



February 20, 2008

Mr. Charlie Fitzimmons
On-Scene Coordinator
U.S. Environmental Protection Agency Region 3
701 Mapes Road
Ft. George Meade, MD 20755-5350

Subject: Trip Report for Jimmy's Tire Salvage Tire Fire
EPA Contract No.: EP-S3-05-02
Technical Direction Document No.: E23-014-08-01-003
Document Tracking No.: 0450

Dear Mr. Fitzimmons,

Tetra Tech EM Inc. (Tetra Tech) is submitting the trip report for Jimmy's Tire Salvage Tire Fire summarizing air monitoring activities conducted on January 23-24th, 2008.

If you have any questions regarding this report, please contact Marian Murphy at (610) 364-2129 or me at (215) 768-0067

Sincerely,

A handwritten signature in black ink, appearing to read 'LSH'.

Lee Shin
Project Manager

Enclosure

cc: TDD File

**TRIP REPORT
FOR THE
JIMMY'S TIRE SALVAGE TIRE FIRE
WASHINGTON, DC**

Prepared for

U.S. Environmental Protection Agency Region 3
1650 Arch Street
Philadelphia, Pennsylvania 19103

Submitted by

Tetra Tech EM Inc.
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EPA Contract No.: EP-S3-05-02

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February 20, 2008

Prepared by

Approved by



Lee Shin
Project Manager



Marian Murphy
Program Manager

CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION.....	3
2.0 BACKGROUND.....	3
2.1 SITE LOCATION.....	3
2.2 SITE DESCRIPTION.....	5
2.3 SITE CHRONOLOGY.....	5
3.0 SITE ACTIVITIES.....	7
4.0 CONCLUSIONS AND RECOMMENDATIONS.....	8
5.0 SUMMARY.....	9
REFERENCES.....	10

Appendices

- A PHOTOGRAPHIC LOG
- B LOGBOOK NOTES

CONTENTS (Continued)

FIGURES

<u>Figure</u>		<u>Page</u>
1	SITE LOCATION MAP.....	2
2	AIR MONITORING LOCATIONS	6

1.0 INTRODUCTION

Under Eastern Area Superfund Technical Assessment and Response Team (START) Contract No. EP-S3-05-02, Technical Direction Document (TDD) No. E23-014-08-02-002, U.S. Environmental Protection Agency (EPA) Region 3 tasked Tetra Tech EM Inc., (Tetra Tech) to prepare a trip report summarizing air monitoring activities at Jimmy's Tire Salvage in Washington, DC. The purpose of the air monitoring was to determine the extent of contamination in the air from the fire that occurred at Jimmy's Tire Salvage. The fire began shortly before 1:30 p.m. in the brick building at the intersection of 12th and K Streets and Florida Avenue on January 21, 2008. Firefighters contained the blaze at about 5:30 p.m., but planned to pour foam on the smoldering business and watch it through the night. Tetra Tech began air monitoring the afternoon of January 23, 2008, and completed air monitoring activities on January 24, 2008. This trip report summarizes air monitoring activities.

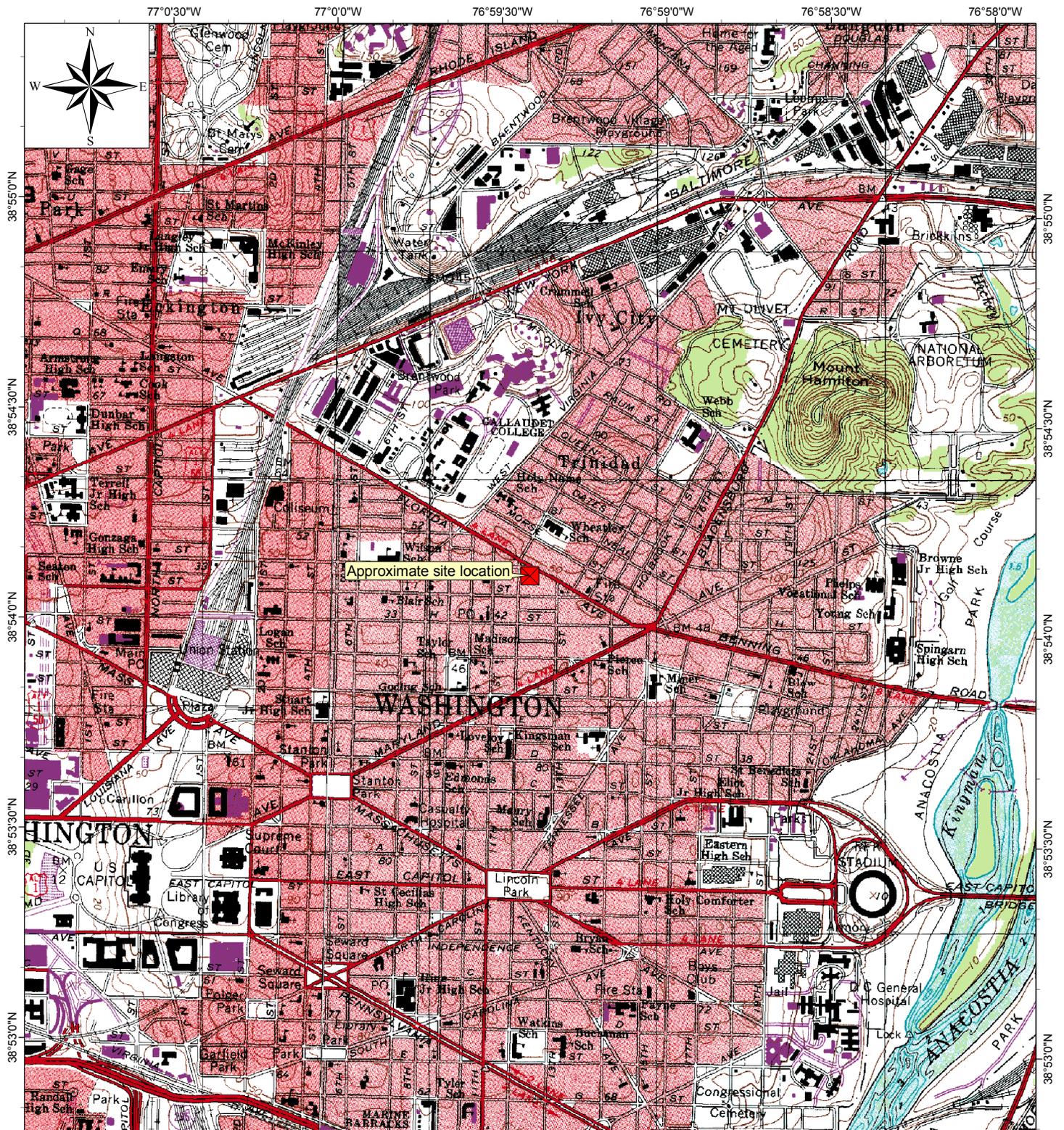
This trip report provides site background in Section 2.0, describes site activities in Section 3.0, discusses recommendations and conclusions in Section 4.0, and provides a summary in Section 5.0. All references cited in this report are listed after the text.

2.0 BACKGROUND

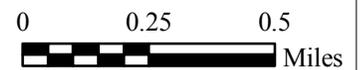
This section describes the site location, presents a description of the site, and summarizes previous site activities and investigations.

2.1 SITE LOCATION

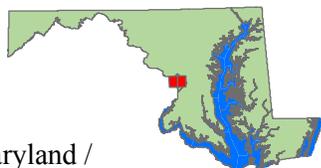
Jimmy's Tire Salvage Tire Fire site is located at 1215 K Street Northeast in Washington, D.C. The approximate geographic coordinates of the site are 38.902 degrees north latitude and 76.9897 degrees west longitude. Figure 1 shows the site location and surrounding areas (USGS 1983).



Source: Modified from USGS 7.5-Minute Series Topographic Quadrangles; Washington East, District of Columbia; Washington West, District of Columbia



Quadrangle Location = ■



Maryland /
District of Columbia

Jimmy's Tire Fire Site Washington, District of Columbia

Figure 1
Site Location Map

TDD No. E23-014-08-01-003
EPA Contract No. EP-S3-05-02

Map created on February 8, 2008
by D. Call, Tetra Tech EM Inc.



2.2 SITE DESCRIPTION

The site was a tire shop in Northeast Washington. The fire began at the intersection of 12th and K Streets and Florida Avenue on January 21, 2008. Jimmy's Tire Salvage is located amid townhouses and apartments in the Trinidad neighborhood. Jimmy's Tire Salvage had been a Florida Avenue institution since the mid-1970's. There were approximately 20,000 to 30,000 tires in the warehouse. Figure 2 shows the site layout, including the location of the warehouse where the fire occurred and the air monitoring locations.

2.3 SITE CHRONOLOGY

At approximately 1:30 p.m. on January 21, 2008, a fire began at Jimmy's Tire Salvage in Washington D.C. Fire crews from Fairfax County, Reagan National Airport, and Andrews Air Force base were brought in to assist D.C. firefighters with foam. At about 5:30 p.m. the fire was contained, but firefighters continued to pour foam and watch it throughout the night (Washington Post 2008).

START was tasked to conduct air monitoring, and mobilized to the site on January 23, 2008.



Source: Modified from USGS Urban Imagery, 2002

Legend

-  Air monitoring location
-  Tire fire location



Approximate Site Location = 



Maryland /
District of Columbia

Jimmy's Tire Fire Site
Washington, District of Columbia

Figure 2
Air Monitoring Location Map

TDD No. E23-014-08-01-003
EPA Contract No. EP-S3-05-02

Map created on February 8, 2008
by D. Call, Tetra Tech EM Inc.



3.0 SITE ACTIVITIES

EPA and Tetra Tech START personnel mobilized to the site on January 23, 2008. Upon reaching the site, EPA and Tetra Tech START personnel met with the Washington D.C. Bureau of Environmental Quality (BEC).

The Tetra Tech START personnel then began to conduct an assessment of air monitoring locations with the EPA and BEC. Three air monitoring instruments were utilized throughout the response. The Multi-Rae, to detect for the presence of volatile organic compounds, the Thermo Anderson Data RAM (Data RAM), for the detection of dust particulate concentrations, and the Personal Data Rams (PDRs), for the detection of dust particulate concentrations. Ten air monitoring locations were established in areas around the Jimmy's Tire Salvage, and the results are shown in Table 1 and 2 averaged for the day. On January 23, 2008, the START personnel collected air monitoring data from 1200-1600. On January 24, 2008, the START collected for one hour, from 0900-1000. In Appendix B, all air monitoring results are shown on the field logbook sheets.

Table 1. Air Monitoring Results for January 23, 2008.
Results in Units: ug/m³

Air Monitoring Locations	Jimmy's Tire Shop	13 th and Florida	13 th and I Street	12 th and K Street Background	12 th and Montello	Morse and Montello	Morse and Trinidad	Trinidad and Florida
Collection Time	1200-1600	1200-1600	1200-1600	1200-1600	1200-1600	1200-1600	1200-1600	1200-1600
Multi-Rae	0	0	0	0	0	0	0	0
DR-1 (TWA Average)	13.96	NA	NA	NA	NA	NA	NA	NA
DR-2 (TWA Average)	NA	NA	NA	13.05	NA	NA	NA	NA
PDR-1 (TWA Average)	7	15	12	.17	14	19	10	4
PDR-2 (TWA Average)	13	17	5	8	18	15	17	16

Key:

Note:	The results are an average of the five hour collection time.	DR:	Data Ram
OSHA Limit:	Units: 5,000 ug/m ³	TWA:	Time Weighted
Average PDR:	personalDataRam	Units:	ug/m ³

Table 2. Air Monitoring Locations and Results for January 24, 2008.

Results in Units: ug/m³

Air Monitoring Locations	Jimmy's Tire Shop	13th and Florida	13th and I Street	12th and K Street Background	12th and Montello Street	Morse and Montello	Morse and Trinidad	Trinidad and Florida
Collection Time	0900-1000	0900-1000	0900-1000	0900-1000	0900-1000	0900-1000	0900-1000	0900-1000
Multi-Rae	0	0	0	0	0	0	0	0
DR-1 (TWA Average)	13.96	NA	NA	NA	NA	NA	NA	NA
DR-2 (TWA Average)	NA	NA	NA	12.92	NA	NA	NA	NA
PDR-1 (TWA Average)	15	12	14	12	15	18	11	13
PDR-2 (TWA Average)	13	14	17	14	5	7	3	6

Key:

Note: The results are an average of the five hour collection time.

DR: Data Ram

OSHA Limit: Units: 5,000 ug/m³

TWA: Time Weighted Average

PDR: personalDataRam

Units: ug/m³

These locations can be found on Figure 2. These activities were conducted in accordance with Tetra Tech's Standard Operating Procedure (SOP) No. 073 "Air Quality Monitoring" (Tetra Tech 1999b)

The Tetra Tech START used the data logging functions of the Data RAMs and PDRs throughout the work day. Tetra Tech START recorded all activities in the site logbook in accordance with Tetra Tech's SOP No. 024, "Recording of Notes in Field Logbook" (Tetra Tech 1999a).

4.0 CONCLUSIONS AND RECOMMENDATIONS

The Occupational Health and Safety Administration (OSHA) permissible exposure limit (PEL) on an 8-hour time weight average (TWA) is 15 milligrams per cubic meter (mg/m³) total dust and 5 mg/m³ for respirable dust (NIOSH 2005).

Air monitoring conducted on January 23-24, 2008, indicated that volatile organic compounds, carbon dioxide, hydrogen sulfide, and respirable dust concentrations were below the OSHA PEL, NIOSH REL, and ACGIH TLV concentrations throughout the response.

Based on the absence of volatile organic compound or respirable dust concentrations above background limits, the air quality was not considered a threat to human health or environment.

5.0 SUMMARY

On January 23-24, 2008, EPA Region 3 and Tetra Tech conducted an air quality assessment at Jimmy's Tire Salvage in Washington D.C. Air monitoring indicated that the overall air quality was not a threat to human health and the environment. The air monitoring results were taken two full days after the initial fire began.

Throughout air monitoring activities on January 23-24, 2008 at Jimmy' Tire Salvage Tire Fire, no hits above background were detected on the Multi-Rae, Data Ram, and the PDR's.

REFERENCES

- National Institute for Health and Safety. (NIOSH). 2005. "Pocket Guide to Chemical Hazards." Department of Health and Human Resources. Washington, District of Columbia. September.
- Tetra Tech EM Inc. (Tetra Tech). 2006. "Quality Assurance Project Plan (QAPP) for START." November.
- Tetra Tech. 1999a. Standard Operating Procedure (SOP) No. 024, "Recording of Notes in Field Logbook." November.
- Tetra Tech. 1999b. SOP No. 073 "Air Quality Monitoring." November.
- U.S. Geological Survey (USGS). 1983. 7.5-Minute Series Topographic Map of Washington, East and West D.C., Quadrangle.
- USGS. (2002) USGS Urban Imagery. Washington, D.C.
- Washington Post. (2008). Article on Jimmy's Tire Fire. Accessed on the web at www.washingtonpost.com/wp-dyn/content/article. January 22.

APPENDIX A
PHOTOGRAPHIC LOG
(Four Pages)



Photographic Documentation

Client: U.S. EPA Region 3
Site Name: Jimmy's Tire Salvage Tire Fire
Location: Hamburg, Pennsylvania

Prepared by: Tetra Tech EM Inc.
Photographer: START Region 3
TDD Number: E23-014-08-01-003

Photograph No.: 1

Photograph Date: 1/23/2008

Orientation: North

Description: Removal of tire and debris from Jimmy's Tire.

Street Address: 12th and K Street.



Photograph No. : 2

Photograph Date: 1/23/2008

Orientation: North

Description: Removal of tire and debris from Jimmy's Tire.

Street Address: 12th and K Street.





Photographic Documentation

Client: U.S. EPA Region 3
Site Name: Jimmy's Tire Salvage Tire Fire
Location: Hamburg, Pennsylvania
Photograph No. : 3

Prepared by: Tetra Tech EM Inc.
Photographer: START Region 3
TDD Number: E23-014-08-01-003

Photograph Date: 1/23/2008

Orientation: East

Description: Data RAM and PDR location directly across the street from Jimmy's Tire.

Street Address: 12th and K Street.



Photograph No. : 4

Photograph Date: 1/23/2008

Orientation: Southeast

Description: Air monitoring at Trinidad and Florida Avenue.

Street Address: Trinidad and Florida Avenue.





Photographic Documentation

Client: U.S. EPA Region 3
Site Name: Jimmy's Tire Salvage Tire Fire
Location: Hamburg, Pennsylvania
Photograph No. : 5

Prepared by: Tetra Tech EM Inc.
Photographer: START Region 3
TDD Number: E23-014-08-01-003

Photograph Date: 1/24/2008

Orientation: North

Description: Crews continue removal of tires and debris from Jimmy's Tire Salvage.

Street Address: 12th and K Street.



Photograph No.: 6

Photograph Date: 1/24/2008

Orientation: North

Description: Air monitoring location across the street from Jimmy's Tire Salvage.

Street Address: 12th and K Street.





Photographic Documentation

Client: U.S. EPA Region 3

Site Name: Jimmy's Tire Salvage Tire Fire

Location: Hamburg, Pennsylvania

Photograph No. : 7

Prepared by: Tetra Tech EM Inc.

Photographer: START Region 3

TDD Number: E23-014-08-01-003

Photograph Date: 1/23/2008

Orientation: Southeast

Description: Crews continue to remove tires and debris from the Jimmy's Tire Salvage.

Street Address: 12th and K Street.



APPENDIX B
LOGBOOK NOTES
(Three Sheets)

Location: Jimmy's Furniture
 Project / Client: Washington DC
 MURPHY / SWIN + HOATHEAD / JAZ

Location: Jimmy's TIRE FIRE
 Project / Client: WASHINGTON DC
 MURPHY / SWIN + WIND BLOWING HOATHEAD *

0.800	START DEMOBILIZED FROM BOOTBAYN	1155	
1.130	START ARRIVES AT COMMAND POST	1200	
	PARTICULATE MONITORING HIS		
	GO WITH THE MULTIBACK, SIDEWALK		
	UPWIND BY VAN, FOR DATARAM	1215	
	OVERALL GOAL IS ASSESSMENT OF	1230	
	AIR QUALITY IN THE AREA	1245	
	BACKGROUNDS	1300	
0.008	1200	1315	
0.005	1205	1330	
0.004	1210	1335	
0.006	1215	1345	
0.005	1220		
0.010	1225		
0.006	1230		
0.006	1235		
0.009	1240		
0.008	1245		
0.007	1300		
0.008	1305		
0.012	1310		
0.007	1315		
0.006	1330		
0.008	1345		

DATA RAMS SET UP ON	FLORIDA AVENUE	
DATA RAM SET UP ON	VEHICLE ON	
K STREET AND FLORIDA AVENUE NE		
END 2 DATA RAM	POP ER-2	VOC
30.8 ug/m ³ TWA	.007 mg/m ³	0
12.5 ug/m ³ TWA	.007 mg/m ³	0
9.8 ug/m ³ TWA	.008 mg/m ³	0
8.4 ug/m ³ TWA	.014 mg/m ³	0
8.4 ug/m ³ TWA	.008 mg/m ³	0
8.0 ug/m ³ TWA	.0006 mg/m ³	0
PM-10 SET UP ON	FLORIDA SIMPLY'S WEST	
TO DATA FROM ON	POUCH OF RESIDENCE	
7.7 ug/m ³ TWA	.007 mg/m ³	0
10.4 ug/m ³ TWA	.006 mg/m ³	0
10.3 ug/m ³ TWA	.006 mg/m ³	0
10.1 ug/m ³ TWA	.006 mg/m ³	0
START DIRECTLY BEHIND TIRE FIRE LOCATION		
NON-OBJECT ON MULTI-LEAK AND ER-1		
POP OSC AND START LOW SMALL OBJECTS		
10.1 ug/m ³ TWA	.007 mg/m ³	0
10.0 ug/m ³ TWA	.007 mg/m ³	0
END 2 DATA RAM	3116.3 DATA RAM	
91.7 count	14.6 count	
11.0 TWA	10.7 TWA	

FEB 28th completion date
Jimmy's Tire Feels 1-24-08

Jimmy's Tire Feels 1-24-08
WASHINGTON, DC THURSDAY
cesily.beall@dc.gov

0700	START MOBILIZED	FROM	4076L
0730	START MANUVE	AT	JIMMY'S FIRE
MULTI-PLATE	141-6R1	PLATE	602-00-1
0	0.001		00-2 00-3
0100	0		1855 $\mu\text{g}/\text{m}^3$ \times 93 $\mu\text{g}/\text{m}^3$
0130	0		180.9 $\mu\text{g}/\text{m}^3$ \times 75.1 $\mu\text{g}/\text{m}^3$ 104.4 $\mu\text{g}/\text{m}^3$
0150	0		1855 $\mu\text{g}/\text{m}^3$ \times 69.2 $\mu\text{g}/\text{m}^3$ 101.0 $\mu\text{g}/\text{m}^3$

1350 START SHAW AND MURPHY ARRIVE BOOTHMAN
1500 START SHAW BEGINS DOWNLOAD OF DATA
FROM FOR AND TIME DATA RAM
1700 START SHAW COMPLETES DOWNLOADING DATA

1034 START SHAW + MURPHY DEMOBILIZE
FROM JIMMY'S TIRE FIRE TO BOOTHMAN

1-22-08 MULTIPATE CALIBRATED ZERO
AND FRACTION AIR CALIBRATION ISOROT=100
O₂ = 20.9% FOR GA TIME FIRE

29 1-24-08

*** Government of the District of Columbia
Department of Health
Environmental Health Administration
Bureau of Environmental Quality

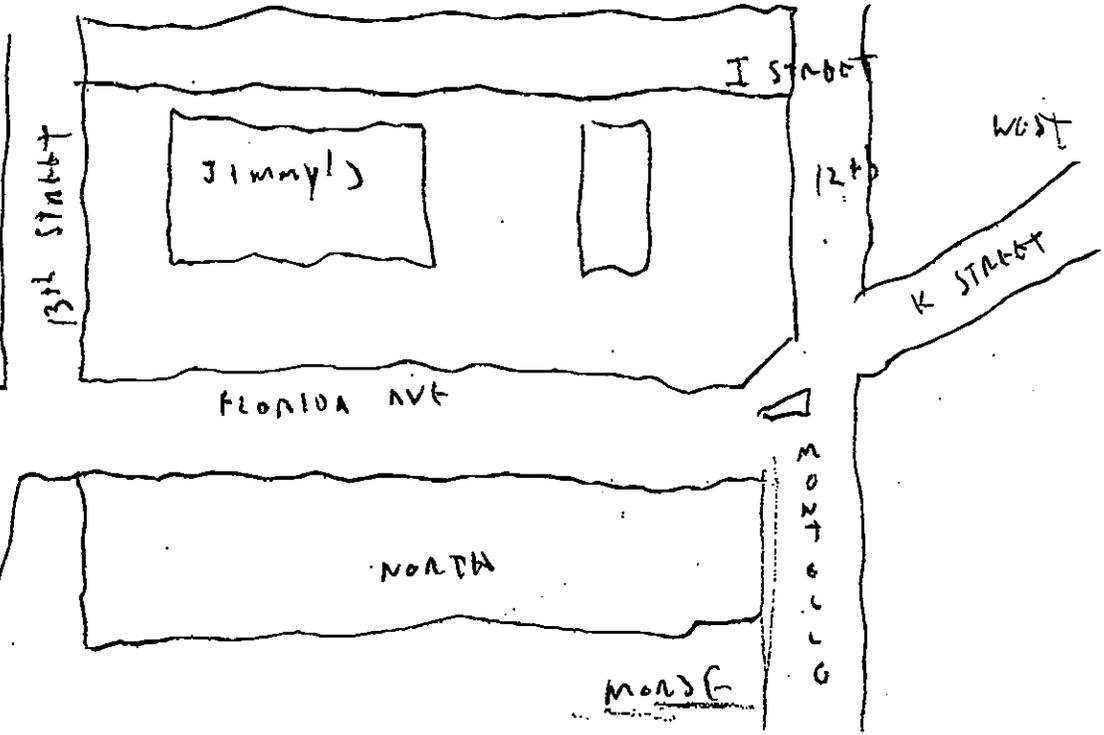
Keith T. Keemer
Environmental Specialist - CIE, OMR, HAZWOPER

Bureau of Environmental Quality Telephone (202) 535-2999
Air Quality Division - Indoor Air Fax (202) 535-1371
51 N Street, NE - 5th Floor <keith.keemer@dc.gov>
Washington, DC 20002

Location Jimmy's Tire Tire Date 1-23-08
Project/Client WASHINGTON DC

MURPHY (SAIN)

TRINIDAD



Location Jimmy's Tire Tire Date 1-25-08
Project/Client WASHINGTON DC

MURPHY (SAIN)

PR-601	PR-602	PR1	PR2	PR3	PR4
1530 .006	.008	9.9	8.8	10.1	0
1545 .005	.007	9.2	8.2	8.1	0
1600 .006	.006	8.5	7.1	7.1	0

1600 START WRAPPED UP FOR THE DAY WILL
STAY OVERNIGHT FOR ONE NIGHT
1630 START ARRIVED AT HOTEL

1-23-08