



**C.M. Hinton, Jr. Landfill Air Monitoring
Rowlett, Dallas County, Texas 75089**

Prepared for:
**City of Rowlett
4000 Main Street
Rowlett, Texas 75088**

Prepared by:
**Dougherty Sprague Enterprises, Inc.
3902 Industrial Street, Suite A
Rowlett, Texas 75088
dse Project No : 1038001**

December 2012

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
1.0 BACKGROUND.....	3
1.1 SAMPLE COLLECTIONS	3
1.2 SAMPLE COLLECTION PROTOCOL	3
1.3 DATA ANALYSES AND COMPARISON TO PROPOSED REGULATORY STANDARDS.....	4
2.0 SAMPLING EVENTS 2010-2011.....	5
2.1: 2010-2011 SAMPLING EVENT 1	5
2.2: 2010-2011 SAMPLING EVENT 2	7
2.3: 2010-2011 SAMPLING EVENT 3	9
2.4: 2010-2011 SAMPLING EVENT 4	11
2.5: 2010-2011 SAMPLING EVENT 5	12
2.6: 2010-2011 SAMPLING EVENT 6	14
3.0 SAMPLING EVENTS 2012.....	16
3.1: 2012 SAMPLING EVENT 1	16
3.2: 2012 SAMPLING EVENT 2	18
3.3: 2012 SAMPLING EVENT 3	21
4.0 SUMMARY RESULTS.....	23
DETECTIONS: 2010-2011	24
DETECTIONS: 2012	24
5.0 GENERAL CONCLUSIONS	25
6.0 RECOMMENDATIONS	26
7.0 REFERENCES	27
8.0 APPENDICES.....	28
TABLES AND CHARTS	29
<i>Chemicals of Concern</i>	29
<i>All Sample Locations, 2010-2011</i>	29
<i>All Sample Locations, 2012</i>	29
<i>All High Methane Readings, 2010-2011</i>	29
<i>All High Methane Readings, 2012</i>	29
FIDO ASSESSMENT	30
LAB REPORTS	31

AIR MONITORING/SAMPLING REPORT

City of Rowlett (CoR), C.M. Hinton, Jr. Landfill Air Monitoring

EXECUTIVE SUMMARY

Dougherty Sprague Enterprises, Inc. (**dsei**) performed air sampling and monitoring in the residential and recreational area (Community Park) surrounding the C.M. Hinton Jr. Landfill located within the City of Rowlett (CoR) between December 12, 2010 and March 3, 2012. The primary goal of the air sampling and monitoring was to collect data for air quality purposes so that potential sources of odor and contamination, which may impact residents who use the Community Park and live in the neighborhoods surrounding the landfill, can be identified.

The Scope of Work (SOW) included real-time monitoring and stationary air sampling in the residential and recreational areas downwind of the landfill. Per the SOW, the sampling events were to occur when the wind was from a Northerly direction.

1.0 BACKGROUND

Dougherty Sprague Enterprises, Inc. (**dsei**) was contracted by the CoR to perform air sampling and monitoring events in the residential and recreational area (Community Park) around the C.M. Hinton Jr. Landfill located within the City of Rowlett. The primary goal of the air sampling and monitoring was to collect data for air quality purposes so that potential sources of odor and contamination could be identified and quantified, which may impact residents who use the Community Park and live in the neighborhoods surrounding the landfill.

The Scope of Work (SOW) included real-time monitoring and stationary air sampling in the residential and recreational areas downwind of the landfill. Per the SOW, the sampling events were to occur when the wind was from a Northerly direction.

1.1 Sample Collections

Summa[®] canisters were used to collect samples upwind of the landfill and downwind of the landfill. Real-time air monitoring was conducted utilizing a driving survey in the park and areas surrounding the landfill.

1.2 Sample Collection Protocol

Samples were collected both upwind and downwind of the landfill in varying locations within Community Park (downwind) and accessible locations upwind. Sample locations were documented using a Global Positioning System (GPS). Each sample location was mapped in Google Earth Pro[®] and AutoCAD[®].

The sampling naming convention used was as follows:

RW01171201

RW= Rowlett

011712=Date

01=Sample Sequence Number

Summa[®] canister samples were collected and analyzed for Volatile Organic Compounds (VOCs) by EPA Method TO14, Hydrogen Sulfide (H₂S) by ASTM Method 1946, and Sulfur Dioxide by GC/MS for the first two sampling events, and an additional analysis of Carbon Disulfide was added in the final sampling event. Real-time air monitoring was conducted to detect Methane (CH₄) and Hydrogen Sulfide (H₂S) utilizing an Eagle 2 726-105-35 Multi-Gas Monitor or an Eagle 72-5401RK Multi-Gas Monitor.

1.3 Data Analyses and Comparison to Proposed Regulatory Standards

The results of the laboratory analyses were compared to Texas Commission on Environmental Quality (TCEQ) Short-Term and Long-Term Effects Screening Levels (ESLs) as published, "July 2011 Effects Screening Levels," published July 29, 2011."

2.0 SAMPLING EVENTS 2010-2011

2.1: 2010-2011 Sampling Event 1

Sample Dates:	December 12-13, 2010	
Sampler:	Curtis Franklin	
Wind Direction/Speed:	Northeast, ~3-4 mph	
Sample Locations:	Downwind	Buffer Zone
Summa Samples Taken:	1	1
Summa Sample ID:	RW1212101	RW1212102
Latitude:	32.949400	32.949083
Longitude:	-96.545700	-96.541983

Sampling Event 1 was conducted from 8:48pm on Sunday, December 12 through 5:42am on Monday, December 13, 2010. Two 8-hour flow controlled Summa canisters were used to collect the stationary samples. The Eagle 72-5401RK Multi-Gas Monitor was used to monitor real-time air conditions. See Table 1 and Figure 1 for the lab results and sample locations.

Stationary Samples

The Summa sample taken downwind of the landfill (RW1212101) was located within Community Park. The following analytes were detected in the Summa air sample:

- Benzene
- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Ethylbenzene
- Toluene
- 1,3,5-Trimethylbenzene
- 1,2,4-Trimethylbenzene
- Trichlorofluoromethane (F-11)
- m&p-Xylenes
- o-Xylene

Of these, the following were found to be above one or more of the TCEQ Effects Screening Levels (ESLs):

- Benzene (above TCEQ Long-Term ESL)

The Summa sample taken upwind of the landfill (RW1212102) was located within Community Park. The following analytes were detected in the Summa air sample:

- Benzene
- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Ethylbenzene
- Toluene
- 1,3,5-Trimethylbenzene
- 1,2,4-Trimethylbenzene

- Trichlorofluoromethane (F-11)
- m&p-Xylenes
- o-Xylene

Of these, the following were found to be above one or more of the TCEQ Effects Screening Levels (ESLs):

- Benzene (above Long-Term ESL)
- m&p-Xylenes (above Short-Term and Long-Term ESLs)

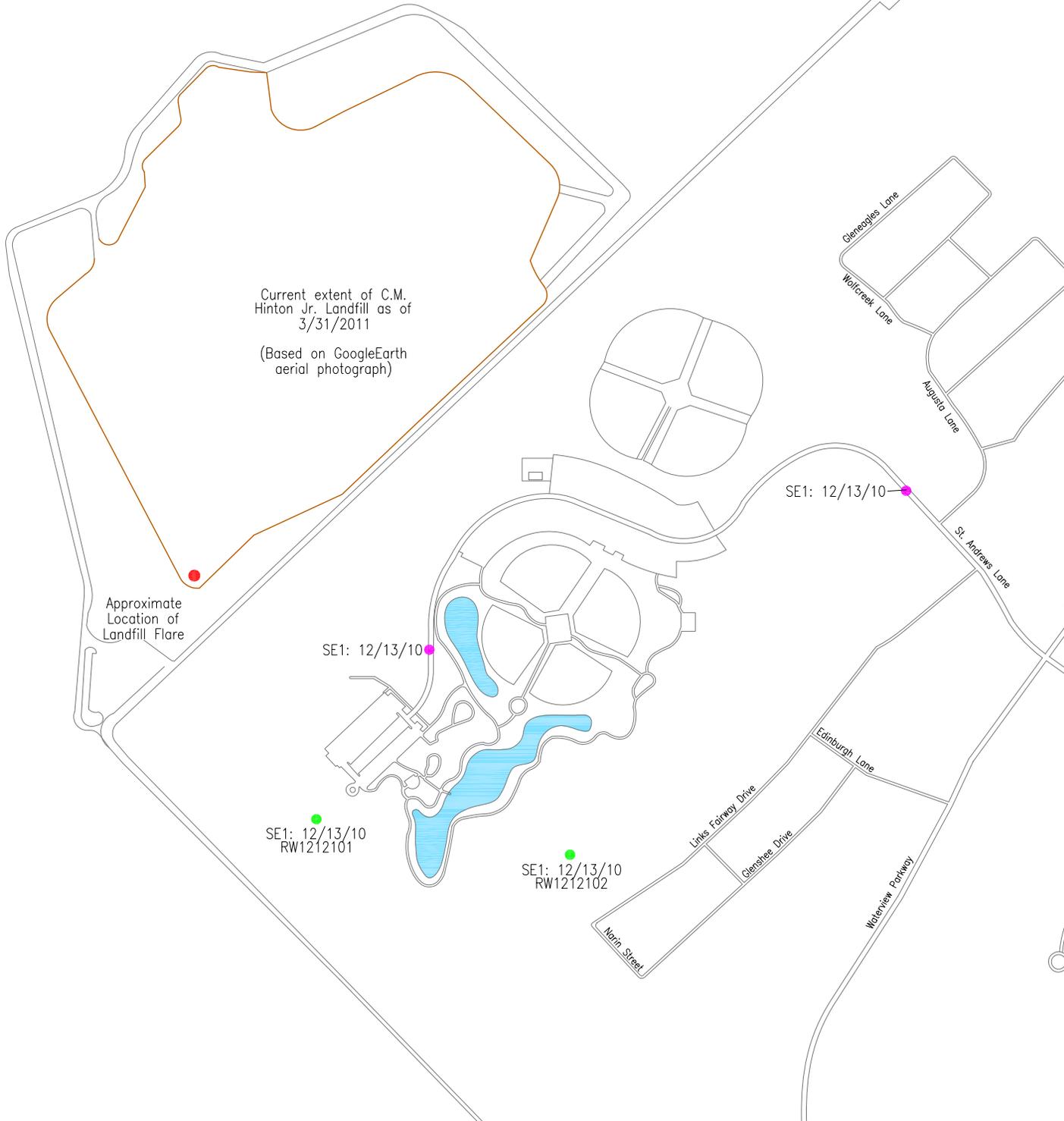
Real-Time Air Monitoring

Real-time air monitoring was conducted throughout the night of December 12 and early morning of December 13, 2010, beginning at approximately 8:00pm and ending at approximately 6:00am. Two high Methane (CH₄) concentration readings were detected during the real-time monitoring:

- December 11, 2010, located where the road is closest to the pond in Community Park.
- December 11, 2010, located at the entrance to Community Park.

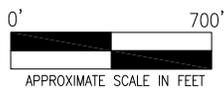
WIND DIRECTION

 MAX SPEED: 10 mph



Dougherty Sprague Enterprises, Inc.
 3902 Industrial Street, Suite A
 Rowlett, Texas 75088

MANAGER	APP. DATE	FILE NAME	
CWF		CAD\Drawing.dwg-FIG1	
APPROX. SCALE	DRAWN	DATE	PROJECT
1"=700'	CMS	3/27/2012	1038001



LEGEND

-  Summa Sampler Location
-  High Methane Reading Location
-  Wind Direction

**2010-2011 AIR MONITORING
 EVENT 1
 DECEMBER 12-13, 2010**

City of Rowlett
 C.M. Hinton Jr. Landfill Air Monitoring
 Rowlett, Texas 75089

SAMPLING EVENT 1: 12/12/2010 - 12/13/2010						
Sample ID	Downwind	Buffer Zone	TCEQ Short-Term ESL	TCEQ Long-Term ESL	TCEQ Short-Term Health AMCV	TCEQ Long-Term Health AMCV
	Sample 1 RW1212101	Sample 2 RW1212102				
	ppbv	ppbv				
Benzene	1.94	16.1	54	1.4	180	1.4
Benzylchloride	ND	ND	10	1		
Bromomethane (Methyl Bromide)	ND	ND	30	3		
Carbon Tetrachloride	ND	ND	20	2		
Chlorobenzene	ND	ND	100	10		
Chloroethane (Ethyl Chloride)	ND	ND	190	19		
Chloroform	ND	ND	20	2		
Chloromethane (Methyl Chloride)	0.92	0.98	500	50		
1,2-Dibromoethane (EDB)	ND	ND	0.5	0.05		
1,2-Dichlorobenzene	ND	ND	120	5.4		
1,3-Dichlorobenzene	ND	ND	120	5.4		
1,4-Dichlorobenzene	ND	ND	120	5.4		
1,1-Dichloroethane	ND	ND	1000	100		
1,1-Dichlorethene	ND	ND				
Dichlorodifluoromethane (F12)	0.65	0.67	10000	1000		
Dichlorotetrafluoroethane (F114)	ND	ND	10000	1000		
1,2-Dichloroethane (EDC)	ND	ND	40	1		
cis-1,2-Dichloroethene	ND	ND				
trans-1,2-Dichloroethene	ND	ND				
Dichloromethane (Methylene chloride)	ND	ND	75	7.5		
1,2-Dichloropropane	ND	ND	100	10		
cis-1,3-Dichloropropene	ND	ND	10	1		
trans-1,3-Dichloropropene	ND	ND	10	1		
Ethylbenzene	0.84	15.6	170	135	20000	450
Hexachlorobutadiene	ND	ND	0.2	0.02		
Styrene	ND	ND	25	33		
1,1,2,2-Tetrachloroethane	ND	ND	10	1		
Tetrachloroethene (PCE)	ND	ND				
Toluene	4.23	50.8	170	330	4000	1100
1,1,1-Trichloroethane (TCA)	ND	ND	2000	200		
1,1,2-Trichloroethane	ND	ND	100	10		
1,3,5-Trimethylbenzene	0.67	6.89	250	25	250	25
1,2,4-Trimethylbenzene	0.47	3.45			250	25
1,2,4-Trichlorobenzene	ND	ND	50	5		
Trichloroethene (TCE)	ND	ND				
Trichlorofluoromethane (F-11)	0.28	0.31	5000	500		
Trichlorotrifluoroethane (F-113)	ND	ND				
Vinyl Chloride	ND	ND	7800	1.2		
m&p-Xylenes	3.12	258	80	42	1700	140
o-Xylene	1.20	12	380	42	1700	140
Hydrogen Sulfide (H ₂ S)	ND	ND				

ESL Effects Screening Levels
AMCV Air Monitoring Comparison Value
BOLD Above one or more ESLs
ppbv parts per billion by volume

NOTES:

"Short-term" generally indicates a 1-hour averaging period.

"Long-term" indicates an annual averaging period.

TCEQ AMCVs are used to evaluate the potential for effects to occur as a result of exposure to concentrations of constituents in the air.

2.2: 2010-2011 Sampling Event 2

Sample Dates:	January 27-28, 2011	
Samplers:	Curtis Franklin, Charlotte Stockard	
Wind Direction/Speed:	East-Northeast to West-Southwest, ~7 mph	
Sample Locations:	Downwind	Upwind
Summa Samples Taken:	1	1
Summa Sample ID:	RW01281103	RW01281104
Latitude:	32.954365	32.967258
Longitude:	-96.535778	-96.541444

Sampling Event 2 was conducted from 9:13pm on Thursday, January 27 through 5:17am on Friday, January 28, 2011. Two 8-hour flow controlled Summa canisters were used to collect the stationary samples. The Eagle 72-5401RK Multi-Gas Monitor was used to monitor real-time air conditions. See Table 2 and Figure 2 for lab results and sample locations.

Stationary Samples

The Summa sample taken downwind of the landfill (RW10281103) was located within Community Park. The following analytes were detected in the Summa air sample:

- Benzene
- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Dichloromethane (Methylene chloride)
- Ethylbenzene
- Toluene
- 1,2,4-Trimethylbenzene
- Trichlorofluoromethane (F-11)
- m&p-Xylenes
- o-Xylene

Of these, none were found to be above the Effects Screening Levels.

The Summa sample taken upwind of the landfill (RW01281104) was located in the parking lot of Cottonwood Church of Christ. The following analytes were detected in the Summa air sample:

- Benzene
- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Dichloromethane (Methylene chloride)
- Ethylbenzene
- Toluene
- Trichlorofluoromethane (F-11)
- m&p-Xylenes
- o-Xylene

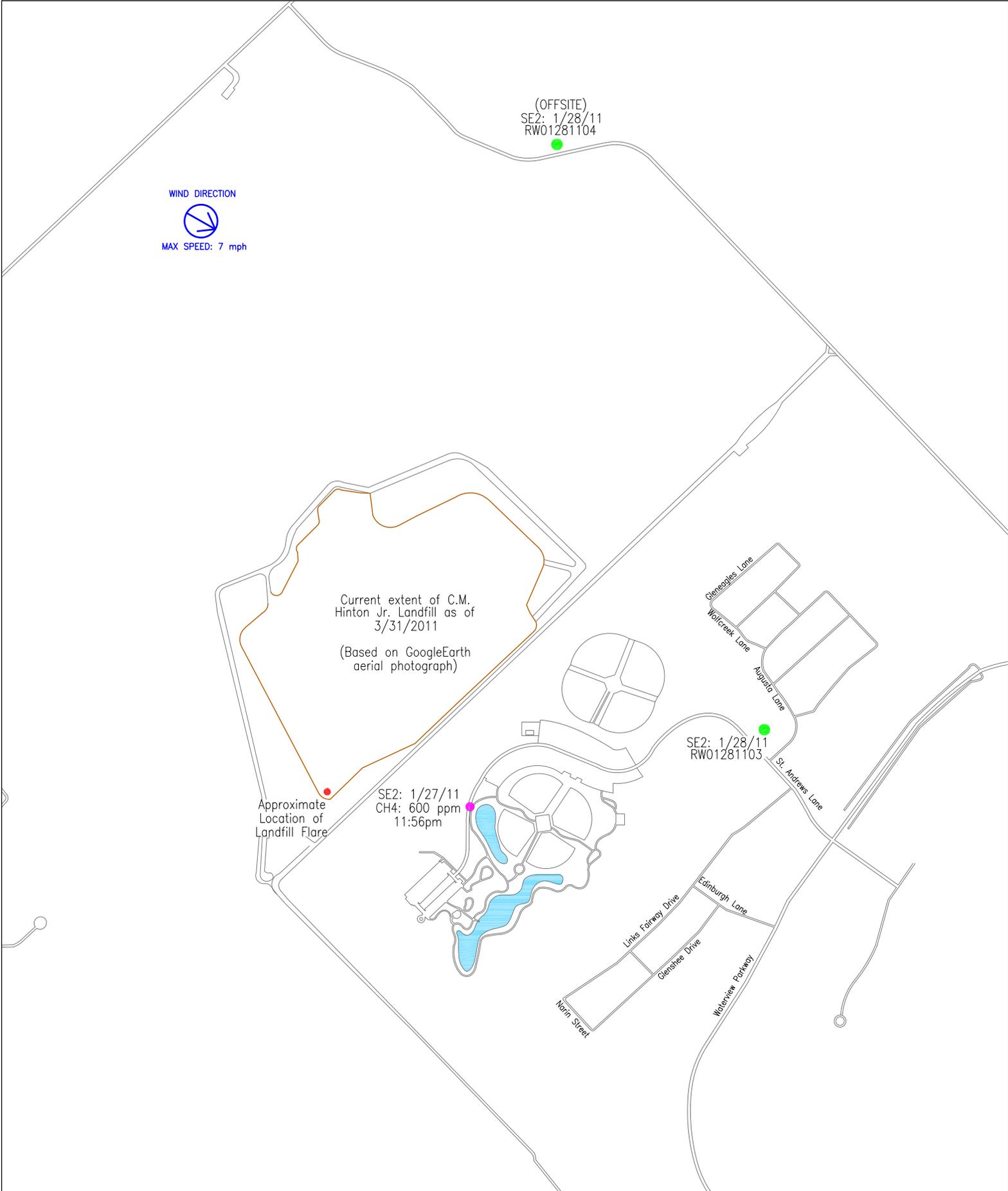
Of these, the following were found to be above one or more of the TCEQ Effects Screening Levels (ESLs):

- Benzene (above Long-Term ESL)

Real-Time Air Monitoring

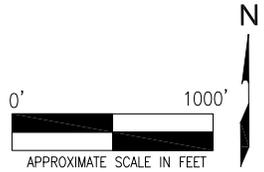
Real-time air monitoring was conducted throughout the night of January 27 and early morning of January 28, 2011, beginning at approximately 9:00pm and ending at approximately 5:30am. One high Methane (CH₄) concentration readings were detected during the real-time monitoring:

- 11:56pm on January 27, 2011 – 600 ppm CH₄, detected where the road is closest to the pond in Community Park.



dse Dougherty Sprague Enterprises, Inc.
3902 Industrial Street, Suite A
Rowlett, Texas 75088

MANAGER	APP. DATE	FILE NAME	
CWF		CAD\Drawing.dwg-FIG2	
APPROX. SCALE	DRAWN	DATE	PROJECT
1"=1000'	CMS	3/27/2012	1038001



LEGEND	
	Summa Sampler Location
	High Methane Reading Location
	Wind Direction

**2010-2011 AIR MONITORING
EVENT 2
JANUARY 27-28, 2011**

City of Rowlett
C.M. Hinton Jr. Landfill Air Monitoring
Rowlett, Texas 75089

SAMPLING EVENT 2: 1/27/2011 - 1/28/2011						
Sample ID	Downwind	Upwind	TCEQ Short-Term ESL	TCEQ Long-Term ESL	TCEQ Short-Term Health AMCV	TCEQ Long-Term Health AMCV
	Sample 1 RW01281103	Sample 2 RW01281104				
	ppbv	ppbv				
Benzene	1.09	2.34	54	1.4	180	1.4
Benzylchloride	ND	ND	10	1		
Bromomethane (Methyl Bromide)	ND	ND	30	3		
Carbon Tetrachloride	ND	ND	20	2		
Chlorobenzene	ND	ND	100	10		
Chloroethane (Ethyl Chloride)	ND	ND	190	19		
Chloroform	ND	ND	20	2		
Chloromethane (Methyl Chloride)	1.11	1.03	500	50		
1,2-Dibromoethane (EDB)	ND	ND	0.5	0.05		
1,2-Dichlorobenzene	ND	ND	120	5.4		
1,3-Dichlorobenzene	ND	ND	120	5.4		
1,4-Dichlorobenzene	ND	ND	120	5.4		
1,1-Dichloroethane	ND	ND	1000	100		
1,1-Dichlorethene	ND	ND				
Dichlorodifluoromethane (F12)	0.65	0.59	10000	1000		
Dichlorotetrafluoroethane (F114)	ND	ND	10000	1000		
1,2-Dichloroethane (EDC)	ND	ND	40	1		
cis-1,2-Dichloroethene	ND	ND				
trans-1,2-Dichloroethene	ND	ND				
Dichloromethane (Methylene chloride)	0.27	0.27	75	7.5		
1,2-Dichloropropane	ND	ND	100	10		
cis-1,3-Dichloropropene	ND	ND	10	1		
trans-1,3-Dichloropropene	ND	ND	10	1		
Ethylbenzene	0.29	0.55	170	135	20000	450
Hexachlorobutadiene	ND	ND	0.2	0.02		
Styrene	ND	ND	25	33		
1,1,2,2-Tetrachloroethane	ND	ND	10	1		
Tetrachloroethene (PCE)	ND	ND				
Toluene	2	3.3	170	330	4000	1100
1,1,1-Trichloroethane (TCA)	ND	ND	2000	200		
1,1,2-Trichloroethane	ND	ND	100	10		
1,3,5-Trimethylbenzene	ND	ND	250	25	250	25
1,2,4-Trimethylbenzene	0.30	ND			250	25
1,2,4-Trichlorobenzene	ND	ND	50	5		
Trichloroethene (TCE)	ND	ND				
Trichlorofluoromethane (F-11)	0.30	0.27	5000	500		
Trichlorotrifluoroethane (F-113)	ND	ND				
Vinyl Chloride	ND	ND	7800	1.2		
m&p-Xylenes	1.2	1.5	80	42	1700	140
o-Xylene	0.35	0.32	380	42	1700	140
Hydrogen Sulfide (H ₂ S)	ND	ND				

ESL Effects Screening Levels
AMCV Air Monitoring Comparison Value
BOLD Above one or more ESLs
ppbv parts per billion by volume

NOTES:

"Short-term" generally indicates a 1-hour averaging period.

"Long-term" indicates an annual averaging period.

TCEQ AMCVs are used to evaluate the potential for effects to occur as a result of exposure to concentrations of constituents in the air.

2.3: 2010-2011 Sampling Event 3

Sample Dates:	March 9-10, 2011	
Sampler:	Charlotte Stockard	
Wind Direction/Speed:	Northwest, ~7 mph	
Sample Locations:	Downwind	Upwind
Summa Samples Taken:	1	1
Summa Sample ID:	RW03101105	RW03101106
Latitude:	32.952383	32.968354
Longitude:	-96.541698	-96.550072

Sampling Event 3 was conducted from 9:21pm on Wednesday March 9 through 5:22am on Thursday, March 10, 2011. Two 8-hour flow controlled Summa canisters were used to collect the stationary samples. The Eagle 72-5401RK Multi-Gas Monitor was used to monitor real-time air conditions. See Table 3 and Figure 3 for lab results and sample locations.

Stationary Samples

The Summa sample taken downwind of the landfill was located within Community Park. The following analytes were detected in the Summa air sample:

- Benzene
- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Ethylbenzene
- Toluene
- m&p-Xylenes

Of these, none were found to be above the TCEQ ESL's.

The Summa sample taken upwind of the landfill was located in the parking lot of Muddy Creek Preserve. The following analytes were detected in the Summa air sample:

- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Trichlorofluoromethane (F-11)

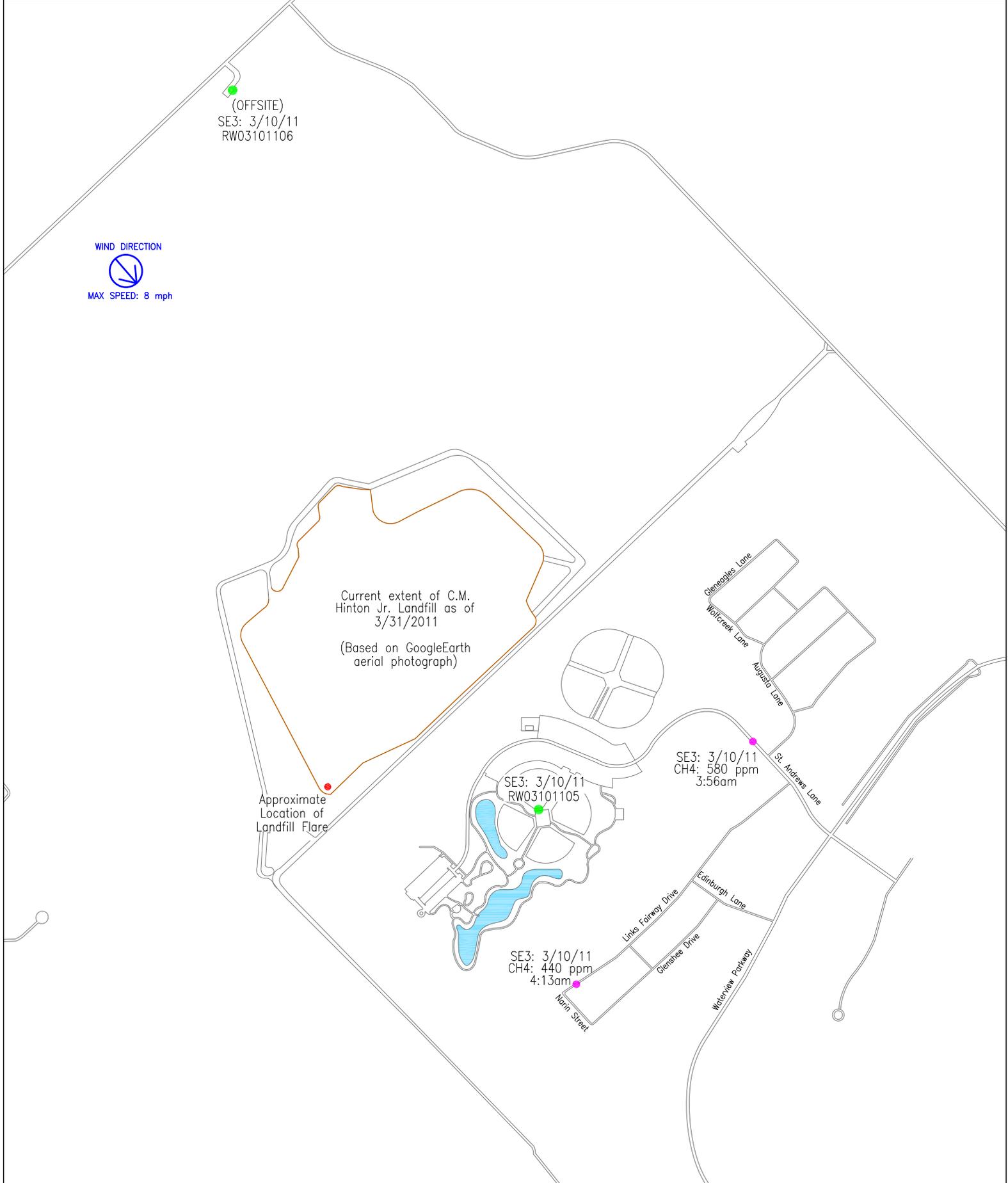
Of these, none were found to be above the TCEQ Effects Screening Levels.

Real-Time Air Monitoring

Real-time air monitoring was conducted throughout the night of March 9 and early morning of March 10, 2011, beginning at approximately 9:00pm and ending at approximately 5:30am. Several high Methane (CH₄) concentration readings were detected during the real-time monitoring:

- 10:45pm, March 9, 2011 – 150 ppm CH₄, detected where the road is closest to the pond in Community Park.
- 10:58pm, March 9, 2011 – 190 ppm CH₄, detected where the road is closest to the pond in Community Park.

- 11:07pm, March 9, 2011 – 120-130 ppm CH₄, detected while driving southwest on Links Fairway Drive between Edinburgh Lane and Nairn Street.
- 11:09pm, March 9, 2011 – 75-95 ppm CH₄, detected while driving northeast on Glenshee Drive between Nairn Street and Edinburgh Lane.
- 11:46pm, March 9, 2011 – 10-20 ppm CH₄, detected while driving southwest on Links Fairway Drive between Edinburgh Land and Nairn Street.
- 3:56am, March 10, 2011 – 580 ppm CH₄, detected while entering Community Park via St. Andrews Lane. CH₄ readings remained between 510-580 ppm throughout park.
- 4:08-4:15am, March 10, 2011 – 420-440 ppm CH₄, detected while driving southwest on Links Fairway Drive between Edinburgh Lane and Nairn Street. Decreased to ~280 ppm CH₄ on Glenshee Drive.



(OFFSITE)
SE3: 3/10/11
RW03101106

WIND DIRECTION

 MAX SPEED: 8 mph

Current extent of C.M. Hinton Jr. Landfill as of 3/31/2011
 (Based on GoogleEarth aerial photograph)

Approximate Location of Landfill Flare

SE3: 3/10/11
RW03101105

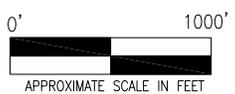
SE3: 3/10/11
CH4: 580 ppm
3:56am

SE3: 3/10/11
CH4: 440 ppm
4:13am



Dougherty Sprague Enterprises, Inc.
3902 Industrial Street, Suite A
Rowlett, Texas 75088

MANAGER	APP. DATE	FILE NAME	
CWF		CAD\Drawing.dwg-FIG3	
APPROX. SCALE	DRAWN	DATE	PROJECT
1"=1000'	CMS	3/27/2012	1038001



LEGEND

-  Summa Sampler Location
-  High Methane Reading Location
-  Wind Direction

**2010-2011 AIR MONITORING
EVENT 3
MARCH 9-MARCH 10, 2011**

City of Rowlett
C.M. Hinton Jr. Landfill Air Monitoring
Rowlett, Texas 75089

SAMPLING EVENT 3: 3/9/2011 - 3/10/2011						
Sample ID	Downwind	Upwind	TCEQ Short-Term ESL	TCEQ Long-Term ESL	TCEQ Short-Term Health AMCV	TCEQ Long-Term Health AMCV
	Sample 1 RW03101105	Sample 2 RW03101106				
	ppbv	ppbv				
Benzene	1.39	ND	54	1.4	180	1.4
Benzylchloride	ND	ND	10	1		
Bromomethane (Methyl Bromide)	ND	ND	30	3		
Carbon Tetrachloride	ND	ND	20	2		
Chlorobenzene	ND	ND	100	10		
Chloroethane (Ethyl Chloride)	ND	ND	190	19		
Chloroform	ND	ND	20	2		
Chloromethane (Methyl Chloride)	0.59	0.59	500	50		
1,2-Dibromoethane (EDB)	ND	ND	0.5	0.05		
1,2-Dichlorobenzene	ND	ND	120	5.4		
1,3-Dichlorobenzene	ND	ND	120	5.4		
1,4-Dichlorobenzene	ND	ND	120	5.4		
1,1-Dichloroethane	ND	ND	1000	100		
1,1-Dichlorethene	ND	ND				
Dichlorodifluoromethane (F12)	0.57	0.66	10000	1000		
Dichlorotetrafluoroethane (F114)	ND	ND	10000	1000		
1,2-Dichloroethane (EDC)	ND	ND	40	1		
cis-1,2-Dichloroethene	ND	ND				
trans-1,2-Dichloroethene	ND	ND				
Dichloromethane (Methylene chloride)	ND	ND	75	7.5		
1,2-Dichloropropane	ND	ND	100	10		
cis-1,3-Dichloropropene	ND	ND	10	1		
trans-1,3-Dichloropropene	ND	ND	10	1		
Ethylbenzene	0.44	ND	170	135	20000	450
Hexachlorobutadiene	ND	ND	0.2	0.02		
Styrene	ND	ND	25	33		
1,1,2,2-Tetrachloroethane	ND	ND	10	1		
Tetrachloroethene (PCE)	ND	ND				
Toluene	2.6	ND	170	330	4000	1100
1,1,1-Trichloroethane (TCA)	ND	ND	2000	200		
1,1,2-Trichloroethane	ND	ND	100	10		
1,3,5-Trimethylbenzene	ND	ND	250	25	250	25
1,2,4-Trimethylbenzene	ND	ND			250	25
1,2,4-Trichlorobenzene	ND	ND	50	5		
Trichloroethene (TCE)	ND	ND				
Trichlorofluoromethane (F-11)	ND	0.21	5000	500		
Trichlorotrifluoroethane (F-113)	ND	ND				
Vinyl Chloride	ND	ND	7800	1.2		
m&p-Xylenes	1.2	ND	80	42	1700	140
o-Xylene	ND	ND	380	42	1700	140
Hydrogen Sulfide (H ₂ S)	ND	ND				

ESL Effects Screening Levels
AMCV Air Monitoring Comparison Value
BOLD Above one or more ESLs
ppbv parts per billion by volume

NOTES:

"Short-term" generally indicates a 1-hour averaging period.

"Long-term" indicates an annual averaging period.

TCEQ AMCVs are used to evaluate the potential for effects to occur as a result of exposure to concentrations of constituents in the air.

2.4: 2010-2011 Sampling Event 4

Sample Dates:	March 30-31, 2011	
Samplers:	Charlotte Stockard, Chris Dougherty	
Wind Direction/Speed:	Northwest, ~2 mph/calm	
Sample Locations:	Downwind	Upwind
Summa Samples Taken:	1	1
Summa Sample ID:	RW03311108	RW03311107
Latitude:	32.950302	32.967238
Longitude:	-96.545736	-96.541450

Sampling Event 4 was conducted from 8:37pm on Wednesday March 30 through 4:26am on Thursday, March 31, 2011. Two 8-hour flow controlled Summa canisters were used to collect the stationary samples. The Eagle 2 726-105-35 Multi-Gas Monitor was used to monitor real-time air conditions. See Table 4 and Figure 4 for lab results and sample locations.

Stationary Samples

The Summa sample taken downwind of the landfill (RW03311108) was located within Community Park. The following analytes were detected in the Summa air sample:

- Benzene
- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Toluene
- Trichlorofluoromethane (F-11)

Of these, the following were found to be above one or more of the Effects Screening Levels (ESLs):

- Benzene (above Long-Term ESL)

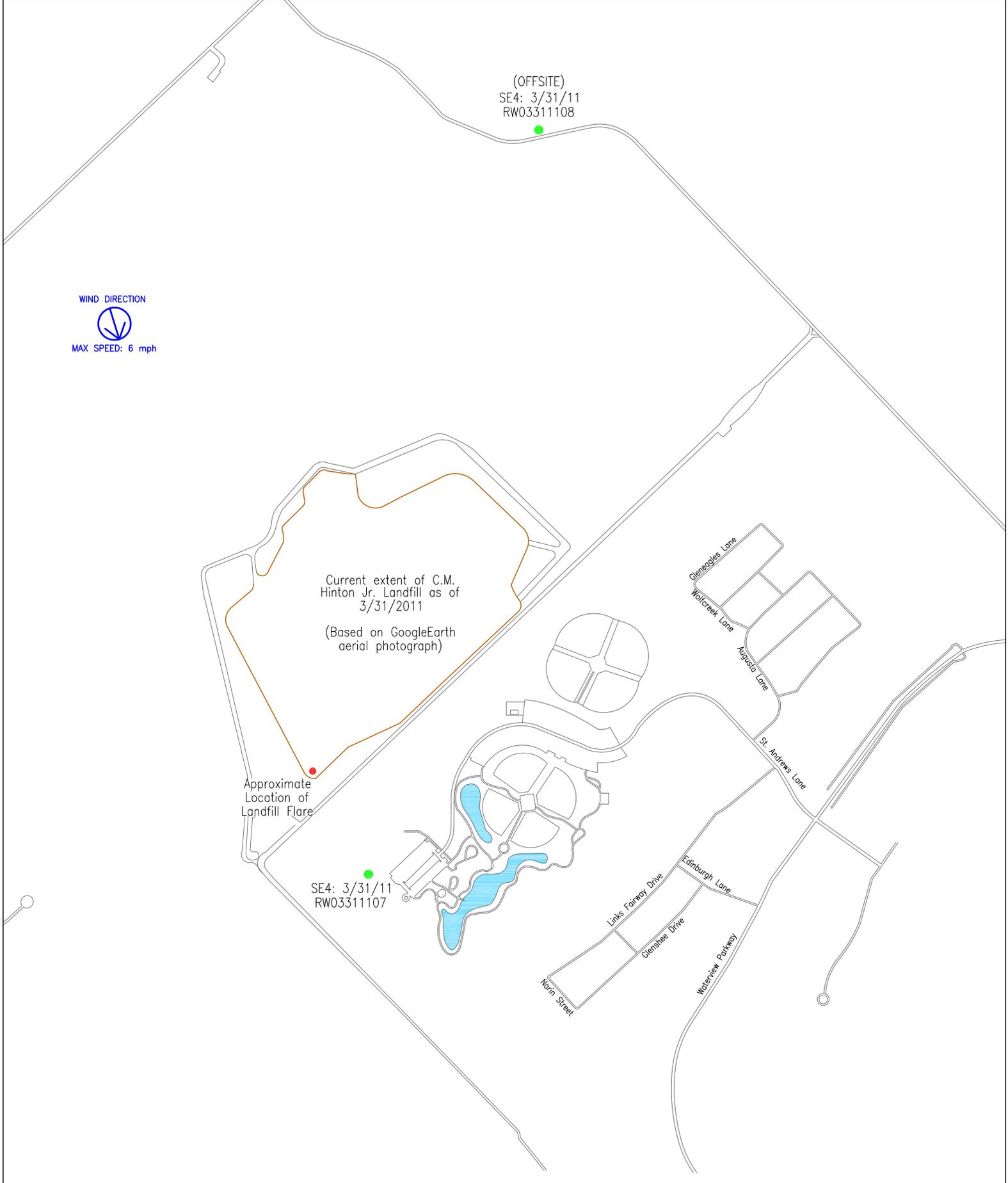
The Summa sample taken upwind of the landfill (RW03311107) was located in the parking lot of Cottonwood Church of Christ. The following analytes were detected in the Summa air sample:

- Dichlorodifluoromethane (F12)

Of these, none were found to be above the TCEQ ESL's.

Real-Time Air Monitoring

Real-time air monitoring was conducted throughout the night of March 30 and early morning of March 31, 2011, beginning at approximately 8:30pm and ending at approximately 4:30am. No high Methane (CH₄) readings were detected during the real-time air monitoring.



(OFFSITE)
SE4: 3/31/11
RW03311108

WIND DIRECTION

 MAX SPEED: 6 mph

Current extent of C.M.
Hinton Jr. Landfill as of
3/31/2011
(Based on GoogleEarth
aerial photograph)

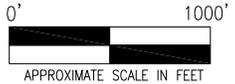
Approximate
Location of
Landfill Flare

SE4: 3/31/11
RW03311107



Dougherty Sprague Enterprises, Inc.
3902 Industrial Street, Suite A
Rowlett, Texas 75088

MANAGER	APP. DATE	FILE NAME	
CWF		CAD\Drawing.dwg-FIG4	
APPROX. SCALE	DRAWN	DATE	PROJECT
1"=1000'	CMS	3/27/2012	1038001



LEGEND

-  Summa Sampler Location
-  High Methane Reading Location
-  Wind Direction

**2010-2011 AIR MONITORING
EVENT 4
MARCH 30-MARCH 31, 2011**

City of Rowlett
C.M. Hinton Jr. Landfill Air Monitoring
Rowlett, Texas 75089

SAMPLING EVENT 4: 3/30/2011 - 3/31/2011						
Sample ID	Downwind	Upwind	TCEQ Short-Term ESL	TCEQ Long-Term ESL	TCEQ Short-Term Health AMCV	TCEQ Long-Term Health AMCV
	Sample 2 RW03311108	Sample 1 RW03311107				
	ppbv	ppbv				
Benzene	3.32	ND	54	1.4	180	1.4
Benzylchloride	ND	ND	10	1		
Bromomethane (Methyl Bromide)	ND	ND	30	3		
Carbon Tetrachloride	ND	ND	20	2		
Chlorobenzene	ND	ND	100	10		
Chloroethane (Ethyl Chloride)	ND	ND	190	19		
Chloroform	ND	ND	20	2		
Chloromethane (Methyl Chloride)	0.53	ND	500	50		
1,2-Dibromoethane (EDB)	ND	ND	0.5	0.05		
1,2-Dichlorobenzene	ND	ND	120	5.4		
1,3-Dichlorobenzene	ND	ND	120	5.4		
1,4-Dichlorobenzene	ND	ND	120	5.4		
1,1-Dichloroethane	ND	ND	1000	100		
1,1-Dichlorethene	ND	ND				
Dichlorodifluoromethane (F12)	0.56	0.59	10000	1000		
Dichlorotetrafluoroethane (F114)	ND	ND	10000	1000		
1,2-Dichloroethane (EDC)	ND	ND	40	1		
cis-1,2-Dichloroethene	ND	ND				
trans-1,2-Dichloroethene	ND	ND				
Dichloromethane (Methylene chloride)	ND	ND	75	7.5		
1,2-Dichloropropane	ND	ND	100	10		
cis-1,3-Dichloropropene	ND	ND	10	1		
trans-1,3-Dichloropropene	ND	ND	10	1		
Ethylbenzene	ND	ND	170	135	20000	450
Hexachlorobutadiene	ND	ND	0.2	0.02		
Styrene	ND	ND	25	33		
1,1,2,2-Tetrachloroethane	ND	ND	10	1		
Tetrachloroethene (PCE)	ND	ND				
Toluene	1.7	ND	170	330	4000	1100
1,1,1-Trichloroethane (TCA)	ND	ND	2000	200		
1,1,2-Trichloroethane	ND	ND	100	10		
1,3,5-Trimethylbenzene	ND	ND	250	25	250	25
1,2,4-Trimethylbenzene	ND	ND			250	25
1,2,4-Trichlorobenzene	ND	ND	50	5		
Trichloroethene (TCE)	ND	ND				
Trichlorofluoromethane (F-11)	0.31	ND	5000	500		
Trichlorotrifluoroethane (F-113)	ND	ND				
Vinyl Chloride	ND	ND	7800	1.2		
m&p-Xylenes	ND	ND	80	42	1700	140
o-Xylene	ND	ND	380	42	1700	140
Hydrogen Sulfide (H ₂ S)	ND	ND				

ESL Effects Screening Levels
AMCV Air Monitoring Comparison Value
BOLD Above one or more ESLs
ppbv parts per billion by volume

NOTES:

"Short-term" generally indicates a 1-hour averaging period.

"Long-term" indicates an annual averaging period.

TCEQ AMCVs are used to evaluate the potential for effects to occur as a result of exposure to concentrations of constituents in the air.

2.5: 2010-2011 Sampling Event 5

Sample Dates:	April 15-16, 2011		
Sampler:	Charlotte Stockard		
Wind Direction/Speed:	East-Northeast to West-Southwest, ~7 mph		
Sample Locations:	Downwind	Upwind	TEST*
Summa Samples Taken:	1	1	1
Summa Sample ID:	RW04161109	RW04161110	RW04161111
Latitude:	32.951128	32.968323	32.905438
Longitude:	-96.545171	-96.550095	-96.565488
Comments:			*This Summa canister sample was run as a QC sample to test fluorocarbon and background levels.

Sampling Event 5 was conducted from 7:56pm on Friday, April 15 through 5:16am on Saturday, April 16, 2011. Three 8-hour flow controlled Summa canisters were used to collect the stationary samples. The Eagle 2 726-105-35 Multi-Gas Monitor was used to monitor real-time air conditions. See Table 5 and Figure 5 for lab results and sample locations.

Stationary Samples

The Summa sample taken downwind of the landfill (RW04161109) was located within Community Park. The following analytes were detected in the Summa air sample:

- Benzene
- Ethylbenzene
- Toluene
- m&p-Xylenes

Of these, the following were found to be above one or more of the TCEQ Effects Screening Levels (ESLs):

- Benzene (above TCEQ Long-Term ESL)

The Summa sample taken upwind of the landfill (RW04161110) was located in the parking lot of Muddy Creek Preserve. The following analytes were detected in the Summa air sample:

- Benzene
- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Toluene
- Trichlorofluoromethane (F-11)

Of these, none were found to be above the TCEQ Effects Screening Levels.

The Summa sample taken as a Test (RW04161111) was located in the field behind dse Rowlett's office building. The Test Summa was run to determine if the detections of Dichlorodifluoromethane (F12) in previous samples upwind and downwind of the landfill were lab contaminants. The following analytes were detected in the Summa air sample:

- Benzene
- Dichlorodifluoromethane (F12)
- Trichlorofluoromethane (F-11)

Of these, none were found to be above the TCEQ Effects Screening Levels.

Real-Time Air Monitoring

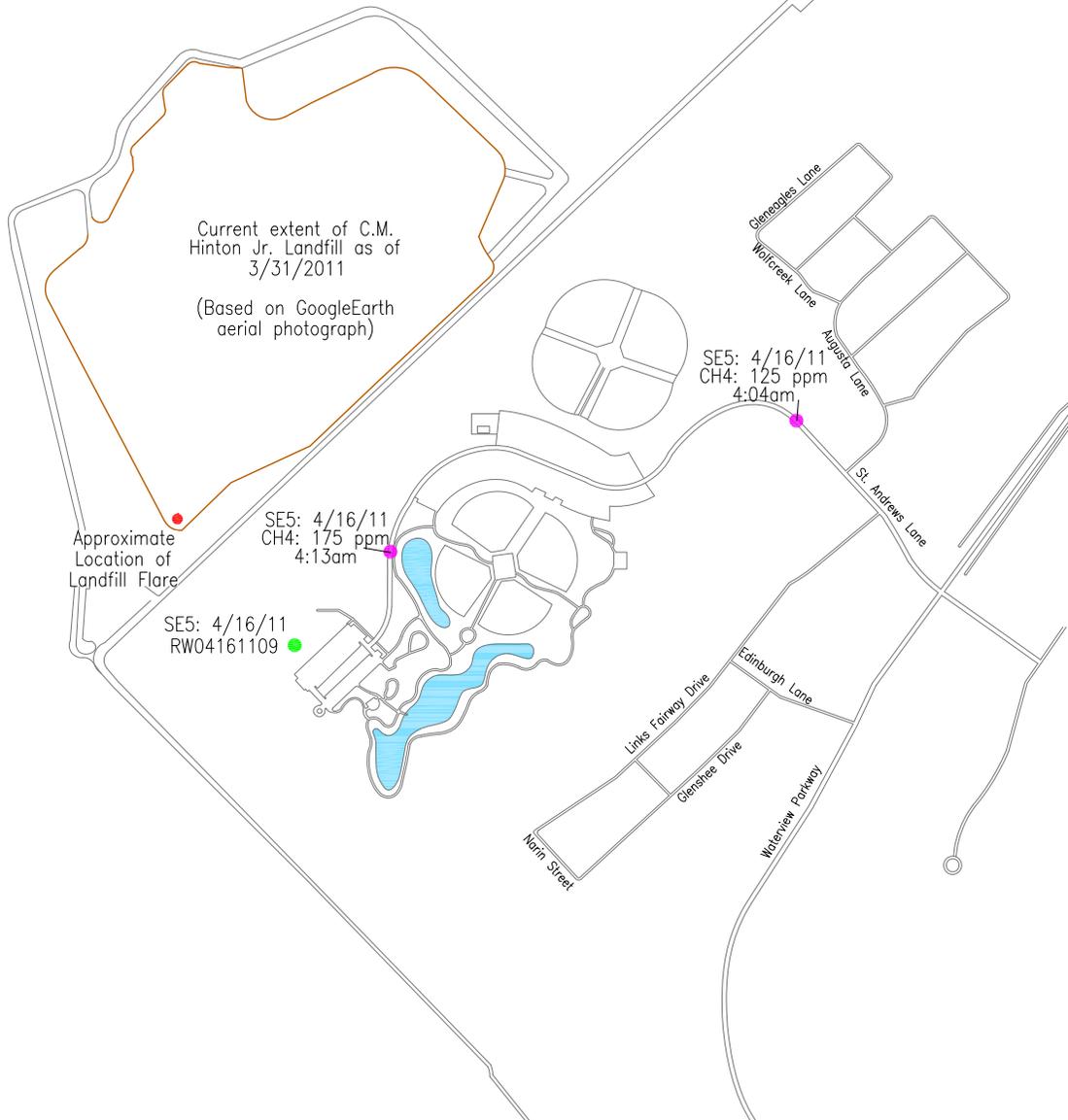
Real-time air monitoring was conducted throughout the night of April 15 and early morning of April 16, 2011, beginning at approximately 8:30pm and ending at approximately 5:15am. Two high Methane (CH₄) concentration readings were detected during the real-time monitoring:

- 4:04am, April 16, 2011 – 125 ppm CH₄, detected while entering Community Park.
- 4:13am, April 16, 2011 – 175 ppm CH₄, detected where the road is closest to the pond in Community Park.

(OFFSITE)
SE5: 4/16/11
RW04161110

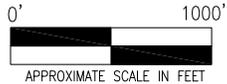
WIND DIRECTION

 MAX SPEED: 16 mph
 (Gusts to 26 mph)



Dougherty Sprague Enterprises, Inc.
3902 Industrial Street, Suite A
Rowlett, Texas 75088

MANAGER	APP. DATE	FILE NAME	
CWF		CAD\Drawing.dwg-FIG5	
APPROX. SCALE	DRAWN	DATE	PROJECT
1"=1000'	CMS	3/27/2012	1038001



LEGEND

-  Summa Sampler Location
-  High Methane Reading Location
-  Wind Direction

**2010-2011 AIR MONITORING
EVENT 5
APRIL 15-APRIL 16, 2011**

City of Rowlett
C.M. Hinton Jr. Landfill Air Monitoring
Rowlett, Texas 75089

SAMPLING EVENT 5: 4/15/2011 - 4/16/2011							
Sample ID	Downwind	Upwind	QC	TCEQ Short-Term ESL	TCEQ Long-Term ESL	TCEQ Short-Term Health AMCV	TCEQ Long-Term Health AMCV
	Sample 1 RW04161109	Sample 2 RW04161110	Sample 3 RW04161111				
	ppbv	ppbv	ppbv				
Benzene	9.56	0.91	0.69	54	1.4	180	1.4
Benzylchloride	ND	ND	ND	10	1		
Bromomethane (Methyl Bromide)	ND	ND	ND	30	3		
Carbon Tetrachloride	ND	ND	ND	20	2		
Chlorobenzene	ND	ND	ND	100	10		
Chloroethane (Ethyl Chloride)	ND	ND	ND	190	19		
Chloroform	ND	ND	ND	20	2		
Chloromethane (Methyl Chloride)	ND	0.65	ND	500	50		
1,2-Dibromoethane (EDB)	ND	ND	ND	0.5	0.05		
1,2-Dichlorobenzene	ND	ND	ND	120	5.4		
1,3-Dichlorobenzene	ND	ND	ND	120	5.4		
1,4-Dichlorobenzene	ND	ND	ND	120	5.4		
1,1-Dichloroethane	ND	ND	ND	1000	100		
1,1-Dichloroethene	ND	ND	ND				
Dichlorodifluoromethane (F12)	ND	0.75	0.62	10000	1000		
Dichlorotetrafluoroethane (F114)	ND	ND	ND	10000	1000		
1,2-Dichloroethane (EDC)	ND	ND	ND	40	1		
cis-1,2-Dichloroethene	ND	ND	ND				
trans-1,2-Dichloroethene	ND	ND	ND				
Dichloromethane (Methylene chloride)	ND	ND	ND	75	7.5		
1,2-Dichloropropane	ND	ND	ND	100	10		
cis-1,3-Dichloropropene	ND	ND	ND	10	1		
trans-1,3-Dichloropropene	ND	ND	ND	10	1		
Ethylbenzene	1.57	ND	ND	170	135	20000	450
Hexachlorobutadiene	ND	ND	ND	0.2	0.02		
Styrene	ND	ND	ND	25	33		
1,1,2,2-Tetrachloroethane	ND	ND	ND	10	1		
Tetrachloroethene (PCE)	ND	ND	ND				
Toluene	5.9	0.46	ND	170	330	4000	1100
1,1,1-Trichloroethane (TCA)	ND	ND	ND	2000	200		
1,1,2-Trichloroethane	ND	ND	ND	100	10		
1,3,5-Trimethylbenzene	ND	ND	ND	250	25	250	25
1,2,4-Trimethylbenzene	ND	ND	ND			250	25
1,2,4-Trichlorobenzene	ND	ND	ND	50	5		
Trichloroethene (TCE)	ND	ND	ND				
Trichlorofluoromethane (F-11)	ND	0.29	0.30	5000	500		
Trichlorotrifluoroethane (F-113)	ND	ND	ND				
Vinyl Chloride	ND	ND	ND	7800	1.2		
m&p-Xylenes	2.7	ND	ND	80	42	1700	140
o-Xylene	ND	ND	ND	380	42	1700	140
Hydrogen Sulfide (H ₂ S)	ND	ND	ND				

ESL Effects Screening Levels
AMCV Air Monitoring Comparison Value
BOLD Above one or more ESLs
ppbv parts per billion by volume

NOTES:

"Short-term" generally indicates a 1-hour averaging period.

"Long-term" indicates an annual averaging period.

TCEQ AMCVs are used to evaluate the potential for effects to occur as a result of exposure to concentrations of constituents in the air.

2.6: 2010-2011 Sampling Event 6

Sample Dates:	May 13-14, 2011	
Sampler:	Charlotte Stockard	
Wind Direction/Speed:	North-Northwest, ~10 mph	
Sample Locations:	Downwind	Upwind
Summa Samples Taken:	1	1
Summa Sample ID:	RW05141112	RW05141113
Latitude:	32.953387	32.968244
Longitude:	-96.538677	-96.550189

Sampling Event 6 was conducted from 8:07pm on Friday, May 13 through 4:23am on Saturday, May 14, 2011. Two 8-hour flow controlled Summa canisters were used to collect the stationary samples. The Eagle 2 726-105-35 Multi-Gas Monitor was used to monitor real-time air conditions. See Table 6 and Figure 6 for lab results and sample locations.

Stationary Samples

The Summa sample taken downwind of the landfill was located within Community Park. The following analytes were detected in the Summa air sample:

- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)

Of these, none were found to be above the TCEQ Effects Screening Levels.

The Summa sample taken upwind of the landfill was located in the parking lot of Muddy Creek Preserve. The following analytes were detected in the Summa air sample:

- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Toluene

Of these, none were found to be above the TCEQ Effects Screening Levels.

Real-Time Air Monitoring

Real-time air monitoring was conducted throughout the night of May 13 and early morning of May 14, 2011, beginning at approximately 9:00pm and ending at approximately 4:30am. Several high Methane (CH₄) concentration readings were detected during the real-time monitoring:

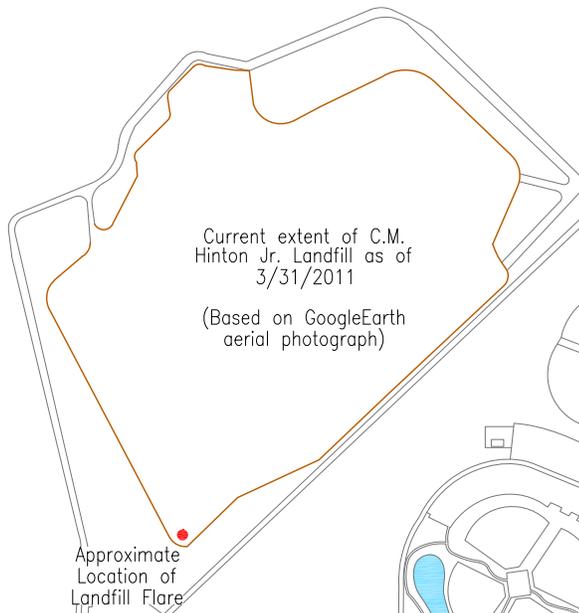
- 11:36pm, May 13, 2011 – 40 ppm CH₄, detected when entering Community Park along St. Andrews Road.
- 11:40 pm, May 13, 2011 – 25-30 ppm CH₄, detected where the road is closest to the pond in Community Park.
- 11:42pm, May 13, 2011 – 35 ppm CH₄, detected in the parking lot downwind of the landfill flare in Community Park. The CH₄ reading remained steady at 65 ppm for several minutes, then decreased to 50-55 ppm.

- 3:35 am, May 14, 2011 – 55 ppm CH₄, detected where the road is closest to the pond in Community Park.

(OFFSITE)
SE6: 5/14/11
RW05141113

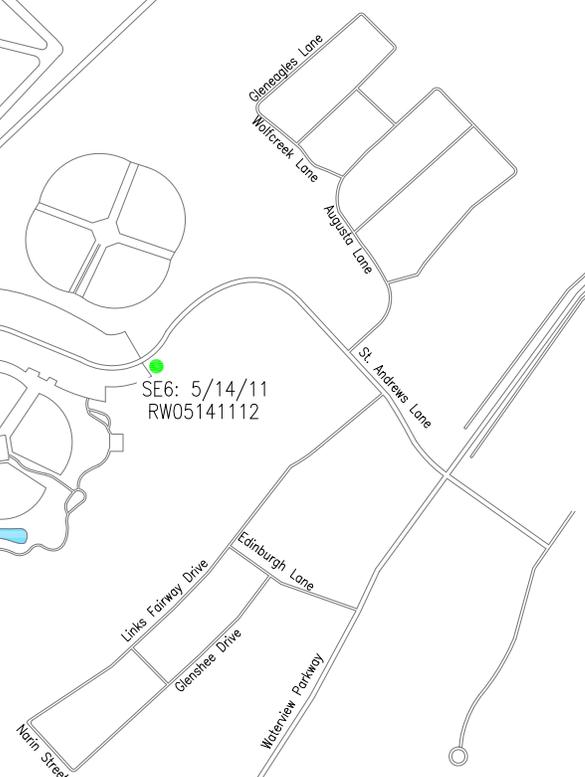
WIND DIRECTION

MAX SPEED: 10 mph



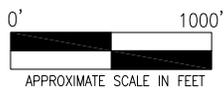
SE6: 5/14/11
CH4: 65 ppm
11:42pm

SE6: 5/14/11
RW05141112



Dougherty Sprague Enterprises, Inc.
3902 Industrial Street, Suite A
Rowlett, Texas 75088

MANAGER	APP. DATE	FILE NAME	
CWF		CAD\Drawing.dwg-FIG6	
APPROX. SCALE	DRAWN	DATE	PROJECT
1"=1000'	CMS	3/27/2012	1038001



N

LEGEND

-  Summa Sampler Location
-  High Methane Reading Location
-  Wind Direction

**2010-2011 AIR MONITORING
EVENT 6
MAY 13-MAY 14, 2011**

City of Rowlett
C.M. Hinton Jr. Landfill Air Monitoring
Rowlett, Texas 75089

SAMPLING EVENT 6: 5/13/2011 - 5/14/2011						
Sample ID	Downwind	Upwind	TCEQ Short-Term ESL	TCEQ Long-Term ESL	TCEQ Short-Term Health AMCV	TCEQ Long-Term Health AMCV
	Sample 1 RW05141112	Sample 2 RW05141113				
	ppbv	ppbv				
Benzene	ND	ND	54	1.4	180	1.4
Benzylchloride	ND	ND	10	1		
Bromomethane (Methyl Bromide)	ND	ND	30	3		
Carbon Tetrachloride	ND	ND	20	2		
Chlorobenzene	ND	ND	100	10		
Chloroethane (Ethyl Chloride)	ND	ND	190	19		
Chloroform	ND	ND	20	2		
Chloromethane (Methyl Chloride)	0.55	0.58	500	50		
1,2-Dibromoethane (EDB)	ND	ND	0.5	0.05		
1,2-Dichlorobenzene	ND	ND	120	5.4		
1,3-Dichlorobenzene	ND	ND	120	5.4		
1,4-Dichlorobenzene	ND	ND	120	5.4		
1,1-Dichloroethane	ND	ND	1000	100		
1,1-Dichlorethene	ND	ND				
Dichlorodifluoromethane (F12)	0.49	0.51	10000	1000		
Dichlorotetrafluoroethane (F114)	ND	ND	10000	1000		
1,2-Dichloroethane (EDC)	ND	ND	40	1		
cis-1,2-Dichloroethene	ND	ND				
trans-1,2-Dichloroethene	ND	ND				
Dichloromethane (Methylene chloride)	ND	ND	75	7.5		
1,2-Dichloropropane	ND	ND	100	10		
cis-1,3-Dichloropropene	ND	ND	10	1		
trans-1,3-Dichloropropene	ND	ND	10	1		
Ethylbenzene	ND	ND	170	135	20000	450
Hexachlorobutadiene	ND	ND	0.2	0.02		
Styrene	ND	ND	25	33		
1,1,2,2-Tetrachloroethane	ND	ND	10	1		
Tetrachloroethene (PCE)	ND	ND				
Toluene	ND	0.38	170	330	4000	1100
1,1,1-Trichloroethane (TCA)	ND	ND	2000	200		
1,1,2-Trichloroethane	ND	ND	100	10		
1,3,5-Trimethylbenzene	ND	ND	250	25	250	25
1,2,4-Trimethylbenzene	ND	ND			250	25
1,2,4-Trichlorobenzene	ND	ND	50	5		
Trichloroethene (TCE)	ND	ND				
Trichlorofluoromethane (F-11)	ND	ND	5000	500		
Trichlorotrifluoroethane (F-113)	ND	ND				
Vinyl Chloride	ND	ND	7800	1.2		
m&p-Xylenes	ND	ND	80	42	1700	140
o-Xylene	ND	ND	380	42	1700	140
Hydrogen Sulfide (H ₂ S)	ND	ND				

ESL Effects Screening Levels
AMCV Air Monitoring Comparison Value
BOLD Above one or more ESLs
ppbv parts per billion by volume

NOTES:

"Short-term" generally indicates a 1-hour averaging period.

"Long-term" indicates an annual averaging period.

TCEQ AMCVs are used to evaluate the potential for effects to occur as a result of exposure to concentrations of constituents in the air.

3.0 SAMPLING EVENTS 2012

3.1: 2012 Sampling Event 1

Sample Dates:	January 17-18, 2012					
Samplers:	Charlotte Stockard, John Selby					
Wind Direction/Speed:	North, Max Speed: 12 mph					
Sample Locations:	Downwind (Close to Landfill)	Downwind (Close to Landfill)	Downwind (Close to Residences)	Downwind (Close to Residences)	Downwind (In park by Lift Station)	Upwind
Summa Samples Taken:	1	1	1	1	1	1
Summa Sample ID:	RW01171201	RW01171202	RW01171203	RW01171204	RW01171205	RW01171206
Latitude:	32.950859°	32.952226°	32.951231°	32.949838°	32.951010°	32.967238°
Longitude:	-96.547085°	-96.545428°	-96.538295°	-96.539823°	-96.543689°	-96.541449°

Sampling Event 1 was conducted from 8:05pm on Tuesday, January 17, 2012 through 5:27am on Wednesday, January 18, 2012. Six 8-hour flow controlled Summa canisters were used to collect the stationary samples. The Eagle 2 726-105-35 Multi-Gas Monitor was used to monitor real-time air conditions. See Table 1 and Figure 1 for the lab results and sample locations.

Stationary Samples

The Summa samples taken downwind of the landfill (RW01171201, RW01171202, RW01171203, RW01171204, RW01171205) were located within Community Park. The following analytes were detected in the Summa air samples:

- Benzene
- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Tetrachloroethene (PCE)
- Toluene
- 1,1,2-Trichloroethane
- Trichloroethene (TCE)
- Propene
- Ethanol
- Carbon Disulfide

Of these, the following were found to be above one or more of the TCEQ Effects Screening Levels (ESLs):

- Carbon Disulfide (above TCEQ Long-Term ESL)

The Summa sample taken upwind of the landfill (RW01171206) was located in the parking lot of Cottonwood Church of Christ (Northeast of the landfill.) The following analytes were detected in the Summa air sample:

- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Toluene
- 1,2,4-Trimethylbenzene
- Propene
- Ethanol
- Methyl Isobutyl Ketone
- Carbon Sulfide

Of these, none were found to be above the Effects Screening Levels.

Real-Time Air Monitoring

Real-time air monitoring was conducted throughout the night of January 17, 2012 and early morning of January 18, 2012, beginning at approximately 8:15pm and ending at approximately 5:45am. Three high Methane (CH₄) concentration readings were detected during the real-time monitoring:

- January 17, 2012, located downwind of the landfill flare. CH₄: 75ppm at 8:32pm.
- January 18, 2012, located downwind of the landfill flare. CH₄: 95ppm at 5:03am.
- January 18, 2012, located near the floodgate in the park. CH₄: 100ppm at 5:20am.

Sample 6 RW01171206	
ug/cu M	
Chloroethane (Methyl Chloride)	1.09
Dichlorodifluoromethane (F12)	2.50
Toluene	2.25
1,2,4-Trichlorobenzene	3.48
Propene	1.7
Ethanol	6.8
Carbonyl Sulfide	20.4



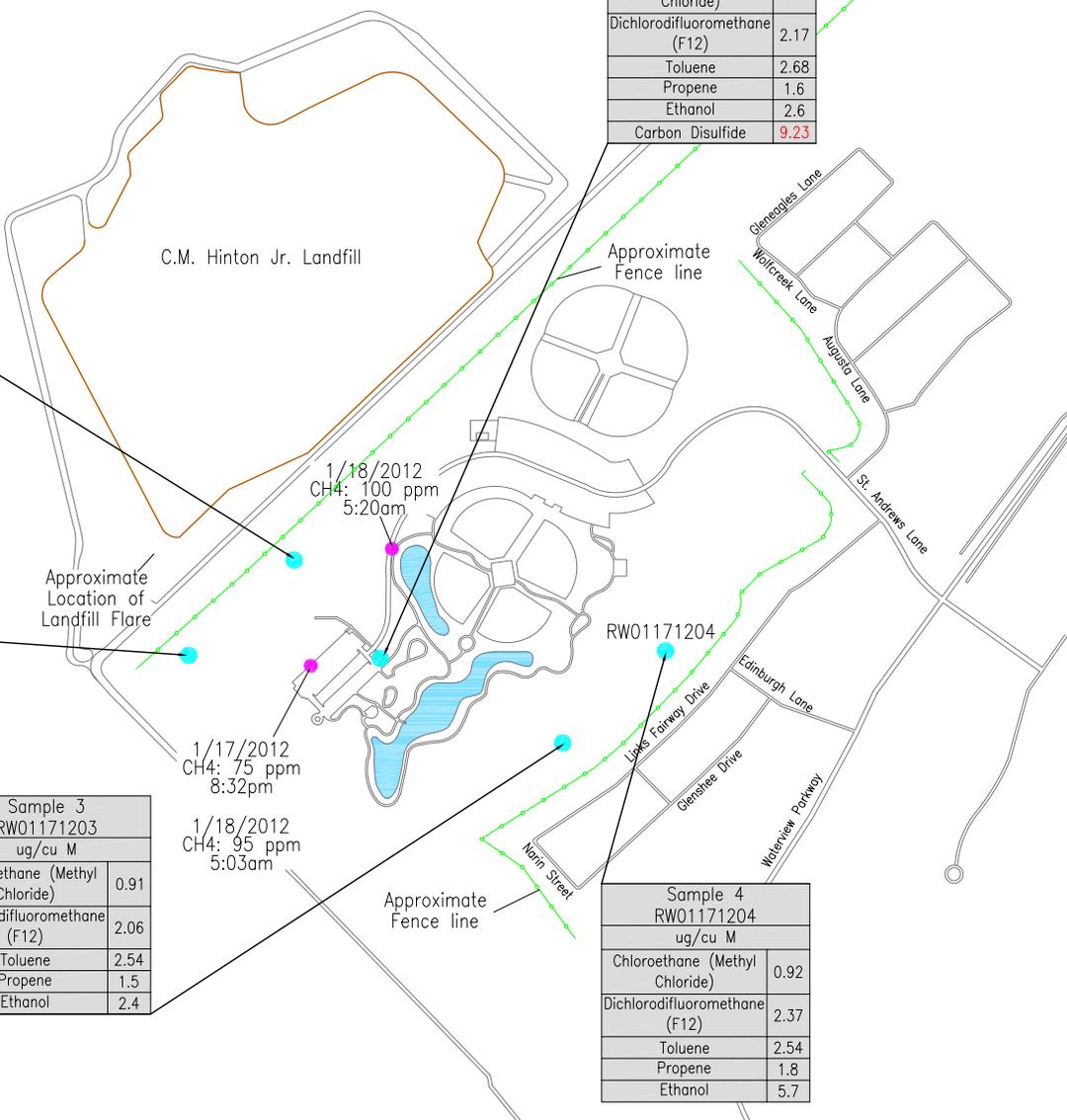
Sample 2 RW01171202	
ug/cu M	
Benzene	1.49
Chloroethane (Methyl Chloride)	0.73
Dichlorodifluoromethane (F12)	1.93
Tetrachloroethene (PCE)	2.09
Toluene	2.13
1,1,2-Trichloroethane	2.67
Trichloroethene (TCE)	134.3
Propene	1.5
Ethanol	2.4
Carbon Disulfide	15.9

Sample 5 RW01171205	
ug/cu M	
Benzene	1.23
Chloroethane (Methyl Chloride)	0.92
Dichlorodifluoromethane (F12)	2.17
Toluene	2.68
Propene	1.6
Ethanol	2.6
Carbon Disulfide	9.23

Sample 1 RW01171201	
ug/cu M	
Chloroethane (Methyl Chloride)	0.91
Dichlorodifluoromethane (F12)	2.18
Propene	1.9
Ethanol	6.3
Isopropanol	5.0
Carbon Disulfide	9.01

Sample 3 RW01171203	
ug/cu M	
Chloroethane (Methyl Chloride)	0.91
Dichlorodifluoromethane (F12)	2.06
Toluene	2.54
Propene	1.5
Ethanol	2.4

Sample 4 RW01171204	
ug/cu M	
Chloroethane (Methyl Chloride)	0.92
Dichlorodifluoromethane (F12)	2.37
Toluene	2.54
Propene	1.8
Ethanol	5.7



1/18/2012
CH4: 100 ppm
5:20am

1/17/2012
CH4: 75 ppm
8:32pm

1/18/2012
CH4: 95 ppm
5:03am

dse Dougherty Sprague Enterprises, Inc.
3902 Industrial Street, Suite A
Rowlett, Texas 75088

MANAGER	APP. DATE	FILE NAME
CWF		CAD\Drawing.dwg-FIG1
APPROX. SCALE	DRAWN	DATE PROJECT
1"=1000'	CMS	3/27/2012 1038001

0' 1000'

APPROXIMATE SCALE IN FEET

LEGEND

- Summa Sampler Location
- High Methane Reading Location
- Wind Direction

**2012 AIR MONITORING
EVENT 1
JANUARY 17-18, 2012**

City of Rowlett
C.M. Hinton Jr. Landfill Air Monitoring
Rowlett, Texas 75089

NEW SAMPLING EVENT 1: 1/17-18/2012

Sample ID	Downwind (Close to Landfill)	Downwind (Close to Landfill)	Downwind (Close to Residences)	Downwind (Close to Residences)	Downwind (In Park by Lift Station)	Upwind	TCEQ Short- Term ESL	TCEQ Long- Term ESL	TCEQ Short- Term Health AMCV	TCEQ Long- Term Health AMCV
	Sample 1 RW01171201	Sample 2 RW01171202	Sample 3 RW01171203	Sample 4 RW01171204	Sample 5 RW01171205	Sample 6 RW01171206	ug/cu M	ug/cu M	ug/cu M	ug/cu M
	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M
Benzene	ND	1.49	ND	ND	1.23	ND	170	4.5	180	1.4
Benzylchloride	ND	ND	ND	ND	ND	ND	50	5		
Bromomethane (Methyl Bromide)	ND	ND	ND	ND	ND	ND	120	12		
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	130	13		
Chlorobenzene	ND	ND	ND	ND	ND	ND	460	46		
Chloroethane (Ethyl Chloride)	ND	ND	ND	ND	ND	ND	500	50		
Chloroform	ND	ND	ND	ND	ND	ND	100	10		
Chloromethane (Methyl Chloride)	0.91	0.73	0.91	0.92	0.92	1.09	1030	103		
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	ND	4	0.4		
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	720	32		
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	720	32		
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	720	32		
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	4000	400		
1,1-Dichlorethene	ND	ND	ND	ND	ND	ND				
Dichlorodifluoromethane (F12)	2.18	1.93	2.06	2.37	2.17	2.50	50000	5000		
Dichlorotetrafluoroethane (F114)	ND	ND	ND	ND	ND	ND	70000	7000		
1,2-Dichloroethane (EDC)	ND	ND	ND	ND	ND	ND	160	4		
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND				
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	7930	793		
Dichloromethane (Methylene	ND	ND	ND	ND	ND	ND	3600	350		
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	460	46		
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	45	4.5		
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	45	4.5		
Ethylbenzene	ND	ND	ND	ND	ND	ND			20000	450
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	2	0.2		
Styrene	ND	ND	ND	ND	ND	ND	110	11		
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	70	7		
Tetrachloroethene (PCE)	ND	2.09	ND	ND	ND	ND	2000	110		
Toluene	ND	2.13	2.54	ND	2.68	2.25	640	1200	4000	1100
1,1,1-Trichloroethane (TCA)	ND	ND	ND	ND	ND	ND	2800	1500		
1,1,2-Trichloroethane	ND	2.67	ND	ND	ND	ND	550	55		
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND			250	25
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	ND			250	25
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	3.48	37000			
Trichloroethene (TCE)	ND	134.3	ND	ND	ND	ND	540	54		
Trichlorofluoromethane (F-11)	ND	ND	ND	ND	ND	ND	28000	2800		
Trichlorotrifluoroethane (F-113)	ND	ND	ND	ND	ND	ND	38000	3800		
Vinyl Chloride	ND	ND	ND	ND	ND	ND	20000	1.2		
m&p-Xylenes	ND	ND	ND	ND	ND	ND	180	180	1700	140
o-Xylene	ND	ND	ND	ND	ND	ND	1600	180	1700	140
Hydrogen Sulfide (H ₂ S)	ND	ND	ND	ND	ND	ND				
Propene	1.9	1.5	1.5	1.8	1.6	1.7	580000			
Ethanol	6.3	2.4	2.4	5.7	2.6	6.8	18800	1880		
Isopropanol	5.0	ND	ND	ND	ND	ND	4920	492		
Methyl Isobutyl Ketone	--	--	--	--	--	3.9	820	82		
Sulfur Dioxide	ND	ND	ND	ND	ND	ND				
Carbonyl Sulfide	ND	ND	ND	ND	ND	20.4	135	2.6		
Dimethyl Sulfide	ND	ND	ND	ND	ND	ND	3	14		
Dimethyl Disulfide	ND	ND	ND	ND	ND	ND	20	2		
Methyl ethyl Disulfide	ND	ND	ND	ND	ND	ND				
Methyl propyl Disulfide	ND	ND	ND	ND	ND	ND				
Butyl Mercaptan	ND	ND	ND	ND	ND	ND	2	1.4		
Isobutyl Mercaptan	ND	ND	ND	ND	ND	ND				
Ethyl Mercaptan	ND	ND	ND	ND	ND	ND	0.8	1.4		
Methyl Mercaptan	ND	ND	ND	ND	ND	ND	2	1.4		
Propyl Mercaptan	ND	ND	ND	ND	ND	ND	2	1.4		
Isopropyl Mercaptan	ND	ND	ND	ND	ND	ND	0.8	0.08		
tert-Butyl Mercaptan	ND	ND	ND	ND	ND	ND				
Diethyl Sulfide	ND	ND	ND	ND	ND	ND	16	14		
Diethyl Disulfide	ND	ND	ND	ND	ND	ND	20	14		
Dimethyl Trisulfide	ND	ND	ND	ND	ND	ND				
Carbon Disulfide	9.01	15.9	ND	ND	9.23	ND	30	3		

ESL Effects Screening Levels

AMCV Air Monitoring Comparison Value

RED Above one or more ESLs

ug/cu M micrograms per cubic meter

NOTES:

"Short-term" generally indicates a 1-hour averaging period.

"Long-term" indicates an annual averaging period.

TCEQ AMCVs are used to evaluate the potential for effects to occur as a result of exposure to concentrations of constituents in the air.

3.2: 2012 Sampling Event 2

Sample Dates:	January 28-29, 2012					
Samplers:	Charlotte Stockard, John Dougherty					
Wind Direction/Speed:	North, Max Speed: 4 mph					
Sample Locations:	Downwind (Close to Landfill)	Downwind (Close to Landfill)	Downwind (Close to Residences)	Downwind (Close to Residences)	Downwind (In park by Lift Station)	Upwind
Summa Samples Taken:	1	1	1	1	1	1
Summa Sample ID:	RW01281207	RW01281208	RW01281209	RW01281210	RW01281211	RW01281212
Latitude:	32.951704°	32.954129°	32.951381°	32.950105°	32.951097°	32.967252°
Longitude:	-96.546542°	-96.543634°	-96.537741°	-96.539169°	-96.543596°	-96.541433°

Sampling Event 2 was conducted from 8:30pm on Saturday, January 28 through 5:30am on Sunday, January 29, 2012. Six 8-hour flow controlled Summa canisters were used to collect the stationary samples. The Eagle 2 726-105-35 Multi-Gas Monitor was used to monitor real-time air conditions. See Table 2 and Figure 2 for lab results and sample locations.

Stationary Samples

The Summa samples taken downwind of the landfill (RW01281207, RW01281208, RW01281209, RW01281210, RW01281211) were located within Community Park. The following analytes were detected in the downwind Summa air samples:

- Benzene
- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Dichloromethane (Methylene Chloride)
- Ethylbenzene
- Toluene
- 1,2,4-Trimethylbenzene
- Trichlorofluoromethane (F-11)
- Vinyl Chloride
- m&p-Xylenes
- o-Xylene
- Propene
- Ethanol
- Isopropanol
- Acetone
- 2-Butanone
- Naphthalene
- 4-Ethyltoluene
- Cyclohexane
- Hexane

- Heptane
- C4 Hydrocarbons
- C5 Hydrocarbons
- 1-Methoxy-2-propyl Acetate
- Isobutane
- Acetaldehyde
- Carbon Disulfide

Of these, the following were found to be above one or more of the TCEQ Effects Screening Levels (ESLs):

- Benzene (above Long-Term ESL)
- m&p-Xylenes (above Short-Term and Long-Term ESLs)
- 1-Methoxy-2-propyl Acetate (above Long-Term ESL)
- Ethanol (above Long-Term ESL)

The Summa sample taken upwind of the landfill (RW01281212) was located in the parking lot of Cottonwood Church of Christ (Northeast of the landfill.) The following analytes were detected in the Summa air sample:

- Benzene
- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Toluene
- m&p-Xylenes
- Propene
- Ethanol
- Isopropanol
- Acetone
- Naphthalene

Of these, the following were found to be above one or more of the TCEQ Effects Screening Levels (ESLs):

- Ethanol (above Long-Term ESL)

Real-Time Air Monitoring

Real-time air monitoring was conducted throughout the night of January 28, 2012 and early morning of January 29, 2012, beginning at approximately 9:15pm and ending at approximately 5:45am. There was an almost constant reading of CH₄ throughout the park during the time of sampling. Readings ranged from 0 ppm to 510 ppm. The CH₄ levels generally followed the following pattern throughout the time of sampling:

- Entering Community Park along St. Andrews Lane: 0-15ppm.
- Softball fields parking area: 100-300ppm.
- Area near the pond, after flood gate: 250-500ppm.
- Near Lift Station: 75-150ppm.
- Back parking area by soccer fields (directly downwind of landfill flare): 100-200ppm.

- In residential area, along Links Fairway between St. Andrews Lane and Edinburgh Lane: 0-15ppm.
- In residential area, along Links Fairway between Edinburgh Land and Nairn Street: 25-55ppm, with a spikes up to 95ppm.



Sample 1 RW01281207 ug/cu M	
Benzene	2.59
Dichlorodifluoromethane (F12)	3.34
Dichloromethane (Methylene Chloride)	4.93
Ethylbenzene	2.8
Toluene	20.5
Trichlorofluoromethane (F-11)	4.68
Vinyl Chloride	0.77
m&p-Xylenes	7.15
o-Xylene	1.56
Propene	12.1
Ethanol	18.2
Isopropanol	3.09
Acetone	7.19
2-Butanone	4.77
Cyclohexane	3.01

Sample 5 RW01281211 ug/cu M	
Benzene	24.5
Chloromethane (Methyl Chloride)	0.83
Dichlorodifluoromethane (F12)	2.51
Ethylbenzene	10.20
Toluene	91.8
1,2,4-Trimethylbenzene	5.65
Trichlorofluoromethane (F-11)	1.9
M&p-Xylenes	191.0
o-Xylene	11.7
Propene	5.1
Ethanol	11.70
Isopropanol	2.5
Acetone	5.8
Naphthalene	6.90
4-Ethyltoluene	2.5

Sample 2 RW01281208 ug/cu M	
Benzene	3.06
Chloromethane (Methyl Chloride)	1.97
Dichlorodifluoromethane (F12)	4.07
Dichloromethane (Methylene Chloride)	8.5
Ethylbenzene	3.3
Toluene	30.1
Trichlorofluoromethane (F-11)	7.64
m&p-Xylenes	8.37
o-Xylene	2.13
Propene	13.9
Ethanol	27.7
Isopropanol	4.02
Acetone	7.66
2-Butanone	7.30
Cyclohexane	5.26
Hexane	6.01
Heptane	5.93
C4 Hydrocarbons	33.2
C5 Hydrocarbons	128

Sample 6 RW01281212 ug/cu M	
Benzene	3.41
Chloromethane (Methyl Chloride)	0.84
Dichlorodifluoromethane (F12)	2.26
Toluene	9.82
M&p-Xylenes	2.56
Propene	5.4
Ethanol	7.20
Isopropanol	1.80
Acetone	7.9
Naphthalene	12.0

Sample 3 RW01281209 ug/cu M	
Benzene	1.94
Chloromethane (Methyl Chloride)	1.05
Dichlorodifluoromethane (F12)	2.89
Dichloromethane (Methylene Chloride)	3.0
Ethylbenzene	2.0
Toluene	13.4
1,2,4-Trimethylbenzene	3.93
Trichlorofluoromethane (F-11)	3.26
m&p-Xylenes	3.77
Propene	8.2
Ethanol	9.4
Isopropanol	2.97
Acetone	6.29
2-Butanone	3.92
C4 Hydrocarbons	12.30
C5 Hydrocarbons	51.2
1-Methoxy-2-propyl acetate	51.3
Isobutane	15.4
Carbon Disulfide	2

Sample 4 RW01281210 ug/cu M	
Benzene	2.34
Chloromethane (Methyl Chloride)	0.88
Dichlorodifluoromethane (F12)	2.46
Toluene	5.38
Trichlorofluoromethane (F-11)	1.57
m&p-Xylenes	1.80
Propene	5.3
Ethanol	10.1
Isopropanol	2.2
Acetone	22.0
2-Butanone	4.03
Naphthalene	10.0
C4 Hydrocarbons	5.7
C5 Hydrocarbons	8.2
Isobutane	3.8
Acetaldehyde	3.6

C.M. Hinton Jr. Landfill

Approximate Location of Landfill Flare

Approximate Fence line

Approximate Fence line

1/29/12
CH4: 230ppm
5:40am

1/28/12
CH4: 135ppm
9:27pm

1/28/12
CH4: 370ppm
9:35pm

1/29/12
CH4: 510ppm
4:57am

1/28/12
CH4: 95ppm
11:58pm

dse Dougherty Sprague Enterprises, Inc.
3902 Industrial Street, Suite A
Rowlett, Texas 75088

MANAGER	APP. DATE	FILE NAME
CWF		CAD\Drawing.dwg-FIG2
APPROX. SCALE	DRAWN	DATE PROJECT
1"=1000'	CMS	3/27/2012 1038001

0' 1000'

APPROXIMATE SCALE IN FEET

LEGEND

- Summa Sampler Location
- High Methane Reading Location
- Wind Direction

**2012 AIR MONITORING
EVENT 2
JANUARY 28-29, 2012**

City of Rowlett
C.M. Hinton Jr. Landfill Air Monitoring
Rowlett, Texas 75089

NEW SAMPLING EVENT 2: 1/28-29/2012

Sample ID	Downwind (Close to Landfill)	Downwind (Close to Landfill)	Downwind (Close to Residences)	Downwind (Close to Residences)	Downwind (In Park by Lift Station)	Upwind	TCEQ Short- Term ESL	TCEQ Long- Term ESL	TCEQ Short- Term Health AMCV	TCEQ Long- Term Health AMCV
	Sample 1 RW01281207	Sample 2 RW01281208	Sample 3 RW01281209	Sample 4 RW01281210	Sample 5 RW01281211	Sample 6 RW01281212	ug/cu M	ug/cu M	ug/cu M	ug/cu M
	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M
Benzene	2.59	3.06	1.94	2.34	24.5	3.41	170	4.5	180	1.4
Benzylchloride	ND	ND	ND	ND	ND	ND	50	5		
Bromomethane (Methyl Bromide)	ND	ND	ND	ND	ND	ND	120	12		
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	130	13		
Chlorobenzene	ND	ND	ND	ND	ND	ND	460	46		
Chloroethane (Ethyl Chloride)	ND	ND	ND	ND	ND	ND	500	50		
Chloroform	ND	ND	ND	ND	ND	ND	100	10		
Chloromethane (Methyl Chloride)	ND	1.97	1.05	0.88	0.83	0.84	1030	103		
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	ND	4	0.4		
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	720	32		
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	720	32		
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	720	32		
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	4000	400		
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND				
Dichlorodifluoromethane (F12)	3.34	4.07	2.89	2.46	2.51	2.26	50000	5000		
Dichlorotetrafluoroethane (F114)	ND	ND	ND	ND	ND	ND	70000	7000		
1,2-Dichloroethane (EDC)	ND	ND	ND	ND	ND	ND	160	4		
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND				
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	7930	793		
Dichloromethane (Methylene chloride)	4.93	8.51	2.99	ND	ND	ND	3600	350		
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	460	46		
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	45	4.5		
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	45	4.5		
Ethylbenzene	2.78	3.28	1.96	ND	10.2	ND	550000		20000	450
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	2	0.2		
Styrene	ND	ND	ND	ND	ND	ND	110	11		
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	70	7		
Tetrachloroethene (PCE)	ND	ND	ND	ND	ND	ND	2000	110		
Toluene	20.5	30.1	13.4	5.38	91.8	9.82	640	1200	4000	1100
1,1,1-Trichloroethane (TCA)	ND	ND	ND	ND	ND	ND	2800	1500		
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	550	55		
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	ND			250	25
1,2,4-Trimethylbenzene	ND	ND	3.93	ND	5.65	ND	123000		250	25
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND				
Trichloroethene (TCE)	ND	ND	ND	ND	ND	ND				
Trichlorofluoromethane (F-11)	4.68	7.64	3.26	1.57	1.85	ND	28000	2800		
Trichlorotrifluoroethane (F-113)	ND	ND	ND	ND	ND	ND	38000	3800		
Vinyl Chloride	0.77	ND	ND	ND	ND	ND	20000	1.2		
m&p-Xylenes	7.15	8.37	3.77	1.80	191	2.56	180	180	1700	140
o-Xylene	1.56	2.13	ND	ND	11.7	ND	1600	180	1700	140
Hydrogen Sulfide (H ₂ S)	ND	ND	ND	ND	ND	ND				
Sulfur Dioxide	ND	ND	ND	ND	ND	ND				
Propene	12.1	13.9	8.2	5.3	5.1	5.4	580000			
Ethanol	18.2	27.7	9.4	10.1	11.7	7.2	135	2.6		
Isopropanol	3.09	4.02	2.97	2.2	2.5	1.8	4920	492		
Acetone	7.19	7.66	6.29	22.0	5.8	7.9	5900	590		
2-Butanone	4.77	7.30	3.92	4.03	--	--	1300	2600		
Naphthalene	--	--	--	10.0	6.9	12.0	440	50		
4-Ethyltoluene	--	--	--	--	2.5	--	1250	250		
Cyclohexane	3.01	5.26	--	--	--	--	3400	340		
Hexane	--	6.01	--	--	--	--	5300	200		
Heptane	--	5.93	--	--	--	--	3500	350		
C4 Hydrocarbons	--	33.20	12.3	5.7	--	--	1500000	90000		
C5 Hydrocarbons	--	128.00	51.2	8.2	--	--	1500000	90000		
1-Methoxy-2-propyl acetate	--	--	51.3	--	--	--	280	28		
Isobutane	--	--	15.4	3.8	--	--	4800	1900		
Acetaldehyde	--	--	--	3.6	--	--	90	9		
Carbon Disulfide	--	--	2.92	--	--	--	30	3		

ESL Effects Screening Levels

AMCV Air Monitoring Comparison Value

RED Above one or more ESLs

ug/cu M micrograms per cubic meter

NOTES:

"Short-term" generally indicates a 1-hour averaging period.

"Long-term" indicates an annual averaging period.

TCEQ AMCVs are used to evaluate the potential for effects to occur as a result of exposure to concentrations of constituents in the air.

3.3: 2012 Sampling Event 3

Sample Dates:	March 2-3, 2012							
Samplers:	Charlotte Stockard, John Selby							
Wind Direction/Speed:	North, Max Speed: 12 mph							
Sample Locations:	Downwind (Close to Landfill)	Downwind (Close to Landfill)	Downwind (By Lift Station in Park)	Downwind (Close to Wolfcreek Lane Residences)	Downwind (Close to Augusta Lane/St. Andrews Land Residences)	Downwind (Close to Links Fairway Residences)	Downwind (Close to Links Fairway Residences)	Upwind (Muddy Creek Preserve)
Summa Samples Taken:	1	1	1	1	1	1	1	1
Summa Sample ID:	RW03021201	RW03021202	RW03021203	RW03021204	RW03021205	RW03021206	RW03021207	RW03021208
Latitude:	32.951885	32.953399	32.950946	32.956745	32.954261	32.950815	32.949864	32.968225
Longitude:	-96.546332	-96.544507	-96.543516	-96.537870	-96.535618	-96.538346	-96.539496	-96.550174

Sampling Event 3 was conducted from 9:00pm on Friday, March 2, 2012 through 6:00am on Saturday, March 3, 2012. Eight 8-hour flow controlled Summa canisters were used to collect the stationary samples. The Eagle 2 726-105-35 Multi-Gas Monitor was used to monitor real-time air conditions. See Table 3 and Figure 3 for lab results and sample locations.

Stationary Samples

The Summa samples taken downwind of the landfill (RW03021201, RW03021202, RW03021203, RW03021204, RW03021205, RW03021206, RW03021207) were located within Community Park. The following analytes were detected in the downwind Summa air samples:

- Benzene
- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F-12)
- Dichloromethane (Methylene chloride)
- Ethylbenzene
- Styrene
- Toluene
- 1,3,5-Trimethylbenzene
- 1,2,4-Trimethylbenzene
- Trichloroethene (TCE)
- m&p-Xylenes
- o-Xylene
- Carbon Disulfide

Of these, the following were found to be above one or more of the TCEQ Effects Screening Levels (ESLs):

- Benzene (above Long-Term ESL)
- m&p-Xylenes (above Short-Term and Long-Term ESLs)
- Carbon Disulfide (above Long-Term ESL)

The Summa sample taken upwind of the landfill (RW03021208) was located in the parking lot of Muddy Creek Preserve, approximately 5,600 feet northeast of the landfill flare. The following analytes were detected in the Summa air sample:

- Benzene
- Chloromethane (Methyl Chloride)
- Dichlorodifluoromethane (F12)
- Toluene
- m&p-Xylenes
- Carbon Disulfide

Of these, the following were found to be above one or more of the TCEQ Effects Screening Levels (ESLs):

- Carbon Disulfide (above Long-Term ESL)

Real-Time Air Monitoring

Real-time air monitoring was conducted throughout the night of March 2, 2012 and early morning of March 3, 2012, beginning at approximately 9:00pm and ending at approximately 6:00am. The methane (CH₄) readings ranged from 0 ppm to 145 ppm. The CH₄ levels generally followed the following pattern throughout the time of sampling:

- Entering Community Park along St. Andrews Lane: 0-5 ppm.
- Area near the pond, after flood gate: 20-35 ppm.
- Back parking area by soccer fields (directly downwind of landfill flare): 25-115 ppm, with a spike up to 145 ppm.
- In residential area, along Links Fairway: 0-5 ppm.
- In residential area, Augusta Lane and Wolfcreek Lane: 0 ppm.

Sample 8 RW03021208	
ug/cu M	
Benzene	0.85
Dichlorodifluoromethane (F12)	2.00
Chloromethane (Methyl Chloride)	1.06
Toluene	3.01
M&p-Xylenes	1.14
Carbon Disulfide	22.9

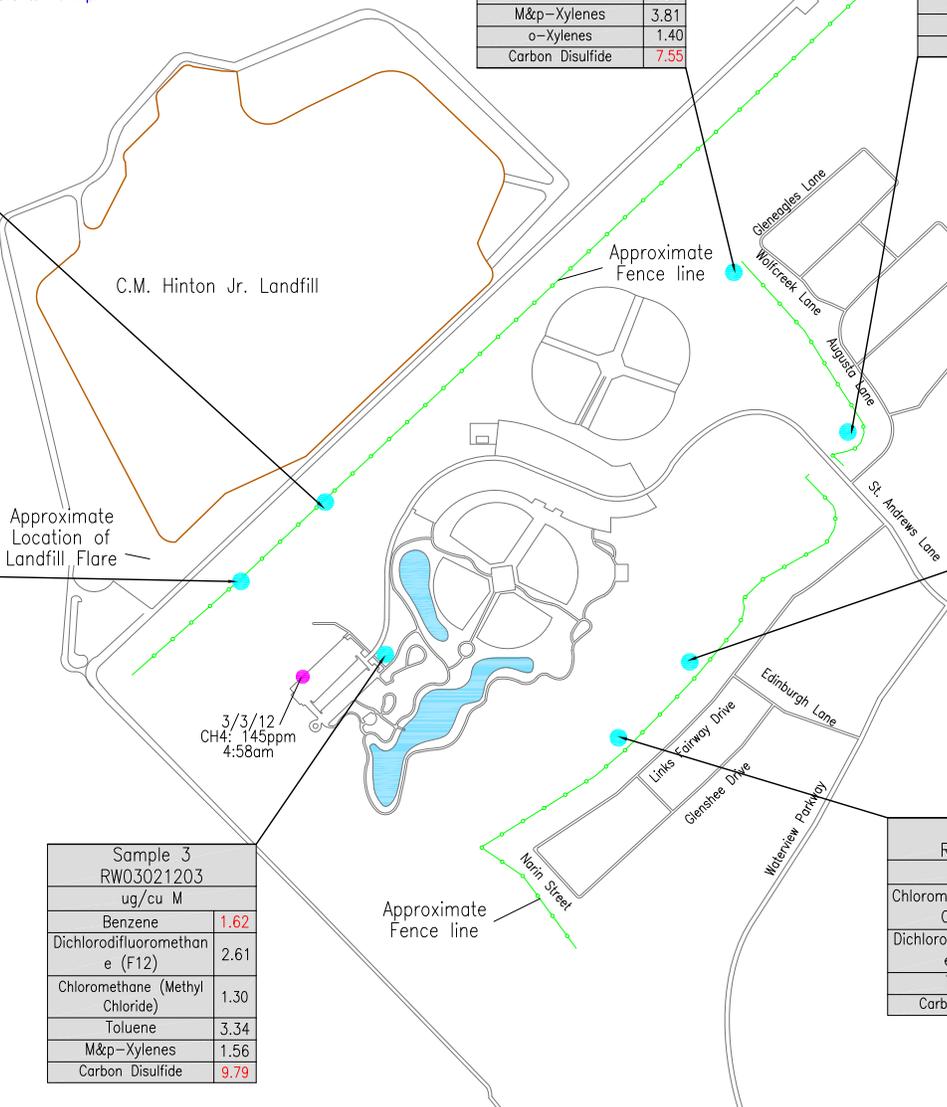
Sample 4 RW03021204	
ug/cu M	
Benzene	3.32
Chloromethane (Methyl Chloride)	1.29
Dichlorodifluoromethane (F12)	2.54
Toluene	4.06
M&p-Xylenes	3.81
o-Xylenes	1.40
Carbon Disulfide	7.55

Sample 5 RW03021205	
ug/cu M	
Chloromethane (Methyl Chloride)	1.12
Dichlorodifluoromethane (F12)	2.12
Toluene	2.48
Carbon Disulfide	2.44



Sample 2 RW03021202	
ug/cu M	
Benzene	24.6
Dichlorodifluoromethane (F12)	2.58
Dichloromethane (Methylene Chloride)	28.0
Ethylbenzene	3.21
Toluene	54.2
1,3,5-Trimethylbenzene	7.28
1,2,4-Trimethylbenzene	25.3
M&p-Xylenes	80.2
o-Xylenes	80.2
Carbon Disulfide	6.53

Sample 6 RW03021206	
ug/cu M	
Benzene	43.4
Chloromethane (Methyl Chloride)	1.06
Dichlorodifluoromethane (F12)	1.96
Ethylbenzene	28.6
Styrene	2.14
Toluene	247
1,3,5-Trimethylbenzene	26.20
1,2,4-Trimethylbenzene	96.8
Trichloroethane (TCE)	1.76
M&p-Xylenes	216
o-Xylenes	61.1
Carbon Disulfide	20.5



Sample 1 RW03021201	
ug/cu M	
Benzene	19.4
Chloromethane (Methyl Chloride)	1.85
Dichlorodifluoromethane (F12)	2.52
Ethylbenzene	10.6
Styrene	1.22
Toluene	141
1,3,5-Trimethylbenzene	7.28
1,2,4-Trimethylbenzene	25.3
M&p-Xylenes	80.2
o-Xylenes	80.2
Carbon Disulfide	10.4

Sample 3 RW03021203	
ug/cu M	
Benzene	1.62
Dichlorodifluoromethane (F12)	2.61
Chloromethane (Methyl Chloride)	1.30
Toluene	3.34
M&p-Xylenes	1.56
Carbon Disulfide	9.79

Sample 7 RW03021207	
ug/cu M	
Chloromethane (Methyl Chloride)	0.93
Dichlorodifluoromethane (F12)	1.87
Toluene	2.04
Carbon Disulfide	1.58

3/3/12
CH4: 145ppm
4:58am

dse Dougherty Sprague Enterprises, Inc.
3902 Industrial Street, Suite A
Rowlett, Texas 75088

MANAGER	APP. DATE	FILE NAME
CWF		CAD\Drawing.dwg-FIG3
APPROX. SCALE	DRAWN	DATE
1"=1000'	CMS	3/27/2012
PROJECT	1038001	

0' 1000'

APPROXIMATE SCALE IN FEET

LEGEND

- Summa Sampler Location
- High Methane Reading Location
- Wind Direction

**2012 AIR MONITORING
EVENT 3
MARCH 2-3, 2012**

City of Rowlett
C.M. Hinton Jr. Landfill Air Monitoring
Rowlett, Texas 75089

NEW SAMPLING EVENT 3: 3/2-3/2012

Sample ID	Downwind (Landfill West)	Downwind (Landfill East)	Downwind (Lift Station)	Downwind (Golf Course- Wolfcreek Lane)	Downwind (Golf Course- Augusta Lane)	Downwind (Golf Course- Southeast)	Downwind (Golf Course- Southwest)	Upwind	TCEQ Short- Term ESL	TCEQ Long- Term ESL	TCEQ Short- Term Health AMCV	TCEQ Long- Term Health AMCV
	Sample 1 RW03021201	Sample 2 RW03021202	Sample 3 RW03021203	Sample 4 RW03021204	Sample 5 RW03021205	Sample 6 RW03021206	Sample 7 RW03021207	Sample 8 RW03021208				
	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M	ug/cu M
Benzene	19.4	24.6	1.62	3.32	ND	43.4	ND	0.85	170	4.5	180	1.4
Benzylchloride	ND	ND	ND	ND	ND	ND	ND	ND	50	5		
Bromomethane (Methyl Bromide)	ND	ND	ND	ND	ND	ND	ND	ND	120	12		
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	130	13		
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	460	46		
Chloroethane (Ethyl Chloride)	ND	ND	ND	ND	ND	ND	ND	ND	500	50		
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	100	10		
Chloromethane (Methyl Chloride)	1.85	ND	1.30	1.29	1.12	1.06	0.93	1.06	1030	103		
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	ND	ND	ND	4	0.4		
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	720	32		
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	720	32		
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	720	32		
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	4000	400		
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND				
Dichlorodifluoromethane (F12)	2.52	2.58	2.61	2.54	2.12	1.96	1.87	2.00	50000	5000		
Dichlorotetrafluoroethane (F114)	ND	ND	ND	ND	ND	ND	ND	ND	70000	7000		
1,2-Dichloroethane (EDC)	ND	ND	ND	ND	ND	ND	ND	ND	160	4		
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND				
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	7930	793		
Dichloromethane (Methylene chloride)	ND	28.0	ND	ND	ND	ND	ND	ND	3600	350		
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	460	46		
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	45	4.5		
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	45	4.5		
Ethylbenzene	10.6	3.21	ND	ND	ND	28.6	ND	ND	550000		20000	450
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	2	0.2		
Styrene	1.22	ND	ND	ND	ND	2.14	ND	ND	110	11		
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	70	7		
Tetrachloroethene (PCE)	ND	ND	ND	ND	ND	ND	ND	ND	2000	110		
Toluene	141	54.2	3.34	4.06	2.48	247	2.04	3.01	640	1200	4000	1100
1,1,1-Trichloroethane (TCA)	ND	ND	ND	ND	ND	ND	ND	ND	2800	1500		
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	550	55		
1,3,5-Trimethylbenzene	7.28	ND	ND	ND	ND	26.2	ND	ND	1250	125	250	25
1,2,4-Trimethylbenzene	25.3	4.33	ND	ND	ND	96.8	ND	ND	123000		250	25
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	37000			
Trichloroethene (TCE)	ND	ND	ND	ND	ND	1.76	ND	ND	540	54		
Trichlorofluoromethane (F-11)	ND	ND	ND	ND	ND	ND	ND	ND	28000	2800		
Trichlorotrifluoroethane (F-113)	ND	ND	ND	ND	ND	ND	ND	ND	38000	3800		
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	20000	1.2		
m&p-Xylenes	80.2	18.0	1.56	3.81	ND	216	ND	1.14	180	180	1700	140
o-Xylene	23.1	4.24	ND	1.40	ND	61.1	ND	ND	1600	180	1700	140
Carbon Disulfide	10.4	6.53	9.79	7.55	2.44	20.5	1.58	22.9	30	3		

ESL Effects Screening Levels
AMCV Air Monitoring Comparison Value

RED Above one or more ESLs
ug/cu M micrograms per cubic meter

NOTES:

"Short-term" generally indicates a 1-hour averaging period.

"Long-term" indicates an annual averaging period.

TCEQ AMCVs are used to evaluate the potential for effects to occur as a result of exposure to concentrations of constituents in the air.

4.0 SUMMARY RESULTS

Detections: 2010-2011
Detections: 2012

DETECTIONS 2010-2011							
Sampling Event	Sample ID	Chemical	Detected Concentration (ppbv)	Short-Term ESL (ppbv)	Long-Term ESL (ppbv)	ESL Basis Short-Term	ESL Basis Long-term
Event 1	RW1212101 (Downwind)	Benzene	1.94	54	1.4	Health	Health
		Chloromethane	0.92	500	50	Health	Health
		Dichlorodifluoromethane	0.65	10000	1000	Health	Health
		Ethylbenzene	0.84	170	135	Odor	Health
		Toluene	4.23	170	330	Odor	Health
		1,3,5 Trimethylbenzene	0.67	250	25	Health	Health
		1,2,4 Trimethylbenzene	0.47	-	-	-	-
		Trichlorofluoromethane	0.28	5000	500	Health	Health
		m&p-Xylenes	3.12	80	42	Odor	Health
		o-Xylene	1.2	380	42	Odor	Health
Event 2	RW1212102 (Buffer Zone)	Benzene	16.1	54	1.4	Health	Health
		Chloromethane	0.98	500	50	Health	Health
		Dichlorodifluoromethane	0.67	10000	1000	Health	Health
		Ethylbenzene	15.6	170	135	Odor	Health
		Toluene	50.8	170	330	Odor	Health
		1,3,5 Trimethylbenzene	6.89	250	25	Health	Health
		1,2,4 Trimethylbenzene	3.45	-	-	-	-
		Trichlorofluoromethane	0.31	5000	500	Health	Health
		m&p-Xylenes	258	80	42	Odor	Health
		o-Xylene	12	380	42	Odor	Health
Event 3	RW03101105 (Downwind)	Benzene	1.09	54	1.4	Health	Health
		Chloromethane	1.11	500	50	Health	Health
		Dichlorodifluoromethane	0.65	10000	1000	Health	Health
		Dichloromethane	0.27	75	7.5	Health	Health
		Ethylbenzene	0.29	170	135	Odor	Health
		Toluene	2	170	330	Odor	Health
		Trichlorofluoromethane	0.3	5000	500	Health	Health
		m&p-Xylenes	1.2	80	42	Odor	Health
		o-Xylene	0.35	380	42	Odor	Health
		Event 4	RW03311108 (Downwind)	Benzene	1.39	54	1.4
Chloromethane	0.59			500	50	Health	Health
Dichlorodifluoromethane	0.57			10000	1000	Health	Health
Ethylbenzene	0.44			170	135	Odor	Health
Toluene	2.6			170	330	Odor	Health
m&p-Xylenes	1.2			80	42	Odor	Health
Event 5	RW04161109 (Downwind)	Benzene	3.32	54	1.4	Health	Health
		Chloromethane	0.53	500	50	Health	Health
		Dichlorodifluoromethane	0.56	10000	1000	Health	Health
		Toluene	1.7	170	330	Odor	Health
		Trichlorofluoromethane	0.31	5000	500	Health	Health
Event 6	RW05141112 (Downwind)	Benzene	9.56	54	1.4	Health	Health
		Ethylbenzene	1.57	170	135	Odor	Health
		Toluene	5.9	170	330	Odor	Health
		m&p-Xylenes	2.7	80	42	Odor	Health
Event 6	RW05141112 (Downwind)	Chloromethane	0.55	500	50	Health	Health
		Dichlorodifluoromethane	0.49	10000	1000	Health	Health

ppbv Parts per billion by volume
ESL TCEQ Effects Screening Level

DETECTIONS 2012						
EVENT 1						
Sample ID	Chemical	Detected Concentration (ug/cu M)	Short-Term ESL (ug/cu M)	Long-Term ESL (ug/ cu M)	ESL Basis Short-Term	ESL Basis Long-term
RW01171201 (Downwind, close to landfill)	Chloromethane	0.91	1030	103	Health	Health
	Dichlorodifluoromethane	2.18	50000	5000	Health	Health
	Propene	1.9	-	-	-	-
	Ethanol	6.3	-	-	-	-
	Isopropanol	5.0	4920	492	Health	Health
	Carbon Disulfide	9.01	30	3	Health	Health
RW01171202 (Downwind, close to landfill)	Benzene	1.49	170	4.5	Health	Health
	Chloromethane	0.91	1030	103	Health	Health
	Dichlorodifluoromethane	1.93	50000	5000	Health	Health
	Tetrachloroethene (PCE)	2.09	2000	26	Health	Health
	Toluene	2.13	640	1200	Odor	Health
	1,1,2-Trichloroethane	2.67	550	55	Health	Health
	Trichloroethene (TCE)	134.3	540	54	Health	Health
	Propene	1.5	-	-	-	-
	Ethanol	2.4	-	-	-	-
Carbon Disulfide	15.9	30	3	Health	Health	
RW01171203 (Downwind, close to residences)	Chloromethane	0.91	1030	103	Health	Health
	Dichlorodifluoromethane	2.06	50000	5000	Health	Health
	Toluene	2.54	640	1200	Odor	Health
	Propene	1.5	-	-	-	-
	Ethanol	2.4	-	-	-	-
RW01171204 (Downwind, close to residences)	Chloromethane	0.92	1030	103	Health	Health
	Dichlorodifluoromethane	2.37	50000	5000	Health	Health
	Propene	1.8	-	-	-	-
	Ethanol	5.7	-	-	-	-
RW01171205 (Downwind, close to residences)	Benzene	1.23	170	4.5	Health	Health
	Chloromethane	0.92	1030	103	Health	Health
	Dichlorodifluoromethane	2.17	50000	5000	Health	Health
	Toluene	2.68	640	1200	Odor	Health
	Propene	1.6	-	-	-	-
	Ethanol	2.6	-	-	-	-
	Carbon Disulfide	9.23	30	3	Health	Health
RW01171206 (Upwind)	Chloromethane	1.09	1030	103	Health	Health
	Dichlorodifluoromethane	2.5	50000	5000	Health	Health
	Toluene	2.25	640	1200	Odor	Health
	1,2,4-Trichlorobenzene	3.48	400	40	Health	Health
	Propene	1.7	-	-	-	-
	Ethanol	6.8	-	-	-	-
	Methyl Isobutyl Ketone	3.9	820	82	Health	Health
	Carbonyl Sulfide	20.4	135	2.6	Odor	Health

micrograms per cubic meter

TCEQ Effects Screening Level

DETECTIONS 2012

EVENT 2

Sample ID	Chemical	Detected Concentration (ug/cu M)	Short-Term ESL (ug/cu M)	Long-Term ESL (ug/ cu M)	ESL Basis Short-Term	ESL Basis Long-term
RW01281207 (Downwind, close to landfill)	Benzene	2.59	170	4.5	Health	Health
	Dichlorodifluoromethane	3.34	50000	5000	Health	Health
	Dichloromethane	4.93	3600	350	Health	Health
	Ethylbenzene	2.78	740	570	Odor	Health
	Toluene	20.5	640	1200	Odor	Health
	Trichlorofluoromethane (F-11)	4.68	28000	2800	Odor	Health
	Vinyl Chloride	0.77	20000	1.2	Health	Health
	m&p-Xylenes	7.15	180	180	Odor	Health
	o-Xylene	1.56	1600	180	Odor	Health
	Propene	12.1	-	-	-	-
	Ethanol	18.2	-	-	-	-
	Isopropanol	3.1	4920	492	Health	Health
	Acetone	7.2	5900	590	Health	Health
	2-Butanone	4.8	1300	2600	Odor	Health
Cyclohexane	3.0	3400	340	Health	Health	
RW01281208 (Downwind, close to landfill)	Benzene	3.06	170	4.5	Health	Health
	Chloromethane	1.97	1030	103	Health	Health
	Dichlorodifluoromethane	4.07	50000	5000	Health	Health
	Dichloromethane	8.51	3600	350	Health	Health
	Ethylbenzene	3.28	740	570	Odor	Health
	Toluene	30.1	640	1200	Odor	Health
	Trichlorofluoromethane (F-11)	7.64	28000	2800	Odor	Health
	m&p-Xylenes	8.37	180	180	Odor	Health
	o-Xylene	2.13	1600	180	Odor	Health
	Propene	13.9	--	--	--	--
	Ethanol	27.7	--	--	--	--
	Isopropanol	4.02	4920	492	Health	Health
	Acetone	7.66	5900	590	Health	Health
	2-Butanone	7.3	1300	2600	Odor	Health
	Cyclohexane	5.26	3400	340	Health	Health
	Hexane	6.01	5300	200	Odor	Health
	Heptane	5.93	3500	350	Health	Health
	C4 Hydrocarbons	33.2	--	--	--	--
C5 Hydrocarbons	128	--	--	--	--	
RW01281209 (Downwind, close to residences)	Benzene	1.94	170	4.5	Health	Health
	Chloromethane	1.05	1030	103	Health	Health
	Dichlorodifluoromethane (F12)	2.89	50000	5000	Health	Health
	Dichloromethane	2.99	3600	350	Health	Health
	Ethylbenzene	1.96	740	570	Odor	Health
	Toluene	13.4	640	1200	Odor	Health
	1,2,4-Trimethylbenzene	3.93	1250	125	Health	Health
	Trichlorofluoromethane (F-11)	3.26	28000	2800	Odor	Health
	m&p-Xylenes	3.77	180	180	Odor	Health
	Propene	8.2	--	--	--	--
	Ethanol	9.4	--	--	--	--
	Isopropanol	2.97	4920	492	Health	Health
	Acetone	6.29	5900	590	Health	Health
	2-Butanone	3.92	1300	2600	Odor	Health
	C4 Hydrocarbons	12.3	--	--	--	--
	C5 Hydrocarbons	51.2	--	--	--	--
	1-Methoxy-2-Propyl Acetate	51.3	280	28	Health	Health
	Isobutane	15.4	4800	1900	Odor	Health
	Carbon Disulfide	2.92	30	3	Health	Health

DETECTIONS 2012

EVENT 2

Sample ID	Chemical	Detected Concentration (ug/cu M)	Short-Term ESL (ug/cu M)	Long-Term ESL (ug/ cu M)	ESL Basis Short-Term	ESL Basis Long-term
RW01281210 (Downwind, close to residences)	Benzene	2.34	170	4.5	Health	Health
	Chloromethane	0.88	1030	103	Health	Health
	Dichlorodifluoromethane	2.46	50000	5000	Health	Health
	Toluene	5.38	640	1200	Odor	Health
	Trichlorofluoromethane (F-11)	1.57	28000	2800	Odor	Health
	m&p-Xylenes	1.8	180	180	Odor	Health
	Propene	5.3	--	--	--	--
	Ethanol	10.1	--	--	--	--
	Isopropanol	2.2	4920	492	Health	Health
	Acetone	22	5900	590	Health	Health
	2-Butanone	4.03	1300	2600	Odor	Health
	Napthalene	10	440	50	Odor	Health
	C4 Hydrocarbons	5.7	--	--	--	--
	C5 Hydrocarbons	8.2	--	--	--	--
	Isobutane	3.8	4800	1900	Odor	Health
Acetaldehyde	3.6	90	45	Odor	Health	
RW01281211 (Downwind, In Park by Lift Stations)	Benzene	24.5	170	4.5	Health	Health
	Chloromethane	0.83	1030	103	Health	Health
	Dichlorodifluoromethane	2.51	50000	5000	Health	Health
	Ethylbenzene	10.2	740	570	Odor	Health
	Toluene	91.8	640	1200	Odor	Health
	1,2,4-Trimethylbenzene	5.65	1250	125	Health	Health
	Trichlorofluoromethane (F-11)	1.85	28000	2800	Odor	Health
	m&p-Xylenes	191	180	180	Odor	Health
	o-Xylene	11.7	1600	180	Odor	Health
	Propene	5.1	--	--	--	--
	Ethanol	11.7	--	--	--	--
	Isopropanol	2.5	4920	492	Health	Health
	Acetone	5.8	5900	590	Health	Health
	Napthalene	6.9	440	50	Odor	Health
	4-Ethyltoluene	2.5	1250	250	Health	Health
RW01281212 (Upwind)	Benzene	3.41	170	4.5	Health	Health
	Chloromethane	0.84	1030	103	Health	Health
	Dichlorodifluoromethane	2.26	50000	5000	Health	Health
	Toluene	9.82	640	1200	Odor	Health
	m&p-Xylenes	2.56	180	180	Odor	Health
	Propene	5.4	--	--	--	--
	Ethanol	7.2	--	--	--	--
	Isopropanol	1.8	4920	492	Health	Health
	Acetone	7.9	5900	590	Health	Health
	Napthalene	12	440	50	Odor	Health

ug/cu M
ESL

micrograms per cubic meter
TCEQ Effects Screening Level

DETECTIONS 2012

EVENT 3

Sample ID	Chemical	Detected Concentration (ug/cu M)	Short-Term ESL (ug/cu M)	Long-Term ESL (ug/ cu M)	ESL Basis Short-Term	ESL Basis Long-term
RW03021201 (Downwind - Landfill West)	Benzene	19.4	170	4.5	Health	Health
	Chloromethane	1.85	1030	103	Health	Health
	Dichlorodifluoromethane	2.52	50000	5000	Health	Health
	Ethylbenzene	10.6	740	570	Odor	Health
	Styrene	1.22	110	11	Health	Health
	Toluene	141	640	1200	Odor	Health
	1,3,5-Trimethylbenzene	7.28	1250	125	Health	Health
	1,2,4-Trimethylbenzene	25.3	1250	125	Health	Health
	m&p-Xylenes	80.2	180	180	Odor	Health
	o-Xylene	23.1	1600	180	Odor	Health
	Carbon Disulfide	10.4	30	3	Health	Health
RW03021202 (Downwind - Landfill East)	Benzene	24.6	170	4.5	Health	Health
	Dichlorodifluoromethane	2.58	50000	5000	Health	Health
	Dichloromethane	28	3600	350	Health	Health
	Ethylbenzene	3.21	740	570	Odor	Health
	Toluene	54.2	640	1200	Odor	Health
	1,2,4-Trimethylbenzene	4.33	1250	125	Health	Health
	m&p-Xylenes	18	180	180	Odor	Health
	o-Xylene	4.24	1600	180	Odor	Health
	Carbon Disulfide	6.53	30	3	Health	Health
	RW03021203 (Downwind - Lift Station)	Benzene	1.62	170	4.5	Health
Chloromethane		1.3	1030	103	Health	Health
Dichlorodifluoromethane		2.61	50000	5000	Health	Health
Toluene		3.34	640	1200	Odor	Health
m&p-Xylenes		1.56	180	180	Odor	Health
Carbon Disulfide		9.79	30	3	Health	Health
RW03021204 (Downwind - Golf Course Wolfcreek Lane)	Benzene	3.32	170	4.5	Health	Health
	Chloromethane	1.29	1030	103	Health	Health
	Dichlorodifluoromethane	2.54	50000	5000	Health	Health
	Toluene	4.06	640	1200	Odor	Health
	m&p-Xylenes	3.81	180	180	Odor	Health
	o-Xylene	1.4	1600	180	Odor	Health
	Carbon Disulfide	7.55	30	3	Health	Health
RW03021205 (Downwind - Golf Course Augusta Lane)	Chloromethane	1.12	1030	103	Health	Health
	Dichlorodifluoromethane	2.12	50000	5000	Health	Health
	Toluene	2.48	640	1200	Odor	Health
	Carbon Disulfide	2.44	30	3	Health	Health
RW03021206 (Downwind - Golf Course Southeast)	Benzene	43.4	170	4.5	Health	Health
	Chloromethane	1.06	1030	103	Health	Health
	Dichlorodifluoromethane	1.96	50000	5000	Health	Health
	Ethylbenzene	28.6	740	570	Odor	Health
	Styrene	2.14	110	11	Health	Health
	Toluene	247	640	1200	Odor	Health
	1,3,5-Trimethylbenzene	26.2	1250	125	Health	Health
	1,2,4-Trimethylbenzene	96.8	1250	125	Health	Health
	Trichloroethene (TCE)	1.76	540	54	Health	Health
	m&p-Xylenes	216	180	180	Odor	Health
	o-Xylene	61.1	1600	180	Odor	Health
	Carbon Disulfide	20.5	30	3	Health	Health
	RW03021207 (Downwind - Golf Course Southwest)	Chloromethane	0.93	1030	103	Health
Dichlorodifluoromethane		1.87	50000	5000	Health	Health
Toluene		2.04	640	1200	Odor	Health
Carbon Disulfide		1.58	30	3	Health	Health
RW03021208 (Upwind)	Benzene	0.85	170	4.5	Health	Health
	Chloromethane	1.06	1030	103	Health	Health
	Dichlorodifluoromethane	2	50000	5000	Health	Health
	Toluene	3.01	640	1200	Odor	Health
	m&p-Xylenes	1.14	180	180	Odor	Health
	Carbon Disulfide	22.9	30	3	Health	Health

ug/cu M
ESL

micrograms per cubic meter
TCEQ Effects Screening Level

5.0 GENERAL CONCLUSIONS

As noted in the Rowlett City Council meeting on November 20, 2012, based on the data collected and normal weather conditions during the year, the overall testing results did not exceed the long-term effects screening levels consistently.

6.0 RECOMMENDATIONS

This limited study has shown effects to be at or above the TCEQ ESL's during various times during the sampling/monitoring events. A more comprehensive study and modeling of the air concentrations of contaminants would be required to establish overall risk to the residents and community than is provided by this study. Additional recommendations are listed below.

- Coordinate with City of Garland to identify possible sources of airborne analytes.
- Modeling of data to determine effects of wind direction, speed and temperature on emissions and concentrations
- Conduct additional monitoring to determine additive effects and proper functioning of the lift stations and wastewater treatment in Community Park
- Conduct a more comprehensive long-term survey in residential area and buffer zone to determine overall exposure to residents and community.
- Check operation and function of the flare to verify proper operation and contaminant destruction meets permit requirements.
- Conduct risk assessment activities in the residential area to quantify and determine overall risk to residents and community.

7.0 REFERENCES

TCEQ; Toxicology Section, Chief Engineer's Office; November 2006 (updated December 29, 2010). "Guidelines to Develop Effects Screening Levels, Reference Values, and Unit Risk Factors", RG-442.

Texas Commission on Environmental Quality (TCEQ) Short-Term and Long-Term Effects Screening Levels (ESLs) as published, "December 2010 Effects Screening Levels, December 29, 2010."

Texas Commission on Environmental Quality (TCEQ) Short-Term and Long-Term Effects Screening Levels (ESLs) as published, "July 2011 Effects Screening Levels, July 29, 2011."

Texas Commission on Environmental Quality (TCEQ) Yearly Summary for Dallas Hinton Street Automated Gas Chromatograph (AutoGC) Location. http://www.tceq.state.tx.us/cgi-bin/compliance/monops/agc_yearly_summary.pl

Aerial photographs obtained from GoogleEarth Mapping Service, dated December 4, 2009, March 31, 2011 and August 2, 2012.

8.0 APPENDICES

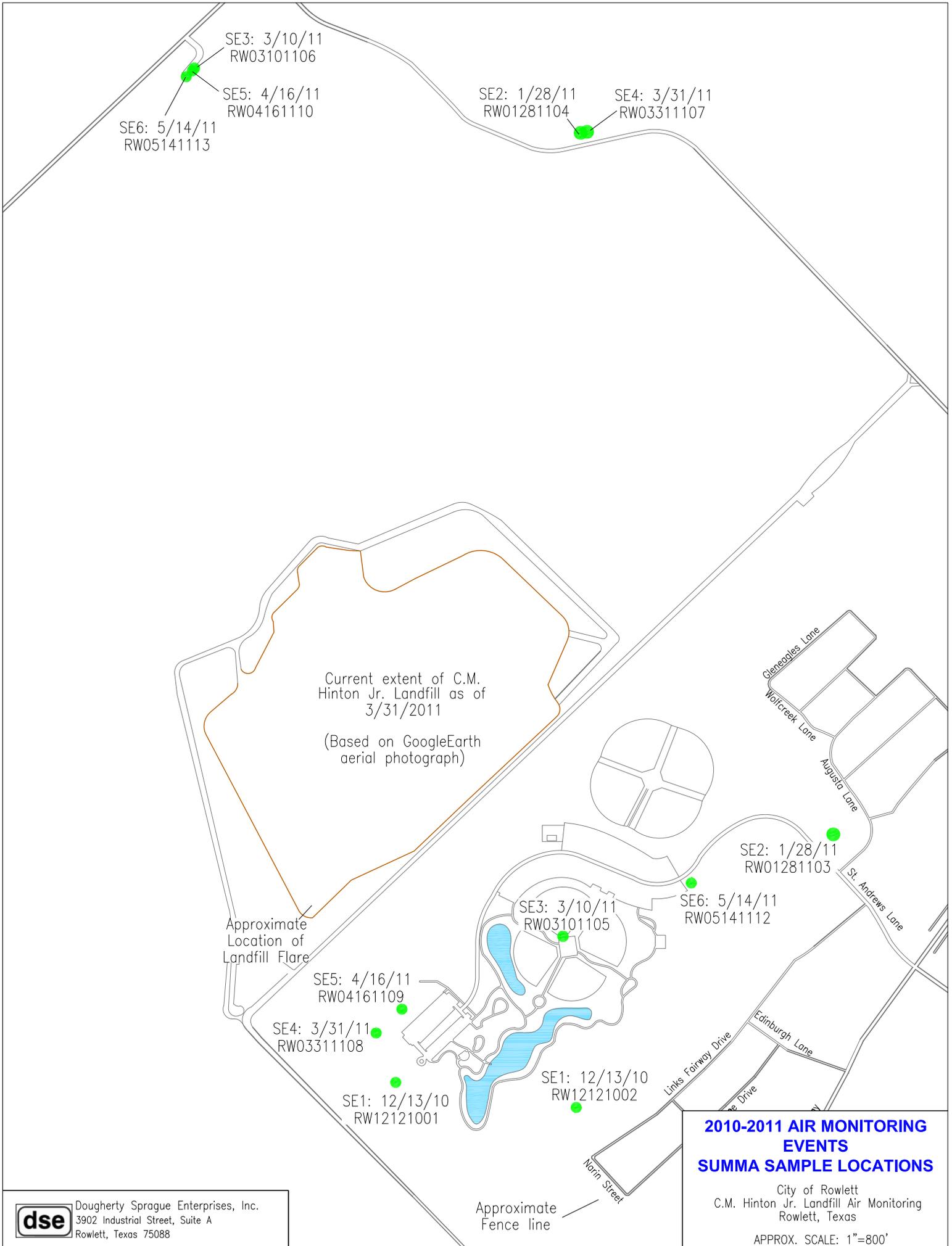
Tables and Charts

All Sample Locations, 2010-2011

All Sample Locations, 2012

All High Methane Readings, 2010-2011

All High Methane Readings, 2012



Current extent of C.M. Hinton Jr. Landfill as of 3/31/2011
(Based on GoogleEarth aerial photograph)

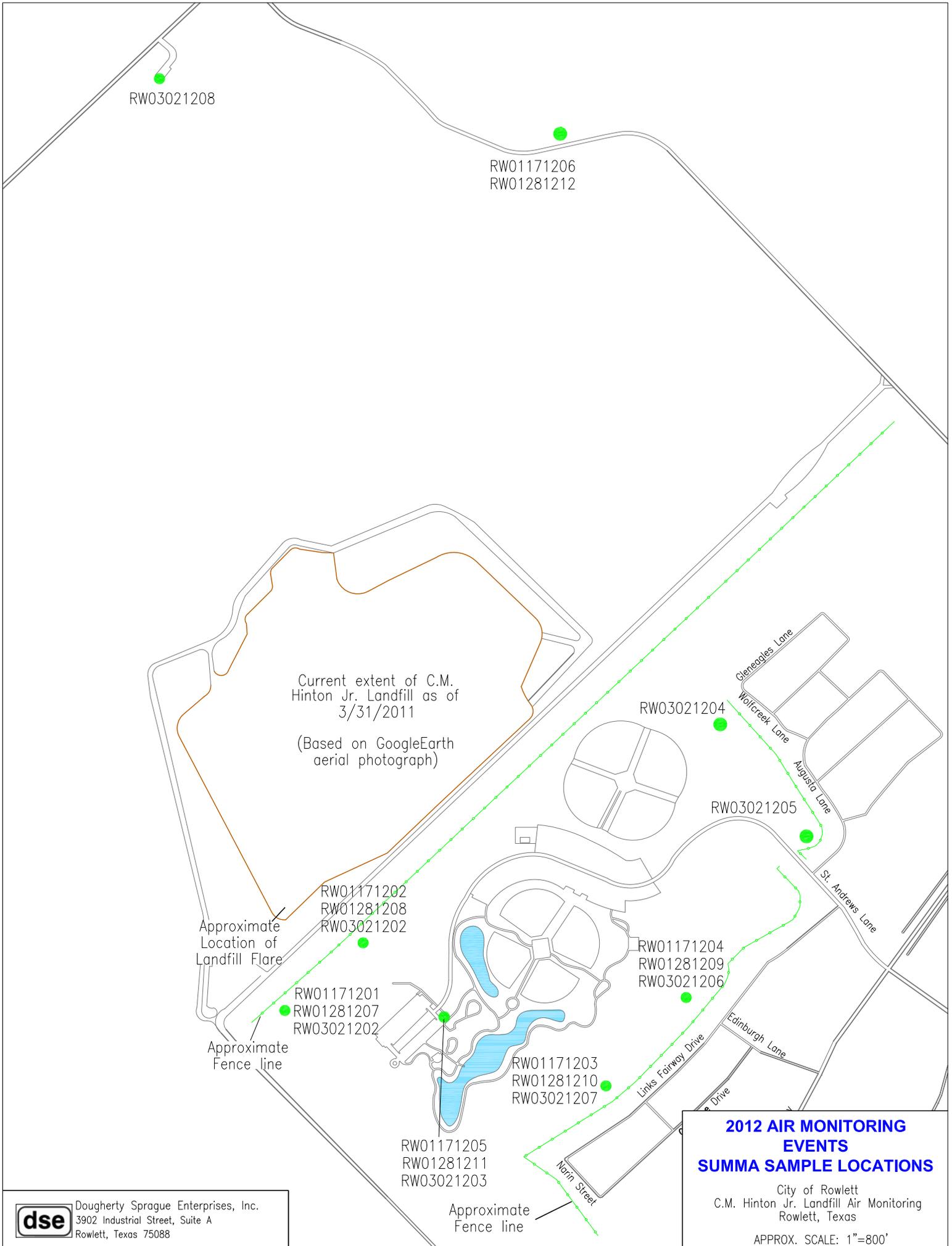
Approximate Location of Landfill Flare

Approximate Fence line

**2010-2011 AIR MONITORING EVENTS
SUMMA SAMPLE LOCATIONS**

City of Rowlett
C.M. Hinton Jr. Landfill Air Monitoring
Rowlett, Texas

APPROX. SCALE: 1"=800'



Current extent of C.M. Hinton Jr. Landfill as of 3/31/2011
 (Based on GoogleEarth aerial photograph)

Approximate Location of Landfill Flare

Approximate Fence line

Approximate Fence line

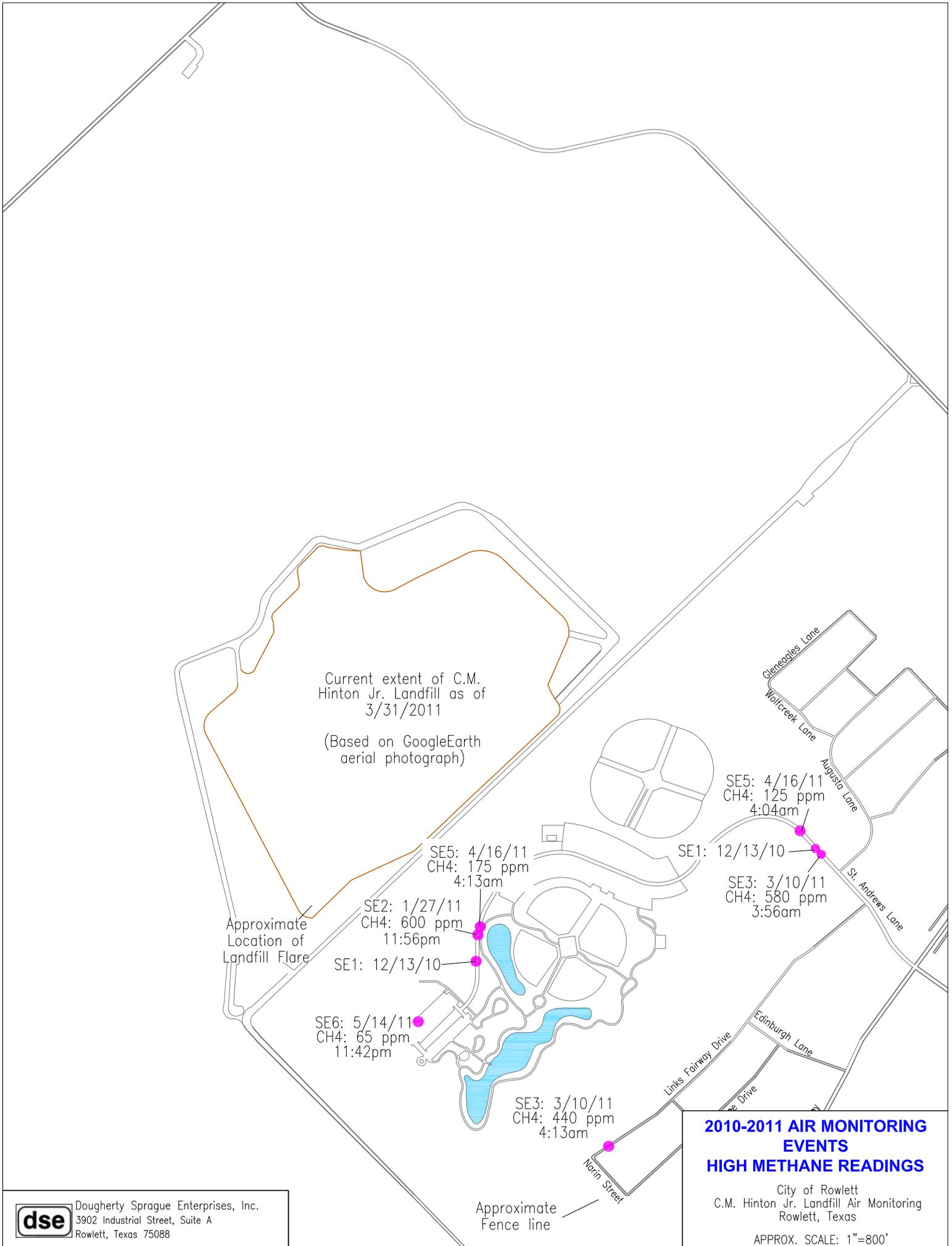
**2012 AIR MONITORING EVENTS
 SUMMA SAMPLE LOCATIONS**

City of Rowlett
 C.M. Hinton Jr. Landfill Air Monitoring
 Rowlett, Texas

APPROX. SCALE: 1"=800'



Dougherty Sprague Enterprises, Inc.
 3902 Industrial Street, Suite A
 Rowlett, Texas 75088



Current extent of C.M. Hinton Jr. Landfill as of 3/31/2011
 (Based on GoogleEarth aerial photograph)

Approximate Location of Landfill Flare

Approximate Fence line

- SE5: 4/16/11
CH4: 175 ppm
4:13am
- SE2: 1/27/11
CH4: 600 ppm
11:56pm
- SE1: 12/13/10
- SE6: 5/14/11
CH4: 65 ppm
11:42pm

- SE5: 4/16/11
CH4: 125 ppm
4:04am
- SE1: 12/13/10
- SE3: 3/10/11
CH4: 580 ppm
3:56am

- SE3: 3/10/11
CH4: 440 ppm
4:13am

**2010-2011 AIR MONITORING EVENTS
 HIGH METHANE READINGS**

City of Rowlett
 C.M. Hinton Jr. Landfill Air Monitoring
 Rowlett, Texas

APPROX. SCALE: 1"=800'

Current extent of C.M. Hinton Jr. Landfill as of 3/31/2011
 (Based on GoogleEarth aerial photograph)

Approximate Location of Landfill Flare

Approximate Fence line

Approximate Fence line

SE1:
 1/17/2012
 CH4: 75 ppm
 8:32pm
 1/18/2012
 CH4: 95 ppm
 5:03am

SE1:
 1/18/2012
 CH4: 100 ppm
 5:20 am

SE2:
 1/28/2012
 CH4: 370 ppm
 9:35pm

SE2:
 1/29/2012
 CH4: 510 ppm
 4:57am

SE2:
 1/29/2012
 CH4: 230 ppm
 5:40am

SE2:
 1/28/2012
 CH4: 135 ppm
 9:27pm

SE3:
 3/3/2012
 CH4: 145 ppm
 4:58am

SE2:
 1/28/2012
 CH4: 95 ppm
 11:58pm

Glencogles Lane

Wolfcreek Lane

Augusta Lane

St. Andrews Lane

Edinburgh Lane

Links Fairway Drive

Glenshee Drive

Waterview Parkway

Narin Street

**2012 AIR MONITORING
 EVENTS
 HIGH METHANE READINGS**

City of Rowlett
 C.M. Hinton Jr. Landfill Air Monitoring
 Rowlett, Texas

APPROX. SCALE: 1"=800'

FIDO Assessment

ODOR CHARACTERIZATION EXAMPLES

The character of an odor is a unique, innate quality of an odor that does not vary with intensity. Under normal circumstances the following types/sources/processes may be characterized as indicated below, however, these examples should only be used as a guide; characterization should be based on the investigator's experience and training.

Highly Offensive

- * Blood drying operations
- * Sewage treatment primary sludge
- * Putrefying animals/fish
- * Hide processing
- * Rancid grease
- * H₂S (Landfill gas, leachate, paper mill black liquor, etc.)
- * Mercaptans (natural gas odorant)

Offensive

- * Landfill garbage/waste
- * Cattle lagoon cleanout
- * Confined hog/poultry operations under best management practices
- * Decaying silage/composting
- * Unprocessed rendering plant material and wastewater
- * Typical grease trap odor
- * Waste burning (rubber, plastic, tires, other non-wood materials)
- * Failing or improperly operated septic systems
- * Organic products like auto-body paint & styrene (fiberglass, cultured marble mfg)¹

Unpleasant

- * Well digested or chemically-treated sludge
- * Cattle operation under best management practices
- * Waste-activated sludge processes
- * Water-based painting
- * Gasoline, diesel fuel
- * Diesel exhaust
- * Asphalt odors
- * Burned coffee/food
- * Brush/wood burning
- * Ammonia
- * Chlorine

Not Unpleasant

- * Ketones, esters, alcohols
- * Fresh-cut grass or hay
- * Normal coffee roasting
- * Normal food preparation
- * Bakery
- * Perfume
- * Spice packaging
- * Winery

¹At low concentrations, organic products such as autobody paint and styrene used in fiberglass and cultured marble operations would not normally be considered to have offensive odors. However, because of a person's potential physical response to these products at higher concentrations (where most complaints concerning these products occur), we generally consider them to have offensive characteristics.

DETERMINING FREQUENCY/DURATION

You are attempting to determine the frequency and duration that the complainant experiences over time. The frequency and duration observed during a single investigation may not accurately represent what the complainant is experiencing. You may have to use information gathered from multiple investigations (investigator observations as well as any information gathered on plant processes, weather, terrain, or complainant information) to make this determination. Consider the following:

Plant Processes

- * Constant, seasonal, intermittent processes/activities (e.g., reactor top opened)
- * Upset conditions, maintenance, startup & shutdown, etc.
- * Plant records, sampling data, CEM data, etc.

Weather

- * Wind rose from source to receptor
- * Temperature or other meteorological data that could affect intensity or duration.
- * Wind speed day, night, summer, winter
- * CAMS Station/NWS data

Terrain

- * Low areas/channels/valleys where odors can funnel
- * Changes that could affect local wind patterns

Complainant Information

- * Statements as to frequency and duration
- * Logs - time, effects, source operations, weather conditions
- * Knowledge of source operations - times, processes
- * Neighbor and/or visitor corroboration

HOW TO USE THE FIDO CHART

Each of the four tables on this FIDO Chart represents a different level of offensiveness (Highly Offensive, Offensive, Unpleasant, and Not Unpleasant). The intensity of the observed odor is documented using the legend on the right side of the chart--with "VS" for Very Strong odors, "S" for Strong, "M" for Moderate, "L" for Light, and "VL" for Very Light. Once the overall frequency and duration have been determined (based on one or more investigations), they are then plotted on the horizontal and vertical axes of the appropriate table. If the odor situation is at least as intense as the colored block in which it is plotted for the corresponding duration and frequency, it is considered a nuisance odor. If the plot falls outside the colored area of the table (NA), the odor does not represent a nuisance.

To summarize, you should analyze the information obtained from all investigations and document the following (FIDO):

Odor Log

- 1 Characterize the odor to determine which **O**ffensiveness table to use (Not Unpleasant to Highly Offensive)
- 2 Assess the **I**ntensity of odor (Very Light to Very Strong)
- 3 Determine the total **D**uration of the odor(s) (1 minute to 24 hours)
- 4 Evaluate the **F**requency of odor occurrence (Single Occurrence to Daily)
- 5 Identify the block on the chart that corresponds to the information from Steps 1-4 and determine if a nuisance condition exists.

Date	Time(s)	How long did the odor last?	Was the odor intermittent? (Y/N)	Weather Conditions			Odor Intensity					Odor Characteristics				Effects/Comments/Concerns		
				Wind direction	Rain (Y/N)	Temperature (°F)	Very Light	Light	Moderate	Strong	Very Strong	Not Unpleasant	Unpleasant	Offensive	Highly Offensive			
1/17/12	2100-2400	3 hr	Y	N	N	46	X							X				
1/18/12	0200-0500	3 hr	Y	N	N	37	X							X				

Odor Log

- 1 Characterize the odor to determine which **O**ffensiveness table to use (Not Unpleasant to Highly Offensive)
- 2 Assess the **I**ntensity of odor (Very Light to Very Strong)
- 3 Determine the total **D**uration of the odor(s) (1 minute to 24 hours)
- 4 Evaluate the **F**requency of odor occurrence (Single Occurrence to Daily)
- 5 Identify the block on the chart that corresponds to the information from Steps 1-4 and determine if a nuisance condition exists.

Date	Time(s)	How long did the odor last?	Was the odor intermittent? (Y/N)	Weather Conditions			Odor Intensity					Odor Characteristics				Effects/Comments/Concerns	
				Wind direction	Rain (Y/N)	Temperature (°F)	Very Light	Light	Moderate	Strong	Very Strong	Not Unpleasant	Unpleasant	Offensive	Highly Offensive		
3/2/12	2100-2300	2 hrs	Y	NNE	N	52		X									Odor not as strong as previous sampling events
3/2-3/12	2300-0100	2 hrs	Y	NNE	N	51	X										Odor intermittent throughout the night/early morning
3/3/12	0400-0600	2 hrs	Y	NNE	N	45	X										Traces of odor throughout the early morning

Lab Reports

Sampling Event 1:
December 12-13, 2010

Report to: Company: <u>Dougherty Sprague Env, Inc.</u> Address: <u>3902 Industrial St.</u> <u>Suite A</u> <u>Rowlett, TX 75088</u> Contact: <u>Curtis Franklin</u> Phone: <u>(972) 412-8666</u> Fax: <u>(972) 412-8660</u> Email: <u>cfranklinedsei.com</u>	Invoice to: Company: <u>Dougherty Sprague Env, Inc.</u> Address: <u>3902 Industrial St.</u> <u>Suite A</u> <u>Rowlett, TX 75088</u> Contact: <u>Curtis Franklin</u> Phone: <u>(972) 412-8666</u> PO/ISO: <u>1038000</u> <u>819-540-4100</u>
---	---

ANALYSIS REQUESTED	TO-14VOCs	TO-15VOCs	TO-1 and/or TO-2 VOCs	FIXED GASES (CO ₂ , CO, O ₂ , N ₂ , CH ₄)	Light Hydrocarbon C ₁ -C ₆	Headspace (Please specify compounds)	Mercaptans & Organic Sulfur Compounds	TICs by GC/MS SCAN	RSK-175 (Methane, ethane, ethene)	MOLD ID	Lab Sample ID (Lab Use Only)
--------------------	-----------	-----------	-----------------------	--	--	--------------------------------------	---------------------------------------	--------------------	-----------------------------------	---------	------------------------------

12 TOTAL PAGES
PAGE 1 OF 12

Sampler's Name (print) <u>Curtis Franklin</u>	Sampler's Signature <u>Curtis Franklin</u>
Proj. No. <u>1038000-1</u>	Project Name <u>Hinton Landfill Monitoring</u>

Date	Time	Can #	Identifying Marks of Sample(s)	TO-14VOCs	TO-15VOCs	TO-1 and/or TO-2 VOCs	FIXED GASES (CO ₂ , CO, O ₂ , N ₂ , CH ₄)	Light Hydrocarbon C ₁ -C ₆	Headspace (Please specify compounds)	Mercaptans & Organic Sulfur Compounds	TICs by GC/MS SCAN	RSK-175 (Methane, ethane, ethene)	MOLD ID	Lab Sample ID (Lab Use Only)
12/12/10	2048-0530	00288	Sample #1 - RW1212101 (N 32°56'15" W 096°32'45")	X					X					GD10-0239-1
12/12/10	2107-0542	99010	Sample #2 - RW1212102 (N 32°56'57" W 096°32'31")	X					X					-2

Relinquished by: (Signature) <u>Curtis Franklin</u>	Date <u>12/13/10</u>	Time <u>0840</u>	Received by: (Signature) <u>Delia</u>	Date <u>12/14/10</u>	Time <u>0840</u>	Remarks <u>FC 2010-0805 w/can 99010</u>
Relinquished by: (Signature) <u>Delia</u>	Date <u>12/13/10</u>	Time <u>0840</u>	Received by: (Signature) <u>Delia</u>	Date <u>12/14/10</u>	Time <u>0840</u>	Remarks <u>FC 0604-201000108 w/can 288.</u>

Any change for Analysis Request should be submitted by a written document.

12/13/10



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD10-0239-001**
Report Date: **16-Dec-10**
Date Analyzed: **13-Dec-10**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-121310TO14**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038000-1**
Hinton Landfill Monitoring

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		NOTE
			12/12/10	12/15/10	
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M
Sample #1-RW1212101	Air	C. Franklin			
Benzene	78	71432	0.2	1.94	6.19
Benzylchloride	126.6	100447	0.2	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.2	ND	ND
Carbon tetrachloride	153.8	56235	0.2	ND	ND
Chlorobenzene	112.6	108907	0.2	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.2	ND	ND
Chloroform	119	67663	0.2	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.2	0.92	1.90
1,2-Dibromoethane (EDB)	187.9	106934	0.2	ND	ND
1,2-Dichlorobenzene	147	95501	0.2	ND	ND
1,3-Dichlorobenzene	147	541731	0.2	ND	ND
1,4-Dichlorobenzene	147	106467	0.2	ND	ND
1,1-Dichloroethane	99	74343	0.2	ND	ND
1,1-Dichlorethene	97	75354	0.2	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.2	0.65	3.22
Dichlorotetrafluoroethane (F114)	170.9	76142	0.2	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.2	ND	ND
cis-1,2-Dichloroethene	97	156592	0.2	ND	ND
trans-1,2-Dichloroethene	97	156605	0.2	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.2	ND	ND
1,2-Dichloropropane	113	78875	0.2	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.2	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.2	ND	ND
Ethylbenzene	106	100414	0.2	0.84	3.64
Hexachlorobutadiene	260.8	87683	0.2	ND	ND
Styrene	104	100425	0.2	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.2	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.2	ND	ND
Toluene	92	108883	0.2	4.23	15.9
1,1,1-Trichloroethane (TCA)	133.4	71556	0.2	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.2	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.2	0.67	3.27
1,2,4-Trimethylbenzene	120.2	95636	0.2	0.47	2.29
1,2,4-Trichlorobenzene	181.5	120821	0.3	ND	ND
Trichloroethene (TCE)	131.3	79016	0.2	ND	ND



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD10-0239-001**
Report Date: **16-Dec-10**
Date Analyzed: **13-Dec-10**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-121310TO14**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038000-1**
Hinton Landfill Monitoring

REPORT OF ANALYTICAL RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED	
Sample #1-RW1212101	Air	C. Franklin		12/12/10	12/15/10
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE
			ppbv	ppbv	ug/cu M
Trichlorofluoromethane (F-11)	137.4	75694	0.2	0.28	1.56
Trichlorotrifluoroethane (F-113)	187.4	76131	0.2	ND	ND
Vinyl Chloride	62.5	75014	0.2	ND	ND
m&p-Xylenes	106	1330207	0.2	3.12	13.5
o-Xylene	106	95476	0.2	1.20	5.20

Surrogate Recovery Report

			Spiked	Found	R%
			ppbv	ppbv	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	6.44	129
Bromofluorobenzene (SS2)	175	460004	5.00	5.32	106

*Comparison with the method blank this sample run with a dilution factor of: **1.15**

Canister #0288 was received at an initial pressure of +1.3psi and pressurized to 3.7psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Data File:varian/101213/101213-10-0239-1.sms

Report File: GDAIR D:\Client-Report\GD10-0239-001



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD10-0239-1H2S**
Report Date: 12/17/2010
Date Analyzed: 12/15/2010
Analyzed by: JCA
GD QC Batch: **QC-121510H2S**

Project No.: **1038000-1**
Hinton Landfill Monitoring

Method: **ASTM 1946**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW1212101	Air	C. Franklin	12/12/10	12/15/10
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	288	ND	

Comparison with the method blank this sample run with a dilution factor of: **1.15**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd10-0239-1H2S
Data File: C:\HPCHEM\1\DATA\101215\S0121507.D



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD10-0239-002
Report Date: 16-Dec-10
Date Analyzed: 13-Dec-10
Analyzed by: LAJ
GD Air QC Batch: QC-121310TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038000-1
Hinton Landfill Monitoring

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL*, RESULT, NOTE. Lists various chemical constituents and their analytical results.



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD10-0239-002**
Report Date: **16-Dec-10**
Date Analyzed: **13-Dec-10**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-121310TO14**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038000-1**
Hinton Landfill Monitoring

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample #2-RW1212102	Air	C. Franklin	12/12/10	12/15/10	
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M
Trichlorofluoromethane (F-11)	137.4	75694	0.2	0.31	1.72
Trichlorotrifluoroethane (F-113)	187.4	76131	0.2	ND	ND
Vinyl Chloride	62.5	75014	0.2	ND	ND
m&p-Xylenes	106	1330207	2.5	258	1119
o-Xylene	106	95476	0.2	12.0	52.0

Surrogate Recovery Report

			Spiked ppbv	Found ppbv	R%
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	6.12	122
Bromofluorobenzene (SS2)	175	460004	5.00	5.49	110

*Comparison with the method blank this sample run with a dilution factor of: **1.24**

Canister #99010 was received at an initial pressure of +1.3psi and pressurized to 3.9psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Data File:varian/101213/101213-10-0239-2.sms

Report File: GDAIR D:\Client-Report\GD10-0239-002



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD10-0239-2H2S**
Report Date: 12/17/2010
Date Analyzed: 12/15/2010
Analyzed by: JCA
GD QC Batch: **QC-121510H2S**

Project No.: **1038000-1**
Hinton Landfill Monitoring

Method: **ASTM 1946**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #2-RW1212102	Air	C. Franklin	12/12/10	12/15/10
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	290	ND	

Comparison with the method blank this sample run with a dilution factor of: **1.16**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd10-0239-2H2S
Data File: C:\HPCHEM\1\DATA\101215\S0121508.D



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

12/14/10

Date Analyzed:

12/13/10

Analyzed by:

LAJ

GD Air QC Batch:

QC-121310

Project No.:

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Benzene	78	71432	0.20	ND	ND	
Benzylchloride	126.6	100447	0.20	ND	ND	N
Bromomethane (Methyl Bromide)	94.9	74839	0.20	ND	ND	
Carbon tetrachloride	153.8	56235	0.20	ND	ND	
Chlorobenzene	112.6	108907	0.20	ND	ND	
Chloroethane (Ethyl Chloride)	64.5	75003	0.20	ND	ND	
Chloroform	119	67663	0.20	ND	ND	
Chloromethane (Methyl Chloride)	50.4	74873	0.20	ND	ND	
1,2-Dibromoethane (EDB)	187.9	106934	0.20	ND	ND	
1,2-Dichlorobenzene	147	95501	0.20	ND	ND	
1,3-Dichlorobenzene	147	541731	0.20	ND	ND	
1,4-Dichlorobenzene	147	106467	0.20	ND	ND	
1,1-Dichloroethane	99	74343	0.20	ND	ND	
1,1-Dichlorethene	97	75354	0.20	ND	ND	
Dichlorodifluoromethane (F12)	120.9	75718	0.20	ND	ND	
Dichlorotetrafluoroethane (F114)	170.9	76142	0.20	ND	ND	
1,2-Dichloroethane (EDC)	99	107062	0.20	ND	ND	
cis-1,2-Dichloroethene	97	156592	0.20	ND	ND	
trans-1,2-Dichloroethene	97	156605	0.20	ND	ND	N
Dichloromethane (Methylene chloride)	84.9	75092	0.20	ND	ND	
1,2-Dichloropropane	113	78875	0.20	ND	ND	
cis-1,3-Dichloropropene	111	10061015	0.20	ND	ND	
trans-1,3-Dichloropropene	111	10061026	0.20	ND	ND	
Ethylbenzene	106	100414	0.20	ND	ND	
Hexachlorobutadiene	260.8	87683	0.20	ND	ND	
Styrene	104	100425	0.20	ND	ND	
1,1,2,2-Tetrachloroethane	167.9	79345	0.20	ND	ND	
Tetrachloroethene (PCE)	165.8	127184	0.20	ND	ND	
Toluene	92	108883	0.20	ND	ND	
1,1,1-Trichloroethane (TCA)	133.4	71556	0.20	ND	ND	
1,1,2-Trichloroethane	133.4	79005	0.20	ND	ND	
1,3,5-Trimethylbenzene/4-Ethyltoluene	120.2	108678	0.20	ND	ND	
1,2,4-Trimethylbenzene	120.2	95636	0.20	ND	ND	
1,2,4-Trichlorobenzene	181.5	120821	0.30	ND	ND	
Trichloroethene (TCE)	131.3	79016	0.20	ND	ND	

CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

12/14/10

Date Analyzed:

12/13/10

Analyzed by:

LAJ

 Project No.: **QC**

GD Air QC Batch:

QC-121310

Method:

EPATO14

NELAP Certification #:
T104704364
REPORT OF ANALYTICAL RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Trichlorofluoromethane (F-11)	137.4	75694	0.20	ND	ND	
Trichlorotrifluoroethane (F-113)	187.4	76131	0.20	ND	ND	
Vinyl Chloride	62.5	75014	0.20	ND	ND	
m&p-Xylenes	106	1330207	0.20	ND	ND	
o-Xylene	106	95476	0.20	ND	ND	
Surrogate Recovery Report			Spiked	Found	R%	
			ppbv	ppbv		
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	5.92	118	
Bromofluorobenzene (SS2)	175	460004	5.00	5.32	106	

*Comparison with the method blank this sample run with a dilution factor of:

1.0
N: Not included in the Scope of NELAC Accreditation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

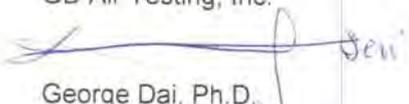
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.


 George Dai, Ph.D.

Laboratory Director

Data File: c:\Varian\101213-7-blk.sms

Report File: GD SR\ID\QC-10-TO14\Blank



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

BS/BSD

Report Date:

12/14/10

Project No.:

Date Analyzed:

12/13/10

Analyzed by:

LAJ

GD Air QC Batch:

QC-121310

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED
BS/BSD	Air		

Spike Control Compounds	Spiked ppbv	BS/ppbv	Found and Recovery			
			BS R%	BSD	BSD R%	% RPD

VOLATILE ORGANICS BY EPA TO-14

Vinyl Chloride	10.0	8.92	89	9.1	91	2
Methylene chloride (Dichloromethane)	10.0	8.2	82	7.7	77	6
1,1,1-Trichloroethane	10.0	8.6	86	8.2	82	5
1,2-Dichloroethane (EDC)	10.0	8.8	88	8.9	89	1
Benzene	10.0	10.4	104	9.2	92	12
Carbon tetrachloride	10.0	9.2	92	8.2	82	11
Trichloroethene (TCE)	10.0	8.1	81	8.1	81	0
Toluene	10.0	8.7	87	8.9	89	2
Chlorobenzene	10.0	8.5	85	8.8	88	3
Ethylbenzene	10.0	8.9	89	8.9	89	0
o-Xylene	10.0	9.0	90	9.2	92	2

Surrogate Recovery Report

1,4-Difluorobenzene (SS1)	5.0	5.88	118	5.29	105.8	10.6
Bromofluorobenzene (SS2)	5.0	5.10	102	5.27	105.4	3.3

- * The control limit for BS Recovery % of all spiked compound is 70% - 130%
- * The control limit for relative percentage difference of BS/BSD is 30%
- * If any control compound is not within the control limit, please see the case narrative for more details.
- * The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Data File: VARIAN\101213-4-bs.sms and 101213-5-bsd.sms
Report File: GD\SRID\QC-TO14\BS-BSD



CLIENT: **GD Air Testing, Inc.**

GD Air Testing Lab. ID: **QC-BLK-121510H2S**

Report Date: 12/17/2010

Date Analyzed: 12/15/2010

Analyzed by: JCA

GD QC Batch: **QC-121510H2S**

NELAP Certification No.: T104704364

Method: **ASTM 1946**

REPORT OF METHOD BLANK RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Blank	Air	JCA	12/15/10	12/15/10

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	250	ND	

* If any compound is out of control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\QC-blk-121510-H2S

Data File: C:\HPCHEM\1\DATA\101217\1S0121502.D



CLIENT: GD Air Testing Inc. QA

GD Air Testing Lab. ID: **QC-121510H2S**
 Report Date: 12/17/2010
 Date Analyzed: 12/15/2010
 Analyzed by: JCA
 NELAP Certification No.: T104704364
 Method: ASTM 1946

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BS/BSD	GAS					
CONSTITUENT	Spiked ppmv	Found and Recovery			NOTE	
		BS	BS, R%	BSD	BSD, R%	RPD %
Hydrogen Sulfide	1000	1210	121	1190	119	1.7

- * The control limit for BS Recovery % of all spiked compound is 70% - 130%
- ** The control limit for relative percentage difference of BS/BSD is 30%
- *** If any control compound is not within the control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Data File: C:\HPCHEM\1\DATA\101215\S0121505.D, S0121506.D
Report File: GDAIR D:\Client_Report\H2S-BS-121510F

Sampling Event 2:

January 27-28, 2011

Report to:
 Company: Dougherty Sprague Env.
 Address: 3902 Industrial St.
Suite A
Rowlett TX 75088
 Contact: Curtis Franklin
 Phone: 817-229-1222
 Fax: 817-540-4101
 Email: cfranklin@dsei.com

Invoice to:
 Company: Dougherty Sprague Env.
 Address: 3902 Industrial St.
Suite A
Rowlett, TX 75088
 Contact: Deborah Farris
 Phone: 972-412-8666
 PO/SO: 103 8000

ANALYSIS REQUESTED
TO-14VOCs
TO-15VOCs
TO-1 and/or TO-2 VOCs
FIXED GASES (CO ₂ , CO, O ₂ , N ₂ , CH ₄)
Light Hydrocarbon C ₁ -C ₆
Headspace (Please specify compounds)
(Mercaptans & Organic Sulfur Compounds)
TICs by GC/MS SCAN
RSK-175 (Methane, ethane, ethene)
MOLD ID

13 TOTAL PAGES
 PAGE 1 OF 13

Sampler's Name (print): Curtis W. Franklin
 Sampler's Signature: Charlotte Stockard
Charlotte Stockard

Proj. No. 1039000-2 Project Name Houston Landfill Monitoring

Date	Time	Can #	Identifying Marks of Sample(s)	TO-14VOCs	TO-15VOCs	TO-1 and/or TO-2 VOCs	FIXED GASES (CO ₂ , CO, O ₂ , N ₂ , CH ₄)	Light Hydrocarbon C ₁ -C ₆	Headspace (Please specify compounds)	(Mercaptans & Organic Sulfur Compounds)	TICs by GC/MS SCAN	RSK-175 (Methane, ethane, ethene)	MOLD ID	Lab Sample ID (Lab Use Only)
1/28/11	2:13-0506	62039	Sample #1 RW01281103	X						X				GD11-0011-1
1/28/11	2:46-0517	2519	Sample #2 RW01281104	X						X				2

Relinquished by: (Signature) <u>Charlotte Stockard</u>	Date <u>1/28/11</u>	Time <u>11:15</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>1/28/11</u>	Time <u>11:16</u>
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Remarks
2, 8hr FC
2 Summa
 Any change for Analysis Request should be submitted by a written document.



Case Narrative

02/11/2011

Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088

RE: QC failed on one compound

Two air canisters were submitted to GD Air Testing, Inc. for the analysis of VOCs and H₂S by EPA Method TO14 and ASTM 1946; respectively.

The QC that was run along with these samples had Toluene outside of the required criteria limit both in the BS and the BSD. Re-run of the QC did not improve the recovery for toluene. Because toluene was detected in each of the samples, it was J coded due to the failing QC.

If you have any questions, please do not hesitate to contact us.

Sincerely,

Dr. George Dai
GD Air Testing Inc.
Lab Director



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0011-001
Report Date: 11-Feb-11
Date Analyzed: 28-Jan-11
Analyzed by: LAJ
GD Air QC Batch: QC-012811TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038000

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Includes rows for Benzene, Benzylchloride, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,1-Dichloroethane, 1,1-Dichlorethene, Dichlorodifluoromethane, Dichlorotetrafluoroethane, 1,2-Dichloroethane, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Dichloromethane, 1,2-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Styrene, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,2,4-Trichlorobenzene, Trichloroethene.



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD11-0011-001**
Report Date: **11-Feb-11**
Date Analyzed: **28-Jan-11**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-012811TO14**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038000**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED	
Sample #1-RW01281103	Air	Charlotte S.		01/28/11	01/28/11
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE
			ppbv	ppbv	ug/cu M
Trichlorofluoromethane (F-11)	137.4	75694	0.2	0.30	1.70
Trichlorotrifluoroethane (F-113)	187.4	76131	0.2	ND	ND
Vinyl Chloride	62.5	75014	0.2	ND	ND
m&p-Xylenes	106	1330207	0.2	1.2	5.0
o-Xylene	106	95476	0.2	0.35	1.5
Surrogate Recovery Report			Spiked	Found	R%
			ppbv	ppbv	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	5.61	112
Bromofluorobenzene (SS2)	175	460004	5.00	5.20	104

*Comparison with the method blank this sample run with a dilution factor of: **1.13**

J: Estimated value, see case narrative.

Canister #62039 was received at an initial pressure of 0.0psi and pressurized to 4.4psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File:varian/110128/110128-23-0011-1.sms

Report File: GDAIR D:\Client-Report\GD11-0011-1



CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD11-0011-1H2S**
Report Date: 2/14/2011
Date Analyzed: 2/10/2011
Analyzed by: JCA
GD QC Batch: **QC-021011H2S**

Project No.: **1038000**

Method: **ASTM 1946**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW01281103	Air	Charlotte S.	01/28/11	01/28/11

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	325	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Comparison with the method blank this sample run with a dilution factor of: **1.3**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd11-0011-1H2S
Data File: C:\HPCHEM\1\DATA\110210\S1021005.D



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD11-0011-002**
Report Date: **11-Feb-11**
Date Analyzed: **28-Jan-11**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-012811TO14**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038000**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		NOTE	
			01/28/11	01/28/11		
Sample #1-RW01281104	Air	Charlotte S.				
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M	
Benzene	78	71432	0.2	2.34	7.47	
Benzylchloride	126.6	100447	0.2	ND	ND	N
Bromomethane (Methyl Bromide)	94.9	74839	0.2	ND	ND	
Carbon tetrachloride	153.8	56235	0.2	ND	ND	
Chlorobenzene	112.6	108907	0.2	ND	ND	
Chloroethane (Ethyl Chloride)	64.5	75003	0.2	ND	ND	
Chloroform	119	67663	0.2	ND	ND	
Chloromethane (Methyl Chloride)	50.4	74873	0.2	1.03	2.12	
1,2-Dibromoethane (EDB)	187.9	106934	0.2	ND	ND	
1,2-Dichlorobenzene	147	95501	0.2	ND	ND	
1,3-Dichlorobenzene	147	541731	0.2	ND	ND	
1,4-Dichlorobenzene	147	106467	0.2	ND	ND	
1,1-Dichloroethane	99	74343	0.2	ND	ND	
1,1-Dichloroethene	97	75354	0.2	ND	ND	
Dichlorodifluoromethane (F12)	120.9	75718	0.2	0.59	2.93	
Dichlorotetrafluoroethane (F114)	170.9	76142	0.2	ND	ND	
1,2-Dichloroethane (EDC)	99	107062	0.2	ND	ND	
cis-1,2-Dichloroethene	97	156592	0.2	ND	ND	
trans-1,2-Dichloroethene	97	156605	0.2	ND	ND	N
Dichloromethane (Methylene chloride)	84.9	75092	0.2	0.27	0.95	
1,2-Dichloropropane	113	78875	0.2	ND	ND	
cis-1,3-Dichloropropene	111	10061015	0.2	ND	ND	
trans-1,3-Dichloropropene	111	10061026	0.2	ND	ND	
Ethylbenzene	106	100414	0.2	0.55	2.40	
Hexachlorobutadiene	260.8	87683	0.4	ND	ND	
Styrene	104	100425	0.2	ND	ND	
1,1,2,2-Tetrachloroethane	167.9	79345	0.2	ND	ND	
Tetrachloroethene (PCE)	165.8	127184	0.2	ND	ND	
Toluene	92	108883	0.2	3.3	12.4	J
1,1,1-Trichloroethane (TCA)	133.4	71556	0.2	ND	ND	
1,1,2-Trichloroethane	133.4	79005	0.2	ND	ND	
1,3,5-Trimethylbenzene	120.2	108678	0.2	ND	ND	
1,2,4-Trimethylbenzene	120.2	95636	0.2	ND	ND	
1,2,4-Trichlorobenzene	181.5	120821	0.5	ND	ND	
Trichloroethene (TCE)	131.3	79016	0.2	ND	ND	



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD11-0011-002**
Report Date: 11-Feb-11
Date Analyzed: 28-Jan-11
Analyzed by: LAJ
GD Air QC Batch: **QC-012811TO14**
Method: EPATO14
NELAP Certification #: **T104704364**

Project No.: 1038000

REPORT OF ANALYTICAL RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample #1-RW01281104	Air	Charlotte S.	01/28/11	01/28/11	
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE
			ppbv	ppbv	ug/cu M
Trichlorofluoromethane (F-11)	137.4	75694	0.2	0.27	1.52
Trichlorotrifluoroethane (F-113)	187.4	76131	0.2	ND	ND
Vinyl Chloride	62.5	75014	0.2	ND	ND
m&p-Xylenes	106	1330207	0.2	1.5	6.4
o-Xylene	106	95476	0.2	0.32	1.4
Surrogate Recovery Report			Spiked	Found	R%
			ppbv	ppbv	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	4.85	97
Bromofluorobenzene (SS2)	175	460004	5.00	4.41	88

*Comparison with the method blank this sample run with a dilution factor of: **1.13**

J: Estimated value, see case narrative.

Canister #2519 was received at an initial pressure of 0.0psi and pressurized to 4.5psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File:varian/110128/110128-24-0011-2.sms

Report File: GDAIR D:\Client-Report\GD11-0011-2



CLIENT: **Curtis Franklin**
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD11-0011-2H2S**
Report Date: **2/14/2011**
Date Analyzed: **2/10/2011**
Analyzed by: **JCA**
GD QC Batch: **QC-021011H2S**

Project No.: **1038000**

Method: **ASTM 1946**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #2-RW01281104	Air	Charlotte S.	01/28/11	01/28/11

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	325	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Comparison with the method blank this sample run with a dilution factor of: **1.3**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

George Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd11-0011-2H2S
Data File: C:\HPCHEM\1\DATA\110210\S1021007.D



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

01/28/11

Date Analyzed:

01/28/11

Analyzed by:

LAJ

GD Air QC Batch:

QC-012811

Project No.:

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Benzene	78	71432	0.20	ND	ND	
Benzylchloride	126.6	100447	0.20	ND	ND	N
Bromomethane (Methyl Bromide)	94.9	74839	0.20	ND	ND	
Carbon tetrachloride	153.8	56235	0.20	ND	ND	
Chlorobenzene	112.6	108907	0.20	ND	ND	
Chloroethane (Ethyl Chloride)	64.5	75003	0.20	ND	ND	
Chloroform	119	67663	0.20	ND	ND	
Chloromethane (Methyl Chloride)	50.4	74873	0.20	ND	ND	
1,2-Dibromoethane (EDB)	187.9	106934	0.20	ND	ND	
1,2-Dichlorobenzene	147	95501	0.20	ND	ND	
1,3-Dichlorobenzene	147	541731	0.20	ND	ND	
1,4-Dichlorobenzene	147	106467	0.20	ND	ND	
1,1-Dichloroethane	99	74343	0.20	ND	ND	
1,1-Dichlorethene	97	75354	0.20	ND	ND	
Dichlorodifluoromethane (F12)	120.9	75718	0.20	ND	ND	
Dichlorotetrafluoroethane (F114)	170.9	76142	0.20	ND	ND	
1,2-Dichloroethane (EDC)	99	107062	0.20	ND	ND	
cis-1,2-Dichloroethene	97	156592	0.20	ND	ND	
trans-1,2-Dichloroethene	97	156605	0.20	ND	ND	N
Dichloromethane (Methylene chloride)	84.9	75092	0.20	ND	ND	
1,2-Dichloropropane	113	78875	0.20	ND	ND	
cis-1,3-Dichloropropene	111	10061015	0.20	ND	ND	
trans-1,3-Dichloropropene	111	10061026	0.20	ND	ND	
Ethylbenzene	106	100414	0.20	ND	ND	
Hexachlorobutadiene	260.8	87683	0.30	ND	ND	
Styrene	104	100425	0.20	ND	ND	
1,1,2,2-Tetrachloroethane	167.9	79345	0.20	ND	ND	
Tetrachloroethene (PCE)	165.8	127184	0.20	ND	ND	
Toluene	92	108883	0.20	ND	ND	
1,1,1-Trichloroethane (TCA)	133.4	71556	0.20	ND	ND	
1,1,2-Trichloroethane	133.4	79005	0.20	ND	ND	
1,3,5-Trimethylbenzene/4-Ethyltoluene	120.2	108678	0.20	ND	ND	
1,2,4-Trimethylbenzene	120.2	95636	0.20	ND	ND	
1,2,4-Trichlorobenzene	181.5	120821	0.40	ND	ND	
Trichloroethene (TCE)	131.3	79016	0.20	ND	ND	



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

01/28/11

Date Analyzed:

01/28/11

Analyzed by:

LAJ

GD Air QC Batch:

QC-012811

Project No.: QC

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Trichlorofluoromethane (F-11)	137.4	75694	0.20	ND	ND	
Trichlorotrifluoroethane (F-113)	187.4	76131	0.20	ND	ND	
Vinyl Chloride	62.5	75014	0.20	ND	ND	
m&p-Xylenes	106	1330207	0.20	ND	ND	
o-Xylene	106	95476	0.20	ND	ND	
Surrogate Recovery Report			Spiked	Found	R%	
			ppbv	ppbv		
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	4.55	91	
Bromofluorobenzene (SS2)	175	460004	5.00	5.49	110	

*Comparison with the method blank this sample run with a dilution factor of:

1.0

N: Not included in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: c:\Varian\110128-19-blk.sms

Report File: GD SR\ID\QC-11-TO14\Blank



CLIENT: **GD Air Testing, Inc.**

GD Air Testing Lab. ID: **QC-BLK-021011H2S**

Report Date: 2/14/2011

Date Analyzed: 2/10/2011

Analyzed by: JCA

GD QC Batch: **QC-021011H2S**

NELAP Certification No.: T104704364

Method: **ASTM 1946**

REPORT OF METHOD BLANK RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Blank	Air	JCA	02/10/11	02/10/11

CONSTITUENT	MW	PQL*	RESULT	NOTE
		ppmv	ppmv	
Hydrogen Sulfide	34.0	250	ND	

* If any compound is out of control limit, please see the case narrative for more details.

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\QC-blk-021011-H2S

Data File: C:\HPCHEM\1\DATA\110210\S1021002.D



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

BS/BSD

Report Date:

01/28/11

Date Analyzed:

01/28/11

Project No.:

Analyzed by:

LAJ

GD Air QC Batch:

QC-012811

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED
BS/BSD	Air		

Spike Control Compounds	Spiked ppbv	Found and Recovery				
		BS/ppbv	BS R%	BSD	BSD R%	% RPD

VOLATILE ORGANICS BY EPA TO-14

Vinyl Chloride	10.0	10.6	106	10.4	104	2
Methylene chloride (Dichloromethane)	10.0	9.8	98	9.4	94	4
1,1,1-Trichloroethane	10.0	10.2	102	9.5	95	7
1,2-Dichloroethane (EDC)	10.0	12.1	121	10.9	109	10
Benzene	10.0	10.1	101	9.1	91	10
Carbon tetrachloride	10.0	9.7	97	9.2	92	6
Trichloroethene (TCE)	10.0	10.1	101	9.3	93	8
Toluene	CN	10.0	16.8	168	169	1
Chlorobenzene	10.0	13.0	130	13.0	130	0
Ethylbenzene	10.0	11.2	112	11.2	112	0
o-Xylene	10.0	9.7	97	9.6	96	1

Surrogate Recovery Report

1,4-Difluorobenzene (SS1)	5.0	4.16	83	3.97	79	4.7
Bromofluorobenzene (SS2)	5.0	4.09	82	3.57	71	13.6

CN: See Case Narrative.

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

* The control limit for relative percentage difference of BS/BSD is 30%

* If any control compound is not within the control limit, please see the case narrative for more details.

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: VARIAN\110128-14-bs.sms and 110128-16-bsd.sms

Report File: GD\SRID\QC-TO14\BS-BSD



CLIENT: GD Air Testing Inc. QA

GD Air Testing Lab. ID:

QC-021011H2S

Report Date: 2/14/2011

Date Analyzed: 2/10/2011

Analyzed by: JCA

NELAP Certification No.: T104704364

Method: ASTM 1946

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED
BS/BSD	GAS		

CONSTITUENT	Spiked ppmv	Found and Recovery				NOTE
		BS	BS, R%	BSD	BSD, R%	
Hydrogen Sulfide	1000	1110	111	1140	114	2.7

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

** The control limit for relative percentage difference of BS/BSD is 30%

*** If any control compound is not within the control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Data File: C:\HPCHEM\1\DATA\110210\S1021003.D, S1021004.D

Report File: GDAIR D:\Client_Report\H2S-BS-021011F

Sampling Event 3:

March 9-10, 2011

Report to:	Invoice to:
Company: <u>Dougherty Sprague</u>	Company: <u>Dougherty Sprague Env.</u>
Address: <u>3902 Industrial St. Env.</u>	Address: <u>3902 Industrial St.</u>
<u>Suite A</u>	<u>Suite A</u>
<u>Rowlett, TX 75088</u>	<u>Rowlett, TX 75088</u>
Contact: <u>Curtis Franklin</u>	Contact: <u>Deborah Farris</u>
Phone: <u>817-229-1222</u>	Phone: <u>972-412-8666</u>
Fax: <u>817-540-4101</u>	PO/SO: <u>1038000</u>
Email: <u>cfranklin@dsei.com</u>	

ANALYSIS REQUESTED
TO-14VOCs
TO-15VOCs
TO-1 and/or TO-2 VOCs
FIXED GASES (CO ₂ , CO, O ₂ , N ₂ , CH ₄)
Light Hydrocarbon C ₁ -C ₆
Headspace (Please specify compounds)
(Mercaptans) & Organic Sulfur Compounds
TICs by GC/MS SCAN
RSK-175 (Methane, ethane, ethene)
MOLD ID

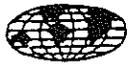
12 TOTAL PAGES
PAGE 1 OF 12
RECEIVED
MAR 21 2011

Sampler's Name (print) <u>Charlotte Stockard</u>	Sampler's Signature <u>Charlotte Stockard</u>
---	--

Proj. No. <u>1038000-3</u>	Project Name <u>Hinton Landfill Monitoring</u>
-------------------------------	---

Date	Time	Can #	Identifying Marks of Sample(s)	TO-14VOCs	TO-15VOCs	TO-1 and/or TO-2 VOCs	FIXED GASES (CO ₂ , CO, O ₂ , N ₂ , CH ₄)	Light Hydrocarbon C ₁ -C ₆	Headspace (Please specify compounds)	(Mercaptans) & Organic Sulfur Compounds	TICs by GC/MS SCAN	RSK-175 (Methane, ethane, ethene)	MOLD ID	Lab Sample ID (Lab Use Only)
3/10/11	2121-0513	9904	Sample #1 RW03101105	X					X					GD11-0033-1
3/10/11	2132-0522	9905	Sample #2 RW03101106	X					X					-2

Relinquished by: (Signature) <u>Charlotte Stockard</u>	Date <u>3-10-11</u>	Time <u>12:25</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>3/10/11</u>	Time <u>1225</u>	Remarks <u>2 Can + 2 FC</u> <u>9904 w/0608-20100104</u> <u>9905 w/0608-20100105</u> Any change for Analysis Request should be submitted by a written document.
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0033-001
Report Date: 14-Mar-11
Date Analyzed: 10-Mar-11
Analyzed by: LAJ
GD Air QC Batch: QC-031011TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038000-3

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL* ppbv, RESULT ppbv, NOTE, ug/cu M. Includes rows for Benzene, Benzylchloride, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,1-Dichloroethane, 1,1-Dichlorethene, Dichlorodifluoromethane, Dichlorotetrafluoroethane, 1,2-Dichloroethane, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Dichloromethane, 1,2-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Styrene, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,2,4-Trichlorobenzene, Trichloroethene.



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0033-001
Report Date: 14-Mar-11
Date Analyzed: 10-Mar-11
Analyzed by: LAJ
GD Air QC Batch: QC-031011TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038000-3

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Includes rows for Trichlorofluoromethane, Trichlorotrifluoroethane, Vinyl Chloride, m&p-Xylenes, o-Xylene, and Surrogate Recovery Report.

*Comparison with the method blank this sample run with a dilution factor of: 1.27

Canister #9904 was received at an initial pressure of 0.0psi and pressurized to 4.0psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Signature of George Dai

George Dai, Ph.D.
Laboratory Director

Data File: CHEM\gd5973.1\031011.B\03101113.D

Report File: GDAIR D:\Client-Report\GD11-0033-1



CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD11-0033-1H2S**
Report Date: **3/16/2011**
Date Analyzed: **3/10/2011**
Analyzed by: **JCA**
GD QC Batch: **QC-031011H2S**

Project No.: **1038000-3**

Method: **ASTM 1946**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW03101105	Air	Charlotte S.	03/10/11	03/10/11

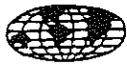
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	318	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Comparison with the method blank this sample run with a dilution factor of: **1.27**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd11-0033-1H2S
Data File: C:\HPCHEM\1\DATA\110310\S1031006.D



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0033-002
Report Date: 14-Mar-11
Date Analyzed: 10-Mar-11
Analyzed by: LAJ
GD Air QC Batch: QC-031011TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038000-3

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Includes rows for various chemical constituents like Benzene, Chloroform, and Toluene.



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0033-002
Report Date: 14-Mar-11
Date Analyzed: 10-Mar-11
Analyzed by: LAJ
GD Air QC Batch: QC-031011TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038000-3

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL*, RESULT, NOTE. Includes data for Trichlorofluoromethane, Trichlorotrifluoroethane, Vinyl Chloride, m&p-Xylenes, o-Xylene, and Surrogate Recovery Report.

*Comparison with the method blank this sample run with a dilution factor of: 1.23
Canister #99015 was received at an initial pressure of 0.3psi and pressurized to 3.7psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC).
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature: AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director
Data File: CHEM\gd5973.1\031011.B\03101114.D
Report File: GDAIR D:\Client-Report\GD11-0033-2



CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD11-0033-2H2S**
Report Date: **3/16/2011**
Date Analyzed: **3/10/2011**
Analyzed by: **JCA**
GD QC Batch: **QC-031011H2S**

Project No.: **1038000-3**

Method: **ASTM 1946**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #2-RW03101106	Air	Charlotte S.	03/10/11	03/10/11
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	308	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Comparison with the method blank this sample run with a dilution factor of: **1.23**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd11-0033-2H2S
Data File: C:\HPCHEM\1\DATA\110310\S1031007.D



CLIENT: **GD Air Testing, Inc.**

GD Air Testing Lab. ID:

Method Blank

Report Date:

03/10/11

Date Analyzed:

03/10/11

Analyzed by:

LAJ

GD Air QC Batch:

QC-031011

Project No.:

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Benzene	78	71432	0.20	ND	ND	
Benzylchloride	126.6	100447	0.20	ND	ND	N
Bromomethane (Methyl Bromide)	94.9	74839	0.20	ND	ND	
Carbon tetrachloride	153.8	56235	0.20	ND	ND	
Chlorobenzene	112.6	108907	0.20	ND	ND	
Chloroethane (Ethyl Chloride)	64.5	75003	0.20	ND	ND	
Chloroform	119	67663	0.20	ND	ND	
Chloromethane (Methyl Chloride)	50.4	74873	0.20	ND	ND	
1,2-Dibromoethane (EDB)	187.9	106934	0.20	ND	ND	
1,2-Dichlorobenzene	147	95501	0.20	ND	ND	
1,3-Dichlorobenzene	147	541731	0.20	ND	ND	
1,4-Dichlorobenzene	147	106467	0.20	ND	ND	
1,1-Dichloroethane	99	74343	0.20	ND	ND	
1,1-Dichlorethene	97	75354	0.20	ND	ND	
Dichlorodifluoromethane (F12)	120.9	75718	0.20	ND	ND	
Dichlorotetrafluoroethane (F114)	170.9	76142	0.20	ND	ND	
1,2-Dichloroethane (EDC)	99	107062	0.20	ND	ND	
cis-1,2-Dichloroethene	97	156592	0.20	ND	ND	
trans-1,2-Dichloroethene	97	156605	0.20	ND	ND	N
Dichloromethane (Methylene chloride)	84.9	75092	0.20	ND	ND	
1,2-Dichloropropane	113	78875	0.20	ND	ND	
cis-1,3-Dichloropropene	111	10061015	0.20	ND	ND	
trans-1,3-Dichloropropene	111	10061026	0.20	ND	ND	
Ethylbenzene	106	100414	0.20	ND	ND	
Hexachlorobutadiene	260.8	87683	0.20	ND	ND	
Styrene	104	100425	0.20	ND	ND	
1,1,2,2-Tetrachloroethane	167.9	79345	0.20	ND	ND	
Tetrachloroethene (PCE)	165.8	127184	0.20	ND	ND	
Toluene	92	108883	0.20	ND	ND	
1,1,1-Trichloroethane (TCA)	133.4	71556	0.20	ND	ND	
1,1,2-Trichloroethane	133.4	79005	0.20	ND	ND	
1,3,5-Trimethylbenzene/4-Ethyltoluene	120.2	108678	0.20	ND	ND	
1,2,4-Trimethylbenzene	120.2	95636	0.20	ND	ND	
1,2,4-Trichlorobenzene	181.5	120821	0.20	ND	ND	
Trichloroethene (TCE)	131.3	79016	0.20	ND	ND	



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

03/10/11

Date Analyzed:

03/10/11

Analyzed by:

LAJ

Project No.: QC

GD Air QC Batch:

QC-031011

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M	
Trichlorofluoromethane (F-11)	137.4	75694	0.20	ND	ND	
Trichlorotrifluoroethane (F-113)	187.4	76131	0.20	ND	ND	
Vinyl Chloride	62.5	75014	0.20	ND	ND	
m&p-Xylenes	106	1330207	0.20	ND	ND	
o-Xylene	106	95476	0.20	ND	ND	
Surrogate Recovery Report			Spiked ppbv	Found ppbv	R%	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	4.94	98.8	
Bromofluorobenzene (SS2)	175	460004	5.00	4.73	94.6	

*Comparison with the method blank this sample run with a dilution factor of:

1.0

N: Not included in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: Chemstation\c\chem\gd5973.I\031011.B\03101109.D

Report File: GD SR\ID\QC-11-TO14\Blank



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

BS/BSD

Report Date:

03/10/11

Date Analyzed:

03/10/11

Project No.:

Analyzed by:

LAJ

GD Air QC Batch:

QC-031011

Method:

EPATO14

NELAP Certification #:

T104704364-09-TX

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED
BS/BSD	Air		

Spike Control Compounds	Spiked	Found and Recovery				
	ppbv	BS/ppbv	BS R%	BSD	BSD R%	% RPD

VOLATILE ORGANICS BY EPA TO-14

Vinyl Chloride	10.0	8.3	83	7.4	74	11.5
Methylene chloride (Dichloromethane)	10.0	8.3	83	8.2	82	1.2
1,1,1-Trichloroethane	10.0	9.3	93	9.5	95	2.1
1,2-Dichloroethane (EDC)	10.0	8.8	88	9.3	93	5.5
Benzene	10.0	9.3	93	9.2	92	1.1
Carbon tetrachloride	10.0	9.0	90	9.5	95	5.4
Trichloroethene (TCE)	10.0	12.0	120	11.0	110	8.7
Toluene	10.0	11.0	110	11.0	110	0.0
Chlorobenzene	10.0	10.0	100	11.0	110	9.5
Ethylbenzene	10.0	11.0	110	11.0	110	0.0
o-Xylene	10.0	12.0	120	13.0	130	8.0

Surrogate Recovery Report

1,4-Difluorobenzene (SS1)	5.0	5.07	101.4	4.90	98.0	3.4
Bromofluorobenzene (SS2)	5.0	4.34	86.8	4.84	96.8	10.9

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

* The control limit for relative percentage difference of BS/BSD is 30%

* If any control compound is not within the control limit, please see the case narrative for more details.

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: c:\chem\gd5973.I\031011.B\03101104.D and 03101107.D

Report File: GD\SR\ID\QC-TO14\BS-BSD



CLIENT: **GD Air Testing, Inc.**

GD Air Testing Lab. ID: **QC-BLK-031011H2S**
 Report Date: 3/16/2011
 Date Analyzed: 3/10/2011
 Analyzed by: JCA
 GD QC Batch: **QC-031011H2S**
 NELAP Certification No.: T104704364
 Method: **ASTM 1946**

REPORT OF METHOD BLANK RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Blank	Air	JCA	03/10/11	03/10/11

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	250	ND	

* If any compound is out of control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\QC-blk-031011-H2S
Data File: C:\HPCHEM\1\DATA\110310\S1031002.D



CLIENT: GD Air Testing Inc. QA

GD Air Testing Lab. ID: QC-031011H2S
Report Date: 3/16/2011
Date Analyzed: 3/10/2011
Analyzed by: JCA
NELAP Certification No.: T104704364
Method: ASTM 1946

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, BS/BSD, GAS, CONSTITUENT, Spiked ppmv, Found and Recovery (BS, BS, R%, BSD, BSD, R%), RPD %, NOTE. Row 1: Hydrogen Sulfide, 1000, 1250, 125, 1320, 132, 5.4

- * The control limit for BS Recovery % of all spiked compound is 70% - 130%
** The control limit for relative percentage difference of BS/BSD is 30%
*** If any control compound is not within the control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature: GJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director

Data File: C:\HPCHEM\1\DATA\110310\S1031003.D, S1031004.D
Report File: GDAIR D:\Client_Report\H2S-BS-031011F

Sampling Event 4:

March 30-31, 2011



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0049-001
Report Date: 04-Apr-11
Date Analyzed: 31-Mar-11
Analyzed by: LAJ
GD Air QC Batch: QC-033111TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038000-4

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL* (ppbv), RESULT (ppbv), NOTE (ug/cu M). Includes rows for Benzene, Benzylchloride, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,1-Dichloroethane, 1,1-Dichlorethene, Dichlorodifluoromethane (F12), Dichlorotetrafluoroethane (F114), 1,2-Dichloroethane (EDC), cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Dichloromethane (Methylene chloride), 1,2-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Styrene, 1,1,2,2-Tetrachloroethane, Tetrachloroethene (PCE), Toluene, 1,1,1-Trichloroethane (TCA), 1,1,2-Trichloroethane, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,2,4-Trichlorobenzene, Trichloroethene (TCE).



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0049-001
Report Date: 04-Apr-11
Date Analyzed: 31-Mar-11
Analyzed by: LAJ
GD Air QC Batch: QC-033111TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038000-4

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL*, RESULT, NOTE. Includes data for Trichlorofluoromethane, Trichlorotrifluoroethane, Vinyl Chloride, m&p-Xylenes, and o-Xylene.

Surrogate Recovery Report

Table with columns: Surrogate Recovery Report, Spiked (ppbv), Found (ppbv), R%. Includes data for 1,4-Difluorobenzene (SS1) and Bromofluorobenzene (SS2).

*Comparison with the method blank this sample run with a dilution factor of: 1.26

Canister #60204 was received at an initial pressure of -0.4psi and pressurized to 3.3psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature of George Dai

George Dai, Ph.D.
Laboratory Director

Data File: CHEM\gd5973.I\033111.B\03311112.D

Report File: GDAIR D:\Client-Report\GD11-0049-1



CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD11-0049-1H2S**
Report Date: 4/8/2011
Date Analyzed: 4/1/2011
Analyzed by: JCA
GD QC Batch: **QC-040111H2S**

Project No.: **1038000-4**

Method: **ASTM 1946**

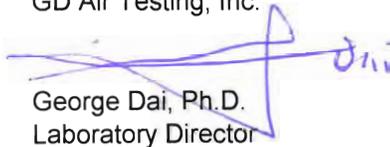
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW03311107	Air	Charlotte S.	03/31/11	03/31/11
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	315	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Comparison with the method blank this sample run with a dilution factor of: **1.26**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.


George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd11-0049-1H2S
Data File: C:\HPCHEM\1\DATA\110401\S1040105.D



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0049-002
Report Date: 04-Apr-11
Date Analyzed: 31-Mar-11
Analyzed by: LAJ
GD Air QC Batch: QC-033111TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038000-4

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL* ppbv, RESULT ppbv, NOTE ug/cu M. Includes list of chemicals like Benzene, Benzylchloride, Bromomethane, etc.

CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD11-0049-002**
 Report Date: **04-Apr-11**
 Date Analyzed: **31-Mar-11**
 Analyzed by: **LAJ**
 GD Air QC Batch: **QC-033111TO14**
 Method: **EPATO14**
NELAP Certification #: T104704364

Project No.: **1038000-4**

REPORT OF ANALYTICAL RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample #1-RW03311108	Air	Charlotte S.	03/31/11	03/31/11	
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE
			ppbv	ppbv	ug/cu M
Trichlorofluoromethane (F-11)	137.4	75694	0.3	0.31	1.74
Trichlorotrifluoroethane (F-113)	187.4	76131	0.3	ND	ND
Vinyl Chloride	62.5	75014	0.3	ND	ND
m&p-Xylenes	106	1330207	0.3	ND	ND
o-Xylene	106	95476	0.3	ND	ND
Surrogate Recovery Report			Spiked	Found	R%
			ppbv	ppbv	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	5.26	105
Bromofluorobenzene (SS2)	175	460004	5.00	4.76	95

*Comparison with the method blank this sample run with a dilution factor of: **1.35**

Canister #0017 was received at an initial pressure of -1.5psi and pressurized to 3.1psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

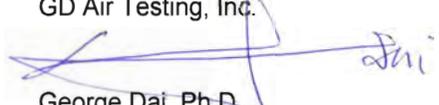
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
 GD Air Testing, Inc.



George Dai, Ph.D.
 Laboratory Director

Data File: CHEM\gd5973.I\033111.B\03311113.D

Report File: GDAIR D:\Client-Report\GD11-0049-2



CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD11-0049-2H2S**
Report Date: 4/8/2011
Date Analyzed: 4/1/2011
Analyzed by: JCA
GD QC Batch: **QC-040111H2S**

Project No.: **1038000-4**

Method: **ASTM 1946**

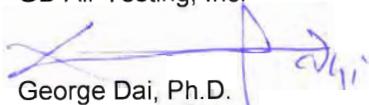
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #2-RW03311108	Air	Charlotte S.	03/31/11	03/31/11
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	338	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Comparison with the method blank this sample run with a dilution factor of: **1.35**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.


George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd11-0049-2H2S
Data File: C:\HPCHEM\1\DATA\110401\1S1040106.D

CLIENT: **GD Air Testing, Inc.**

GD Air Testing Lab. ID:

Method Blank

Report Date:

03/31/11

Date Analyzed:

03/31/11

Analyzed by:

LAJ

Project No.:

GD Air QC Batch:

QC-033111

Method:

EPATO14

NELAP Certification #:
T104704364
REPORT OF METHOD BLANK RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Benzene	78	71432	0.20	ND	ND	
Benzylchloride	126.6	100447	0.20	ND	ND	N
Bromomethane (Methyl Bromide)	94.9	74839	0.20	ND	ND	
Carbon tetrachloride	153.8	56235	0.20	ND	ND	
Chlorobenzene	112.6	108907	0.20	ND	ND	
Chloroethane (Ethyl Chloride)	64.5	75003	0.20	ND	ND	
Chloroform	119	67663	0.20	ND	ND	
Chloromethane (Methyl Chloride)	50.4	74873	0.20	ND	ND	
1,2-Dibromoethane (EDB)	187.9	106934	0.20	ND	ND	
1,2-Dichlorobenzene	147	95501	0.20	ND	ND	
1,3-Dichlorobenzene	147	541731	0.20	ND	ND	
1,4-Dichlorobenzene	147	106467	0.20	ND	ND	
1,1-Dichloroethane	99	74343	0.20	ND	ND	
1,1-Dichlorethene	97	75354	0.20	ND	ND	
Dichlorodifluoromethane (F12)	120.9	75718	0.20	ND	ND	
Dichlorotetrafluoroethane (F114)	170.9	76142	0.20	ND	ND	
1,2-Dichloroethane (EDC)	99	107062	0.20	ND	ND	
cis-1,2-Dichloroethene	97	156592	0.20	ND	ND	
trans-1,2-Dichloroethene	97	156605	0.20	ND	ND	N
Dichloromethane (Methylene chloride)	84.9	75092	0.20	ND	ND	
1,2-Dichloropropane	113	78875	0.20	ND	ND	
cis-1,3-Dichloropropene	111	10061015	0.20	ND	ND	
trans-1,3-Dichloropropene	111	10061026	0.20	ND	ND	
Ethylbenzene	106	100414	0.20	ND	ND	
Hexachlorobutadiene	260.8	87683	0.20	ND	ND	
Styrene	104	100425	0.20	ND	ND	
1,1,2,2-Tetrachloroethane	167.9	79345	0.20	ND	ND	
Tetrachloroethene (PCE)	165.8	127184	0.20	ND	ND	
Toluene	92	108883	0.20	ND	ND	
1,1,1-Trichloroethane (TCA)	133.4	71556	0.20	ND	ND	
1,1,2-Trichloroethane	133.4	79005	0.20	ND	ND	
1,3,5-Trimethylbenzene/4-Ethyltoluene	120.2	108678	0.20	ND	ND	
1,2,4-Trimethylbenzene	120.2	95636	0.20	ND	ND	
1,2,4-Trichlorobenzene	181.5	120821	0.20	ND	ND	
Trichloroethene (TCE)	131.3	79016	0.20	ND	ND	

PAGE 8 OF 12

CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

03/31/11

Date Analyzed:

03/31/11

Analyzed by:

LAJ

 Project No.: **QC**

GD Air QC Batch:

QC-033111

Method:

EPATO14

NELAP Certification #:
T104704364
REPORT OF METHOD BLANK RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Trichlorofluoromethane (F-11)	137.4	75694	0.20	ND	ND	
Trichlorotrifluoroethane (F-113)	187.4	76131	0.20	ND	ND	
Vinyl Chloride	62.5	75014	0.20	ND	ND	
m&p-Xylenes	106	1330207	0.20	ND	ND	
o-Xylene	106	95476	0.20	ND	ND	
Surrogate Recovery Report			Spiked	Found	R%	
			ppbv	ppbv		
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	5.34	106.8	
Bromofluorobenzene (SS2)	175	460004	5.00	4.62	92.4	

*Comparison with the method blank this sample run with a dilution factor of:

1.0
N: Not included in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

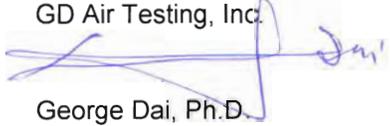
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.


 George Dai, Ph.D.

Laboratory Director

Data File: Chemstation\c\chem\gd5973.1\033111.B\03311107.D

Report File: GD SR\ID\QC-11-TO14\Blank

CLIENT: **GD Air Testing, Inc.**

 GD Air Testing Lab. ID: **BS/BSD**

Report Date: 03/31/11

Project No.:

Date Analyzed: 03/31/11

Analyzed by: LAJ

 GD Air QC Batch: **QC-033111**

Method: EPATO14

NELAP Certification #: **T104704364-09-TX**
REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BS/BSD	Air					
Spike Control Compounds	Spiked	Found and Recovery				
	ppbv	BS/ppbv	BS R%	BSD	BSD R%	% RPD
VOLATILE ORGANICS BY EPA TO-14						
Vinyl Chloride	10.0	7.5	75	7.6	76	1.3
Methylene chloride (Dichloromethane)	10.0	8.2	82	7.8	78	5.0
1,1,1-Trichloroethane	10.0	10.0	100	9.5	95	5.1
1,2-Dichloroethane (EDC)	10.0	9.8	98	9.6	96	2.1
Benzene	10.0	8.6	86	8.1	81	6.0
Carbon tetrachloride	10.0	10.0	100	9.6	96	4.1
Trichloroethene (TCE)	10.0	12.0	120	11.0	110	8.7
Toluene	10.0	10.0	100	10.0	100	0.0
Chlorobenzene	10.0	9.3	93	8.8	88	5.5
Ethylbenzene	10.0	10.0	100	9.4	94	6.2
o-Xylene	10.0	11.0	110	11.0	110	0.0
Surrogate Recovery Report						
1,4-Difluorobenzene (SS1)	5.0	4.98	99.6	5.07	101.4	1.8
Bromofluorobenzene (SS2)	5.0	4.65	93.0	4.42	88.4	5.1

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

* The control limit for relative percentage difference of BS/BSD is 30%

* If any control compound is not within the control limit, please see the case narrative for more details.

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

Respectfully submitted

GD Air Testing, Inc.



George Dai, Ph.D.

Laboratory Director

Data File: c:\chem\gd5973.I\033111.B\03311104.D and 03311115.D

Report File: GD\SRID\QC-TO14\BS-BSD



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID: **QC-BLK-040111H2S**

Report Date: 4/8/2011

Date Analyzed: 4/1/2011

Analyzed by: JCA

GD QC Batch: **QC-040111H2S**

NELAP Certification No.: T104704364

Method: **ASTM 1946**

REPORT OF METHOD BLANK RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Blank	Air	JCA	04/01/11	04/01/11
CONSTITUENT	MW	PQL*	RESULT	NOTE
		ppmv	ppmv	
Hydrogen Sulfide	34.0	250	ND	

* If any compound is out of control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\QC-blk-040111-H2S

Data File: C:\HPCHEM\1\DATA\110401\S1040102.D



CLIENT: GD Air Testing Inc. QA

GD Air Testing Lab. ID: **QC-040111H2S**
 Report Date: 4/8/2011
 Date Analyzed: 4/1/2011
 Analyzed by: JCA
 NELAP Certification No.: T104704364
 Method: ASTM 1946

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BS/BSD	GAS					
CONSTITUENT	Spiked ppmv	Found and Recovery				NOTE
		BS	BS, R%	BSD	BSD, R%	
Hydrogen Sulfide	1000	1250	125	1230	123	1.6

- * The control limit for BS Recovery % of all spiked compound is 70% - 130%
- ** The control limit for relative percentage difference of BS/BSD is 30%
- *** If any control compound is not within the control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Data File: C:\HPCHEM\1\DATA\110401\S1040103.D, S1040104.D
Report File: GDAIR D:\Client_Report\H2S-BS-040111F

Sampling Event 5:

April 15-16, 2011

*Due to a lab error, the lab report date and date analyzed are incorrect.

Report to:		Invoice to:	
Company: <u>Dougherty Sprague Env.</u>	Company: <u>Dougherty Sprague Env.</u>	Address: <u>3902 Industrial St.</u>	Address: <u>3902 Industrial St.</u>
Address: <u>Suite A</u>	Address: <u>Suite A</u>	Rowlett, TX 75088	Rowlett, TX 75088
Contact: <u>Curtis Franklin</u>	Contact: <u>Deborah Farris</u>	Phone: <u>817-540-4100</u>	Phone: <u>972-412-8666</u>
Phone: <u>817-540-4100</u>	Phone: <u>972-412-8666</u>	Fax: <u>817-540-4101</u>	PO/ISO: <u>1038001</u>
Fax: <u>817-540-4101</u>	PO/ISO: <u>1038001</u>	Email: <u>cfranklin@dsei.com</u>	

ANALYSIS REQUESTED	TO-14VOCs	TO-15VOCs	TO-1 and/or TO-2 VOCs	FIXED GASES (CO ₂ , CO, O ₂ , N ₂ , CH ₄)	Light Hydrocarbon C ₁ -C ₆	Headspace (Please specify compounds)	(Mercaptans & Organic Sulfur Compounds)	TICs by GC/MS SCAN	RSK-175 (Methane, ethane, ethene)	MOLD ID	Lab Sample ID (Lab Use Only)
--------------------	-----------	-----------	-----------------------	--	--	--------------------------------------	---	--------------------	-----------------------------------	---------	------------------------------

Sampler's Name (print)	Sampler's Signature
<u>Charlotte Stockard</u>	<u>Charlotte Stockard</u>

Proj. No.	Project Name
<u>1038001-5</u>	<u>Hinton Landfill Monitoring</u>

Date	Time	Can #	Identifying Marks of Sample(s)	TO-14VOCs	TO-15VOCs	TO-1 and/or TO-2 VOCs	FIXED GASES (CO ₂ , CO, O ₂ , N ₂ , CH ₄)	Light Hydrocarbon C ₁ -C ₆	Headspace (Please specify compounds)	(Mercaptans & Organic Sulfur Compounds)	TICs by GC/MS SCAN	RSK-175 (Methane, ethane, ethene)	MOLD ID	Lab Sample ID (Lab Use Only)
<u>4/15/11</u>	<u>2030-0448</u>	<u>62213</u>	<u>Sample #1 RW04161109</u>	X						X				<u>GD11-0060-1</u>
<u>4/16/11</u>	<u>2042-0500</u>	<u>9904</u>	<u>Sample #2 RW04161110</u>	X						X				<u>-2</u>
<u>4/16/11</u>	<u>1956-0516</u>	<u>2515</u>	<u>Sample #3 RW04161111</u>	X						X				<u>-3</u>
			<u>Can 62213 w/ FC 0608-201001Q3</u>											
			<u>Can 9904 " " FC 4104CV</u>											
			<u>Can 2515 " " FC 4104CV-3</u>											

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Remarks
<u>Charlotte Stockard</u>	<u>4-18/11</u>	<u>10:04</u>	<u>[Signature]</u>	<u>4/18/11</u>	<u>10:04</u>	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Normal TAT 3 can + 3 FC Pickup Any change for Analysis Request should be submitted by a written document.
			<u>[Signature]</u>	<u>4/18/11</u>	<u>10:04</u>	

*Lab error: Incorrect report and analysis dates.



GD Air Testing Inc.

www.gdair.com

CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD11-0060-001**
 Report Date: ~~14-Mar-11~~ ^{2*}
 Date Analyzed: ~~10-Mar-11~~ ¹
 Analyzed by: **LAJ**
 GD Air QC Batch: **QC-031011TO14**
 Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001-5**

REPORT OF ANALYTICAL RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED			
Sample #1-RW04161109	Air	Charlotte S.	04/15/11	04/18/11		
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Benzene	78	71432	0.3	9.56	30.50	
Benzylchloride	126.6	100447	0.3	ND	ND	N
Bromomethane (Methyl Bromide)	94.9	74839	0.3	ND	ND	
Carbon tetrachloride	153.8	56235	0.3	ND	ND	
Chlorobenzene	112.6	108907	0.3	ND	ND	
Chloroethane (Ethyl Chloride)	64.5	75003	0.3	ND	ND	
Chloroform	119	67663	0.3	ND	ND	
Chloromethane (Methyl Chloride)	50.4	74873	0.3	ND	ND	
1,2-Dibromoethane (EDB)	187.9	106934	0.3	ND	ND	
1,2-Dichlorobenzene	147	95501	0.3	ND	ND	
1,3-Dichlorobenzene	147	541731	0.3	ND	ND	
1,4-Dichlorobenzene	147	106467	0.3	ND	ND	
1,1-Dichloroethane	99	74343	0.3	ND	ND	
1,1-Dichlorethene	97	75354	0.3	ND	ND	
Dichlorodifluoromethane (F12)	120.9	75718	0.3	ND	ND	
Dichlorotetrafluoroethane (F114)	170.9	76142	0.3	ND	ND	
1,2-Dichloroethane (EDC)	99	107062	0.3	ND	ND	
cis-1,2-Dichloroethene	97	156592	0.3	ND	ND	
trans-1,2-Dichloroethene	97	156605	0.3	ND	ND	N
Dichloromethane (Methylene chloride)	84.9	75092	0.3	ND	ND	
1,2-Dichloropropane	113	78875	0.3	ND	ND	
cis-1,3-Dichloropropene	111	10061015	0.3	ND	ND	
trans-1,3-Dichloropropene	111	10061026	0.3	ND	ND	
Ethylbenzene	106	100414	0.3	1.57	6.81	
Hexachlorobutadiene	260.8	87683	0.3	ND	ND	
Styrene	104	100425	0.3	ND	ND	
1,1,2,2-Tetrachloroethane	167.9	79345	0.3	ND	ND	
Tetrachloroethene (PCE)	165.8	127184	0.3	ND	ND	
Toluene	92	108883	0.3	5.9	22.3	
1,1,1-Trichloroethane (TCA)	133.4	71556	0.3	ND	ND	
1,1,2-Trichloroethane	133.4	79005	0.3	ND	ND	
1,3,5-Trimethylbenzene	120.2	108678	0.3	ND	ND	
1,2,4-Trimethylbenzene	120.2	95636	0.3	ND	ND	
1,2,4-Trichlorobenzene	181.5	120821	0.3	ND	ND	
Trichloroethene (TCE)	131.3	79016	0.3	ND	ND	

PAGE 2 OF 15



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0060-001
Report Date: 14-Mar-11
Date Analyzed: 10-Mar-11
Analyzed by: LAJ
GD Air QC Batch: QC-031011TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001-5

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL*, RESULT, NOTE. Includes data for Trichlorofluoromethane, Trichlorotrifluoroethane, Vinyl Chloride, m&p-Xylenes, and o-Xylene.

Surrogate Recovery Report

Table with columns: Surrogate Recovery Report, Spiked ppbv, Found ppbv, R%. Includes data for 1,4-Difluorobenzene and Bromofluorobenzene.

*Comparison with the method blank this sample run with a dilution factor of: 1.50
Canister #62213 was received at an initial pressure of -1.7psi and pressurized to 4.4psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC).
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature of George Dai

George Dai, Ph.D.
Laboratory Director
Data File: CHEM\gd5973.1\042011.B\04201132.D
Report File: GDAIR D:\Client-Report\GD11-0060-1



CLIENT: **Curtis Franklin**
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD11-0060-1H2S**
Report Date: **4/25/2011**
Date Analyzed: **4/20/2011**
Analyzed by: **JCA**
GD QC Batch: **QC-042011H2S**

Project No.: **1038001-5**

Method: **ASTM 1946**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW04161109	Air	Charlotte S.	04/15/11	04/18/11
CONSTITUENT	MW	PQL*	RESULT	NOTE
		ppmv	ppmv	
Hydrogen Sulfide	34.0	368	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Comparison with the method blank this sample run with a dilution factor of: **1.47**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd11-0060-1H2S
Data File: C:\HPCHEM\1\DATA\110420\1S1042005.D



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0060-002
Report Date: 14-Mar-11
Date Analyzed: 10-Mar-11
Analyzed by: LAJ
GD Air QC Batch: QC-031011TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001-5

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Rows include various chemical constituents like Benzene, Chlorobenzene, etc.



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD11-0060-002**
Report Date: **14-Mar-11** *Q2**
Date Analyzed: **10-Mar-11** *Q1*
Analyzed by: **LAJ**
GD Air QC Batch: **QC-031011TO14**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001-5**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		NOTE
			04/15/11	04/18/11	
Sample #2-RW04161110	Air	Charlotte S.			
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M
Trichlorofluoromethane (F-11)	137.4	75694	0.2	0.29	1.62
Trichlorotrifluoroethane (F-113)	187.4	76131	0.2	ND	ND
Vinyl Chloride	62.5	75014	0.2	ND	ND
m&p-Xylenes	106	1330207	0.2	ND	ND
o-Xylene	106	95476	0.2	ND	ND
Surrogate Recovery Report			Spiked ppbv	Found ppbv	R%
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	5.30	106
Bromofluorobenzene (SS2)	175	460004	5.00	5.31	106

*Comparison with the method blank this sample run with a dilution factor of: **1.23**

Canister #9904 was received at an initial pressure of 1.1psi and pressurized to 4.7psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File:CHEM\gd5973.1\042011.B\04201127.D

Report File: GDAIR D:\Client-Report\GD11-0060-2



CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD11-0060-2H2S**
Report Date: 4/25/2011
Date Analyzed: 4/20/2011
Analyzed by: JCA
GD QC Batch: **QC-042011H2S**

Project No.: **1038001-5**

Method: **ASTM 1946**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #2-RW04161110	Air	Charlotte S.	04/15/11	04/18/11

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	308	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Comparison with the method blank this sample run with a dilution factor of: **1.23**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd11-0060-2H2S
Data File: C:\HPCHEM\1\DATA\110420\S1042006.D



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0060-003
Report Date: 14-Mar-11
Date Analyzed: 10-Mar-11
Analyzed by: LAJ
GD Air QC Batch: QC-031011TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001-5

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL* ppbv, RESULT ppbv, NOTE. Includes rows for Benzene, Benzylchloride, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,1-Dichloroethane, 1,1-Dichlorethene, Dichlorodifluoromethane, Dichlorotetrafluoroethane, 1,2-Dichloroethane, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Dichloromethane, 1,2-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Styrene, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,2,4-Trichlorobenzene, Trichloroethene.



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0060-003
Report Date: 14-Mar-11
Date Analyzed: 10-Mar-11
Analyzed by: LAJ
GD Air QC Batch: QC-031011TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001-5

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Includes rows for Trichlorofluoromethane, Trichlorotrifluoroethane, Vinyl Chloride, m&p-Xylenes, o-Xylene, and Surrogate Recovery Report.

*Comparison with the method blank this sample run with a dilution factor of: 1.30
Canister #2515 was received at an initial pressure of 0.3psi and pressurized to 4.8psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC).
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature: AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director
Data File: CHEM\gd5973.I\042011.B\04201131.D
Report File: GDAIR D:\Client-Report\GD11-0060-3

RECEIVED

MAY 02 2011

www.gdair.com



GD Air Testing Inc.

CLIENT: **Curtis Franklin**
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD11-0060-3H2S**
Report Date: **4/25/2011**
Date Analyzed: **4/20/2011**
Analyzed by: **JCA**
GD QC Batch: **QC-042011H2S**

Project No.: **1038001-5**

Method: **ASTM 1946**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #3-RW04161111	Air	Charlotte S.	04/15/11	04/18/11

CONSTITUENT	MW	PQL*	RESULT	NOTE
		ppmv	ppmv	
Hydrogen Sulfide	34.0	325	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Comparison with the method blank this sample run with a dilution factor of: **1.30**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd11-0060-3H2S
Data File: C:\HPCHEM\1\DATA\110420\1S1042007.D



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

04/20/11

Date Analyzed:

04/20/11

Analyzed by:

LAJ

GD Air QC Batch:

QC-042011

Project No.:

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Benzene	78	71432	0.20	ND	ND	
Benzylchloride	126.6	100447	0.20	ND	ND	N
Bromomethane (Methyl Bromide)	94.9	74839	0.20	ND	ND	
Carbon tetrachloride	153.8	56235	0.20	ND	ND	
Chlorobenzene	112.6	108907	0.20	ND	ND	
Chloroethane (Ethyl Chloride)	64.5	75003	0.20	ND	ND	
Chloroform	119	67663	0.20	ND	ND	
Chloromethane (Methyl Chloride)	50.4	74873	0.20	ND	ND	
1,2-Dibromoethane (EDB)	187.9	106934	0.20	ND	ND	
1,2-Dichlorobenzene	147	95501	0.20	ND	ND	
1,3-Dichlorobenzene	147	541731	0.20	ND	ND	
1,4-Dichlorobenzene	147	106467	0.20	ND	ND	
1,1-Dichloroethane	99	74343	0.20	ND	ND	
1,1-Dichlorethene	97	75354	0.20	ND	ND	
Dichlorodifluoromethane (F12)	120.9	75718	0.20	ND	ND	
Dichlorotetrafluoroethane (F114)	170.9	76142	0.20	ND	ND	
1,2-Dichloroethane (EDC)	99	107062	0.20	ND	ND	
cis-1,2-Dichloroethene	97	156592	0.20	ND	ND	
trans-1,2-Dichloroethene	97	156605	0.20	ND	ND	N
Dichloromethane (Methylene chloride)	84.9	75092	0.20	ND	ND	
1,2-Dichloropropane	113	78875	0.20	ND	ND	
cis-1,3-Dichloropropene	111	10061015	0.20	ND	ND	
trans-1,3-Dichloropropene	111	10061026	0.20	ND	ND	
Ethylbenzene	106	100414	0.20	ND	ND	
Hexachlorobutadiene	260.8	87683	0.20	ND	ND	
Styrene	104	100425	0.20	ND	ND	
1,1,2,2-Tetrachloroethane	167.9	79345	0.20	ND	ND	
Tetrachloroethene (PCE)	165.8	127184	0.20	ND	ND	
Toluene	92	108883	0.20	ND	ND	
1,1,1-Trichloroethane (TCA)	133.4	71556	0.20	ND	ND	
1,1,2-Trichloroethane	133.4	79005	0.20	ND	ND	
1,3,5-Trimethylbenzene/4-Ethyltoluene	120.2	108678	0.20	ND	ND	
1,2,4-Trimethylbenzene	120.2	95636	0.20	ND	ND	
1,2,4-Trichlorobenzene	181.5	120821	0.20	ND	ND	
Trichloroethene (TCE)	131.3	79016	0.20	ND	ND	



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

04/20/11

Date Analyzed:

04/20/11

Analyzed by:

LAJ

GD Air QC Batch:

QC-042011

Project No.: QC

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M	
Trichlorofluoromethane (F-11)	137.4	75694	0.20	ND	ND	
Trichlorotrifluoroethane (F-113)	187.4	76131	0.20	ND	ND	
Vinyl Chloride	62.5	75014	0.20	ND	ND	
m&p-Xylenes	106	1330207	0.20	ND	ND	
o-Xylene	106	95476	0.20	ND	ND	
Surrogate Recovery Report			Spiked ppbv	Found ppbv	R%	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	5.38	107.6	
Bromofluorobenzene (SS2)	175	460004	5.00	4.81	96.2	

*Comparison with the method blank this sample run with a dilution factor of:

1.0

N: Not included in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

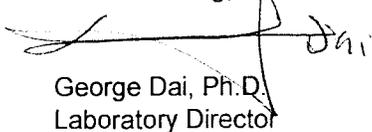
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.


George Dai, Ph.D.
Laboratory Director

Data File: Chemstation\c\chem\gd5973.1\042011.B\04201107.D

Report File: GD SR\ND\QC-11-TO14\Blank

CLIENT: **GD Air Testing, Inc.**

GD Air Testing Lab. ID:

BS/BSD

Report Date:

04/20/11

Project No.:

Date Analyzed:

04/20/11

Analyzed by:

LAJ

GD Air QC Batch:

QC-042011

Method:

EPATO14

NELAP Certification #:
T104704364-09-TX
REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BS/BSD	Air					
Spike Control Compounds	Spiked	Found and Recovery				
	ppbv	BS/ppbv	BS R%	BSD	BSD R%	% RPD
VOLATILE ORGANICS BY EPA TO-14						
Vinyl Chloride	5.0	5.7	113	5.3	105	7.5
Methylene chloride (Dichloromethane)	5.0	5.9	118	5.3	106	10.4
1,1,1-Trichloroethane	5.0	6.2	125	5.8	116	7.1
1,2-Dichloroethane (EDC)	5.0	5.8	116	5.6	112	3.7
Benzene	5.0	5.6	113	5.4	107	5.1
Carbon tetrachloride	5.0	6.0	121	5.6	112	7.4
Trichloroethene (TCE)	5.0	6.1	122	5.7	114	7.0
Toluene	5.0	6.1	123	5.5	110	11.2
Chlorobenzene	5.0	5.5	109	5.2	103	5.7
Ethylbenzene	5.0	6.0	120	5.7	114	5.3
o-Xylene	5.0	6.3	127	6.1	122	4.0
Surrogate Recovery Report						
1,4-Difluorobenzene (SS1)	5.0	5.17	103.4	5.20	104.0	0.6
Bromofluorobenzene (SS2)	5.0	4.71	94.2	5.08	101.6	7.6

*CN: See case narrative.

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

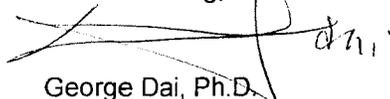
* The control limit for relative percentage difference of BS/BSD is 30%

* If any control compound is not within the control limit, please see the case narrative for more details.

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

Respectfully submitted

GD Air Testing, Inc.



George Dai, Ph.D.

Laboratory Director

Data File: c:\chem\gd5973.I\042011.B\04201103.D and 04201104.D

Report File: GD\SR\ID\QC-TO14\BS-BSD



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID: **QC-BLK-042011H2S**

Report Date: 4/25/2011

Date Analyzed: 4/20/2011

Analyzed by: JCA

GD QC Batch: **QC-042011H2S**

NELAP Certification No.: T104704364

Method: **ASTM 1946**

REPORT OF METHOD BLANK RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Blank	Air	JCA	04/20/11	04/20/11

CONSTITUENT	MW	PQL*	RESULT	NOTE
		ppmv	ppmv	
Hydrogen Sulfide	34.0	250	ND	

* If any compound is out of control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\QC-blk-042011-H2S
Data File: C:\HPCHEM\1\DATA\110420\S1042002.D

RECEIVED
APR 02 2011



CLIENT: GD Air Testing Inc. QA

GD Air Testing Lab. ID: **QC-042011H2S**

Report Date: 4/25/2011

Date Analyzed: 4/20/2011

Analyzed by: JCA

NELAP Certification No.: T104704364

Method: ASTM 1946

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BS/BSD	GAS					
CONSTITUENT	Spiked ppmv	Found and Recovery			NOTE	
		BS	BS, R%	BSD	BSD, R%	RPD %
Hydrogen Sulfide	1000	1250	125	1260	126	0.8

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

** The control limit for relative percentage difference of BS/BSD is 30%

*** If any control compound is not within the control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Data File: C:\HPCHEM\1\DATA\110420\S1042003.D, S1042004.D

Report File: GDAIR D:\Client_Report\H2S-BS-042011F

Sampling Event 6:

May 13-14, 2011

Report to:	Invoice to:
Company: <u>Dougherty Sprague Env.</u>	Company: <u>Dougherty Sprague Env.</u>
Address: <u>3902 Industrial St. Suite A</u>	Address: <u>3902 Industrial St. Suite A</u>
<u>Rowlett, TX 75088</u>	<u>Rowlett, TX 75088</u>
Contact: <u>Curtis Franklin</u>	Contact: <u>Deborah Farris</u>
Phone: <u>817-540-4100</u>	Phone: <u>972-412-8666</u>
Fax: <u>817-540-4101</u>	PO/SO: <u>1035001</u>
Email: <u>Cfranklin@edsei.com</u>	

ANALYSIS REQUESTED	TO-14VOCs																			
	TO-15VOCs																			
	TO-1 and/or TO-2 VOCs																			
	FIXEDGASES (CO, CO ₂ , O ₂ , N ₂ , CH ₄)																			
	Light Hydrocarbon C ₁ -C ₆																			
	Headspace (Please specify compounds)																			
	(Mercaptans & Organic Sulfur Compounds)																			
	TICs by GC/MS SCAN																			
	RSK-175 (Methane, ethane, ethene)																			
	MOLD ID																			

12 TOTAL PAGES
PAGE 1 OF 12

Sampler's Name (print)	Sampler's Signature
<u>Charlotte Stockard</u>	<u>Charlotte Stockard</u>

Proj. No.	Project Name
<u>1038001-6</u>	<u>Hinton Landfill Monitoring</u>

Date	Time	Can #	Identifying Marks of Sample(s)	TO-14VOCs	TO-15VOCs	TO-1 and/or TO-2 VOCs	FIXEDGASES (CO, CO ₂ , O ₂ , N ₂ , CH ₄)	Light Hydrocarbon C ₁ -C ₆	Headspace (Please specify compounds)	(Mercaptans & Organic Sulfur Compounds)	TICs by GC/MS SCAN	RSK-175 (Methane, ethane, ethene)	MOLD ID	Lab Sample ID (Lab Use Only)
<u>5/13/11</u>	<u>2007-405</u>	<u>2517</u>	<u>Sample #1 RW05141112</u>	X					X					<u>GD1H0076-1</u>
<u>5/13/11</u>	<u>2029-423</u>	<u>2516</u>	<u>Sample #2 RW05141113</u>	X					X					<u>-2</u>

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Remarks
<u>[Signature]</u>	<u>5/16/11</u>	<u>10:07</u>	<u>[Signature]</u>	<u>5/16/11</u>	<u>10:07</u>	
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Any change for Analysis Request should be submitted by a written document.
<u>[Signature]</u>			<u>[Signature]</u>	<u>5/16/11</u>	<u>10:07</u>	

2 cant + 2 FC



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0076-001
Report Date: 17-May-11
Date Analyzed: 16-May-11
Analyzed by: LAJ
GD Air QC Batch: QC-051611TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001-6

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL*, RESULT, NOTE. Lists various chemical compounds and their analysis results.



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0076-001
Report Date: 17-May-11
Date Analyzed: 16-May-11
Analyzed by: LAJ
GD Air QC Batch: QC-051611TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001-6

REPORT OF ANALYTICAL RESULTS

Page 2 of 2

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Includes rows for Trichlorofluoromethane, Trichlorotrifluoroethane, Vinyl Chloride, m&p-Xylenes, o-Xylene, and Surrogate Recovery Report.

*Comparison with the method blank this sample run with a dilution factor of: 2.17
Canister #2517 was received at an initial pressure of -5.7psi and pressurized to 4.8psi.
N: Not in the Scope of NELAC Accreditation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC).
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature of George Dai, Ph.D.

George Dai, Ph.D.
Laboratory Director
Data File:CHEM\gd5973.1\051611.B\05161108.D
Report File: GDAIR D:\Client-Report\GD11-0076-1



CLIENT: **Curtis Franklin**
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD11-0076-1H2S**
Report Date: 5/23/2011
Date Analyzed: 5/18/2011
Analyzed by: JCA
GD QC Batch: **QC-051811H2S**

Project No.: **1038001-6**

Method: **ASTM 1946**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW05141112	Air	Charlotte S.	05/13/11	05/16/11
CONSTITUENT	MW	PQL*	RESULT	NOTE
		ppmv	ppmv	
Hydrogen Sulfide	34.0	535	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Comparison with the method blank this sample run with a dilution factor of: **2.14**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.


George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd11-0076-1H2S
Data File: C:\HPCHEM\1\DATA\110518\S1051806.D



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD11-0076-002
Report Date: 17-May-11
Date Analyzed: 16-May-11
Analyzed by: LAJ
GD Air QC Batch: QC-051611TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001-6

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Includes rows for various chemical constituents like Benzene, Chloroform, and Toluene.

CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD11-0076-002**
 Report Date: **17-May-11**
 Date Analyzed: **16-May-11**
 Analyzed by: **LAJ**
 GD Air QC Batch: **QC-051611TO14**
 Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001-6**

REPORT OF ANALYTICAL RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample #2-RW05141113	Air	Charlotte S.	05/13/11	05/16/11	
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE
			ppbv	ppbv	ug/cu M
Trichlorofluoromethane (F-11)	137.4	75694	0.2	ND	ND
Trichlorotrifluoroethane (F-113)	187.4	76131	0.2	ND	ND
Vinyl Chloride	62.5	75014	0.2	ND	ND
m&p-Xylenes	106	1330207	0.2	ND	ND
o-Xylene	106	95476	0.2	ND	ND

Surrogate Recovery Report

			Spiked	Found	R%
			ppbv	ppbv	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	5.15	103
Bromofluorobenzene (SS2)	175	460004	5.00	4.93	99

*Comparison with the method blank this sample run with a dilution factor of: **1.23**

Canister #2516 was received at an initial pressure of 0.3psi and pressurized to 3.7psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
 GD Air Testing, Inc.



George Dai, Ph.D.
 Laboratory Director

Data File:CHEM\gd5973.1\051611.B\05161109.D

Report File: GDAIR D:\Client-Report\GD11-0076-2



CLIENT: **Curtis Franklin**
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD11-0076-2H2S**
Report Date: **5/23/2011**
Date Analyzed: **5/18/2011**
Analyzed by: **JCA**
GD QC Batch: **QC-051811H2S**

Project No.: **1038001-6**

Method: **ASTM 1946**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #2-RW05141113	Air	Charlotte S.	05/13/11	05/16/11
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	308	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.

Comparison with the method blank this sample run with a dilution factor of:

1.23

RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).

QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd11-0076-2H2S

Data File: C:\HPCHEM\1\DATA\110518\1S1051807.D



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

05/16/11

Date Analyzed:

05/16/11

Analyzed by:

LAJ

GD Air QC Batch:

QC-051611

Project No.:

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Benzene	78	71432	0.20	ND	ND	
Benzylchloride	126.6	100447	0.20	ND	ND	N
Bromomethane (Methyl Bromide)	94.9	74839	0.20	ND	ND	
Carbon tetrachloride	153.8	56235	0.20	ND	ND	
Chlorobenzene	112.6	108907	0.20	ND	ND	
Chloroethane (Ethyl Chloride)	64.5	75003	0.20	ND	ND	
Chloroform	119	67663	0.20	ND	ND	
Chloromethane (Methyl Chloride)	50.4	74873	0.20	ND	ND	
1,2-Dibromoethane (EDB)	187.9	106934	0.20	ND	ND	
1,2-Dichlorobenzene	147	95501	0.20	ND	ND	
1,3-Dichlorobenzene	147	541731	0.20	ND	ND	
1,4-Dichlorobenzene	147	106467	0.20	ND	ND	
1,1-Dichloroethane	99	74343	0.20	ND	ND	
1,1-Dichlorethene	97	75354	0.20	ND	ND	
Dichlorodifluoromethane (F12)	120.9	75718	0.20	ND	ND	
Dichlorotetrafluoroethane (F114)	170.9	76142	0.20	ND	ND	
1,2-Dichloroethane (EDC)	99	107062	0.20	ND	ND	
cis-1,2-Dichloroethene	97	156592	0.20	ND	ND	
trans-1,2-Dichloroethene	97	156605	0.20	ND	ND	N
Dichloromethane (Methylene chloride)	84.9	75092	0.20	ND	ND	
1,2-Dichloropropane	113	78875	0.20	ND	ND	
cis-1,3-Dichloropropene	111	10061015	0.20	ND	ND	
trans-1,3-Dichloropropene	111	10061026	0.20	ND	ND	
Ethylbenzene	106	100414	0.20	ND	ND	
Hexachlorobutadiene	260.8	87683	0.20	ND	ND	
Styrene	104	100425	0.20	ND	ND	
1,1,2,2-Tetrachloroethane	167.9	79345	0.20	ND	ND	
Tetrachloroethene (PCE)	165.8	127184	0.20	ND	ND	
Toluene	92	108883	0.20	ND	ND	
1,1,1-Trichloroethane (TCA)	133.4	71556	0.20	ND	ND	
1,1,2-Trichloroethane	133.4	79005	0.20	ND	ND	
1,3,5-Trimethylbenzene/4-Ethyltoluene	120.2	108678	0.20	ND	ND	
1,2,4-Trimethylbenzene	120.2	95636	0.20	ND	ND	
1,2,4-Trichlorobenzene	181.5	120821	0.20	ND	ND	
Trichloroethene (TCE)	131.3	79016	0.20	ND	ND	

CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

05/16/11

Date Analyzed:

05/16/11

Analyzed by:

LAJ

 Project No.: **QC**

GD Air QC Batch:

QC-051611

Method:

EPAT014

NELAP Certification #:
T104704364
REPORT OF METHOD BLANK RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Trichlorofluoromethane (F-11)	137.4	75694	0.20	ND	ND	
Trichlorotrifluoroethane (F-113)	187.4	76131	0.20	ND	ND	
Vinyl Chloride	62.5	75014	0.20	ND	ND	
m&p-Xylenes	106	1330207	0.20	ND	ND	
o-Xylene	106	95476	0.20	ND	ND	
Surrogate Recovery Report			Spiked	Found	R%	
			ppbv	ppbv		
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	5.13	102.6	
Bromofluorobenzene (SS2)	175	460004	5.00	4.81	96.2	

*Comparison with the method blank this sample run with a dilution factor of:

1.0
N: Not included in the Scope of NELAC Accreditation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC).

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

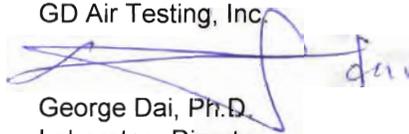
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.



 George Dai, Ph.D.
 Laboratory Director

Data File: Chemstation\c\chem\gd5973.I\051611.B\05161107.D

Report File: GD SR\ID\QC-11-TO14\Blank



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

BS/BSD

Report Date:

05/17/11

Date Analyzed:

05/17/11

Project No.:

Analyzed by:

LAJ

GD Air QC Batch:

QC-051711

Method:

EPATO14

NELAP Certification #:

T104704364-09-TX

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BS/BSD	Air					
Spike Control Compounds	Spiked ppbv	Found and Recovery				
		BS/ppbv	BS R%	BSD	BSD R%	% RPD
VOLATILE ORGANICS BY EPA TO-14						
Vinyl Chloride	5.0	5.4	108	5.3	107	1.3
Methylene chloride (Dichloromethane)	5.0	5.2	104	5.1	102	1.6
1,1,1-Trichloroethane	5.0	5.3	105	5.4	107	1.9
1,2-Dichloroethane (EDC)	5.0	5.3	105	5.3	105	0.2
Benzene	5.0	5.4	107	5.4	107	0.0
Carbon tetrachloride	5.0	5.1	103	5.2	104	1.7
Trichloroethene (TCE)	5.0	5.6	111	5.6	112	0.5
Toluene	5.0	5.7	115	5.7	113	1.4
Chlorobenzene	5.0	5.5	110	5.6	112	1.6
Ethylbenzene	5.0	5.7	114	5.8	116	1.7
o-Xylene	5.0	5.8	116	5.9	118	1.7
Surrogate Recovery Report						
1,4-Difluorobenzene (SS1)	5.0	5.11	102.2	5.09	101.8	0.4
Bromofluorobenzene (SS2)	5.0	4.88	97.6	4.96	99.2	1.6

*CN: See case narrative.

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

* The control limit for relative percentage difference of BS/BSD is 30%

* If any control compound is not within the control limit, please see the case narrative for more details.

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: c:\chem\gd5973.1\051611.B\05161104.D and 05161105.D

Report File: GD\SRID\QC-TO14\BS-BSD



CLIENT: **GD Air Testing, Inc.**

GD Air Testing Lab. ID: **QC-BLK-051811H2S**

Report Date: 5/23/2011

Date Analyzed: 5/18/2011

Analyzed by: JCA

GD QC Batch: **QC-051811H2S**

NELAP Certification No.: T104704364

Method: **ASTM 1946**

REPORT OF METHOD BLANK RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Blank	Air	JCA	05/18/11	05/18/11

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	250	ND	

* If any compound is out of control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\QC-blk-051811-H2S
Data File: C:\HPCHEM\1\DATA\110518\S1051802.D



CLIENT: **GD Air Testing Inc. QA**

GD Air Testing Lab. ID:

QC-051811H2S

Report Date:

5/23/2011

Date Analyzed:

5/18/2011

Analyzed by:

JCA

NELAP Certification No.:

T104704364

Method:

ASTM 1946

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BS/BSD	GAS					
CONSTITUENT	Spiked ppmv	Found and Recovery				NOTE
		BS	BS, R%	BSD	BSD, R%	
Hydrogen Sulfide	1000	1300	130	1240	124	4.7

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

** The control limit for relative percentage difference of BS/BSD is 30%

*** If any control compound is not within the control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Data File: C:\HPCHEM1\DATA\110518\S1051803.D, S1051804.D

Report File: GDAIR D:\Client_Report\H2S-BS-051811F

2012 Sampling Event 1:
January 17-18 , 2012



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0012-001
Report Date: 23-Jan-12
Date Analyzed: 19-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-011912TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Page 1 of 2

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Rows include various chemical constituents like Benzene, Benzylchloride, Bromomethane, etc.



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0012-001
Report Date: 23-Jan-12
Date Analyzed: 19-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-011912TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Includes data for various constituents like Trichlorofluoromethane, Vinyl Chloride, etc.

Surrogate Recovery Report

Table with columns: Surrogate Recovery Report, Spiked, Found, R%. Includes data for 1,4-Difluorobenzene and Bromofluorobenzene.

*Comparison with the method blank this sample run with a dilution factor of: 1.00
Canister #2516 was received at an initial pressure of 1.4psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature: AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director
Data File:CHEMSTATION_01\gd5973.I\01191220.D
Report File: GDAIR D:\Client-Report\GD12-0012-001



CLIENT: **Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088**

Project No.: **1038001**

GD Air Testing Lab. ID: **GD12-0012-001-M**
Report Date: 23-Jan-12
Date Analyzed: 19-Jan-12
Analyzed by: LAJ
GD Air QC Batch: **QC-011912TO14**
Method: EPA TO14
NELAP Certification #: T104704364

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
			01/17/12	01/18/12	
Sample #1-RW01171201	Air	Charlotte S.			
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M
Mercaptans and other Sulfur Gases by GC/MS					
Sulfur Dioxide	64	7446095	1.00	ND	ND N,T
Carbon Disulfide	76	75150	1.00	2.90	9.01 T
Carbonyl Sulfide	60	463581	1.00	ND	ND N,T
Dimethyl Sulfide	62	75183	1.00	ND	ND N,T
Dimethyl Disulfide	94	624920	1.00	ND	ND N,T
Methyl ethyl Disulfide	108	20333395	1.00	ND	ND N,T
Methyl propyl Disulfide	122	2179604	1.00	ND	ND N,T
Butyl Mercaptan	90	109795	1.00	ND	ND N,T
Isobutyl Mercaptan	90	513531	1.00	ND	ND N,T
Ethyl Mercaptan	62	75081	1.00	ND	ND N,T
Methyl Mercaptan	48	74931	1.00	ND	ND N,T
Propyl Mercaptan	76	107039	1.00	ND	ND N,T
Isopropyl Mercaptan	76	75332	1.00	ND	ND N,T
tert-Butyl Mercaptan	90	75661	1.00	ND	ND N,T
Diethyl Sulfide	90	352932	1.00	ND	ND N,T
Diethyl Disulfide	122	110816	1.00	ND	ND N,T
Dimethyl Trisulfide	126	3658808	1.00	ND	ND N,T

*Comparison with the method blank this sample run with a dilution factor of: **1.00**

Canister #2516 was received at an initial pressure of 1.4psi.

N: Instrument calibration not performed for this analyte. Analyte determined as tentatively identified compounds (TICS) and concentration is an estimate.

T: The State of TX (TCEQ) does not offer accreditation for this compound.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: Chemstation_01/gd5973.I/01191220.D

Report File: GDAIR D:\Client-Report\GD12-0012-001M

CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0012-002**
 Report Date: 23-Jan-12
 Date Analyzed: 19-Jan-12
 Analyzed by: LAJ
 GD Air QC Batch: **QC-011912TO14**
 Method: EPATO14
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		NOTE
			01/17/12	01/18/12	
Sample #2-RW01171202	Air	Charlotte S.			
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M
Benzene	78	71432	0.26	0.47	1.49
Benzylchloride	126.6	100447	0.26	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.26	ND	ND
Carbon tetrachloride	153.8	56235	0.26	ND	ND
Chlorobenzene	112.6	108907	0.26	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.26	ND	ND
Chloroform	119	67663	0.26	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.26	0.35	0.73
1,2-Dibromoethane (EDB)	187.9	106934	0.26	ND	ND
1,2-Dichlorobenzene	147	95501	0.26	ND	ND
1,3-Dichlorobenzene	147	541731	0.26	ND	ND
1,4-Dichlorobenzene	147	106467	0.26	ND	ND
1,1-Dichloroethane	99	74343	0.26	ND	ND
1,1-Dichlorethene	97	75354	0.26	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.26	0.39	1.93
Dichlorotetrafluoroethane (F114)	170.9	76142	0.26	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.26	ND	ND
cis-1,2-Dichloroethene	97	156592	0.26	ND	ND
trans-1,2-Dichloroethene	97	156605	0.26	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.26	ND	ND
1,2-Dichloropropane	113	78875	0.26	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.26	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.26	ND	ND
Ethylbenzene	106	100414	0.26	ND	ND
Hexachlorobutadiene	260.8	87683	0.20	ND	ND
Styrene	104	100425	0.26	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.26	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.26	0.31	2.09
Toluene	92	108883	0.26	0.57	2.13
1,1,1-Trichloroethane (TCA)	133.4	71556	0.26	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.26	0.49	2.67
1,3,5-Trimethylbenzene	120.2	108678	0.26	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.26	ND	ND
1,2,4-Trichlorobenzene	181.5	120821	0.26	ND	ND
Trichloroethene (TCE)	131.3	79016	0.26	25.0	134.3



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0012-002
Report Date: 23-Jan-12
Date Analyzed: 19-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-011912TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL*, RESULT, NOTE. Rows include Trichlorofluoromethane, Trichlorotrifluoroethane, Vinyl Chloride, m&p-Xylenes, o-Xylene, Propene, Ethanol, Isopropanol.

Surrogate Recovery Report

Table with columns: Surrogate, MW, CAS, Spiked ppbv, Found ppbv, R%. Rows include 1,4-Difluorobenzene (SS1), Bromofluorobenzene (SS2).

*Comparison with the method blank this sample run with a dilution factor of:

1.30

Canister #1043 was received at an initial pressure of -0.1psi and pressurized to 4.2psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.

T: The State of Texas (TCEQ) does not offer accreditation for this compound.

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature: AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director

Data File: CHEMSTATION_01\gd5973.I\01191221.D

Report File: GDAIR D:\Client-Report\GD12-0012-002



CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0012-2H2S**
Report Date: 1/26/2012
Date Analyzed: 1/25/2012
Analyzed by: JCA
GD QC Batch: **QC-012512H2S**
NELAP Certification No.: T104704364
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #2-RW01171202	Air	Charlotte S.	01/17/12	01/18/12
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	323	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Canister #1043 was received at an initial pressure of -0.1psi and was pressurized to 4.2psi.
Comparison with the method blank this sample run with a dilution factor of: **1.29**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0012-2H2S
Data File: C:\HPCHEM1\DATA\110518\S2012506.D



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0012-003
Report Date: 23-Jan-12
Date Analyzed: 19-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-011912TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Page 1 of 2

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Rows include various chemical constituents like Benzene, Chloroethane, and Toluene with their respective analytical data.

CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

Project No.: **1038001**

GD Air Testing Lab. ID: **GD12-0012-003**
 Report Date: **23-Jan-12**
 Date Analyzed: **19-Jan-12**
 Analyzed by: **LAJ**
 GD Air QC Batch: **QC-011912TO14**
 Method: **EPATO14**
NELAP Certification #: **T104704364**

REPORT OF ANALYTICAL RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample #3-RW01171203	Air	Charlotte S.	01/17/12	01/18/12	
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE
			ppbv	ppbv	ug/cu M
Trichlorofluoromethane (F-11)	137.4	75694	0.26	ND	ND
Trichlorotrifluoroethane (F-113)	187.4	76131	0.26	ND	ND
Vinyl Chloride	62.5	75014	0.26	ND	ND
m&p-Xylenes	106	1330207	0.40	ND	ND
o-Xylene	106	95476	0.26	ND	ND
Propene	44	115071	0.65	0.81	1.5 T
Ethanol	46	64175	0.65	1.28	2.4 T
Isopropanol	60	67630	0.65	ND	ND T

Surrogate Recovery Report

			Spiked	Found	R%
			ppbv	ppbv	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	4.63	92.6
Bromofluorobenzene (SS2)	175	460004	5.00	4.67	93.4

*Comparison with the method blank this sample run with a dilution factor of: **1.30**

Canister #2874 was received at an initial pressure of -1.4psi and pressurized to 2.7psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.

T: The State of Texas (TCEQ) does not offer accreditation for this compound.

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

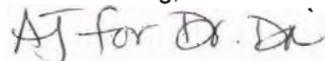
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.



George Dai, Ph.D.

Laboratory Director

Data File:CHEMSTATION_01\gd5973.I\01191222.D

Report File: GDAIR D:\Client-Report\GD12-0012-003



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0012-003-M
Report Date: 23-Jan-12
Date Analyzed: 19-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-011912TO14
Method: EPA TO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with 4 columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED. Row 1: Sample #3-RW01171203, Air, Charlotte S., 01/17/12, 01/18/12

Table with 7 columns: CONSTITUENT, MW, CAS, PQL* ppbv, RESULT ppbv, ug/cu M, NOTE. Section: Mercaptans and other Sulfur Gases by GC/MS. Lists various sulfur compounds and their results.

*Comparison with the method blank this sample run with a dilution factor of: 1.30

Canister #2874 was received at an initial pressure of -1.4psi and pressurized to 2.7psi.

N: Instrument calibration not performed for this analyte. Analyte determined as tentatively identified compounds (TICS) and concentration is an estimate.

T: The State of TX (TCEQ) does not offer accreditation for this compound.

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature: AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director

Data File: Chemstation_01/gd5973.I/01191222.D

Report File: GDAIR D:\Client-Report\GD12-0012-003M

CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0012-3H2S**
 Report Date: 1/26/2012
 Date Analyzed: 1/25/2012
 Analyzed by: JCA
 GD QC Batch: **QC-012512H2S**
 NELAP Certification No.: T104704364
 Method: **ASTM 1946**

Project No.: **1038001**

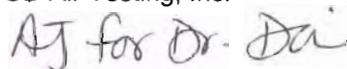
REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #3-RW01171203	Air	Charlotte S.	01/17/12	01/18/12
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	328	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
 Canister #2874 was received at an initial pressure of -1.4psi and was pressurized to 2.7psi.
 Comparison with the method blank this sample run with a dilution factor of: **1.31**
 RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
 QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
 GD Air Testing, Inc.



George Dai, Ph.D.
 Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0012-3H2S
 Data File: C:\HPCHEM1\DATA\110518\S2012507.D



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0012-004
Report Date: 23-Jan-12
Date Analyzed: 19-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-011912TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL* ppbv, RESULT ppbv, NOTE ug/cu M. Includes rows for Benzene, Benzylchloride, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, 1,2-Dibromoethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,1-Dichloroethane, 1,1-Dichlorethene, Dichlorodifluoromethane, Dichlorotetrafluoroethane, 1,2-Dichloroethane, cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Dichloromethane, 1,2-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Styrene, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, 1,3,5-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,2,4-Trichlorobenzene, Trichloroethene.

CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0012-004**
 Report Date: **23-Jan-12**
 Date Analyzed: **19-Jan-12**
 Analyzed by: **LAJ**
 GD Air QC Batch: **QC-011912TO14**
 Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 2 of 2

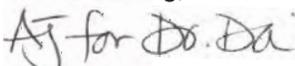
SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED	
Sample #4-RW01171204	Air	Charlotte S.		01/17/12	01/18/12
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE
			ppbv	ppbv	ug/cu M
Trichlorofluoromethane (F-11)	137.4	75694	0.40	ND	ND
Trichlorotrifluoroethane (F-113)	187.4	76131	0.40	ND	ND
Vinyl Chloride	62.5	75014	0.40	ND	ND
m&p-Xylenes	106	1330207	0.40	ND	ND
o-Xylene	106	95476	0.40	ND	ND
Propene	44	115071	1.00	0.99	1.8 T
Ethanol	46	64175	1.00	3.02	5.7 T
Isopropanol	60	67630	1.00	ND	ND T

Surrogate Recovery Report

			Spiked	Found	R%
			ppbv	ppbv	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	4.75	95.0
Bromofluorobenzene (SS2)	175	460004	5.00	4.68	93.6

*Comparison with the method blank this sample run with a dilution factor of: **2.00**
 Canister #7488 was received at an initial pressure of -5.5psi and pressurized to 3.7psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
 Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
 *RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
 * The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
 *Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
 *QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
 GD Air Testing, Inc.



George Dai, Ph.D.
 Laboratory Director

Data File: CHEMSTATION_01\gd5973.I\01191223.D
 Report File: GDAIR D:\Client-Report\GD12-0012-004



CLIENT: **Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0012-004-M**
Report Date: 23-Jan-12
Date Analyzed: 19-Jan-12
Analyzed by: LAJ
GD Air QC Batch: **QC-011912TO14**
Method: EPA TO14
NELAP Certification #: T104704364

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED	
Sample #4-RW01171204	Air	Charlotte S.	01/17/12	01/18/12

CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M	NOTE
Mercaptans and other Sulfur Gases by GC/MS						
Sulfur Dioxide	64	7446095	2.00	ND	ND	N,T
Carbon Disulfide	76	75150	2.00	ND	ND	T
Carbonyl Sulfide	60	463581	2.00	ND	ND	N,T
Dimethyl Sulfide	62	75183	2.00	ND	ND	N,T
Dimethyl Disulfide	94	624920	2.00	ND	ND	N,T
Methyl ethyl Disulfide	108	20333395	2.00	ND	ND	N,T
Methyl propyl Disulfide	122	2179604	2.00	ND	ND	N,T
Butyl Mercaptan	90	109795	2.00	ND	ND	N,T
Isobutyl Mercaptan	90	513531	2.00	ND	ND	N,T
Ethyl Mercaptan	62	75081	2.00	ND	ND	N,T
Methyl Mercaptan	48	74931	2.00	ND	ND	N,T
Propyl Mercaptan	76	107039	2.00	ND	ND	N,T
Isopropyl Mercaptan	76	75332	2.00	ND	ND	N,T
tert-Butyl Mercaptan	90	75661	2.00	ND	ND	N,T
Diethyl Sulfide	90	352932	2.00	ND	ND	N,T
Diethyl Disulfide	122	110816	2.00	ND	ND	N,T
Dimethyl Trisulfide	126	3658808	2.00	ND	ND	N,T

*Comparison with the method blank this sample run with a dilution factor of: **2.00**

Canister #7488 was received at an initial pressure of -5.5psi and pressurized to 3.7psi.

N: Instrument calibration not performed for this analyte. Analyte determined as tentatively identified compounds (TICS) and concentration is an estimate.

T: The State of TX (TCEQ) does not offer accreditation for this compound.

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: Chemstation_01/gd5973.I/01191223.D

Report File: GDAIR D:\Client-Report\GD12-0012-004M

CLIENT: **Curtis Franklin**
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0012-4H2S**
 Report Date: 1/26/2012
 Date Analyzed: 1/25/2012
 Analyzed by: JCA
 GD QC Batch: **QC-012512H2S**
 NELAP Certification No.: T104704364
 Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #4-RW01171204	Air	Charlotte S.	01/17/12	01/18/12
CONSTITUENT	MW	PQL*	RESULT	NOTE
		ppmv	ppmv	
Hydrogen Sulfide	34.0	495	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.

Canister #7488 was received at an initial pressure of -5.4psi and was pressurized to 3.7psi.

Comparison with the method blank this sample run with a dilution factor of:

1.98

RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).

QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted

GD Air Testing, Inc.



George Dai, Ph.D.

Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0012-4H2S

Data File: C:\HPCHEM1\DATA\110518\S2012508.D



CLIENT: **Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0012-005**
Report Date: 23-Jan-12
Date Analyzed: 19-Jan-12
Analyzed by: LAJ
GD Air QC Batch: **QC-011912TO14**
Method: EPATO14
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
			01/17/12	01/18/12	
Sample #5-RW01171205	Air	Charlotte S.			
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M
Benzene	78	71432	0.27	0.38	1.23
Benzylchloride	126.6	100447	0.27	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.27	ND	ND
Carbon tetrachloride	153.8	56235	0.27	ND	ND
Chlorobenzene	112.6	108907	0.27	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.27	ND	ND
Chloroform	119	67663	0.27	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.27	0.45	0.92
1,2-Dibromoethane (EDB)	187.9	106934	0.27	ND	ND
1,2-Dichlorobenzene	147	95501	0.27	ND	ND
1,3-Dichlorobenzene	147	541731	0.27	ND	ND
1,4-Dichlorobenzene	147	106467	0.27	ND	ND
1,1-Dichloroethane	99	74343	0.27	ND	ND
1,1-Dichlorethene	97	75354	0.27	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.27	0.44	2.17
Dichlorotetrafluoroethane (F114)	170.9	76142	0.27	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.27	ND	ND
cis-1,2-Dichloroethene	97	156592	0.27	ND	ND
trans-1,2-Dichloroethene	97	156605	0.27	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.27	ND	ND
1,2-Dichloropropane	113	78875	0.27	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.27	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.27	ND	ND
Ethylbenzene	106	100414	0.27	ND	ND
Hexachlorobutadiene	260.8	87683	0.20	ND	ND
Styrene	104	100425	0.27	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.27	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.27	ND	ND
Toluene	92	108883	0.27	0.71	2.68
1,1,1-Trichloroethane (TCA)	133.4	71556	0.27	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.27	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.27	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.27	ND	ND
1,2,4-Trichlorobenzene	181.5	120821	0.27	ND	ND
Trichloroethene (TCE)	131.3	79016	0.27	ND	ND



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0012-005
Report Date: 23-Jan-12
Date Analyzed: 19-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-011912TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL*, RESULT, NOTE. Lists various chemical compounds and their detection results.

Surrogate Recovery Report

Table with columns: Surrogate, MW, CAS, Spiked ppbv, Found ppbv, R%. Lists 1,4-Difluorobenzene and Bromofluorobenzene.

*Comparison with the method blank this sample run with a dilution factor of: 1.36
Canister #9905 was received at an initial pressure of -0.8psi and pressurized to 4.2psi.
N: Not in the Scope of NELAC Accreditation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director

Data File: CHEMSTATION_01\gd5973.1\01191224.D
Report File: GDAIR D:\Client-Report\GD12-0012-005



CLIENT: **Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0012-005-M**
Report Date: 23-Jan-12
Date Analyzed: 19-Jan-12
Analyzed by: LAJ
GD Air QC Batch: **QC-011912TO14**
Method: EPA TO14
NELAP Certification #: T104704364

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED	
Sample #5-RW01171205	Air	Charlotte S.	01/17/12	01/18/12

CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M	NOTE
Mercaptans and other Sulfur Gases by GC/MS						
Sulfur Dioxide	64	7446095	1.36	ND	ND	N,T
Carbon Disulfide	76	75150	1.36	2.97	9.23	T
Carbonyl Sulfide	60	463581	1.36	ND	ND	N,T
Dimethyl Sulfide	62	75183	1.36	ND	ND	N,T
Dimethyl Disulfide	94	624920	1.36	ND	ND	N,T
Methyl ethyl Disulfide	108	20333395	1.36	ND	ND	N,T
Methyl propyl Disulfide	122	2179604	1.36	ND	ND	N,T
Butyl Mercaptan	90	109795	1.36	ND	ND	N,T
Isobutyl Mercaptan	90	513531	1.36	ND	ND	N,T
Ethyl Mercaptan	62	75081	1.36	ND	ND	N,T
Methyl Mercaptan	48	74931	1.36	ND	ND	N,T
Propyl Mercaptan	76	107039	1.36	ND	ND	N,T
Isopropyl Mercaptan	76	75332	1.36	ND	ND	N,T
tert-Butyl Mercaptan	90	75661	1.36	ND	ND	N,T
Diethyl Sulfide	90	352932	1.36	ND	ND	N,T
Diethyl Disulfide	122	110816	1.36	ND	ND	N,T
Dimethyl Trisulfide	126	3658808	1.36	ND	ND	N,T

*Comparison with the method blank this sample run with a dilution factor of: **1.36**

Canister #7488 was received at an initial pressure of -5.5psi and pressurized to 3.7psi.

N: Instrument calibration not performed for this analyte. Analyte determined as tentatively identified compounds (TICS) and concentration is an estimate.

T: The State of TX (TCEQ) does not offer accreditation for this compound.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: Chemstation_01/gd5973.I/01191224.D

Report File: GDAIR D:\Client-Report\GD12-0012-005M



CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0012-5H2S**
Report Date: 1/26/2012
Date Analyzed: 1/25/2012
Analyzed by: JCA
GD QC Batch: **QC-012512H2S**
NELAP Certification No.: T104704364
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #5-RW01171205	Air	Charlotte S.	01/17/12	01/18/12
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	313	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Canister #60185 was received at an initial pressure of -0.15psi and was pressurized to 3.5psi.
Comparison with the method blank this sample run with a dilution factor of: **1.25**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0012-5H2S
Data File: C:\HPCHEM\1\DATA\110518\S2012509.D

CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0012-006**
 Report Date: 23-Jan-12
 Date Analyzed: 20-Jan-12
 Analyzed by: LAJ
 GD Air QC Batch: **QC-012012TO14**
 Method: EPATO14
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED	
Sample #6-RW01171206	Air	Charlotte S.		01/17/12	01/18/12
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE
			ppbv	ppbv	ug/cu M
Benzene	78	71432	0.25	ND	ND
Benzylchloride	126.6	100447	0.25	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.25	ND	ND
Carbon tetrachloride	153.8	56235	0.25	ND	ND
Chlorobenzene	112.6	108907	0.25	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.25	ND	ND
Chloroform	119	67663	0.25	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.25	0.53	1.09
1,2-Dibromoethane (EDB)	187.9	106934	0.25	ND	ND
1,2-Dichlorobenzene	147	95501	0.25	ND	ND
1,3-Dichlorobenzene	147	541731	0.25	ND	ND
1,4-Dichlorobenzene	147	106467	0.25	ND	ND
1,1-Dichloroethane	99	74343	0.25	ND	ND
1,1-Dichlorethene	97	75354	0.25	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.25	0.51	2.50
Dichlorotetrafluoroethane (F114)	170.9	76142	0.25	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.25	ND	ND
cis-1,2-Dichloroethene	97	156592	0.25	ND	ND
trans-1,2-Dichloroethene	97	156605	0.25	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.25	ND	ND
1,2-Dichloropropane	113	78875	0.25	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.25	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.25	ND	ND
Ethylbenzene	106	100414	0.25	ND	ND
Hexachlorobutadiene	260.8	87683	0.20	ND	ND
Styrene	104	100425	0.25	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.25	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.25	ND	ND
Toluene	92	108883	0.25	0.60	2.25
1,1,1-Trichloroethane (TCA)	133.4	71556	0.25	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.25	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.25	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.25	ND	ND
1,2,4-Trichlorobenzene	181.5	120821	0.25	0.47	3.48
Trichloroethene (TCE)	131.3	79016	0.25	ND	ND

CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0012-006**
 Report Date: 23-Jan-12
 Date Analyzed: 20-Jan-12
 Analyzed by: LAJ
 GD Air QC Batch: **QC-012012TO14**
 Method: EPATO14
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample #6-RW01171206	Air	Charlotte S.	01/17/12	01/18/12	
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE
			ppbv	ppbv	ug/cu M
Trichlorofluoromethane (F-11)	137.4	75694	0.25	ND	ND
Trichlorotrifluoroethane (F-113)	187.4	76131	0.25	ND	ND
Vinyl Chloride	62.5	75014	0.25	ND	ND
m&p-Xylenes	106	1330207	0.40	ND	ND
o-Xylene	106	95476	0.25	ND	ND
Propene	44	115071	0.63	0.94	1.7 T
Ethanol	46	64175	0.63	3.61	6.8 T
Isopropanol	60	67630	0.63	ND	ND T
Methyl isobutyl ketone	100	108101	0.63	0.96	3.9 T
Surrogate Recovery Report			Spiked	Found	R%
			ppbv	ppbv	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	4.89	97.8
Bromofluorobenzene (SS2)	175	460004	5.00	4.96	99.2

*Comparison with the method blank this sample run with a dilution factor of: **1.25**

Canister #60185 was received at an initial pressure of -0.15psi and pressurized to 3.5psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.

T: The State of Texas (TCEQ) does not offer accreditation for this compound.

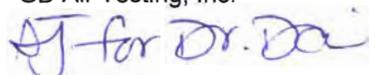
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
 GD Air Testing, Inc.



George Dai, Ph.D.

Laboratory Director

Data File:CHEMSTATION_01\gd5973.I\01201214.D

Report File: GDAIR D:\Client-Report\GD12-0012-006



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0012-006-M
Report Date: 23-Jan-12
Date Analyzed: 20-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-012012TO14
Method: EPA TO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with 4 columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED. Row 1: Sample #6-RW01171206, Air, Charlotte S., 01/17/12, 01/18/12

Table with 7 columns: CONSTITUENT, MW, CAS, PQL* ppbv, RESULT ppbv, ug/cu M, NOTE. Section: Mercaptans and other Sulfur Gases by GC/MS. Rows include Sulfur Dioxide, Carbon Disulfide, Carbonyl Sulfide, etc.

*Comparison with the method blank this sample run with a dilution factor of: 1.25
Canister #60185 was received at an initial pressure of -0.15psi and pressurized to 3.5psi.
N: Instrument calibration not performed for this analyte. Analyte determined as tentatively identified compounds (TICS) and concentration is an estimate.
T: The State of TX (TCEQ) does not offer accreditation for this compound.

Respectfully submitted
GD Air Testing, Inc.
George Dai, Ph.D.
Laboratory Director
Data File: Chemstation_01/gd5973.I/01201214.D
Report File: GDAIR D:\Client-Report\GD12-0012-006M



CLIENT: Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0012-6H2S
Report Date: 1/26/2012
Date Analyzed: 1/25/2012
Analyzed by: JCA
GD QC Batch: QC-012512H2S
NELAP Certification No.: T104704364
Method: ASTM 1946

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #6-RW01171206	Air	Charlotte S.	01/17/12	01/18/12
CONSTITUENT	MW	PQL*	RESULT	NOTE
		ppmv	ppmv	
Hydrogen Sulfide	34.0	340	ND	S

S: Not in the Scope of NELAC Accreditation. Constituent analyzed using ASTM 1946.
Canister #9905 was received at an initial pressure of -0.8psi and was pressurized to 4.2psi.
Comparison with the method blank this sample run with a dilution factor of: 1.36
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.
AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0012-6H2S
Data File: C:\HPCHEM\1\DATA\110518\S2012510.D



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

01/19/12

Date Analyzed:

01/19/12

Analyzed by:

LAJ

GD Air QC Batch:

QC-011912

Project No.:

Method:

EPA TO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED			
BLK	Air					
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M	
Benzene	78	71432	0.20	ND	ND	
Benzylchloride	126.6	100447	0.20	ND	ND	
Bromomethane (Methyl Bromide)	94.9	74839	0.20	ND	ND	
Carbon tetrachloride	153.8	56235	0.20	ND	ND	
Chlorobenzene	112.6	108907	0.20	ND	ND	
Chloroethane (Ethyl Chloride)	64.5	75003	0.20	ND	ND	
Chloroform	119	67663	0.20	ND	ND	
Chloromethane (Methyl Chloride)	50.4	74873	0.20	ND	ND	
1,2-Dibromoethane (EDB)	187.9	106934	0.20	ND	ND	
1,2-Dichlorobenzene	147	95501	0.20	ND	ND	
1,3-Dichlorobenzene	147	541731	0.20	ND	ND	
1,4-Dichlorobenzene	147	106467	0.20	ND	ND	
1,1-Dichloroethane	99	74343	0.20	ND	ND	
1,1-Dichlorethene	97	75354	0.20	ND	ND	
Dichlorodifluoromethane (F12)	120.9	75718	0.20	ND	ND	
Dichlorotetrafluoroethane (F114)	170.9	76142	0.20	ND	ND	
1,2-Dichloroethane (EDC)	99	107062	0.20	ND	ND	
cis-1,2-Dichloroethene	97	156592	0.20	ND	ND	
trans-1,2-Dichloroethene	97	156605	0.20	ND	ND	
Dichloromethane (Methylene chloride)	84.9	75092	0.20	ND	ND	
1,2-Dichloropropane	113	78875	0.20	ND	ND	
cis-1,3-Dichloropropene	111	10061015	0.20	ND	ND	
trans-1,3-Dichloropropene	111	10061026	0.20	ND	ND	
Ethylbenzene	106	100414	0.20	ND	ND	
Hexachlorobutadiene	260.8	87683	0.20	ND	ND	
Styrene	104	100425	0.20	ND	ND	
1,1,2,2-Tetrachloroethane	167.9	79345	0.20	ND	ND	
Tetrachloroethene (PCE)	165.8	127184	0.20	ND	ND	
Toluene	92	108883	0.20	ND	ND	
1,1,1-Trichloroethane (TCA)	133.4	71556	0.20	ND	ND	
1,1,2-Trichloroethane	133.4	79005	0.20	ND	ND	
1,3,5-Trimethylbenzene	120.2	108678	0.20	ND	ND	
1,2,4-Trimethylbenzene	120.2	95636	0.20	ND	ND	
1,2,4-Trichlorobenzene	181.5	120821	0.20	ND	ND	
Trichloroethene (TCE)	131.3	79016	0.20	ND	ND	



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

01/19/12

Date Analyzed:

01/19/12

Analyzed by:

LAJ

Project No.: QC

GD Air QC Batch:

QC-011912

Method:

EPA TO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M	
Trichlorofluoromethane (F-11)	137.4	75694	0.20	ND	ND	
Trichlorotrifluoroethane (F-113)	187.4	76131	0.20	ND	ND	
Vinyl Chloride	62.5	75014	0.20	ND	ND	
m&p-Xylenes	106	1330207	0.40	ND	ND	
o-Xylene	106	95476	0.20	ND	ND	
Surrogate Recovery Report			Spiked ppbv	Found ppbv	R%	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	4.28	85.6	
Bromofluorobenzene (SS2)	175	460004	5.00	3.73	74.6	

*Comparison with the method blank this sample run with a dilution factor of:

1.0

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: Chemstation/gd5973.I/01191218.D

Report File: GD SR\ID\QC-12-TO14\Blank

CLIENT: **GD Air Testing, Inc.**

GD Air Testing Lab. ID:

Method Blank

Report Date:

12/20/12

Date Analyzed:

12/20/12

Analyzed by:

LAJ

GD Air QC Batch:

QC-122012

Project No.:

Method:

EPA TO14

NELAP Certification #:
T104704364
REPORT OF METHOD BLANK RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED			
BLK	Air					
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M	
Benzene	78	71432	0.20	ND	ND	
Benzylchloride	126.6	100447	0.20	ND	ND	
Bromomethane (Methyl Bromide)	94.9	74839	0.20	ND	ND	
Carbon tetrachloride	153.8	56235	0.20	ND	ND	
Chlorobenzene	112.6	108907	0.20	ND	ND	
Chloroethane (Ethyl Chloride)	64.5	75003	0.20	ND	ND	
Chloroform	119	67663	0.20	ND	ND	
Chloromethane (Methyl Chloride)	50.4	74873	0.20	ND	ND	
1,2-Dibromoethane (EDB)	187.9	106934	0.20	ND	ND	
1,2-Dichlorobenzene	147	95501	0.20	ND	ND	
1,3-Dichlorobenzene	147	541731	0.20	ND	ND	
1,4-Dichlorobenzene	147	106467	0.20	ND	ND	
1,1-Dichloroethane	99	74343	0.20	ND	ND	
1,1-Dichloroethene	97	75354	0.20	ND	ND	
Dichlorodifluoromethane (F12)	120.9	75718	0.20	ND	ND	
Dichlorotetrafluoroethane (F114)	170.9	76142	0.20	ND	ND	
1,2-Dichloroethane (EDC)	99	107062	0.20	ND	ND	
cis-1,2-Dichloroethene	97	156592	0.20	ND	ND	
trans-1,2-Dichloroethene	97	156605	0.20	ND	ND	
Dichloromethane (Methylene chloride)	84.9	75092	0.20	ND	ND	
1,2-Dichloropropane	113	78875	0.20	ND	ND	
cis-1,3-Dichloropropene	111	10061015	0.20	ND	ND	
trans-1,3-Dichloropropene	111	10061026	0.20	ND	ND	
Ethylbenzene	106	100414	0.20	ND	ND	
Hexachlorobutadiene	260.8	87683	0.20	ND	ND	
Styrene	104	100425	0.20	ND	ND	
1,1,1,2-Tetrachloroethane	167.9	79345	0.20	ND	ND	
Tetrachloroethene (PCE)	165.8	127184	0.20	ND	ND	
Toluene	92	108883	0.20	ND	ND	
1,1,1-Trichloroethane (TCA)	133.4	71556	0.20	ND	ND	
1,1,2-Trichloroethane	133.4	79005	0.20	ND	ND	
1,3,5-Trimethylbenzene	120.2	108678	0.20	ND	ND	
1,2,4-Trimethylbenzene	120.2	95636	0.20	ND	ND	
1,2,4-Trichlorobenzene	181.5	120821	0.20	ND	ND	
Trichloroethene (TCE)	131.3	79016	0.20	ND	ND	

PAGE 28 OF 33

CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

12/20/12

Date Analyzed:

12/20/12

Analyzed by:

LAJ

 Project No.: **QC**

GD Air QC Batch:

QC-122012

Method:

EPA TO14

NELAP Certification #:
T104704364
REPORT OF METHOD BLANK RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M	
Trichlorofluoromethane (F-11)	137.4	75694	0.20	ND	ND	
Trichlorotrifluoroethane (F-113)	187.4	76131	0.20	ND	ND	
Vinyl Chloride	62.5	75014	0.20	ND	ND	
m&p-Xylenes	106	1330207	0.40	ND	ND	
o-Xylene	106	95476	0.20	ND	ND	
Surrogate Recovery Report			Spiked ppbv	Found ppbv	R%	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	4.98	99.6	
Bromofluorobenzene (SS2)	175	460004	5.00	4.77	95.4	

*Comparison with the method blank this sample run with a dilution factor of:

1.0

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

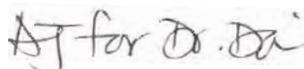
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.



George Dai, Ph.D.

Laboratory Director

Data File: Chemstation/gd5973.I/01201206.D

Report File: GD SR\QC-12-TO14\Blank



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

BS/BSD

Report Date:

01/19/12

Date Analyzed:

01/19/12

Project No.:

Analyzed by:

LAJ

GD Air QC Batch:

QC-011912

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED
BS/BSD	Air		

Spike Control Compounds	Spiked ppbv	Found and Recovery				
		BS/ppbv	BS R%	BSD	BSD R%	% RPD

VOLATILE ORGANICS BY EPA TO-14

Vinyl Chloride	5.0	3.9	78	3.7	74	5.3
Methylene chloride (Dichloromethane)	5.0	4.2	84	3.8	75	11.3
1,1,1-Trichloroethane	5.0	4.3	86	3.8	76	12.3
1,2-Dichloroethane (EDC)	5.0	4.2	84	3.8	76	10.0
Benzene	5.0	4.0	80	3.7	74	7.8
Carbon tetrachloride	5.0	4.2	84	3.8	76	10.0
Trichloroethene (TCE)	5.0	4.2	84	4.0	79	5.9
Toluene	5.0	4.6	92	4.2	84	9.1
Chlorobenzene	5.0	4.4	87	4.0	80	8.4
Ethylbenzene	5.0	4.9	98	4.3	86	13.0
o-Xylene	5.0	4.6	92	4.2	84	9.1

Surrogate Recovery Report

1,4-Difluorobenzene (SS1)	5.0	4.44	88.8	4.60	92.0	3.5
Bromofluorobenzene (SS2)	5.0	4.39	87.8	4.56	91.2	3.8

*CN: See case narrative.

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

* The control limit for relative percentage difference of BS/BSD is 30%

* If any control compound is not within the control limit, please see the case narrative for more details.

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: c:\chem\gd5973.I\01191214.D and 01191215.D

Report File: GD\SR\ID\QC-TO14\BS-BSD



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

BS/BSD

Report Date:

01/20/12

Date Analyzed:

01/20/12

Project No.:

Analyzed by:

LAJ

GD Air QC Batch:

QC-012012

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BS/BSD	Air					
Spike Control Compounds	Spiked ppbv	Found and Recovery				
		BS/ppbv	BS R%	BSD	BSD R%	% RPD

VOLATILE ORGANICS BY EPA TO-14

Vinyl Chloride	5.0	4.8	96	4.0	80	18.2
Methylene chloride (Dichloromethane)	5.0	5.0	100	4.2	84	17.4
1,1,1-Trichloroethane	5.0	5.3	106	4.2	84	23.2
1,2-Dichloroethane (EDC)	5.0	5.0	100	4.0	80	22.2
Benzene	5.0	5.2	104	4.4	88	16.7
Carbon tetrachloride	5.0	5.0	99	4.1	82	19.0
Trichloroethene (TCE)	5.0	4.9	98	4.4	88	10.8
Toluene	5.0	5.6	112	4.8	96	15.4
Chlorobenzene	5.0	5.2	104	4.4	88	16.7
Ethylbenzene	5.0	5.9	118	4.9	98	18.5
o-Xylene	5.0	6.1	122	4.9	98	21.8

Surrogate Recovery Report

1,4-Difluorobenzene (SS1)	5.0	5.05	101.0	5.20	104.0	2.9
Bromofluorobenzene (SS2)	5.0	5.06	101.2	5.05	101.0	0.2

*CN: See case narrative.

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

* The control limit for relative percentage difference of BS/BSD is 30%

* If any control compound is not within the control limit, please see the case narrative for more details.

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: c:\chem\gd5973.1\01201203.D and 01201204.D

Report File: GD\SRID\QC-TO14\BS-BSD



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID: **QC-BLK-012512H2S**

Report Date: 1/26/2012

Date Analyzed: 1/25/2012

Analyzed by: JCA

GD QC Batch: **QC-012512H2S**

NELAP Certification No.: T104704364

Method: **ASTM 1946**

REPORT OF METHOD BLANK RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Blank	Air	JCA	01/25/12	01/25/12

CONSTITUENT	MW	PQL*	RESULT	NOTE
		ppmv	ppmv	
Hydrogen Sulfide	34.0	250	ND	

* If any compound is out of control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\QC-blk-012512-H2S
Data File: C:\HPCHEM\1\DATA\020125\S2012502.D

CLIENT: **GD Air Testing Inc. QA**

 GD Air Testing Lab. ID: **QC-012512H2S**

Report Date: 1/26/2012

Date Analyzed: 1/25/2012

Analyzed by: JCA

NELAP Certification No.: T104704364

Method: ASTM 1946

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

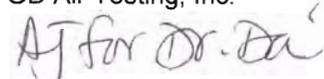
SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED				
BS/BSD	GAS						
CONSTITUENT	Spiked ppmv	Found and Recovery					NOTE
		BS	BS, R%	BSD	BSD, R%	RPD %	
Hydrogen Sulfide	1000	1200	120	1140	114	5.1	

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

** The control limit for relative percentage difference of BS/BSD is 30%

*** If any control compound is not within the control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.



George Dai, Ph.D.
Laboratory Director

Data File: C:\HPCHEM\1\DATA\0120125\S2012503.D, S2012504.D

Report File: GDAIR D:\Client_Report\H2S-BS-012512F

2012 Sampling Event 2:

January 28-29, 2012



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0017-001**
Report Date: **02-Feb-12**
Date Analyzed: **31-Jan-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-013112TO14**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		NOTE
			01/28/12	01/30/12	
Sample #1-RW01281207	Air	Charlotte S.			
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M
Benzene	78	71432	0.25	0.81	2.59
Benzylchloride	126.6	100447	0.25	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.25	ND	ND
Carbon tetrachloride	153.8	56235	0.25	ND	ND
Chlorobenzene	112.6	108907	0.25	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.25	ND	ND
Chloroform	119	67663	0.25	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.25	ND	ND
1,2-Dibromoethane (EDB)	187.9	106934	0.25	ND	ND
1,2-Dichlorobenzene	147	95501	0.25	ND	ND
1,3-Dichlorobenzene	147	541731	0.25	ND	ND
1,4-Dichlorobenzene	147	106467	0.25	ND	ND
1,1-Dichloroethane	99	74343	0.25	ND	ND
1,1-Dichlorethene	97	75354	0.25	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.25	0.68	3.34
Dichlorotetrafluoroethane (F114)	170.9	76142	0.25	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.25	ND	ND
cis-1,2-Dichloroethene	97	156592	0.25	ND	ND
trans-1,2-Dichloroethene	97	156605	0.25	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.25	1.42	4.93
1,2-Dichloropropane	113	78875	0.25	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.25	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.25	ND	ND
Ethylbenzene	106	100414	0.25	0.64	2.78
Hexachlorobutadiene	260.8	87683	0.25	ND	ND
Styrene	104	100425	0.25	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.25	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.25	ND	ND
Toluene	92	108883	0.25	5.45	20.5
1,1,1-Trichloroethane (TCA)	133.4	71556	0.25	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.25	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.25	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.25	ND	ND
1,2,4-Trichlorobenzene	181.5	120821	0.25	ND	ND
Trichloroethene (TCE)	131.3	79016	0.25	ND	ND



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0017-001**
Report Date: **02-Feb-12**
Date Analyzed: **31-Jan-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-013112TO14**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		NOTE	
			01/28/12	01/30/12		
Sample #1-RW01281207	Air	Charlotte S.				
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M	
Trichlorofluoromethane (F-11)	137.4	75694	0.25	0.83	4.68	
Trichlorotrifluoroethane (F-113)	187.4	76131	0.25	ND	ND	
Vinyl Chloride	62.5	75014	0.25	0.30	0.77	
m&p-Xylenes	106	1330207	0.49	1.65	7.15	
o-Xylene	106	95476	0.25	0.36	1.56	
Propene	44	115071	0.62	6.73	12.1	T
Ethanol	46	64175	0.62	9.70	18.2	T
Isopropanol	60	67630	0.62	1.26	3.09	T
Acetone	58	67641	0.62	3.03	7.19	T
2-Butanone	72	78933	0.62	1.62	4.77	
Cyclohexane	84	110827	0.62	0.88	3.01	
Sulfur Dioxide	64	7446095	1.23	ND	ND	N

Surrogate Recovery Report

			Spiked ppbv	Found ppbv	R%
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	5.47	109
Bromofluorobenzene (SS2)	175	460004	5.00	5.21	104

*Comparison with the method blank this sample run with a dilution factor of: **1.23**

Canister #2879 was received at an initial pressure of 1.1psi and pressurized to 4.8psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.

T: The State of Texas (TCEQ) does not offer accreditation for this compound.

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director
Data File:CHEMSTATION_01\gd5973.I\01311210.D
Report File: GDAIR D:\Client-Report\GD12-0017-001



CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0017-1H2S**
Report Date: **2/6/2012**
Date Analyzed: **2/2/2012**
Analyzed by: **JCA**
GD QC Batch: **QC-020212H2S**
NELAP Certification No.: **T104704364**
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW01281207	Air	Charlotte S.	01/28/12	01/30/12
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	308	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #2879 was received at an initial pressure of 1.4psi and was pressurized to 4.8psi.
Comparison with the method blank this sample run with a dilution factor of: **1.23**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.
George Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0017-1H2S
Data File: C:\HPCHEM\1\DATA\120202\S2020205.D



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0017-002**
Report Date: **02-Feb-12**
Date Analyzed: **31-Jan-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-013112TO14**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		NOTE
			01/28/12	01/30/12	
Sample #2-RW01281208	Air	Charlotte S.			
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M
Benzene	78	71432	0.24	0.96	3.06
Benzylchloride	126.6	100447	0.24	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.24	ND	ND
Carbon tetrachloride	153.8	56235	0.24	ND	ND
Chlorobenzene	112.6	108907	0.24	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.24	ND	ND
Chloroform	119	67663	0.24	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.24	0.96	1.97
1,2-Dibromoethane (EDB)	187.9	106934	0.24	ND	ND
1,2-Dichlorobenzene	147	95501	0.24	ND	ND
1,3-Dichlorobenzene	147	541731	0.24	ND	ND
1,4-Dichlorobenzene	147	106467	0.24	ND	ND
1,1-Dichloroethane	99	74343	0.24	ND	ND
1,1-Dichlorethene	97	75354	0.24	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.24	0.82	4.07
Dichlorotetrafluoroethane (F114)	170.9	76142	0.24	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.24	ND	ND
cis-1,2-Dichloroethene	97	156592	0.24	ND	ND
trans-1,2-Dichloroethene	97	156605	0.24	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.24	2.45	8.51
1,2-Dichloropropane	113	78875	0.24	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.24	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.24	ND	ND
Ethylbenzene	106	100414	0.24	0.76	3.28
Hexachlorobutadiene	260.8	87683	0.24	ND	ND
Styrene	104	100425	0.24	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.24	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.24	ND	ND
Toluene	92	108883	0.24	8.01	30.1
1,1,1-Trichloroethane (TCA)	133.4	71556	0.24	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.24	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.24	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.24	ND	ND
1,2,4-Trichlorobenzene	181.5	120821	0.24	ND	ND
Trichloroethene (TCE)	131.3	79016	0.24	ND	ND



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0017-002
Report Date: 02-Feb-12
Date Analyzed: 31-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-013112TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Rows include Trichlorofluoromethane (F-11), Trichlorotrifluoroethane (F-113), Vinyl Chloride, m&p-Xylenes, o-Xylene, Propene, Ethanol, Isopropanol, Acetone, 2-Butanone, Cyclohexane, Hexane, Heptane, C4 Hydrocarbons, C5 Hydrocarbons, Sulfur Dioxide.

Surrogate Recovery Report

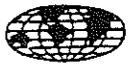
Table with columns: Surrogate, Spiked (ppbv), Found (ppbv), R%. Rows include 1,4-Difluorobenzene (SS1) and Bromofluorobenzene (SS2).

*Comparison with the method blank this sample run with a dilution factor of: 1.21
Canister #99013 was received at an initial pressure of 1.1psi and pressurized to 4.5psi.
N: Not in the Scope of NELAC Accreditation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Signature: AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Data File: CHEMSTATION_01\gd5973.I\01311211.D
Report File: GDAIR D:\Client-Report\GD12-0017-002



CLIENT: **Curtis Franklin**
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0017-2H2S**
Report Date: **2/6/2012**
Date Analyzed: **2/2/2012**
Analyzed by: **JCA**
GD QC Batch: **QC-020212H2S**
NELAP Certification No.: **T104704364**
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW01281208	Air	Charlotte S.	01/28/12	01/30/12

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	303	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #99013 was received at an initial pressure of 1.1psi and was pressurized to 4.5psi.
Comparison with the method blank this sample run with a dilution factor of: **1.21**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.
AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0017-2H2S
Data File: C:\HPCHEM\1\DATA\120202\1S2020206.D



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0017-003
Report Date: 02-Feb-12
Date Analyzed: 31-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-013112TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL* ppbv, RESULT ppbv, NOTE ug/cu M. Rows include various chemical constituents like Benzene, Chloroform, and Toluene.



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0017-003
Report Date: 02-Feb-12
Date Analyzed: 31-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-013112TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Includes rows for various chemical constituents like Trichlorofluoromethane, Vinyl Chloride, and a Surrogate Recovery Report section.

*Comparison with the method blank this sample run with a dilution factor of: 1.29
Canister #0019 was received at an initial pressure of 0.6psi and pressurized to 5.0psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature: AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director

Data File: CHEMSTATION_01\gd5973.I\01311215.D
Report File: GDAIR D:\Client-Report\GD12-0017-003



CLIENT: **Curtis Franklin**
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0017-3H2S**
Report Date: **2/6/2012**
Date Analyzed: **2/2/2012**
Analyzed by: **JCA**
GD QC Batch: **QC-020212H2S**
NELAP Certification No.: **T104704364**
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW01281209	Air	Charlotte S.	01/28/12	01/30/12

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	323	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #0019 was received at an initial pressure of 0.6psi and was pressurized to 5.0psi.
Comparison with the method blank this sample run with a dilution factor of: **1.29**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0017-3H2S
Data File: C:\HPCHEM\1\DATA\120202\S2020207.D



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0017-004**
Report Date: **02-Feb-12**
Date Analyzed: **31-Jan-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-013112TO14**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		NOTE
			01/28/12	01/30/12	
Sample #4-RW01281210	Air	Charlotte S.			
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M
Benzene	78	71432	0.26	0.73	2.34
Benzylchloride	126.6	100447	0.26	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.26	ND	ND
Carbon tetrachloride	153.8	56235	0.26	ND	ND
Chlorobenzene	112.6	108907	0.26	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.26	ND	ND
Chloroform	119	67663	0.26	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.26	0.43	0.88
1,2-Dibromoethane (EDB)	187.9	106934	0.26	ND	ND
1,2-Dichlorobenzene	147	95501	0.26	ND	ND
1,3-Dichlorobenzene	147	541731	0.26	ND	ND
1,4-Dichlorobenzene	147	106467	0.26	ND	ND
1,1-Dichloroethane	99	74343	0.26	ND	ND
1,1-Dichlorethene	97	75354	0.26	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.26	0.50	2.46
Dichlorotetrafluoroethane (F114)	170.9	76142	0.26	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.26	ND	ND
cis-1,2-Dichloroethene	97	156592	0.26	ND	ND
trans-1,2-Dichloroethene	97	156605	0.26	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.26	ND	ND
1,2-Dichloropropane	113	78875	0.26	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.26	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.26	ND	ND
Ethylbenzene	106	100414	0.26	ND	ND
Hexachlorobutadiene	260.8	87683	0.26	ND	ND
Styrene	104	100425	0.26	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.26	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.26	ND	ND
Toluene	92	108883	0.26	1.43	5.38
1,1,1-Trichloroethane (TCA)	133.4	71556	0.26	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.26	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.26	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.26	ND	ND
1,2,4-Trichlorobenzene	181.5	120821	0.26	ND	ND
Trichloroethene (TCE)	131.3	79016	0.26	ND	ND



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0017-004
Report Date: 02-Feb-12
Date Analyzed: 31-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-013112TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Rows include Trichlorofluoromethane, Vinyl Chloride, Propene, Ethanol, Isopropanol, Acetone, 2-Butanone, Naphthalene, Sulfur Dioxide, Isobutane, C4 Hydrocarbon, C5 Hydrocarbon, Acetaldehyde.

Surrogate Recovery Report

Table with columns: Surrogate Recovery Report, Spiked ppbv, Found ppbv, R%. Rows include 1,4-Difluorobenzene (SS1), Bromofluorobenzene (SS2).

*Comparison with the method blank this sample run with a dilution factor of: 1.28
Canister #A7735 was received at an initial pressure of 0.2psi and pressurized to 4.4psi.
N: Not in the Scope of NELAC Accreditation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Signature of George Dai

George Dai, Ph.D.
Laboratory Director

Data File: CHEMSTATION_01\gd5973.I\01311212.D
Report File: GDAIR D:\Client-Report\GD12-0017-004



CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0017-4H2S**
Report Date: **2/6/2012**
Date Analyzed: **2/2/2012**
Analyzed by: **JCA**
GD QC Batch: **QC-020212H2S**
NELAP Certification No.: **T104704364**
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW01281210	Air	Charlotte S.	01/28/12	01/30/12

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	320	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #A7735 was received at an initial pressure of 0.2psi and was pressurized to 4.4psi.
Comparison with the method blank this sample run with a dilution factor of: **1.28**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.
AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0017-4H2S
Data File: C:\HPCHEM\1\DATA\120202\S2020208.D



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0017-005**
Report Date: **02-Feb-12**
Date Analyzed: **31-Jan-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-013112TO14**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		NOTE
			01/28/12	01/30/12	
Sample #5-RW01281211	Air	Charlotte S.			
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M
Benzene	78	71432	0.26	7.69	24.5
Benzylchloride	126.6	100447	0.26	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.26	ND	ND
Carbon tetrachloride	153.8	56235	0.26	ND	ND
Chlorobenzene	112.6	108907	0.26	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.26	ND	ND
Chloroform	119	67663	0.26	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.26	0.40	0.83
1,2-Dibromoethane (EDB)	187.9	106934	0.26	ND	ND
1,2-Dichlorobenzene	147	95501	0.26	ND	ND
1,3-Dichlorobenzene	147	541731	0.26	ND	ND
1,4-Dichlorobenzene	147	106467	0.26	ND	ND
1,1-Dichloroethane	99	74343	0.26	ND	ND
1,1-Dichlorethene	97	75354	0.26	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.26	0.51	2.51
Dichlorotetrafluoroethane (F114)	170.9	76142	0.26	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.26	ND	ND
cis-1,2-Dichloroethene	97	156592	0.26	ND	ND
trans-1,2-Dichloroethene	97	156605	0.26	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.26	ND	ND
1,2-Dichloropropane	113	78875	0.26	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.26	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.26	ND	ND
Ethylbenzene	106	100414	0.26	2.35	10.2
Hexachlorobutadiene	260.8	87683	0.26	ND	ND
Styrene	104	100425	0.26	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.26	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.26	ND	ND
Toluene	92	108883	0.52	24.4	91.8
1,1,1-Trichloroethane (TCA)	133.4	71556	0.26	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.26	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.26	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.26	1.15	5.65
1,2,4-Trichlorobenzene	181.5	120821	0.26	ND	ND
Trichloroethene (TCE)	131.3	79016	0.26	ND	ND



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0017-005
Report Date: 02-Feb-12
Date Analyzed: 31-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-013112TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL*, RESULT, NOTE. Rows include Trichlorofluoromethane, Trichlorotrifluoroethane, Vinyl Chloride, m&p-Xylenes, o-Xylene, Propene, Ethanol, Isopropanol, Acetone, Naphthalene, 4-Ethyltoluene, Sulfur Dioxide.

Surrogate Recovery Report

Table with columns: Spiked ppbv, Found ppbv, R%. Rows include 1,4-Difluorobenzene (SS1), Bromofluorobenzene (SS2).

*Comparison with the method blank this sample run with a dilution factor of: 1.29
Canister #62207 was received at an initial pressure of 0.1psi and pressurized to 4.4psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature: AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director

Data File:CHEMSTATION_01\gd5973.I\01311213.D
Report File: GDAIR D:\Client-Report\GD12-0017-005



CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0017-5H2S**
Report Date: **2/6/2012**
Date Analyzed: **2/2/2012**
Analyzed by: **JCA**
GD QC Batch: **QC-020212H2S**
NELAP Certification No.: **T104704364**
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW01281211	Air	Charlotte S.	01/28/12	01/30/12

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	323	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #62207 was received at an initial pressure of 0.1psi and was pressurized to 4.4psi.
Comparison with the method blank this sample run with a dilution factor of: **1.29**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.
AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0017-5H2S
Data File: C:\HPCHEM\1\DATA\120202\S2020209.D



CLIENT: **Curtis Franklin**
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0017-006**
Report Date: **02-Feb-12**
Date Analyzed: **31-Jan-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-013112TO14**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		NOTE
			01/28/12	01/30/12	
Sample #6-RW01281212	Air	Charlotte S.			
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M
Benzene	78	71432	0.26	1.07	3.41
Benzylchloride	126.6	100447	0.26	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.26	ND	ND
Carbon tetrachloride	153.8	56235	0.26	ND	ND
Chlorobenzene	112.6	108907	0.26	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.26	ND	ND
Chloroform	119	67663	0.26	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.26	0.41	0.84
1,2-Dibromoethane (EDB)	187.9	106934	0.26	ND	ND
1,2-Dichlorobenzene	147	95501	0.26	ND	ND
1,3-Dichlorobenzene	147	541731	0.26	ND	ND
1,4-Dichlorobenzene	147	106467	0.26	ND	ND
1,1-Dichloroethane	99	74343	0.26	ND	ND
1,1-Dichloroethene	97	75354	0.26	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.26	0.46	2.26
Dichlorotetrafluoroethane (F114)	170.9	76142	0.26	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.26	ND	ND
cis-1,2-Dichloroethene	97	156592	0.26	ND	ND
trans-1,2-Dichloroethene	97	156605	0.26	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.26	ND	ND
1,2-Dichloropropane	113	78875	0.26	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.26	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.26	ND	ND
Ethylbenzene	106	100414	0.26	ND	ND
Hexachlorobutadiene	260.8	87683	0.26	ND	ND
Styrene	104	100425	0.26	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.26	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.26	ND	ND
Toluene	92	108883	0.52	2.61	9.82
1,1,1-Trichloroethane (TCA)	133.4	71556	0.26	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.26	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.26	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.26	ND	ND
1,2,4-Trichlorobenzene	181.5	120821	0.26	ND	ND
Trichloroethene (TCE)	131.3	79016	0.26	ND	ND



CLIENT: Curtis Franklin
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0017-006
Report Date: 02-Feb-12
Date Analyzed: 31-Jan-12
Analyzed by: LAJ
GD Air QC Batch: QC-013112TO14
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Rows include Trichlorofluoromethane, Vinyl Chloride, m&p-Xylenes, Propene, Ethanol, Isopropanol, Acetone, Naphthalene, Sulfur Dioxide.

Surrogate Recovery Report

Table with columns: Surrogate, Spiked (ppbv), Found (ppbv), R%. Rows include 1,4-Difluorobenzene (SS1), Bromofluorobenzene (SS2).

*Comparison with the method blank this sample run with a dilution factor of: 1.30

Canister #62210 was received at an initial pressure of -0.6psi and pressurized to 3.7psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.

T: The State of Texas (TCEQ) does not offer accreditation for this compound.

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Signature of George Dai

George Dai, Ph.D.
Laboratory Director

Data File:CHEMSTATION_01\gd5973.I\01311214.D
Report File: GDAIR D:\Client-Report\GD12-0017-006



CLIENT: **Curtis Franklin
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0017-6H2S**
Report Date: **2/6/2012**
Date Analyzed: **2/2/2012**
Analyzed by: **JCA**
GD QC Batch: **QC-020212H2S**
NELAP Certification No.: **T104704364**
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW01281212	Air	Charlotte S.	01/28/12	01/30/12

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	325	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #62210 was received at an initial pressure of -0.6psi and was pressurized to 3.7psi.
Comparison with the method blank this sample run with a dilution factor of: **1.30**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.
George Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0017-6H2S
Data File: C:\HPCHEM\1\DATA\120202\S2020210.D



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

01/31/12

Date Analyzed:

01/31/12

Analyzed by:

LAJ

GD Air QC Batch:

QC-013112

Project No.:

Method:

EPA TO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Benzene	78	71432	0.20	ND	ND	
Benzylchloride	126.6	100447	0.20	ND	ND	
Bromomethane (Methyl Bromide)	94.9	74839	0.20	ND	ND	
Carbon tetrachloride	153.8	56235	0.20	ND	ND	
Chlorobenzene	112.6	108907	0.20	ND	ND	
Chloroethane (Ethyl Chloride)	64.5	75003	0.20	ND	ND	
Chloroform	119	67663	0.20	ND	ND	
Chloromethane (Methyl Chloride)	50.4	74873	0.20	ND	ND	
1,2-Dibromoethane (EDB)	187.9	106934	0.20	ND	ND	
1,2-Dichlorobenzene	147	95501	0.20	ND	ND	
1,3-Dichlorobenzene	147	541731	0.20	ND	ND	
1,4-Dichlorobenzene	147	106467	0.20	ND	ND	
1,1-Dichloroethane	99	74343	0.20	ND	ND	
1,1-Dichlorethene	97	75354	0.20	ND	ND	
Dichlorodifluoromethane (F12)	120.9	75718	0.20	ND	ND	
Dichlorotetrafluoroethane (F114)	170.9	76142	0.20	ND	ND	
1,2-Dichloroethane (EDC)	99	107062	0.20	ND	ND	
cis-1,2-Dichloroethene	97	156592	0.20	ND	ND	
trans-1,2-Dichloroethene	97	156605	0.20	ND	ND	
Dichloromethane (Methylene chloride)	84.9	75092	0.20	ND	ND	
1,2-Dichloropropane	113	78875	0.20	ND	ND	
cis-1,3-Dichloropropene	111	10061015	0.20	ND	ND	
trans-1,3-Dichloropropene	111	10061026	0.20	ND	ND	
Ethylbenzene	106	100414	0.20	ND	ND	
Hexachlorobutadiene	260.8	87683	0.20	ND	ND	
Styrene	104	100425	0.20	ND	ND	
1,1,2,2-Tetrachloroethane	167.9	79345	0.20	ND	ND	
Tetrachloroethene (PCE)	165.8	127184	0.20	ND	ND	
Toluene	92	108883	0.20	ND	ND	
1,1,1-Trichloroethane (TCA)	133.4	71556	0.20	ND	ND	
1,1,2-Trichloroethane	133.4	79005	0.20	ND	ND	
1,3,5-Trimethylbenzene	120.2	108678	0.20	ND	ND	
1,2,4-Trimethylbenzene	120.2	95636	0.20	ND	ND	
1,2,4-Trichlorobenzene	181.5	120821	0.20	ND	ND	
Trichloroethene (TCE)	131.3	79016	0.20	ND	ND	



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

01/31/12

Date Analyzed:

01/31/12

Analyzed by:

LAJ

Project No.: **QC**

GD Air QC Batch:

QC-013112

Method:

EPA TO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M	
Trichlorofluoromethane (F-11)	137.4	75694	0.20	ND	ND	
Trichlorotrifluoroethane (F-113)	187.4	76131	0.20	ND	ND	
Vinyl Chloride	62.5	75014	0.20	ND	ND	
m&p-Xylenes	106	1330207	0.40	ND	ND	
o-Xylene	106	95476	0.20	ND	ND	
Surrogate Recovery Report			Spiked ppbv	Found ppbv	R%	
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	5.99	119.8	
Bromofluorobenzene (SS2)	175	460004	5.00	4.66	93.2	

*Comparison with the method blank this sample run with a dilution factor of:

1.0

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: Chemstation/gd5973.I/01311209.D

Report File: GD SR\ND\QC12-TO14\Blank



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

BS/BSD

Report Date:

01/31/12

Date Analyzed:

01/31/12

Project No.:

Analyzed by:

LAJ

GD Air QC Batch:

QC-013112

Method:

EPATO14

NELAP Certification #:

T104704364

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED			
BS/BSD	Air					
Spike Control Compounds	Spiked	Found and Recovery				
	ppbv	BS/ppbv	BS R%	BSD	BSD R%	% RPD
Vinyl Chloride	5.0	5.4	107	4.5	90	17.4
Methylene chloride (Dichloromethane)	5.0	5.4	108	4.9	98	9.7
1,1,1-Trichloroethane	5.0	6.0	120	5.0	100	18.5
1,2-Dichloroethane (EDC)	5.0	5.6	111	4.6	91	19.8
Benzene	5.0	5.6	113	5.0	100	11.9
Carbon tetrachloride	5.0	5.7	114	4.9	98	15.1
Trichloroethene (TCE)	5.0	5.6	111	5.0	100	10.6
Toluene	5.0	6.2	124	5.2	104	17.5
Chlorobenzene	5.0	5.2	104	4.5	90	14.4
Ethylbenzene	5.0	5.3	106	4.8	96	9.9
o-Xylene	5.0	5.5	110	5.0	100	9.5
Surrogate Recovery Report						
1,4-Difluorobenzene (SS1)	5.0	5.75	115.0	5.23	104.6	9.5
Bromofluorobenzene (SS2)	5.0	5.05	101.0	4.67	93.4	7.8

*CN: See case narrative.

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

* The control limit for relative percentage difference of BS/BSD is 30%

* If any control compound is not within the control limit, please see the case narrative for more details.

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File: c:\chem\gd5973.I\01311204.D and 01311205.D

Report File: GD\SR\ID\QC-TO14\BS-BSD



CLIENT: **GD Air Testing, Inc.**

GD Air Testing Lab. ID: **QC-BLK-020212H2S**

Report Date: **2/6/2012**

Date Analyzed: **2/2/2012**

Analyzed by: **JCA**

GD QC Batch: **QC-020212H2S**

NELAP Certification No.: **T104704364**

Method: **ASTM 1946**

REPORT OF METHOD BLANK RESULTS Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Blank	Air	JCA	02/02/12	02/02/12

CONSTITUENT	MW	PQL*	RESULT	NOTE
		ppmv	ppmv	
Hydrogen Sulfide	34.0	250	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.

* If any compound is out of control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\QC-blk-020212-H2S
Data File: C:\HPCHEM\1\DATA\020202\S2020202.D



CLIENT: GD Air Testing Inc. QA

GD Air Testing Lab. ID:

QC-020212H2S

Report Date: 2/6/2012

Date Analyzed: 2/2/2012

Analyzed by: JCA

NELAP Certification No.: T104704364

Method: ASTM 1946

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED			
BS/BSD	GAS						
CONSTITUENT	Spiked ppmv	Found and Recovery				RPD %	NOTE
		BS	BS, R%	BSD	BSD, R%		
Hydrogen Sulfide	1000	1200	120	1150	115	4.3	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

** The control limit for relative percentage difference of BS/BSD is 30%

*** If any control compound is not within the control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr Dai

George Dai, Ph.D.
Laboratory Director

Data File: C:\HPCHEM\1\DATA\0120202\S2020203.D, S2020204.D

Report File: GDAIR D:\Client_Report\H2S-BS-020212F

2012 Sampling Event 3:

March 2-3, 2012

Report to:
 Company: Dougherty Spague Env
 Address: 3902 Industrial St
 Suite A
 Rowlett, TX 75088
 Contact: Charlotte Stockard
 Phone: 972-412-8666
 Fax: 972-412-8660
 Email: cstockard@edsei.com

Invoice to:
 Company: Dougherty Spague Env
 Address: 3902 Industrial St
 Suite A
 Rowlett, TX 75088
 Contact: Deborah Famis
 Phone: 972-412-8666
 PO/ISO: 1038001

Sampler's Name (print)
 Charlotte Stockard
Sampler's Signature
 Charlotte Stockard

Project Name
 Hinton Landfill Air Monitoring

Date	Time	Can #	Identifying Marks of Sample(s)	SO2 & Carbondisulfide	TO-14VOCs	TO-15VOCs	TO-1 and/or TO-2 VOCs	Light Hydrocarbon C ₁ -C ₆	Headspace (Please specify compounds)	(Mercaptans & Organic Sulfur Compounds)	TICS by GC/MS SCAN	RSK-175 (Methane, ethane, ethene)	MOLD ID	Lab Sample ID (Lab Use Only)
3/2/12	2131-	604	Sample 1 - RW03021201	X	X	X	X	X	X	X	X	X	GD12-0042-1	
3/3/12	0511	145	Sample 2 - RW03021202	X	X	X	X	X	X	X	X	X		-2
3/2/12	2133-	34	Sample 3 - RW03021203	X	X	X	X	X	X	X	X	X		-3
3/3/12	0509	0018	Sample 4 - RW03021204	X	X	X	X	X	X	X	X	X		-4
3/2/12	2138-	2874	Sample 5 - RW03021205	X	X	X	X	X	X	X	X	X		-5
3/3/12	0523	800	Sample 6 - RW03021206	X	X	X	X	X	X	X	X	X		-6
3/2/12	2155-	2515	Sample 7 - RW03021207	X	X	X	X	X	X	X	X	X		-7
3/3/12	0529	6220	Sample 8 - RW03021208	X	X	X	X	X	X	X	X	X		-8
3/2/12	2203-													
3/3/12	0538													
3/2/12	2205-													
3/3/12	0537													
3/2/12	2218-													
3/3/12	0549													

ANALYSIS REQUESTED
 TO-14VOCs
 TO-15VOCs
 TO-1 and/or TO-2 VOCs
 Light Hydrocarbon C₁-C₆
 Headspace (Please specify compounds)
 (Mercaptans & Organic Sulfur Compounds)
 TICS by GC/MS SCAN
 RSK-175 (Methane, ethane, ethene)
 MOLD ID

Remarks
 Normal TAT
 Scan + 8 FC

Relinquished by: (Signature)
 [Signature]
Date
 3/5/12

Received by: (Signature)
 [Signature]
Date
 3/5/12

Time
 10:17 AM

Time
 10:17 AM

Any change for Analysis Request should be submitted by a written document.



CLIENT: **Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-001**
Report Date: **08-Mar-12**
Date Analyzed: **05-Mar-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-030512**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		NOTE
			03/02/12	03/05/12	
Sample 1-RW03021201	Air	Charlotte S.			
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	ug/cu M
Benzene	78	71432	0.28	6.08	19.4
Benzylchloride	126.6	100447	0.28	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.28	ND	ND
Carbon tetrachloride	153.8	56235	0.28	ND	ND
Chlorobenzene	112.6	108907	0.28	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.28	ND	ND
Chloroform	119	67663	0.28	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.28	0.90	1.85
1,2-Dibromoethane (EDB)	187.9	106934	0.28	ND	ND
1,2-Dichlorobenzene	147	95501	0.28	ND	ND
1,3-Dichlorobenzene	147	541731	0.28	ND	ND
1,4-Dichlorobenzene	147	106467	0.28	ND	ND
1,1-Dichloroethane	99	74343	0.28	ND	ND
1,1-Dichloroethene	97	75354	0.28	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.28	0.51	2.52
Dichlorotetrafluoroethane (F114)	170.9	76142	0.28	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.28	ND	ND
cis-1,2-Dichloroethene	97	156592	0.28	ND	ND
trans-1,2-Dichloroethene	97	156605	0.28	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.28	ND	ND
1,2-Dichloropropane	113	78875	0.28	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.28	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.28	ND	ND
Ethylbenzene	106	100414	0.28	2.45	10.6
Hexachlorobutadiene	260.8	87683	0.28	ND	ND
Styrene	104	100425	0.28	0.29	1.22
1,1,2,2-Tetrachloroethane	167.9	79345	0.28	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.70	ND	ND
Toluene	92	108883	7.84	37.5	141
1,1,1-Trichloroethane (TCA)	133.4	71556	0.28	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.28	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.28	1.48	7.28
1,2,4-Trimethylbenzene	120.2	95636	0.28	5.15	25.3
1,2,4-Trichlorobenzene	181.5	120821	0.28	ND	ND
Trichloroethene (TCE)	131.3	79016	0.28	ND	ND



CLIENT: Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0042-001
Report Date: 08-Mar-12
Date Analyzed: 05-Mar-12
Analyzed by: LAJ
GD Air QC Batch: QC-030512
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Includes rows for Trichlorofluoromethane, Trichlorotrifluoroethane, Vinyl Chloride, m&p-Xylenes, o-Xylene, Carbon Disulfide, and Sulfur dioxide.

Tentatively Identified Compounds (TICs)

Surrogate Recovery Report

*Comparison with the method blank this sample run with a dilution factor of: 1.40
Canister #604 was received at an initial pressure of -1.4psi and pressurized to 4.3psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature: AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director
Data File: CHEMSTATION_01\gd5973.1\03051216.D
Report File: GDAIR D:\Client-Report\GD12-0042-001



CLIENT: **Charlotte Stockard
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-1H2S**
Report Date: **3/8/2012**
Date Analyzed: **3/6/2012**
Analyzed by: **JCA**
GD QC Batch: **QC-030612H2S**
NELAP Certification No.: **T104704364**
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW03021201	Air	Charlotte S.	03/02/12	03/05/12

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	358	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #604 was received at an initial pressure of -1.4psi and was pressurized to 4.3psi.
Comparison with the method blank this sample run with a dilution factor of: **1.43**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0042-1H2S
Data File: C:\HPCHEM1\DATA\120306\S2030605.D



CLIENT: Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0042-002
Report Date: 08-Mar-12
Date Analyzed: 05-Mar-12
Analyzed by: LAJ
GD Air QC Batch: QC-030512
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample 2-RW03021202	Air	Charlotte S.	03/02/12	03/05/12	
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M
Benzene	78	71432	0.26	7.71	24.6
Benzylchloride	126.6	100447	0.26	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.26	ND	ND
Carbon tetrachloride	153.8	56235	0.26	ND	ND
Chlorobenzene	112.6	108907	0.26	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.26	ND	ND
Chloroform	119	67663	0.26	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.26	ND	ND
1,2-Dibromoethane (EDB)	187.9	106934	0.26	ND	ND
1,2-Dichlorobenzene	147	95501	0.26	ND	ND
1,3-Dichlorobenzene	147	541731	0.26	ND	ND
1,4-Dichlorobenzene	147	106467	0.26	ND	ND
1,1-Dichloroethane	99	74343	0.26	ND	ND
1,1-Dichlorethene	97	75354	0.26	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.26	0.52	2.58
Dichlorotetrafluoroethane (F114)	170.9	76142	0.26	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.26	ND	ND
cis-1,2-Dichloroethene	97	156592	0.26	ND	ND
trans-1,2-Dichloroethene	97	156605	0.26	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.26	8.07	28.0
1,2-Dichloropropane	113	78875	0.26	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.26	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.26	ND	ND
Ethylbenzene	106	100414	0.26	0.74	3.21
Hexachlorobutadiene	260.8	87683	0.26	ND	ND
Styrene	104	100425	0.26	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.26	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.65	ND	ND
Toluene	92	108883	0.26	14.4	54.2
1,1,1-Trichloroethane (TCA)	133.4	71556	0.26	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.26	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.26	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.26	0.88	4.33
1,2,4-Trichlorobenzene	181.5	120821	0.26	ND	ND
Trichloroethene (TCE)	131.3	79016	0.26	ND	ND



CLIENT: Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0042-002
Report Date: 08-Mar-12
Date Analyzed: 05-Mar-12
Analyzed by: LAJ
GD Air QC Batch: QC-030512
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL*, RESULT, NOTE. Includes rows for Trichlorofluoromethane, Trichlorotrifluoroethane, Vinyl Chloride, m&p-Xylenes, o-Xylene, Carbon Disulfide, and Tentatively Identified Compounds (TICs) like Sulfur dioxide.

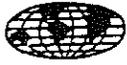
*Comparison with the method blank this sample run with a dilution factor of: 1.30
Canister #145 was received at an initial pressure of -0.7psi and pressurized to 3.5psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director

Data File:CHEMSTATION_01\gd5973.I\03051217.D
Report File: GDAIR D:\Client-Report\GD12-0042-002



CLIENT: **Charlotte Stockard
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-2H2S**
Report Date: 3/8/2012
Date Analyzed: 3/6/2012
Analyzed by: JCA
GD QC Batch: **QC-030612H2S**
NELAP Certification No.: T104704364
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW03021202	Air	Charlotte S.	03/02/12	03/05/12
CONSTITUENT	MW	PQL*	RESULT	NOTE
		ppmv	ppmv	
Hydrogen Sulfide	34.0	325	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #145 was received at an initial pressure of -0.7psi and was pressurized to 3.5psi.
Comparison with the method blank this sample run with a dilution factor of: **1.30**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0042-2H2S
Data File: C:\HPCHEM\1\DATA\120306\12030606.D



CLIENT: **Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-003**
Report Date: **08-Mar-12**
Date Analyzed: **05-Mar-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-030512**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample 3-RW03021203	Air	Charlotte S.	03/02/12	03/05/12	
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M
Benzene	78	71432	0.28	0.51	1.62
Benzylchloride	126.6	100447	0.28	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.28	ND	ND
Carbon tetrachloride	153.8	56235	0.28	ND	ND
Chlorobenzene	112.6	108907	0.28	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.28	ND	ND
Chloroform	119	67663	0.28	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.28	0.63	1.30
1,2-Dibromoethane (EDB)	187.9	106934	0.28	ND	ND
1,2-Dichlorobenzene	147	95501	0.28	ND	ND
1,3-Dichlorobenzene	147	541731	0.28	ND	ND
1,4-Dichlorobenzene	147	106467	0.28	ND	ND
1,1-Dichloroethane	99	74343	0.28	ND	ND
1,1-Dichlorethene	97	75354	0.28	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.28	0.53	2.61
Dichlorotetrafluoroethane (F114)	170.9	76142	0.28	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.28	ND	ND
cis-1,2-Dichloroethene	97	156592	0.28	ND	ND
trans-1,2-Dichloroethene	97	156605	0.28	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.28	ND	ND
1,2-Dichloropropane	113	78875	0.28	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.28	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.28	ND	ND
Ethylbenzene	106	100414	0.28	ND	ND
Hexachlorobutadiene	260.8	87683	0.28	ND	ND
Styrene	104	100425	0.28	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.28	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.70	ND	ND
Toluene	92	108883	0.28	0.89	3.34
1,1,1-Trichloroethane (TCA)	133.4	71556	0.28	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.28	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.28	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.28	ND	ND
1,2,4-Trichlorobenzene	181.5	120821	0.28	ND	ND
Trichloroethene (TCE)	131.3	79016	0.28	ND	ND



CLIENT: Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0042-003
Report Date: 08-Mar-12
Date Analyzed: 05-Mar-12
Analyzed by: LAJ
GD Air QC Batch: QC-030512
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Includes rows for Trichlorofluoromethane, Vinyl Chloride, m&p-Xylenes, Carbon Disulfide, and Tentatively Identified Compounds (TICs).

*Comparison with the method blank this sample run with a dilution factor of: 1.40
Canister #34 was received at an initial pressure of -1.3psi and pressurized to 4.2psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature: AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director

Data File: CHEMSTATION_01\gd5973.1\03051218.D
Report File: GDAIR D:\Client-Report\GD12-0042-003



CLIENT: **Charlotte Stockard
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-3H2S**
Report Date: **3/8/2012**
Date Analyzed: **3/6/2012**
Analyzed by: **JCA**
GD QC Batch: **QC-030612H2S**
NELAP Certification No.: **T104704364**
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW03021203	Air	Charlotte S.	03/02/12	03/05/12
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	353	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #34 was received at an initial pressure of -1.3psi and was pressurized to 4.2psi.
Comparison with the method blank this sample run with a dilution factor of: **1.41**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.
AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0042-3H2S
Data File: C:\HPCHEM\1\DATA\120306\S2030607.D



CLIENT: **Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-004**
Report Date: **08-Mar-12**
Date Analyzed: **05-Mar-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-030512**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample 4-RW03021204	Air	Charlotte S.	03/02/12	03/05/12	
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE
			ppbv	ppbv	ug/cu M
Benzene	78	71432	0.28	1.04	3.32
Benzylchloride	126.6	100447	0.28	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.28	ND	ND
Carbon tetrachloride	153.8	56235	0.28	ND	ND
Chlorobenzene	112.6	108907	0.28	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.28	ND	ND
Chloroform	119	67663	0.28	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.28	0.63	1.29
1,2-Dibromoethane (EDB)	187.9	106934	0.28	ND	ND
1,2-Dichlorobenzene	147	95501	0.28	ND	ND
1,3-Dichlorobenzene	147	541731	0.28	ND	ND
1,4-Dichlorobenzene	147	106467	0.28	ND	ND
1,1-Dichloroethane	99	74343	0.28	ND	ND
1,1-Dichlorethene	97	75354	0.28	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.28	0.51	2.54
Dichlorotetrafluoroethane (F114)	170.9	76142	0.28	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.28	ND	ND
cis-1,2-Dichloroethene	97	156592	0.28	ND	ND
trans-1,2-Dichloroethene	97	156605	0.28	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.28	ND	ND
1,2-Dichloropropane	113	78875	0.28	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.28	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.28	ND	ND
Ethylbenzene	106	100414	0.28	ND	ND
Hexachlorobutadiene	260.8	87683	0.28	ND	ND
Styrene	104	100425	0.28	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.28	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.70	ND	ND
Toluene	92	108883	0.28	1.08	4.06
1,1,1-Trichloroethane (TCA)	133.4	71556	0.28	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.28	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.28	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.28	ND	ND
1,2,4-Trichlorobenzene	181.5	120821	0.28	ND	ND
Trichloroethene (TCE)	131.3	79016	0.28	ND	ND



CLIENT: **Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-004**
Report Date: **08-Mar-12**
Date Analyzed: **05-Mar-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-030512**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample 4-RW03021204	Air	Charlotte S.	03/02/12	03/05/12	
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M
Trichlorofluoromethane (F-11)	137.4	75694	0.28	ND	ND
Trichlorotrifluoroethane (F-113)	187.4	76131	0.28	ND	ND
Vinyl Chloride	62.5	75014	0.28	ND	ND
m&p-Xylenes	106	1330207	0.56	0.88	3.81
o-Xylene	106	95476	0.28	0.32	1.40
Carbon Disulfide	76	75150	0.28	2.43	7.55 T

Tentatively Identified Compounds (TICs)

Sulfur dioxide	64	7446095	1.40	ND	ND	N
----------------	----	---------	------	----	----	---

Surrogate Recovery Report

			Spiked ppbv	Found ppbv	R%
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	4.60	92.0
Bromofluorobenzene (SS2)	175	460004	5.00	4.60	92.0

*Comparison with the method blank this sample run with a dilution factor of: **1.40**

Canister #0018 was received at an initial pressure of -0.7psi and pressurized to 4.4psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.

T: The State of Texas (TCEQ) does not offer accreditation for this compound.

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted

GD Air Testing, Inc.

George Dai, Ph.D.

Laboratory Director

Data File:CHEMSTATION_01\gd5973.I\03051219.D

Report File: GDAIR D:\Client-Report\GD12-0042-004



CLIENT: **Charlotte Stockard
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-4H2S**
Report Date: **3/8/2012**
Date Analyzed: **3/6/2012**
Analyzed by: **JCA**
GD QC Batch: **QC-030612H2S**
NELAP Certification No.: **T104704364**
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW03021204	Air	Charlotte S.	03/02/12	03/05/12
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	340	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #0018 was received at an initial pressure of -0.7psi and was pressurized to 4.4psi.
Comparison with the method blank this sample run with a dilution factor of: **1.36**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0042-4H2S
Data File: C:\HPCHEM\1\DATA\120306\S2030608.D



CLIENT: Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: **GD12-0042-005**
Report Date: 08-Mar-12
Date Analyzed: 05-Mar-12
Analyzed by: LAJ
GD Air QC Batch: **QC-030512**
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample 5-RW03021205	Air	Charlotte S.	03/02/12	03/05/12	
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M
Benzene	78	71432	0.26	ND	ND
Benzylchloride	126.6	100447	0.26	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.26	ND	ND
Carbon tetrachloride	153.8	56235	0.26	ND	ND
Chlorobenzene	112.6	108907	0.26	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.26	ND	ND
Chloroform	119	67663	0.26	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.26	0.54	1.12
1,2-Dibromoethane (EDB)	187.9	106934	0.26	ND	ND
1,2-Dichlorobenzene	147	95501	0.26	ND	ND
1,3-Dichlorobenzene	147	541731	0.26	ND	ND
1,4-Dichlorobenzene	147	106467	0.26	ND	ND
1,1-Dichloroethane	99	74343	0.26	ND	ND
1,1-Dichlorethene	97	75354	0.26	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.26	0.43	2.12
Dichlorotetrafluoroethane (F114)	170.9	76142	0.26	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.26	ND	ND
cis-1,2-Dichloroethene	97	156592	0.26	ND	ND
trans-1,2-Dichloroethene	97	156605	0.26	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.26	ND	ND
1,2-Dichloropropane	113	78875	0.26	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.26	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.26	ND	ND
Ethylbenzene	106	100414	0.26	ND	ND
Hexachlorobutadiene	260.8	87683	0.26	ND	ND
Styrene	104	100425	0.26	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.26	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.65	ND	ND
Toluene	92	108883	0.26	0.66	2.48
1,1,1-Trichloroethane (TCA)	133.4	71556	0.26	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.26	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.26	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.26	ND	ND
1,2,4-Trichlorobenzene	181.5	120821	0.26	ND	ND
Trichloroethene (TCE)	131.3	79016	0.26	ND	ND



CLIENT: Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0042-005
Report Date: 08-Mar-12
Date Analyzed: 05-Mar-12
Analyzed by: LAJ
GD Air QC Batch: QC-030512
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL*, RESULT, NOTE. Includes rows for Trichlorofluoromethane, Vinyl Chloride, and Sulfur dioxide.

*Comparison with the method blank this sample run with a dilution factor of: 1.30
Canister #2874 was received at an initial pressure of 0.4psi and pressurized to 4.3psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.
George Dai, Ph.D.
Laboratory Director
Data File: CHEMSTATION_01\gd5973.I\03051220.D
Report File: GDAIR D:\Client-Report\GD12-0042-005



CLIENT: **Charlotte Stockard
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-5H2S**
Report Date: **3/8/2012**
Date Analyzed: **3/6/2012**
Analyzed by: **JCA**
GD QC Batch: **QC-030612H2S**
NELAP Certification No.: **T104704364**
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW03021205	Air	Charlotte S.	03/02/12	03/05/12

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	315	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #2874 was received at an initial pressure of 0.4psi and was pressurized to 4.3psi.
Comparison with the method blank this sample run with a dilution factor of: **1.26**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0042-5H2S
Data File: C:\HPCHEM1\DATA\120306\1S2030609.D



CLIENT: **Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-006**
Report Date: **08-Mar-12**
Date Analyzed: **05-Mar-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-030512**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample 6-RW03021206	Air	Charlotte S.	03/02/12	03/05/12	
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M
Benzene	78	71432	0.28	13.6	43.4
Benzylchloride	126.6	100447	0.28	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.28	ND	ND
Carbon tetrachloride	153.8	56235	0.28	ND	ND
Chlorobenzene	112.6	108907	0.28	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.28	ND	ND
Chloroform	119	67663	0.28	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.28	0.52	1.06
1,2-Dibromoethane (EDB)	187.9	106934	0.28	ND	ND
1,2-Dichlorobenzene	147	95501	0.28	ND	ND
1,3-Dichlorobenzene	147	541731	0.28	ND	ND
1,4-Dichlorobenzene	147	106467	0.28	ND	ND
1,1-Dichloroethane	99	74343	0.28	ND	ND
1,1-Dichlorethene	97	75354	0.28	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.28	0.40	1.96
Dichlorotetrafluoroethane (F114)	170.9	76142	0.28	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.28	ND	ND
cis-1,2-Dichloroethene	97	156592	0.28	ND	ND
trans-1,2-Dichloroethene	97	156605	0.28	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.28	ND	ND
1,2-Dichloropropane	113	78875	0.28	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.28	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.28	ND	ND
Ethylbenzene	106	100414	0.28	6.59	28.6
Hexachlorobutadiene	260.8	87683	0.28	ND	ND
Styrene	104	100425	0.28	0.50	2.14
1,1,2,2-Tetrachloroethane	167.9	79345	0.28	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.70	ND	ND
Toluene	92	108883	19.6	65.7	247
1,1,1-Trichloroethane (TCA)	133.4	71556	0.28	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.28	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.28	5.33	26.2
1,2,4-Trimethylbenzene	120.2	95636	0.28	19.7	96.8
1,2,4-Trichlorobenzene	181.5	120821	0.28	ND	ND
Trichloroethene (TCE)	131.3	79016	0.28	0.33	1.76



CLIENT: Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0042-006
Report Date: 08-Mar-12
Date Analyzed: 05-Mar-12
Analyzed by: LAJ
GD Air QC Batch: QC-030512
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, MW, CAS, PQL*, RESULT, NOTE. Includes rows for Trichlorofluoromethane, Trichlorotrifluoroethane, Vinyl Chloride, m&p-Xylenes, o-Xylene, Carbon Disulfide, and Sulfur dioxide.

Tentatively Identified Compounds (TICs)

Surrogate Recovery Report

*Comparison with the method blank this sample run with a dilution factor of: 1.40
Canister #800 was received at an initial pressure of -1.4psi and pressurized to 3.7psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

Handwritten signature of George Dai

George Dai, Ph.D.
Laboratory Director
Data File:CHEMSTATION_01\gd5973.I\03051221.D
Report File: GDAIR D:\Client-Report\GD12-0042-006



CLIENT: **Charlotte Stockard
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-6H2S**
Report Date: 3/8/2012
Date Analyzed: 3/6/2012
Analyzed by: JCA
GD QC Batch: **QC-030612H2S**
NELAP Certification No.: T104704364
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

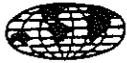
SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW03021206	Air	Charlotte S.	03/02/12	03/05/12
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	345	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #800 was received at an initial pressure of -1.4psi and was pressurized to 3.7psi.
Comparison with the method blank this sample run with a dilution factor of: **1.38**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0042-6H2S
Data File: C:\HPCHEM\1\DATA\120306\12030610.D



CLIENT: **Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-007**
Report Date: **08-Mar-12**
Date Analyzed: **05-Mar-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-030512**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample 7-RW03021207	Air	Charlotte S.	03/02/12	03/05/12	
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M
Benzene	78	71432	0.30	ND	ND
Benzylchloride	126.6	100447	0.30	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.30	ND	ND
Carbon tetrachloride	153.8	56235	0.30	ND	ND
Chlorobenzene	112.6	108907	0.30	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.30	ND	ND
Chloroform	119	67663	0.30	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.30	0.45	0.93
1,2-Dibromoethane (EDB)	187.9	106934	0.30	ND	ND
1,2-Dichlorobenzene	147	95501	0.30	ND	ND
1,3-Dichlorobenzene	147	541731	0.30	ND	ND
1,4-Dichlorobenzene	147	106467	0.30	ND	ND
1,1-Dichloroethane	99	74343	0.30	ND	ND
1,1-Dichlorethene	97	75354	0.30	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.30	0.38	1.87
Dichlorotetrafluoroethane (F114)	170.9	76142	0.30	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.30	ND	ND
cis-1,2-Dichloroethene	97	156592	0.30	ND	ND
trans-1,2-Dichloroethene	97	156605	0.30	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.30	ND	ND
1,2-Dichloropropane	113	78875	0.30	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.30	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.30	ND	ND
Ethylbenzene	106	100414	0.30	ND	ND
Hexachlorobutadiene	260.8	87683	0.30	ND	ND
Styrene	104	100425	0.30	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.30	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.75	ND	ND
Toluene	92	108883	21.0	0.54	2.04
1,1,1-Trichloroethane (TCA)	133.4	71556	0.30	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.30	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.30	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.30	ND	ND
1,2,4-Trichlorobenzene	181.5	120821	0.30	ND	ND
Trichloroethene (TCE)	131.3	79016	0.30	ND	ND



CLIENT: Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0042-007
Report Date: 08-Mar-12
Date Analyzed: 05-Mar-12
Analyzed by: LAJ
GD Air QC Batch: QC-030512
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Page 2 of 2

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL*, RESULT, NOTE. Includes rows for Trichlorofluoromethane, Trichlorotrifluoroethane, Vinyl Chloride, m&p-Xylenes, o-Xylene, Carbon Disulfide, and Tentatively Identified Compounds (TICs) like Sulfur dioxide.

Surrogate Recovery Report

Table with columns: Compound Name, MW, CAS, Spiked (ppbv), Found (ppbv), R%. Includes 1,4-Difluorobenzene (SS1) and Bromofluorobenzene (SS2).

*Comparison with the method blank this sample run with a dilution factor of: 1.50
Canister #2515 was received at an initial pressure of -1.7psi and pressurized to 5.0psi.
N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.
Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.
T: The State of Texas (TCEQ) does not offer accreditation for this compound.
*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.
George Dai, Ph.D.
Laboratory Director
Data File:CHEMSTATION_01\gd5973.I\03051222.D
Report File: GDAIR D:\Client-Report\GD12-0042-007



CLIENT: **Charlotte Stockard
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-7H2S**
Report Date: **3/8/2012**
Date Analyzed: **3/6/2012**
Analyzed by: **JCA**
GD QC Batch: **QC-030612H2S**
NELAP Certification No.: **T104704364**
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW03021207	Air	Charlotte S.	03/02/12	03/05/12
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	373	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #2515 was received at an initial pressure of -1.5psi and was pressurized to 5.0psi.
Comparison with the method blank this sample run with a dilution factor of: **1.49**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr. Dai
George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0042-7H2S
Data File: C:\HPCHEM\1\DATA\120306\S2030611.D



CLIENT: **Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-008**
Report Date: **08-Mar-12**
Date Analyzed: **05-Mar-12**
Analyzed by: **LAJ**
GD Air QC Batch: **QC-030512**
Method: **EPATO14**
NELAP Certification #: **T104704364**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED		
Sample 8-RW03021208	Air	Charlotte S.	03/02/12	03/05/12	
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M
Benzene	78	71432	0.26	0.27	0.85
Benzylchloride	126.6	100447	0.26	ND	ND
Bromomethane (Methyl Bromide)	94.9	74839	0.26	ND	ND
Carbon tetrachloride	153.8	56235	0.26	ND	ND
Chlorobenzene	112.6	108907	0.26	ND	ND
Chloroethane (Ethyl Chloride)	64.5	75003	0.26	ND	ND
Chloroform	119	67663	0.26	ND	ND
Chloromethane (Methyl Chloride)	50.4	74873	0.26	0.51	1.06
1,2-Dibromoethane (EDB)	187.9	106934	0.26	ND	ND
1,2-Dichlorobenzene	147	95501	0.26	ND	ND
1,3-Dichlorobenzene	147	541731	0.26	ND	ND
1,4-Dichlorobenzene	147	106467	0.26	ND	ND
1,1-Dichloroethane	99	74343	0.26	ND	ND
1,1-Dichloroethene	97	75354	0.26	ND	ND
Dichlorodifluoromethane (F12)	120.9	75718	0.26	0.41	2.00
Dichlorotetrafluoroethane (F114)	170.9	76142	0.26	ND	ND
1,2-Dichloroethane (EDC)	99	107062	0.26	ND	ND
cis-1,2-Dichloroethene	97	156592	0.26	ND	ND
trans-1,2-Dichloroethene	97	156605	0.26	ND	ND
Dichloromethane (Methylene chloride)	84.9	75092	0.26	ND	ND
1,2-Dichloropropane	113	78875	0.26	ND	ND
cis-1,3-Dichloropropene	111	10061015	0.26	ND	ND
trans-1,3-Dichloropropene	111	10061026	0.26	ND	ND
Ethylbenzene	106	100414	0.26	ND	ND
Hexachlorobutadiene	260.8	87683	0.26	ND	ND
Styrene	104	100425	0.26	ND	ND
1,1,2,2-Tetrachloroethane	167.9	79345	0.26	ND	ND
Tetrachloroethene (PCE)	165.8	127184	0.65	ND	ND
Toluene	92	108883	18.2	0.80	3.01
1,1,1-Trichloroethane (TCA)	133.4	71556	0.26	ND	ND
1,1,2-Trichloroethane	133.4	79005	0.26	ND	ND
1,3,5-Trimethylbenzene	120.2	108678	0.26	ND	ND
1,2,4-Trimethylbenzene	120.2	95636	0.26	ND	ND
1,2,4-Trichlorobenzene	181.5	120821	0.26	ND	ND
Trichloroethene (TCE)	131.3	79016	0.26	ND	ND



CLIENT: Charlotte Stockard
Dougherty Sprague Env., Inc.
3902 Industrial St. Suite A
Rowlett, TX 75088

GD Air Testing Lab. ID: GD12-0042-008
Report Date: 08-Mar-12
Date Analyzed: 05-Mar-12
Analyzed by: LAJ
GD Air QC Batch: QC-030512
Method: EPATO14
NELAP Certification #: T104704364

Project No.: 1038001

REPORT OF ANALYTICAL RESULTS

Table with columns: SAMPLE DESCRIPTION, MATRIX, SAMPLE BY, SAMPLED DATE /RECEIVED, CONSTITUENT, MW, CAS, PQL* ppbv, RESULT ppbv, NOTE ug/cu M. Rows include Trichlorofluoromethane (F-11), Trichlorotrifluoroethane (F-113), Vinyl Chloride, m&p-Xylenes, o-Xylene, Carbon Disulfide.

Tentatively Identified Compounds (TICs)

Table with columns: Compound Name, MW, CAS, PQL, RESULT, NOTE. Row: Sulfur dioxide, 64, 7446095, 1.30, ND, ND, N.

Surrogate Recovery Report

Table with columns: Compound Name, MW, CAS, Spiked ppbv, Found ppbv, R%. Rows: 1,4-Difluorobenzene (SS1), Bromofluorobenzene (SS2).

*Comparison with the method blank this sample run with a dilution factor of: 1.30

Canister #62209 was received at an initial pressure of 0.5psi and pressurized to 5.0psi.

N: Not in the Scope of NELAC Accrediation. Instrument calibration not performed for this analyte.

Analyte determined as tentatively identified compound (TIC) and concentration is an estimate.

T: The State of Texas (TCEQ) does not offer accreditation for this compound.

*RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

*Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.

*QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

AJ for Dr. Dai

George Dai, Ph.D.
Laboratory Director

Data File:CHEMSTATION_01\gd5973.I\03051223.D
Report File: GDAIR D:\Client-Report\GD12-0042-008



CLIENT: **Charlotte Stockard
DSE, Inc.
3902 Industrial St., Suite A
Rowlett, TX 75088**

GD Air Testing Lab. ID: **GD12-0042-8H2S**
Report Date: **3/8/2012**
Date Analyzed: **3/6/2012**
Analyzed by: **JCA**
GD QC Batch: **QC-030612H2S**
NELAP Certification No.: **T104704364**
Method: **ASTM 1946**

Project No.: **1038001**

REPORT OF ANALYTICAL RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Sample #1-RW03021208	Air	Charlotte S.	03/02/12	03/05/12
CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	325	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.
Canister #62209 was received at an initial pressure of 0.5psi and was pressurized to 5.0psi.
Comparison with the method blank this sample run with a dilution factor of: **1.30**
RESULTS listed as "ND" were not detected at or above the listed PQL (Practical Quantitation Limit).
QA/QC reports following this report include: Method Blank, Blank Spike (BS), and Blank Spike Duplicate (BSD).

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Report File: GDAIR D:\Client_Report\gd12-0042-8H2S
Data File: C:\HPCHEM\1\DATA\120306\S2030612.D



CLIENT: **GD Air Testing, Inc.**

GD Air Testing Lab. ID:

Method Blank

Report Date:

03/05/12

Date Analyzed:

03/05/12

Analyzed by:

LAJ

GD Air QC Batch:

QC-030512

Project No.:

Method:

EPA TO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

Page 1 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY	SAMPLED DATE /RECEIVED			
BLK	Air					
CONSTITUENT	MW	CAS	PQL* ppbv	RESULT ppbv	NOTE ug/cu M	
Benzene	78	71432	0.20	ND	ND	
Benzylchloride	126.6	100447	0.20	ND	ND	
Bromomethane (Methyl Bromide)	94.9	74839	0.20	ND	ND	
Carbon tetrachloride	153.8	56235	0.20	ND	ND	
Chlorobenzene	112.6	108907	0.20	ND	ND	
Chloroethane (Ethyl Chloride)	64.5	75003	0.20	ND	ND	
Chloroform	119	67663	0.20	ND	ND	
Chloromethane (Methyl Chloride)	50.4	74873	0.20	ND	ND	
1,2-Dibromoethane (EDB)	187.9	106934	0.20	ND	ND	
1,2-Dichlorobenzene	147	95501	0.20	ND	ND	
1,3-Dichlorobenzene	147	541731	0.20	ND	ND	
1,4-Dichlorobenzene	147	106467	0.20	ND	ND	
1,1-Dichloroethane	99	74343	0.20	ND	ND	
1,1-Dichlorethene	97	75354	0.20	ND	ND	
Dichlorodifluoromethane (F12)	120.9	75718	0.20	ND	ND	
Dichlorotetrafluoroethane (F114)	170.9	76142	0.20	ND	ND	
1,2-Dichloroethane (EDC)	99	107062	0.20	ND	ND	
cis-1,2-Dichloroethene	97	156592	0.20	ND	ND	
trans-1,2-Dichloroethene	97	156605	0.20	ND	ND	
Dichloromethane (Methylene chloride)	84.9	75092	0.20	ND	ND	
1,2-Dichloropropane	113	78875	0.20	ND	ND	
cis-1,3-Dichloropropene	111	10061015	0.20	ND	ND	
trans-1,3-Dichloropropene	111	10061026	0.20	ND	ND	
Ethylbenzene	106	100414	0.20	ND	ND	
Hexachlorobutadiene	260.8	87683	0.20	ND	ND	
Styrene	104	100425	0.20	ND	ND	
1,1,2,2-Tetrachloroethane	167.9	79345	0.20	ND	ND	
Tetrachloroethene (PCE)	165.8	127184	0.50	ND	ND	
Toluene	92	108883	0.20	ND	ND	
1,1,1-Trichloroethane (TCA)	133.4	71556	0.20	ND	ND	
1,1,2-Trichloroethane	133.4	79005	0.20	ND	ND	
1,3,5-Trimethylbenzene	120.2	108678	0.20	ND	ND	
1,2,4-Trimethylbenzene	120.2	95636	0.20	ND	ND	
1,2,4-Trichlorobenzene	181.5	120821	0.20	ND	ND	
Trichloroethene (TCE)	131.3	79016	0.20	ND	ND	

PAGE 26 OF 30



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

Method Blank

Report Date:

03/05/12

Date Analyzed:

03/05/12

Analyzed by:

LAJ

Project No.: QC

GD Air QC Batch:

QC-030512

Method:

EPA TO14

NELAP Certification #:

T104704364

REPORT OF METHOD BLANK RESULTS

Page 2 of 2

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED		
BLK	Air					
CONSTITUENT	MW	CAS	PQL*	RESULT	NOTE	
			ppbv	ppbv	ug/cu M	
Trichlorofluoromethane (F-11)	137.4	75694	0.20	ND	ND	
Trichlorotrifluoroethane (F-113)	187.4	76131	0.20	ND	ND	
Vinyl Chloride	62.5	75014	0.20	ND	ND	
m&p-Xylenes	106	1330207	0.40	ND	ND	
o-Xylene	106	95476	0.20	ND	ND	
Surrogate Recovery Report			Spiked	Found	R%	
			ppbv	ppbv		
1,4-Difluorobenzene (SS1)	118.1	540363	5.00	4.93	98.6	
Bromofluorobenzene (SS2)	175	460004	5.00	5.02	100	

- *Comparison with the method blank this sample run with a dilution factor of: 1.0
- *RESULTS Listed as 'ND' were not detected at or above the listed PQL (Practical Quantitation Limit).
- * The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.
- *Concentrations in ug/cu M reported at 760 mm Hg pressure and 298 deg.K.
- *QA/QC reports followed this report include: Method blank, Blank spike (BS) and Blank spike duplicate (BSD)

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Data File: Chemstation/gd5973.I/03051214.D
Report File: GD SR\ID\QC12-TO14\Blank



CLIENT: GD Air Testing, Inc.

GD Air Testing Lab. ID:

BS/BSD

Report Date:

03/05/12

Date Analyzed:

03/05/12

Project No.:

Analyzed by:

LAJ

GD Air QC Batch:

QC-030512

Method:

EPA TO14

NELAP Certification #:

T104704364

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED			
BS/BSD	Air						
Spike Control Compounds	Spiked	Found and Recovery					
	ppbv	BS/ppbv	BS R%	BSD	BSD R%	% RPD	
Vinyl Chloride	5.0	5.3	106	5.5	111	4.2	
Methylene chloride (Dichloromethane)	5.0	5.8	116	5.7	113	2.6	
1,1,1-Trichloroethane	5.0	5.0	100	5.2	104	3.9	
1,2-Dichloroethane (EDC)	5.0	4.8	96	4.9	99	2.7	
Benzene	5.0	4.6	92	4.6	92	0.4	
Carbon tetrachloride	5.0	4.7	94	5.1	102	8.2	
Trichloroethene (TCE)	5.0	3.9	78	4.4	88	12.0	
Toluene	5.0	4.8	96	4.9	98	2.1	
Chlorobenzene	5.0	4.5	89	4.4	87	2.0	
Ethylbenzene	5.0	4.7	94	4.4	87	7.5	
o-Xylene	5.0	4.2	84	4.1	83	1.4	
Surrogate Recovery Report							
1,4-Difluorobenzene (SS1)	5.0	4.67	93.4	4.60	92.0	1.5	
Bromofluorobenzene (SS2)	5.0	4.66	93.2	5.27	105.4	12.3	

*CN: See case narrative.

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

* The control limit for relative percentage difference of BS/BSD is 30%

* If any control compound is not within the control limit, please see the case narrative for more details.

* The control limit for Surrogate Recovery % of all spiked compound is 70% - 130%. Only one is required to pass.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Data File: c:\chem\gd5973.l\03051211.D and 03051212.D
Report File: GD\SR\ID\QC-TO14\BS-BSD



CLIENT: **GD Air Testing, Inc.**

GD Air Testing Lab. ID: **QC-BLK-030612H2S**
 Report Date: 3/8/2012
 Date Analyzed: 3/6/2012
 Analyzed by: JCA
 GD QC Batch: **QC-021012H2S**
 NELAP Certification No.: T104704364
 Method: **ASTM 1946**

REPORT OF METHOD BLANK RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLED BY	SAMPLED DATE /RECEIVED	
Blank	Air	JCA	03/06/12	03/06/12

CONSTITUENT	MW	PQL* ppmv	RESULT ppmv	NOTE
Hydrogen Sulfide	34.0	250	ND	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.

* If any compound is out of control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.


 George Dai, Ph.D.
 Laboratory Director

Report File: GDAIR D:\Client_Report\QC-blk-030612-H2S
 Data File: C:\HPCHEM\1\DATA\030602\S2030602.D



CLIENT: GD Air Testing Inc. QA

GD Air Testing Lab. ID: **QC-030612H2S**
 Report Date: 3/8/2012
 Date Analyzed: 3/6/2012
 Analyzed by: JCA
 NELAP Certification No.: T104704364
 Method: ASTM 1946

REPORT OF BLANK SPIKE RESULTS

Page 1 of 1

SAMPLE DESCRIPTION	MATRIX	SAMPLE BY		SAMPLED DATE /RECEIVED			
BS/BSD	GAS						
CONSTITUENT	Spiked ppmv	Found and Recovery				RPD %	NOTE
		BS	BS, R%	BSD	BSD, R%		
Hydrogen Sulfide	1000	1160	116	1100	110	5.3	T

T: The State of Texas (TCEQ) does not offer accreditation for this compound.

* The control limit for BS Recovery % of all spiked compound is 70% - 130%

** The control limit for relative percentage difference of BS/BSD is 30%

*** If any control compound is not within the control limit, please see the case narrative for more details.

Respectfully submitted
GD Air Testing, Inc.

George Dai, Ph.D.
Laboratory Director

Data File: C:\HPCHEM\1\DATA\0120306\S2030603.D, S2030604.D

Report File: GDAIR D:\Client_Report\H2S-BS-030612F