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SCAQMD Rule 1150.1-Monitoring Reports

2166-05416

LANDFILL AIR EMISSIONS MONITORING

BRADLEY LANDFILL
FOURTH QUARTER

Prepared for:

Valley Reclamation Company
9188 Glenoaks Boulevard
Sun Valley, California 91352

Prepared by:

Waste Management of North America
18500 Von Karman Ave.

EXECUTIVE SUMMARY

Landfill Air Emissions Monitoring results at the Bradley Landfill for the fourth quarter of 1990 (for months September, October and November) are presented in this report. Data is reported pursuant to the *"Guidelines for Implementation of Rule 1150.1"*, as published by the South Coast Air Quality Management District.

The data indicates that Valley Reclamation Company, owner/operator of the Bradley Landfill, is in compliance with Rule 1150.1 and all Variance conditions (Case Number 3824) from Rule 1150.1.

VRC has instituted its own self monitoring of the landfill during the month of November, 1990. This report encompasses data from our former consultant, SCS Engineers, as well as from VRC. VRC's in-house technicians have received extensive training from an outside consulting firm in the implementation of this program.

In addition, VRC has changed Laboratories in November 1990, from SCS Engineers Laboratory to AtmAA, Incorporated. VRC believes that AtmAA Inc. is a highly qualified laboratory, and is under the direction of a former SCAQMD Senior Air Quality Chemist, Michael Porter. SCS Engineers had previously subcontracted some of Bradley's air quality analysis in past months to AtmAA. AtmAA is familiar with the requirements of Rule 1150.1.

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1.0 INTRODUCTION

This report presents the results of landfill air emission monitoring performed at Bradley Landfill during the months of September, October and November by SCS and Waste Management of North America personnel. Monitoring was performed in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1150.1 Monitoring plan developed by Valley Reclamation Company (VRC), a subsidiary of Waste Management of North America.

Rule 1150.1 requires that monthly monitoring and quarterly reporting of emissions of specified toxic compounds in the landfill environment be performed. Specific types of monitoring include:

- Instantaneous landfill surface monitoring;
- Ambient air sampling upwind and downwind of the site;
- Integrated surface sampling;
- Internal Landfill Gas Sampling; and,
- Perimeter probe sampling and weekly readings.

<u>Landfill site</u>

The Bradley Landfill is located in the Sun Valley District of Los Angeles California, in the northwest corner of the Los Angeles metropolitan area. The landfill is owned and operated by VRC. The site was formerly a sand and gravel pit operated by Conrock Company. The landfill is currently a Class III waste disposal facility occupying approximately 209 acres. Current refuse filling activities are taking place at Bradley West. An active landfill gas (LFG) migration/emissions control system has been operational at the site since 1982. The LFG Collection System produces in excess of 2 million cubic feet per day. During periods of high energy demand, LFG is collected, processed and piped to the Los Angeles Department of Water and Power (LADWP) Valley Steam Generating Station. When the LFG is not in demand by LADWP, it is routed to an on-site flare station where it is incinerated in accordance with SCAQMD [illegible] and [illegible] conditions.

2.0 SAMPLING PROCEDURES

This section outlines the procedures used in performing each activity. Sampling was conducted on a monthly basis during September, October and November. All field and analytical procedures were performed in accordance with the guidelines for implementing Rule 1150.1 published by the SCAQMD. All field equipment utilized at the site complies with SCAQMD standards.

2.1 INSTANTANEOUS LANDFILL SURFACE MONITORING

Each month the entire landfill disposal area is monitored for Total Organic Compounds (TOC) measured as methane, using a Flame Ionizing Detector, OVA Model 128. This monitoring consists of walking the landfill over a pre-established 100 ft. by 100 ft. grid while maintaining a 3 inch monitoring distance above the surface. Any detections of TOC in exceedance of 50 ppm are marked on the grid site map (Appendix A) giving location and concentration. Any exceedances of 500 ppm or greater are reported. Prior to each surface area sweep, the equipment is calibrated using a three point method and the weather is monitored to ensure favorable conditions. Wind speed average is measured via a hand held anemometer, and readings are recorded every one-half hour. Instantaneous surface monitoring information is included on the intercompany memorandums in Appendix A. Details on weather conditions, instrument operation, laboratory calibration, and field audits are given in Appendix B.

Portions of the landfill were prevented from monitoring due to activities including dirt stock piling, heavy truck traffic, landfill covering on active face, and steep landfill slopes. The 100 square foot grid pattern monthly site maps are shown on Appendix A.

2.2 INTEGRATED SURFACE SAMPLING

Integrated Surface Samples (ISS) were obtained from accessible areas overlying deposited refuse materials. The majority of the ISS grids were 100 ft. by 500 ft. rectangles. However, several altered rectangular grids were utilized due to access limitations such as changes to on-site traffic flow, location of working face, drilling of new gas recovery wells and stock pilling of soil. The altered grid shapes were used to adequately cover the landfill surface while maintaining the required 50,000 square foot aerial coverage. All ISS samples were collected by walking an equivalent 50,000 square foot (2,600 linear feet) grid over a 25 minute period. The locations of all ISS grids are shown in Appendix A.

Wind speed was monitored and recorded during the sampling event from the mobile meteoroligical station. Ten minute averages that were obtained and diagramed in graphs representing the average wind speed are depicted in Appendix C.

Sampling was performed using a back pack mounted, hand held sampling apparatus. A 10 litre Tedlar bag enclosed in a light proof container was attached to the sampling apparatus. The gas was directed to the bag via Teflon tubing. Following collection, the air samples were transported to the Atmospheric Assessment Associates Inc. (AtmAA Inc.) Laboratory for analysis. The samples were analyzed within 72 hours for SCAQMD Rule 1150.1 toxic components, methane, and Total gaseous non-methane organics (TGNMO).

2.3 AMBIENT AIR SAMPLING

Ambient air monitoring stations were positioned up and downwind of the site. On each test date, two 24-hour samples and three less-than-24 hour samples (including one duplicate) were obtained from upwind and downwind locations. These sampler locations are shown in Appendix A. Sample locations were determined based on information generated during meteorological monitoring performed as part of the air Solid Waste Assessment Test in May 1988 and information gathered from the mobile meteorological station. Twenty-four hour meteorological surveys were conducted prior to each ambient air sampling event. Samples were not obtained unless weather conditions and wind conditions were within the rule 1150.1 specifications. Wind speed and direction were continuously recorded using a mobile meteorological station, and is summarized in Appendix C.

The 24-hour samplers were programmed to sample from 10:00 a.m. until 10:00 a.m. the following day. The less-than-24-hour samplers were programmed to sample during the peak drainage hours as shown by the meteorological station. Flow rates were adjusted to provide an approximate 10-liter sample for the programmed sample duration. Field sheets, detailing the calibration and setup of each of the samplers, are presented in Appendix B.

Following collection, the air samples were transported to AtmAA Inc. laboratory, and analyzed within 72 hours for SCAQMD Rule 1150.1 toxic components, methane, and TGNMO.

2.4 INTERNAL LANDFILL GAS SAMPLING

Each month, one sample was collected from the LFG collection system header pipe. The sample was obtained over a 10-minute period into a 10-liter Tedlar bag, that was enclosed in a light-proof container. The gas was directed to the Tedlar bag via Teflon tubing. All sample hoses and fittings were made of stainless steel or Teflon materials.

Following collection, the air samples were transported to the AtmAA Inc. laboratory, and analyzed within 72 hours for SCAQMD Rule 1150.1 toxic components, methane, and TGNMO.

2.5 PERIMETER PROBE SAMPLING

Each week the perimeter probes are monitored for methane content using a Gastech NP204 combustible gas indicator. Weekly probe results are listed in Appendix E. Field equipment and specifications are located in Appendix F.

Monthly gas samples are collected from two samples from two perimeter probes. Prior to sampling, each probe was evacuated until the TOC remained constant for 30 seconds. Samples were then collected in a 10-liter Tedlar bag. The sample was obtained over a ten minute period.

Following collection, the air samples were transported to the laboratory for analysis.

3.0 RESULTS AND DISCUSSION

3.1 INSTANTANEOUS SURFACE MONITORING

Landfill surface monitoring was performed at the Bradley East, West and West Extension locations during the months of September, October, and November. Grid maps showing the landfill areas surveyed and locations of notable emissions are included in Appendix A. The results and discussion of the survey of the findings are provided below.

SEPTEMBER

No detections of TOC as methane were detected.

OCTOBER

One detection of TOC as methane exceeded 1000 ppm. Located at Bradley West Landfill near the Gas Recovery plant (Grid No. Y6), settlement fissures were found along the surface extending a distance of approximately 100 feet. Immediately following the survey, landfill operations in cooperation with Gas Recovery were notified and the problem area remediated by covering the fissures with approximately two feet of soil. A follow-up investigation was conducted and no Methane was detected from the remediated area (see Appendix A).

NOVEMBER

During the month of November on the 20, two detections of methane exceeded 1000 ppm. Located at Bradley West Landfill near Grid No. Z7 an emission exceeding 1000 ppm was detected from a decommissioned condensate trap. Landfill operations personnel were notified and the problem area was covered with soil. The other detection of Methane was located at Bradley East (south section) near Grid No. Y29. The source of emission that exceeded 1000 ppm of methane was from a missing Quick Disconnect fitting at gas extraction Well 35 (redrill). The on-site Gas Recovery Technicians were notified and the missing part was replaced resulting in remediation of the point source.

Reports and their responses to the Instantaneous Landfill Surface Monitoring are included in Appendix A. Details on weather conditions, instrument operation, laboratory calibration, and field audits are presented in Appendix B.

3.2 INTEGRATED SURFACE SAMPLING

The number of ISS collected during the three month period are as follows:

September	17 ISS grids
October	18 ISS grids
November	12 ISS grids

Each ISS was tested in the field for TOC using a Century OVA Model 128. Throughout the quarter, there were no exceedences of the 50 ppm as TOC levels in any of the 47 grids sampled. During each month of the quarter, two samples were selected for sampling. Table 1 presents a summary of the analytical results obtained for this quarter. Complete laboratory reports are included in Appendix D.

The anayltical results for this quarter are all within Rule 1150.1 guidlines; no exceedences were detected and all levels of measured compounds were within normal background for this area. The results shown in Table 1 are of similar magnitude. Grid number two encompasses a gas well, condensate pumping station, and a conveyor belt which runs underground through part of the landfill. It is not known what effect these obstructions had on the sample results.

It should be noted that the ISS were not necessarily collected from the same area of the landfill (grid) as the previous month (i.e., ISS locations in Table 1 vary from month to month). The locations of each ISS are shown on Appendix A.

3.3 AMBIENT AIR SAMPLING

Sample results for 24 and less-than 24-hour samples that were collected in October, September, and November are shown in Table 4,5,6 respectively. A duplicate (collocated) sample was obtained at the downwind, less-than-24-hour sample location (the point of maximum expected contaminant concentrations). Table 2 presents the 24-hour upwind and downwind analytical results for each of the day tested. Table 3 presents the less-than-24-hour upwind and downwind analytical results, and Table 4 presents the less-than-24-hour downwind collocated analytical results. The locations of the air samplers are depicted in Appendix A.

The upwind to downwind 24-hour and less-than 24-hour samples were very similar in the results.

3.4 INTERNAL LANDFILL GAS SAMPLING

The internalization of 1150.1 monitoring duties during November with WMNA personnel also resulted in a change of laboratories. Table 5 lists the results of the forth quarter and compares the detection limits of the two laboratories (SCS Laboratory and AtmAA, Inc.). The differences in concentrations of the analytes is possibly due to different laboratories quality control procedures. Appendix D presents the results from the last three months.

TABLE 1. INTERGRATED SURFACE SAMPLES - ANALYTICAL RESULTS

Concentrations are reported as ppb. unless noted

Referenced grid locations are shown in Appendix A

Sample I.D. No.	Grid #10 14007	Grid #11 14008	Grid #1 19083	Grid #4 19084	Grid #12 VRISS002	Grid #2 VRISS011	Detection limits
COMPOUNDS	September (ppb)		October (ppb)		November (ppb)		(ppb)
Acetonitrile	ND	ND	ND	ND	ND	ND	0.8
Benzene	7.5[illegible]	7.04	4.65	4.99	11.2	16.8	0.1
Benzyl chloride	ND	ND	ND	ND	ND	ND	0.8
Chlorobenzene	ND	ND	ND	ND	ND	ND	0.1
Dichlorobenzene	ND	ND	ND	ND	ND	ND	1.1
1,1-dichloroethane	ND	ND	ND	ND	ND	ND	0.4
1,2-dichloroethane	ND	ND	ND	ND	ND	ND	0.2
11dichloroethylene	0.3[illegible]	0.26	ND	ND	ND	ND	0.1
Dichloromethane	3.05	3.08	8.13	9.86	7.04	3.46	0.2
Perchloroethene	2.60	3.10	2.42	2.61	2.48	2.06	0.1
Carbon Tetrachloride	0.12	0.12	0.10	0.10	0.11	0.12	0.06
Toluene	15.6	16.4	12.1	13.6	20.0	41.0	0.1
111trichloroethane	24.7	25.2	10.4	9.45	15.6	50.7	0.06
Trichloroethene	0.17	0.20	0.24	0.19	0.23	0.28	0.06
Chloroform	0.17	0.13	0.09	0.08	0.12	0.11	0.08
Vinyl Chloride	ND	ND	ND	ND	ND	ND	0.1
m+p-xylenes	8.14	8.04	7.21	7.28	13.2	28.1	0.4
o-xylenes	6.48	7.19	4.37	1.74	7.71	18.5	0.2
Total Methane (ppmv)	2.6[illegible]ppm	2.76ppm	1.32 ppm	1.65ppm	2.67ppm	6.20ppm	1.0ppm
Total Non-Methane Organics(ppmv)	2.7[illegible]ppm	8.75ppm	2.97ppm	1.67ppm	2.92ppm	4.70ppm	1.0ppm

TABLE 2. 24 HOUR AMBIENT AIR SAMPLES – ANAYLTICAL RESULTS

Concentrations are reported as ppbv unless otherwise noted

	September		October		November	
	Upwind	Downwind	Upwind	Downwind	Upwind	Downwind
Compounds Sample	14001	14005	1403	1407	VRAA006	VRAA07
	(ppb)		(ppb)		(ppb)	
Acetonitrile	ND	ND	ND	ND	ND	ND
Benzene	2.34	2.30	4.39	3.75	5.48	5.15
Benzyl Chloride	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND
Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	0.14	ND	ND	ND	ND	ND
Dichloromethane	1.12	1.25	1.64	1.97	2.22	2.58
Perchloroethene	0.30	0.57	0.94	0.89	1.13	0.85
Carbon Tetrachloride	0.10	0.10	0.10	0.10	0.12	0.12
Toluene	9.98	8.16	9.58	9.32	11.5	11.8
1,1,1-trichloroethane	7.03	6.74	5.86	6.72	10.6	17.5
Trichloroethane	0.26	0.29	0.23	0.49	0.14	0.14
Chloroform	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND
m+p-xylenes	3.28	2.62	5.81	5.03	7.31	7.14
o-xylenes	2.52	2.09	3.40	3.29	4.71	9.44
Total methane in ppm	1.95 ppm	2.19 ppm	1.21 ppm	1.53 ppm	2.61 ppm	2.08 ppm

TABLE 3. LESS THAN 24 HOUR AMBIENT AIR SAMPLES – ANAYLTICAL RESULTS

Concentrations are reported as ppbv unless otherwise noted

	September		October		November	
	Upwind	Downwind	Upwind	Downwind	Upwind	Downwind
Compounds Sample	14006	14002	1406	1404	VRAA010	VRAA008
	(ppb)		(ppb)		(ppb)	
Acetonitrile	ND	ND	ND	ND	ND	ND
Benzene	1.92	2.88	4.03	5.58	2.36	3.23
Benzyl Chloride	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	0.15	ND	ND	ND	ND
Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,1-dichloroethane	ND	ND	ND	ND	ND	ND
1,2-dichloroethane	ND	ND	ND	ND	ND	ND
1,1-dichloroethene	ND	0.14	ND	ND	ND	ND
Dichloromethane	1.73	1.82	1.35	1.36	1.38	1.46
Perchloroethene	0.[illegible]	0.9	0.78	0.67	0.43	0.63
Carbon Tetrachloride	0.[illegible]	0.10	0.11	0.10	0.11	0.12
Toluene	9.[illegible]9	15.0	9.31	13.2	5.60	7.06
1,1,1-trichloroethane	6.[illegible]	7.93	3.16	2.72	11.5	4.10
Trichloroethane	0.28	0.38	0.20	0.18	0.11	0.072
Chloroform	ND	ND	ND	ND	ND	ND
Vinyl Chloride	ND	ND	ND	ND	ND	ND
m+p-xylenes	3.[illegible]	4.15	5.96	9.93	3.83	5.54
o-xylenes	1.[illegible]5	2.76	2.82	4.75	2.50	3.09
Total methane in ppm	1.[illegible]0 ppm	2.55 ppm	1.55 ppm	1.48 ppm	2.32 ppm	2.92 ppm

TABLE 4. LESS THAN 24 HOUR CO-LOCATED AMBIENT AIR SAMPLES – ANAYLTICAL RESULTS

Concentrations are reported as ppbv unless otherwise noted

	SEPTEMBER		OCTOBER		NOVEMBER	
	Downwind	Co-located	Downwind	Co-located	Downwind	Co-located
ompounds Sample	14002	14004	1404	1401	VRAA008	VRAA009
	ppb		ppb		ppb	
cetonitrile	ND	ND	ND	ND	ND	ND
enzene	2.38	3.26	5.58	6.80	3.23	3.26
enzyl Chloride	ND	ND	ND	ND	ND	ND
hlorobenzene	0.15	ND	ND	ND	ND	ND
ichlorobenzene	ND	ND	ND	ND	ND	ND
,1-dichloroethane	ND	ND	ND	ND	ND	ND
,2-dichloroethane	ND	ND	ND	ND	ND	ND
,1-dichloroethene	0.[illegible]4	0.15	ND	ND	ND	ND
ichloromethane	1.[illegible]2	1.85	1.36	1.27	1.46	1.53
erchloroethene	0.[illegible]	0.91	0.67	0.67	0.63	0.67
arbon Tetrachloride	0.[illegible]0	0.10	0.10	0.12	0.12	0.11
oluene	15.0	10.6	13.2	16.0	7.06	7.22
,1,1-trichloroethane	7.93	7.80	2.72	2.87	4.10	4.03
richloroethane	0.38	0.27	0.18	0.15	0.072	0.11
hloroform	ND	ND	ND	ND	ND	ND
inyl Chloride	ND	ND	ND	ND	ND	ND
+p-xylenes	4.[illegible]5	4.33	9.93	12.2	5.54	5.50
-xylenes	2.[illegible]3	2.91	4.75	5.72	3.09	3.59
otal methane in ppm	2.[illegible] ppm	2.71 ppm	1.48 ppm	1.58 ppm	2.92 ppm	13.4 ppm

TABLE 5. LANDFILL GAS SAMPLES - ANALYTICAL RESULTS

Concentrations are reported as ppb, unless noted

COMPOUNDS	September Sample12415 (ppb)	October Sample19081	Detection limit for SCS Lab. (ppb)	November RICS001 (ppb)	Detection limit for AtmAA inc. (ppb)
Acetonitrile	ND	ND	5000	61.1	5
Benzene	13000	13120	500	1020	50
Benzyl chloride	ND	ND	500	<100	100
Chlorobenzene	ND	ND	500	<100	50
Dichlorobenzene	ND	ND	2000	7900	100
1,1-dichloroethane	20000	13200	20	7180	100
1,2-dichloroethane	2050	395	20	638	20
1,1-dichloroethylene	ND	245	20	792	30
Dichloromethane	70000	10300	60	15500	15
Perchloroethene	>475	>470	10	17800	2
Carbon Tetrachloride	ND	ND	5	<1	1
Toluene	8000	7640	500	62600	75
1,1,1-trichloroethane	>1500	>510	10	940	5
Trichloroethene	>3500	>1300	10	6530	4
Chloroform	90	14	2	18.7	2
Vinyl Chloride	ND	ND	500	2660	20
m+p-xylenes			500	18200	100
o-xylenes	25000	22750		17400	60
Total Gas Non-methane Organics Measured as ppm V/V	188 ppm	824 ppm	1ppm	8610 ppm	1ppm
COMPONENTS Measured in % V/V					
Methane	39.2	41.9	5ppm	43.9	0.2%
Carbon Dioxide	37.7	39.4	1ppm	41.5	0.2%
Oxygen	3.2	1.4	1ppm	.96	0.2%
Nitrogen	19.9	17.3	1ppm	13.5	0.2%

ND= Not Detected

3.5 PERIMETER PROBE SAMPLING

Two perimeter probe samples were analyzed this quarter for toxic components, methane, and TGNMO at AtmAA Inc. laboratory. One probe sample each from the East (E-8D) and West Section (W-9) were chosen to be analyzed based on methane concentrations. During the past quarter, weekly probe readings were taken for pressure and percent methane. The results of the monitoring are listed in Appendix D.

3.6 QUALITY ASSURANCE/QUALITY CONTROL PROVISIONS

Quality assurance/quality control (QA/QC) provisions were strictly maintained during sample collection and analysis. The provisions for field quality assurance and sampling methodology included:

- Adherence to sample handling and chain-of-custody provisions, as out-lined in the Guidelines for Implementing Rule 1150.1.
- Use of field data sheets to record sampling date and location, initials of field personnel, sample flow rates, regular equipment checks and calibration, weather conditions, etc.
- Collection of sample blanks and duplicates. Note that duplicates and field blanks were delivered to the laboratory as "blind" samples (i.e, these samples were not distinguished from the other samples on the chain-of-custody forms).
- Regular service checks and calibration of all field equipment.
- Prior to each use, the Tedlar bags were purged three times with purified Nitrogen and then vacuum tested for leakage.

Blank Samples

As part of standard QA/QC provisions, a trip blank was prepared by transporting a sample bag of laboratory-grade nitrogen to and from the site in a light sealed container, without otherwise being disturbed. Laboratory results of the trip blanks are included in Appendix D.

The trip blank for the November sampling event was punctured in route to the laboratory, therefore no data was available for this sampling round.

Duplicate Sample

Duplicate samples were obtained on all test dates at the downwind less-than-24-hour sampler location. No significant changes between the two samples were noticed. Analytical results are summarized in Table 4 and are included in Appendix D.

APPENDIX A

SITE PLANS SHOWING SAMPLE LOCATIONS FOR INSTANTANEOUS SURFACE MONITORING, INTEGRATED SURFACE SWEEPS AND AMBIENT AIR SAMPLING

INSTANTANEOUS SURFACE MONITORING, REPORTS AND RESPONSES
FOR THE MONTH OF SEPTEMBER

A Waste Management Company

September 16, 1990

To: John Mays

From: R. Johnson R. Collins

SUBJECT: Gas Emission Survey carried out on Bradley West, Bradley West Extension and Bradley East Landfills on September 13 and 14, 1990.

A sweep was conducted using two Century Organic Vapor Analyzers Model OVA 128, to locate potential surface landfill gas emissions. Monthly emission surveys are carried out at Bradley landfill making note of detections exceeding 50 ppm TOC as methane.

Details on the weather conditions, instrument operation, performance checklist, laboratory calibration and field audits are attached.

The results of the survey and a discussion of the findings are provided below.

BRADLEY WEST

Time of Sweep: 10:00 - 12:00 September 14, 1990

There were no detections in excess of 50 ppm TOC as methane observed at Bradley West.

A portion of Bradley West was not surveyed due to active trash disposal and dirt stock piling.

BRADLEY WEST EXTENSION

Time of Sweep: 8:30 - 10:00 September 14, 1990

There were no detections in excess of 50 ppm TOC as methane observed at Bradley West extension.

BRADLEY EAST (NORTH SECTION)

Time of Sweep: 10:00 - 12:00 September 13, 1990

There were no detections in excess of 50 ppm TOC as methane observed at Bradley West extension.

BRADLEY EAST (SOUTH SECTION)

Time of Sweep: 8:30 - 10:00 September 13, 1990

There were no detections in excess of 50 ppm TOC as methane observed at Bradley West extension.

No other detections of organic vapor was observed.

c.c. Eric Davies
Bob Austin
Susan Kilgore

Rod Collins

A Waste Management Company

DATE: September 19, 1990

TO: JOHN MAYS

FROM: SUSAN KILGORE

SUBJECT: **RESPONSE TO POINT SOURSE EMISSIONS SEPTEMBER 13 AND 14, 1990**

In response to the Gas Emission Survey performed by Environmental Technicians, Rod Collins and Riel Johnson on September 13 and 14, 1990, the following responses were taken:

Bradley West

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

Bradley West Extention

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

Brabley East (North Section)

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

Bradley East (South Section)

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

PARTIALLY SCANNED OVERSIZE ITEM(S)

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1 OF 19

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(415) 536-2000

INSTANTANEOUS SURFACE MONITORING, REPORTS AND RESPONSES
FOR THE MONTH OF OCTOBER

A Waste Management Company

November 1, 1990

To: John Mays

From: Ernest Dragan

SUBJECT: Gas Emission Survey carried out on Bradley West, Bradley West Extension and Bradley East Landfills on October 25, 1990.

A sweep was conducted using a Century Organic Vapor Analyzer Model OVA 128, to locate potential surface landfill gas emissions. Monthly emission surveys are carried out at Bradley landfill making note of detections exceeding 500 ppm TOC as methane.

Weather conditions were favorable, noting that no rainfall was observed three days prior to the survey. Details on the weather conditions, instrument operation, performance checklist, laboratory calibration and field audits are attached.

The results of the survey and a discussion of the findings are provided below.

BRADLEY WEST

Time of Sweep: 11:30 - 13:00 October 25, 1990

One area where the detection of Methane exceeded 1000ppm was located in the region of Y 6. Fissures were found running along the surface extending a distance of ~100 feet.

A portion of Bradley West was not surveyed due to active trash disposal and dirt stock piling.

BRADLEY WEST EXTENSION

Time of Sweep: 13:00 - 13:45 October 25, 1990

There were no detections in excess of 500 ppm TOC as methane observed at Bradley West extension.

BRADLEY EAST (NORTH SECTION)

Time of Sweep: 13:45 - 14:45 October 25, 1990

There were no detections in excess of 500 ppm TOC as methane observed at Bradley West extension.

A portion of Bradley East (North section) was not surveyed due to dirt stock piling.

BRADLEY EAST (SOUTH SECTION)

Time of Sweep: 14:45 - 15:30 October 25, 1990

There were no detections in excess of 500 ppm TOC as methane observed at Bradley West extension.

No other detections of organic vapor was observed.

c.c. Eric Davies
Bob Austin
Susan Kilgore

Valley Reclamation Company
9188 Glenoaks Boulevard
P.O. Box 39
Sun Valley California 91352
818/767-6150 • FAX: 818/767-4270

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: NOVEMBER 15, 1990

TO: JOHN MAYS

FROM: SUSAN KILGORE

SUBJECT: RESPONSE TO POINT SOURCE EMISSIONS OCTOBER 25, 1990

In response to the Gas Emission Survey performed by Environmental Technician, Ernest Dragan, on October 25, 1990, the following responses were taken:

BRADLEY WEST:

1. Exceeded Limits: A detection exceeding 1,000 ppm TOC as methane was detected near grid Y6. Fissures were found running along the surface of the ground, extending a distance of 100 feet.

   Response: Landfill Operations in cooperation with Gas Recovery, responded to the exceedence by covering the area with approximately two feet of soil. A follow-up investigation using the organic vapor analyzer was conducted on November 14, 1990. No methane was detected.

BRADLEY WEST EXTENSION:

1. Exceeded Limits: No exceeded limits were noted.

   Response: No response necessary.

BRADLEY EAST (North Section):

1. Exceeded Limits: No exceeded limits were noted.

   Response: No response necessary.

BRADLEY EAST (South Section):

1. Exceeded Limits: No exceeded limits were noted.

   Response: No response necessary.

cc: Eric Davies
Greg Loughnane
Gas Recovery Technicians
Bob Austin
Ernest Dragan

F/VR Rule 1150.1/Report/7/90

Valley Reclamation Company
9188 Glenoaks Boulevard
P.O. Box 39
un Valley, California 91352
18/767-6180 • FAX: 818/767-4270

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: NOVEMBER 15, 1990

TO: JOHN MAYS

FROM: SUSAN KILGORE

SUBJECT: RESPONSE TO POINT SOURCE EMISSIONS OCTOBER 25, 1990

In response to the Gas Emission Survey performed by Environmental Technician, Ernest Dragan, on October 25, 1990, the following responses were taken:

BRADLEY WEST:

1. Exceeded Limits: A detection exceeding 1,000 ppm TOC as methane was detected near grid Y6. Fissures were found running along the surface of the ground, extending a distance of 100 feet.

   Response: Landfill Operations in cooperation with Gas Recovery, responded to the exceedence by covering the area with approximately two feet of soil. A follow-up investigation using the organic vapor analyzer was conducted on November 14, 1990. No methane was detected.

BRADLEY WEST EXTENSION:

1. Exceeded Limits: No exceeded limits were noted.

   Response: No response necessary.

BRADLEY EAST (North Section):

1. Exceeded Limits: No exceeded limits were noted.

   Response: No response necessary.

BRADLEY EAST (South Section):

1. Exceeded Limits: No exceeded limits were noted.

   Response: No response necessary.

cc: Eric Davies
Greg Loughnane
Gas Recovery Technicians
Bob Austin
Ernest Dragan

F/VR Rule 1150.1/Report 11/90

PARTIALLY SCANNED
OVERSIZE ITEM(S)

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for partially scanned image(s).

2 OF 19

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contact the Region IX Superfund Records Center at
(415) 536-2000

INSTANTANEOUS SURFACE MONITORING, REPORTS AND RESPONSES
FOR THE MONTH OF NOVEMBER

Valley Reclamation Company
9188 Glenoaks Boulevard
P.O. Box 39
Sun Valley, California 91352
18/767-6180 • FAX: 818/767-4270

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: NOVEMBER 20, 1990

TO: JOHN MAYS

FROM: RODNEY COLLINS

SUBJECT: **GAS EMISSION SURVEY CARRIED OUT ON BRADLEY WEST, BRADLEY WEST EXTENSION AND BRADLEY EAST LANDFILLS ON NOVEMBER 13, 1990.**

A sweep was conducted using a Century Organic Vapor Analyzer Model OVA 128, to locate potential surface landfill gas emissions. Monthly emission surveys are carried out at Bradley landfill making note of detections exceeding 500 ppm TOC as methane.

Weather conditions were favorable, noting that no rainfall was observed three days prior to the survey. Details on the weather conditions, instrument operation, performance checklist, laboratory calibration and field audits are attached.

The results of the survey and a discussion of the findings are provided below.

BRADLEY WEST

Time of Sweep: 14:00 - 15:30 November 13, 1990

An area where the detection of Methane exceeded 1000 ppm was located near the gas recovery plant. This region is located at grid Z7 on the site topographical map. The emission source was a decommissioned condensate trap.

A portion of Bradley West was not surveyed due to active trash disposal and dirt stock piling.

BRADLEY WEST EXTENSION

Time of Sweep: 16:00 - 17:30 November 13, 1990
There were no detections in excess of 500 ppm TOC as methane observed at Bradley West extension.

BRADLEY EAST (NORTH SECTION)

Time of Sweep: 12:30 - 13:00 November 13, 1990

There were no detections in excess of 500 ppm TOC as methane observed at Bradley East (North section).

A portion of Bradley East (North section) was not surveyed due to dirt stock piling.

BRADLEY EAST (SOUTH SECTION)

Time of Sweep: 10:00 - 11:30 November 13, 1990

An area where the detection of Methane exceeded 1000 ppm was located near the EMD Technician's trailer. The region is located near grid Y29 on the site topographical map. The source of the emission was a missing Quick Disconnect fitting at gas extraction well 35-redrill.

No other detections of organic vapor was observed.

c.c. Eric Davies
Bob Austin
Susan Kilgore

PARTIALLY SCANNED OVERSIZE ITEM(S)

See document # 2199225
for partially scanned image(s).

3 OF 19

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ISS AND AMBIENT AIR SITE PLAN FOR THE MONTH OF SEPTEMBER

PARTIALLY SCANNED OVERSIZE ITEM(S)

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for partially scanned image(s).

4 OF 19

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(415) 536-2000

ISS AND AMBIENT AIR SITE PLAN FOR THE MONTH OF OCTOBER

PARTIALLY SCANNED OVERSIZE ITEM(S)

See document # 2199225
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5 OF 19

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(415) 536-2000

ISS AND AMBIENT AIR SITE PLAN FOR THE MONTH OF NOVEMBER

PARTIALLY SCANNED
OVERSIZE ITEM(S)

See document # 2199225
for partially scanned image(s).
6 OF 19

For complete hardcopy version of the oversize document
contact the Region IX Superfund Records Center at
(415) 536-2000

APPENDIX B

FIELD RECORD LOGS

FIELD LOGS FOR
INSTANTANEOUS SURFACE SWEEP FOR MONTH OF SEPTEMBER

DATE : 9/13/90

PURPOSE : OVA SWEEP BRADLEY West & West Extension

TIME : (WEST) 10:00 - 12:00 (WEST EXTENTION) 8:30 - 10:00

BAROMETER : 2997

WIND SPEED :

10:00 A.M	3.5 mph
10:30	3.5 mph.
11:00	.6 mph.
11:45	1.7 mph

OVA MODEL 128 SERIAL # 41034

CALIBRATION

H_2 SUPPLY PRESSURE : 10 psi

SAMPLE FLOW RATE : 2

INTEGRITY

LEAKS : NONE

	~~AUDIT~~	~~[illegible]~~	AUDIT	~~Accuracy~~
CALIBRATION -				
ZERO AIR	0 ppm		4 ppm	
95 PPM	95 ppm		92 ppm	97%
9:30 am				

AMBIENT AIR READING FOLLOWING IGNITION : 2.5 ppm

* Audit wasn't performed ~~out~~ in the field

DATE 9/13/90

PURPOSE OVA SWEEP BRADLEY East

TIME : 8:30 - 12:00

BAROMETER 29.88

WIND SPEED 5mph @ 10:00 AM

6 - 10:30 12:00 - 0.0

2.5 - 11:00

2.9 - 11:35 12:15 - 5.2

OVA MODEL 128 SERIAL # 41034 40501

CALIBRATION

H_2 SUPPLY PRESSURE : 10

SAMPLE FLOW RATE : 2

INTEGRITY :

ANY LEAKS : NO

CALIBRATION	—	AUDIT READING 11:30	ACCURACY
ZERO AIR	100%	11 ppm	
95 PPM	100%	100 ppm	95%

AMBIEM AIR READING FOLLOWING IGNITION 3 PPM

FIELD LOGS FOR
INSTANTANEOUS SURFACE SWEEP FOR MONTH OF OCTOBER

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: BRADLEY 234

PURPOSE: OVA SWEEP

OPERATOR: ERN. DRAGAN

DATE: Oct. 25, 1990 **Start** 11:30 **Finish** 15:30

Model # 128
Serial # 41034

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery Test	(Pass)/Fail	Perform ~~Three~~ ONE Point Internal Calibration Before Use.
Reading Following Ignition	4 ppm	**CALIBRATION CHECK**
Leak Test	(Pass)/Fail	
Clean System Check (Check Valve Chatter)	(Pass)/Fail	
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	(Pass)/Fail	

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
95 ppm	95 ppm	100	

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1. 3:30	95 ppm	90	95%
2.			

Instrument calibrated to CH_4 gas

COMMENTS: BAROMETER @ 12:00PM - 30.05

WIND SPEED: 3.1 MPH 11:30, 3.1 - 12:30PM, 2.0 - 13:30PM, 5 - 14:30, 7.6 - 15:30PM

FIELD LOGS FOR
INSTANTANEOUS SURFACE SWEEP FOR MONTH OF NOVEMBER

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: Bradley

PURPOSE: OVA Sweep

OPERATOR: R. Collins

DATE: 11/13/90 **Start** 1030 **Finish** 1530

Model # OVA 128
Serial # 41034

INSTRUMENT INTEGRITY CHECKLIST	
Battery Test	Pass/Fail
Reading Following Ignition	0.8 ppm
Leak Test	Pass/Fail
Clean System Check (Check Valve Chatter)	Pass/Fail
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail

INSTRUMENT CALIBRATION

Perform Three Point Internal Calibration Before Use.

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
95	76	80	Ø
900	880	98	Ø

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1. 1530	95	90	95
2. 1530	900	900	100

instrument calibrated to CH_4 gas

COMMENTS: Barometer @ 30.00 ; Wind speed : 1.0 mph @ 10:00 , 2.1 mph @ 1030 , 2.0 mph @ 1100 , 2.7 mph @ 1130 , 2.4 mph @ 1200 , 9.1 mph @ 1230 , 9.7 mph @ 1300 , 9.0 mph @ 1400 , 9.5 mph @ 1430 , 7.0 mph @ 1500 , 11.7 mph @ 1530. Two point calibration performed.

ISS FIELD LOGS FOR MONTH OF SEPTEMBER

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: MG / DJ
SAMPLE I.D. NUMBER: ISS #2
JOB NUMBER: 189091.03
BAG NUMBER:
SAMPLE LOCATION:
EQUIPMENT I.D. NUMBER: ISS #1
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / (INTEGRATED SURFACE SAMPLE) / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-10-90 TIME: 7:25
PROGRAM STOP: (DATE): 9-10-90 TIME: 7:51

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7:10		
	(2)			50	7:09		
	(3)			50	7:06		
	(4)						
	(5)						
PROGRAM STOP	(1)			50	7:12		
	(2)						
	(3)						
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	(AIR / LFG)
FIXED GASES	
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☐ OK ☐ LOW

LEAK CHECK ☐ OK

OBSERVATIONS: PROGRAM START: AMBIENT => 6.2
SAMPLE => 6.1 ppm/v

PROGRAM STOP:
winds ~ 3mph

BAROMETRIC 29.98 inHg

1150.1 - 7 / 89

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3318
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: MG / OJ
SAMPLE I.D. NUMBER ISS #2
JOB NUMBER: 189091.03
BAG NUMBER
SAMPLE LOCATION:
EQUIPMENT I.D. NUMBER ISS #2
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / (INTEGRATED SURFACE SAMPLE) / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-10-90 TIME: 7:25
PROGRAM STOP: (DATE): 9-10-90 TIME: 7:51

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7:12		
	(2)			50	7:18		
	(3)			50	7:10		
	(4)						
	(5)						
PROGRAM STOP	(1)			50	7:11		
	(2)						
	(3)						
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	(AIR) / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☐ OK ☐ LOW

LEAK CHECK ☐ OK

OBSERVATIONS: PROGRAM START: Ambient = 6.4
SAMPLE = 6.5

PROGRAM STOP:

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: MG / OJ
SAMPLE I.D. NUMBER: ISS #3
JOB NUMBER: 189091.03
BAG NUMBER:
SAMPLE LOCATION:
EQUIPMENT I.D. NUMBER: ~~ISS~~ #1
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / (INTEGRATED SURFACE SAMPLE) / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-10-90 TIME: 8:05
PROGRAM STOP: (DATE): 9-10-90 TIME: 8:31

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7:06		
	(2)			50	7:11		
	(3)			50	7:10		
	(4)						
	(5)						
PROGRAM STOP	(1)			50	7:18		
	(2)						
	(3)						
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	(AIR) / LFG
FIXED GASES	~~AIR~~ / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☐ OK ☐ LOW

LEAK CHECK ☐ OK

OBSERVATIONS: PROGRAM START: Ambient => 6.2
Sample => 6.2 ppm

PROGRAM STOP:
Winds ≈ 3 mph

1150.1 - 7 / 89

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0605

PERSONNEL: MDG / 05 SAMPLE I.D. NUMBER ISS #4
JOB NUMBER: 189091.03 BAG NUMBER
SAMPLE LOCATION: EQUIPMENT I.D. NUMBER ~~ISS~~ #2
SAMPLE STATION NUMBER: OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-10-90 TIME: 8:05
PROGRAM STOP: (DATE): 9-10-90 TIME: 8:31

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7:15		
	(2)			50	7:13		
	(3)			50	7:08		
	(4)						
	(5)						
PROGRAM STOP	(1)			50	7:18		
	(2)						
	(3)						
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☐ OK ☐ LOW

LEAK CHECK ☐ OK

OBSERVATIONS: PROGRAM START: Ambient = 6.3
Sample = 5.9 ppm

PROGRAM STOP:

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: MG / OJ
SAMPLE I.D. NUMBER ISS#5
JOB NUMBER: 189091.03
BAG NUMBER
SAMPLE LOCATION:
EQUIPMENT I.D. NUMBER RS #1
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-10-90 TIME: 8:43
PROGRAM STOP: (DATE): 9-10-90 TIME: 9:04

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7:06		
	(2)			50	7:01		
	(3)			50	7:10		
	(4)						
	(5)						
PROGRAM STOP	(1)			50	7:09		
	(2)						
	(3)						
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☐ OK ☐ LOW

LEAK CHECK ☐ OK

OBSERVATIONS: PROGRAM START: Ambient = 5.9
Sample = 5.7

PROGRAM STOP:
Winds ~ 4 mph

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: PS/OJ
SAMPLE I.D. NUMBER: 1SS#6
JOB NUMBER: 01891091 03
BAG NUMBER:
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-11-90 TIME: 7:50 Am
PROGRAM STOP: (DATE): 9-11-90 TIME: 8:15

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.07		
	(2)						
	(3)			50	7:05		
	(4)						
	(5)			50	7:13		
PROGRAM STOP	(1)			50	7:41		
	(2)						
	(3)			50	7:48		
	(4)						
	(5)			50	7:58		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≃ 5.4 ppm

PROGRAM STOP: Sample ≃ 5.2 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: DJ/PS
SAMPLE I.D. NUMBER: 1SS#7
JOB NUMBER: 01S9091 03
BAG NUMBER:
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-11-90 TIME: 7.50 Am
PROGRAM STOP: (DATE): 9-11-90 TIME: 8:15

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.49		
	(2)						
	(3)			50	7.55		
	(4)						
	(5)			50	7.50		
PROGRAM STOP	(1)			50	7.54		
	(2)						
	(3)			50	7.55		
	(4)						
	(5)			50	7.49		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 5.4 ppm

PROGRAM STOP: Sample ≈ 5.1 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: PS/OJ
SAMPLE I.D. NUMBER: #8155
JOB NUMBER: 0189091.03
BAG NUMBER:
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-11-90 TIME: 8:45 AM
PROGRAM STOP: (DATE): 9-11-90 TIME: 9:10

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.41		
	(2)						
	(3)			50	7.48		
	(4)						
	(5)			50	7.58		
PROGRAM STOP	(1)			50	7.54		
	(2)						
	(3)			50	7.78		
	(4)						
	(5)			50	7.49		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 7.9 ppm

PROGRAM STOP: Sample ≈ 7.4 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: OT / PS
SAMPLE I.D. NUMBER: ISS#9
JOB NUMBER: 018901.03
BAG NUMBER:
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-11-90 TIME: 8:40 Am
PROGRAM STOP: (DATE): 9-11-90 TIME: 9:05

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.59		
	(2)						
	(3)			50	7.55		
	(4)						
	(5)			50	7.49		
PROGRAM STOP	(1)			50	7.72		
	(2)						
	(3)			50	7.32		
	(4)						
	(5)			50	7.45		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient 1 7.9 ppm

PROGRAM STOP: Sample ≈ 7.6 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: PS/OJ
SAMPLE I.D. NUMBER: ISS #10 14007
JOB NUMBER: 0189091.03
BAG NUMBER:
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-11-90 TIME: 9:40 AM
PROGRAM STOP: (DATE): 9-11-90 TIME: 10:05

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.72		
	(2)						
	(3)			50	7.32		
	(4)						
	(5)			50	7.45		
PROGRAM STOP	(1)			50	7.52		
	(2)						
	(3)			50	7.49		
	(4)						
	(5)			50	7.55		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 6.8 ppm

PROGRAM STOP: Sample ≈ 6.7 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: PS/OJ
SAMPLE I.D. NUMBER: ISS#11 14008
JOB NUMBER: 0189091.03
BAG NUMBER:
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-11-90 TIME: 9:40 AM
PROGRAM STOP: (DATE): 9-11-90 TIME: 10:05

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.54		
	(2)						
	(3)			50	7.78		
	(4)						
	(5)			50	7.45		
PROGRAM STOP	(1)			50	7.47		
	(2)						
	(3)			50	7.58		
	(4)						
	(5)			50	7.43		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
TOXIC CORE GROUP	AIR / LFG	
SUPPLIMENTAL GROUP	AIR / LFG	
TOTAL ORGANICS AS METHANE	AIR / LFG	
FIXED GASES	AIR / LFG	
OTHER TOMO		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 6.6 ppm

PROGRAM STOP: Sample ≈ 6.6 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

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ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: OJ / PS
SAMPLE I.D. NUMBER: 155 #12
JOB NUMBER: 0189091.03
BAG NUMBER:
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-11-90 TIME: 10:25 Am
PROGRAM STOP: (DATE): 9-11-90 TIME: 10:50

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.52		
	(2)						
	(3)			50	7.49		
	(4)						
	(5)			50	7.55		
PROGRAM STOP	(1)			50	7.53		
	(2)						
	(3)			50	7.60		
	(4)						
	(5)			50	7.55		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 5.6 ppm

PROGRAM STOP: Sample ≈ 6.0 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3318
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: PS / OJ
SAMPLE I.D. NUMBER: LSS #13
JOB NUMBER: 0189091.03
BAG NUMBER:
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-11-90 TIME: 10:30 Am
PROGRAM STOP: (DATE): 9-11-90 TIME: 10:55

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.47		
	(2)						
	(3)			50	7.58		
	(4)						
	(5)			50	7.43		
PROGRAM STOP	(1)			50	7.39		
	(2)						
	(3)			50	7.43		
	(4)						
	(5)			50	7.55		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 5.6 ppm

PROGRAM STOP: Sample ≈ 6.0 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: OJ/ PS
SAMPLE I.D. NUMBER: ISS #14
JOB NUMBER: D189091.03
BAG NUMBER:
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-12-90 TIME: 7 45 am
PROGRAM STOP: (DATE): 9-12-90 TIME: 8:10

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.71		
	(2)						
	(3)			50	7.61		
	(4)						
	(5)			50	7.51		
PROGRAM STOP	(1)			50	7.57		
	(2)						
	(3)			50	7.49		
	(4)						
	(5)			50	7.49		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 4.0 ppm

PROGRAM STOP: Sample ≈ 4.0 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

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ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD
NINTH FLOOR
LONG BEACH, CA
90807-2316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: PS/OJ
SAMPLE I.D. NUMBER: 155 #15
JOB NUMBER: 01890 91.03
BAG NUMBER:
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-12-90 TIME: 7:45 AM
PROGRAM STOP: (DATE): 9-12-90 TIME: 8:10

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.24		
	(2)						
	(3)			50	7.19		
	(4)						
	(5)			50	7.03		
PROGRAM STOP	(1)			50	7.52		
	(2)						
	(3)			50	7.49		
	(4)						
	(5)			50	7.50		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 4.2 ppm

PROGRAM STOP: Sample ≈ 4.0 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: OJ / PS
SAMPLE I.D. NUMBER: 155 # 16
JOB NUMBER: 0189091.03
BAG NUMBER:
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-12-90 TIME: 8:20 AM
PROGRAM STOP: (DATE): 9-12-90 TIME: 8:45

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.57		
	(2)						
	(3)			50	7.49		
	(4)						
	(5)			50	7.49		
PROGRAM STOP	(1)			50	7.58		
	(2)						
	(3)			50	7.59		
	(4)						
	(5)			50	7.45		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 60 ppm

PROGRAM STOP: Sample ≈ 5.9 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: BJ OJ
SAMPLE I.D. NUMBER: LSS#17
JOB NUMBER: 018909.03
BAG NUMBER:
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9-12-90 TIME: 8:20 AM
PROGRAM STOP: (DATE): 9-12-90 TIME: 8:45

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.52		
	(2)						
	(3)			50	7.49		
	(4)						
	(5)			50	7.50		
PROGRAM STOP	(1)			50	7.50		
	(2)						
	(3)			50	7.45		
	(4)						
	(5).			50	7.47		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 6.0 ppm

PROGRAM STOP: Sample ≈ 5.9 ppm

ISS FIELD LOGS FOR MONTH OF OCTOBER

SCAQMD 1150.1 • FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: OJ/PS
SAMPLE I.D. NUMBER: 19083
JOB NUMBER: 0189091.03
BAG NUMBER: 1SS#1
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10-16-90 TIME: 10:15 AM
PROGRAM STOP: (DATE): " TIME: 10:40

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS VOL (cc)	TIME (SEC)	FLOW (cc/mn)	(cc/min)
PROGRAM START	(1)			50	7.30		
	(2)						
	(3)			50	7.30		
	(4)						
	(5)			50	7.59		
PROGRAM STOP	(1)			50	7.74		
	(2)						
	(3)			50	7.78		
	(4)						
	(5)			50	7.84		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER TNMO	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS:

Wind ≈ 2 mph

PROGRAM START: Ambient ≈ 9.0 ppm

PROGRAM STOP: Sample ≈ 10.1 ppm

SCAQMD 1150.1 • FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: PS/OJ
SAMPLE I.D. NUMBER: —
JOB NUMBER: 0189091.03
BAG NUMBER: 135 # 2
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10-16-90 TIME: 10:40 Am
PROGRAM STOP: (DATE): " TIME: 11:05 Am

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.00		
	(2)						
	(3)			50	6.97		
	(4)						
	(5)			50	7.45		
PROGRAM STOP	(1)			50	7.38		
	(2)						
	(3)			50	7.47		
	(4)						
	(5)			50	7.95		

SAMPLE ANALYSIS: N/A

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER:	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 9.5 ppm

Wind ≈ 2mph

PROGRAM STOP: Sample ≈ 9.0 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3318
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: OJ/PS
SAMPLE I.D. NUMBER
JOB NUMBER: 0184091.03
BAG NUMBER 155 #3
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10-16-90 TIME: 11:10
PROGRAM STOP: (DATE): " TIME: 11:35

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.74		
	(2)						
	(3)			50	7.78		
	(4)						
	(5)			50	7.84		
PROGRAM STOP	(1)			50	7.76		
	(2)						
	(3)			50	7.97		
	(4)						
	(5)			50	7.47		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 9.8 ppm

PROGRAM STOP: Sample ≈ 10.0 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: PS/OJ
SAMPLE I.D. NUMBER: 19084
JOB NUMBER: 0189091.03
BAG NUMBER: 155 #4
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER:
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10-16-90 TIME: 11:15 Am
PROGRAM STOP: (DATE): " TIME: 11:40

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.38		
	(2)						
	(3)			50	7.47		
	(4)						
	(5)			50	7.95		
PROGRAM STOP	(1)			50	7.50		
	(2)						
	(3)			50	7.30		
	(4)						
	(5)			50	7.86		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
~~TOXIC CORE GROUP~~	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
~~TOTAL ORGANICS AS METHANE~~	AIR / LFG
~~FIXED GASES~~	AIR / LFG
~~OTHER~~ TNMC	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: [✓] OK [ ] LOW

LEAK CHECK [✓] OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 9.5 ppm

PROGRAM STOP: Sample ≈ 10.0 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3318
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: SVC
SAMPLE I.D. NUMBER
JOB NUMBER: 0189091.03
BAG NUMBER ISS # 5
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER ISS #01
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/2/90 TIME: 9:15
PROGRAM STOP: (DATE): 10/17/90 TIME: 9:40

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.45		
	(2)				7.87		
	(3)				7.35		
	(4)						
	(5)						
PROGRAM STOP	(1)			50	8.92		
	(2)						
	(3)				8.93		
	(4)				8.94		
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: ambient = 10

PROGRAM STOP: sample = 10

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: OJ
JOB NUMBER: 01[illegible]
SAMPLE LOCATION: Bradley
SAMPLE STATION NUMBER:

SAMPLE I.D. NUMBER
BAG NUMBER 155 #6
EQUIPMENT I.D. NUMBER 155 #02
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10-17-90 TIME: [illegible] AM
PROGRAM STOP: (DATE): 10-17-90 TIME: [illegible] AM

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START.	(1)			50	7.49		
	(2)						
	(3)			50	7.57		
	(4)						
	(5)			50	7.55		
PROGRAM STOP	(1)			50	7.40		
	(2)						
	(3)			50	7.5[illegible]		
	(4)						
	(5)			50	7.[illegible]3		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	[illegible]
OTHER	

SAMPLE AVERAGE FLOW cc/min

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: AMBIENT [illegible] 40

Wind [illegible] MPH

PROGRAM STOP: SAMPLE = 10

1150.1 - 7 / 89

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: S/C
JOB NUMBER: 0189091.03
SAMPLE LOCATION: Bradley
SAMPLE STATION NUMBER:
SAMPLE I.D. NUMBER
BAG NUMBER 155 #8
EQUIPMENT I.D. NUMBER 155 #01
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/12/[illegible] TIME: [illegible]
PROGRAM STOP: (DATE): TIME: 10:15

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)				7.98		
	(2)						
	(3)				7.81		
	(4)						
	(5)				7.78		
PROGRAM STOP	(1)				8.00		
	(2)						
	(3)				8.64		
	(4)						
	(5)				8.46		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: ambient = 10

PROGRAM STOP: sample = 10

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: OT
SAMPLE I.D. NUMBER
JOB NUMBER: 0189091.03
BAG NUMBER ISS #07
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER ISS #02
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): [illegible] TIME:
PROGRAM STOP: (DATE): [illegible] TIME: 4M

CLOCK TIMER ACTUAL TIME

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50			
	(2)						
	(3)			50	[illegible]		
	(4)						
	(5)			50	[illegible]		
PROGRAM STOP	(1)			50	7.37		
	(2)						
	(3)			50	7.29		
	(4)						
	(5)			50	7.25		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
[illegible]	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: AMBIENT AIR ≈ 10

winds

— MPH

PROGRAM STOP: SAMPle ≈ 10

1150.1 - 7 / 89

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: DS
SAMPLE I.D. NUMBER
JOB NUMBER: 0189091.03
BAG NUMBER ISS #9
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER ISS #02
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10-17-90 TIME: 10:37
PROGRAM STOP: (DATE): " " " TIME: 11:03

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.37		
	(2)						
	(3)			50	7.29		
	(4)						
	(5)			50	7.25		
PROGRAM STOP	(1)			50	7.31		
	(2)						
	(3)			50	7.25		
	(4)						
	(5)			50	7.20		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: AMBIENT AIR ≈ 10

winds ___ MPH

PROGRAM STOP: SAMPLE ≈ 10

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3319
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: SIK
SAMPLE I.D. NUMBER
JOB NUMBER: 189091.03
BAG NUMBER ISS #10
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER ISS #01
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/7/90 TIME: 10:45
PROGRAM STOP: (DATE): TIME: 11:10

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.23		
	(2)						
	(3)			50	7.21		
	(4)						
	(5)			50	7.31		
PROGRAM STOP	(1)			50	7.30		
	(2)						
	(3)			50	7.28		
	(4)						
	(5)			50	7.40		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient = 10

PROGRAM STOP: Sample = 10

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: OJ
SAMPLE I.D. NUMBER
JOB NUMBER: 18909103
BAG NUMBER 155 #11
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER 155 #02
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10-22-90 TIME: 8:00 AM
PROGRAM STOP: (DATE): 10-22-90 TIME: 8:26 AM

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7:49		
	(2)						
	(3)			50	7.31		
	(4)						
	(5)			50	7.35		
PROGRAM STOP	(1)			50	7.35		
	(2)			~~50~~			
	(3)			50	7.27		
	(4)						
	(5)			50	7.29		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: AMBIENT AIR ≈ 10

winds

PROGRAM STOP: SAMPLE ≈ 10

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: SVC
JOB NUMBER: C189091.C3
SAMPLE LOCATION: Bradley
SAMPLE STATION NUMBER:
SAMPLE I.D. NUMBER
BAG NUMBER 1SS#12
EQUIPMENT I.D. NUMBER 1SS#01
OTHER:

SAMPLE TYPE: AMBIENT AIR / (INTEGRATED SURFACE SAMPLE) / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/22/90 TIME: 8:10
PROGRAM STOP: (DATE): 10/22/90 TIME: 8:55

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7:24		
	(2)						
	(3)			50	7:31		
	(4)						
	(5)			50	7:35		
PROGRAM STOP	(1)			50	10.75		
	(2)						
	(3)			50	10.40		
	(4)						
	(5)			50	10.67		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient = 10.0 ppm. near flare

PROGRAM STOP: Sample = 9.4 ppm

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3318
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: OJ
JOB NUMBER: # 112091.03
SAMPLE LOCATION: Bradley
SAMPLE STATION NUMBER:
SAMPLE I.D. NUMBER
BAG NUMBER ISS #13
EQUIPMENT I.D. NUMBER ISS # 02
OTHER:

SAMPLE TYPE: AMBIENT AIR / (INTEGRATED SURFACE SAMPLE) / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10-22-90 TIME: 8:36 AM
PROGRAM STOP: (DATE): 10-22-90 TIME: 9:01 AM

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.35		
	(2)						
	(3)			50	7.27		
	(4)						
	(5)			50	7.29		
PROGRAM STOP	(1)			50	7.33		
	(2)						
	(3)			50	7.26		
	(4)						
	(5)			50	7.31		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
[illegible]	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: AMBIENT Air ≈ 10

PROGRAM STOP: SAMPLE ≈ 10

winds

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SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: SVC
JOB NUMBER: 0189091.03
SAMPLE LOCATION: Bradley
SAMPLE STATION NUMBER:

SAMPLE I.D. NUMBER
BAG NUMBER 155 #14
EQUIPMENT I.D. NUMBER 155#01
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/22/90 TIME: 8:45
PROGRAM STOP: (DATE): 10/22/90 TIME: 9:10

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)				7.51		
	(2)						
	(3)				7.62		
	(4)						
	(5)				7.66		
PROGRAM STOP	(1)				7.89		
	(2)						
	(3)				7.94		
	(4)						
	(5)				8.01		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☐ OK ☐ LOW

LEAK CHECK ☐ OK

OBSERVATIONS: PROGRAM START: Ambient = 10

PROGRAM STOP: Sample = 10

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: O.J.
JOB NUMBER: # 189091.03
SAMPLE LOCATION: Bradley
SAMPLE STATION NUMBER:

SAMPLE I.D. NUMBER
BAG NUMBER 1[illegible] #15
EQUIPMENT I.D. NUMBER 1SS #02
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10-22-90 TIME: 9.50 AM
PROGRAM STOP: (DATE): 10-22-90 TIME: 9.56 AM

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.33		
	(2)						
	(3)			50	7.26		
	(4)						
	(5)			50	7.31		
PROGRAM STOP	(1)			50	7.30		
	(2)						
	(3)			50	7.24		
	(4)						
	(5)			50	7.29		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient ≈ 09.0

winds ___ MPH.

PROGRAM STOP: SAMPle ≈ 09.1

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SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: JVC
SAMPLE I.D. NUMBER
JOB NUMBER: 0189091.03
BAG NUMBER 155 #16
SAMPLE LOCATION: Bradley
EQUIPMENT I.D. NUMBER 155 #01
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / (INTEGRATED SURFACE SAMPLE) / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/22/90 TIME: 9:30
PROGRAM STOP: (DATE): 10/22/90 TIME: 9:55

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.89		
	(2)						
	(3)			50	7.94		
	(4)						
	(5)			50	8.01		
PROGRAM STOP	(1)			50	10.24		
	(2)						
	(3)			50	9.87		
	(4)						
	(5)			50	9.48		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient = 9.0

PROGRAM STOP: Sample = 8.4

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: C.J
JOB NUMBER: 0189091.03
SAMPLE LOCATION: Bradley
SAMPLE STATION NUMBER:
SAMPLE I.D. NUMBER
BAG NUMBER ISS#17
EQUIPMENT I.D. NUMBER ISS#02
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/22/90 TIME: 10:05
PROGRAM STOP: (DATE): 10/22/90 TIME: 10:31

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.30		
	(2)						
	(3)			50	7.24		
	(4)						
	(5)			50	7.29		
PROGRAM STOP	(1)			50	7.31		
	(2)						
	(3)			50	7.29		
	(4)						
	(5)			50	7.30		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient = 8.8

PROGRAM STOP: Sample = 9.7

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3319
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: SVC
JOB NUMBER: 0189091.03
SAMPLE LOCATION: Bradley
SAMPLE STATION NUMBER:

SAMPLE I.D. NUMBER
BAG NUMBER 155 #18
EQUIPMENT I.D. NUMBER 155 #01
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/22/90 TIME: 10:16
PROGRAM STOP: (DATE): 10/22/90 TIME: 10:35

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)			50	7.96		
	(2)						
	(3)			50	1.88		
	(4)						
	(5)			50	1.65		
PROGRAM STOP	(1)			50	7.87		
	(2)						
	(3)			50	7.82		
	(4)						
	(5)			50	7.76		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Ambient = 9.2

PROGRAM STOP: Sample = 8.8

ISS FIELD LOGS FOR MONTH OF NOVEMBER

WMNA - EMD

FIELD SAMPLING LOG

DATE: 11/15/90

LOCATION: Bradley

TECHNICIAN: E. Dragan / R. Collins

WEATHER CONDITION: Fair

BAROMETRIC PRESSURE START: 30.08

BAROMETRIC PRESSURE FINISH: 30.08

WEATHER STATION: dimptronix

INSTRUMENTS USED & SERIAL #'S Klundfelter Pump # 9010, 9011

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
1	1.2							VRISS007	0800
2	4.5							VRISS017	0800
3	0.04							VRISS003	0905
4	1.7							VRISS004	0900
5	0.4							VRISS005	0940
6	1.8							VRISS013	0940

REVIEWED BY: DATE:

NOTE: ATTACH CALIBRATION LOG

WMNA - EMD

CLIMATRONICS WIND SPEED/DIRECTION INSTRUMENTATION CHECKLIST

SITE: Bradley

DATE: 11/16/90

TECHNICIAN: R. Collins / E. Dragar

RECORDER NO.: _____

MONITORING LOCATION ESTABLISHED & MARKED ON TOPO: _____ YES (✓) NO ( )

LOCATION FREE OF POTENTIAL WIND OBSTRUCTION: _____ YES (✓) NO ( )

EQUIPMENT TESTED PRIOR TO USE: _____ YES (✓) NO ( )

BATTERY FULLY CHARGED & TESTED PRIOR TO USE: _____ YES (✓) NO ( )

EQUIPMENT ASSEMBLED & MAST RAISED & SECURED: _____ YES (✓) NO ( )

CROSSARM ALIGNED TO TRUE NORTH: _____ YES (✓) NO ( )

ALL CONNECTIONS MADE: _____ YES (✓) NO ( )

ALL EQUIPMENT LOCKED & SECURED: _____ YES (✓) NO ( )

COMMENTS/PROBLEMS: stationary weather station; checked prior to sampling

WMNA - EMD
INTEGRATED SURFACE SAMPLER CHECKLIST

SITE: Bradley DATE 11/6/90

SAMPLER NO.: ~~[illegible]~~ 9010/9011

TECHNICIAN: R. Collins / E. Dragun

IS CONTINOUS WIND SPEED RECORDER SET UP IN REPRESENTATIVE AREA OF SITE: YES [✓] NO [ ]

IS CONTINOUS RECORDER READING LESS THAN 5 MPH ON 10 MIN. AVG. YES [✓] NO [ ]

HAS THERE BEEN ANY RAINFALL WITHIN 72 HOURS: YES [ ] NO [✓]

GRID ASSIGNED NO. ON MAP: YES [✓] NO [ ]

GRID MARKER IN PLACE: YES [✓] NO [ ]

GRID FIELD MARKED: YES [✓] NO [ ]

LEAK CHECK PERFORMED: YES [✓] NO [ ]

FLOW SETTING (APPROX .333 CC/MIN.) 19

3" LEVEL MARKER IN PLACE: YES [✓] NO [ ]

IS TEDLAR BAG STILL SEALED: YES [✓] NO [ ]

IS TEDLAR BAG CONNECTED & STRAPPED IN PLACE: YES [✓] NO [ ]

IS VALVE ON BAG OPEN/SAMPLING STARTING: YES [✓] NO [ ]

TIME (START):

FLOW (START):

BAROMETRIC PRESSURE (START):

TIME (STOP):

FLOW (STOP):

BAROMETRIC PRESSURE (STOP):

DISTANCE WALKED:

BAG VOLUME: FULL [ ] 3/4 [ ] 1/2 [ ] 1/4 [ ] EMPTY [ ]

WMNA - EMD

FIELD SAMPLING LOG

DATE: 11/16/90

LOCATION: Bradley

TECHNICIAN: R. Collins / E. Dragar

WEATHER CONDITION: Fair

BAROMETRIC PRESSURE START: 30.08

BAROMETRIC PRESSURE FINISH: 30.08

WEATHER STATION: Climatronics

INSTRUMENTS USED & SERIAL #'S Klindfelder Pump #9026, 9011

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
7	0.3							VRISS010	0740
8	0.3							VRISS009	0740
9	0.5							VRISS008	0820
10	0.7							VRISS014	0820
11	1.4							VRISS013	0900
12	1.2							VRISS002	0900

REVIEWED BY: DATE:

NOTE: ATTACH CALIBRATION LOG

WMNA - EMD
INTEGRATED SURFACE SAMPLER CHECKLIST

SITE: Bradley DATE 11/15/90

SAMPLER NO.: 9010 / 9011

TECHNICIAN: R. Collins / E. Dragon

IS CONTINOUS WIND SPEED RECORDER SET UP IN REPRESENTATIVE AREA OF SITE: YES [✓] NO [ ]

IS CONTINOUS RECORDER READING LESS THAN 5 MPH ON 10 MIN. AVG. YES [✓] NO [ ]

HAS THERE BEEN ANY RAINFALL WITHIN 72 HOURS: YES [ ] NO [✓]

GRID ASSIGNED NO. ON MAP: YES [✓] NO [ ]

GRID MARKER IN PLACE: YES [✓] NO [ ]

GRID FIELD MARKED: YES [✓] NO [ ]

LEAK CHECK PERFORMED: YES [✓] NO [ ]

FLOW SETTING (APPROX .333 CC/MIN.)

3" LEVEL MARKER IN PLACE: YES [✓] NO [ ]

IS TEDLAR BAG STILL SEALED: YES [✓] NO [ ]

IS TEDLAR BAG CONNECTED & STRAPPED IN PLACE: YES [✓] NO [ ]

IS VALVE ON BAG OPEN/SAMPLING STARTING: YES [✓] NO [ ]

TIME (START): 19

FLOW (START): 19

BAROMETRIC PRESSURE (START): 30.00

TIME (STOP): [illegible]

FLOW (STOP): [illegible]

BAROMETRIC PRESSURE (STOP): 30.00

DISTANCE WALKED: 2503 ft

BAG VOLUME: FULL [ ] 3/4 [ ] 1/2 [ ] 1/4 [ ] EMPTY [ ]

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: Bradley Landfill

PURPOSE: Intergrated Surface Sweep Bag Analyzation

OPERATOR:

DATE: 11/15/90 **Start** 1145 **Finish** 1220

Model # OVA 128
Serial #

INSTRUMENT INTEGRITY CHECKLIST	
Battery Test	Pass/Fail
Reading Following Ignition	0.8 ppm
Leak Test	Pass/Fail
Clean System Check (Check Valve Chatter)	Pass/Fail
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail

INSTRUMENT CALIBRATION

Perform Three Point Internal Calibration Before Use.

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
9	10		0.8
95	175		0.8
900	<1000		0.8

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1. 12:30	9	8.9	
12:30	95	94	
2. 12:30	900	820	

Instrument calibrated to CH4 gas

COMMENTS: the accuracy of the OVA 128 is ±10 units at each scale.

AMBIENT AIR FIELD LOGS FOR MONTH OF SEPTEMBER

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 428-9544
FAX (213) 427-0805

PERSONNEL: MDG
SAMPLE I.D. NUMBER 14001
JOB NUMBER: 189091.03
BAG NUMBER N/A
SAMPLE LOCATION: SE - 24 hr.
EQUIPMENT I.D. NUMBER 2A
SAMPLE STATION NUMBER: UPWIND - 24
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9/10/90 TIME: 10:00 HRS
PROGRAM STOP: (DATE): 9/11/90 TIME: 10:00 HRS

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)		9	5cc	35		
	(2)		10	5cc	35		
	(3)		10	5cc	35		
	(4)						
	(5)						
PROGRAM STOP	(1)						
	(2)						
	(3)						
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS	SAMPLE AVERAGE FLOW cc/mm
(TOXIC CORE GROUP)	(AIR) / LFG	
SUPPLIMENTAL GROUP	AIR / LFG	
(TOTAL ORGANICS AS METHANE)	(AIR) / LFG	
[illegible]	AIR / LFG	
OTHER		

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: CLEAR DAY, DRY CONDITIONS, SLIGHT WIND. NOTE: ROTOMETER HAS DEBRIS IN IT.

PROGRAM STOP:

SCAQMD 1150.1 - FIELD DATA SHEET

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ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: WDG
SAMPLE I.D. NUMBER: 14002
JOB NUMBER: 18909.03
BAG NUMBER: N/A
SAMPLE LOCATION: SE - L24
EQUIPMENT I.D. NUMBER: 2B
SAMPLE STATION NUMBER: DOWN L24
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9/10/90 TIME: 23:00 HRS
PROGRAM STOP: (DATE): 9/11/90 TIME: 05:00 HRS

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)		34	9	15		
	(2)		34	9	15		
	(3)		34	9	15		
	(4)						
	(5)						
PROGRAM STOP	(1)						
	(2)						
	(3)						
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(TOXIC CORE GROUP)	(AIR) LFG
SUPPLIMENTAL GROUP	AIR / LFG
(TOTAL ORGANICS AS METHANE)	(AIR) LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: [✓] OK [ ] LOW

LEAK CHECK [✓] OK

OBSERVATIONS: PROGRAM START: CLEAR & DRY

PROGRAM STOP:

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3318
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: MDG
SAMPLE I.D. NUMBER 14004
JOB NUMBER: 0189091.03
BAG NUMBER N/A
SAMPLE LOCATION: SE - L24
EQUIPMENT I.D. NUMBER 4B
SAMPLE STATION NUMBER: DOWN L24
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9/10/90 TIME: 11:00
PROGRAM STOP: (DATE): 9/11/90 TIME: 5:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)		34	9	15.8		
	(2)		34	9	16.3		
	(3)		34	9	15.4		
	(4)						
	(5)						
PROGRAM STOP	(1)						
	(2)						
	(3)						
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(TOXIC CORE GROUP)	(AIR) / LFG
SUPPLIMENTAL GROUP	AIR / LFG
(TOTAL ORGANICS AS METHANE)	(AIR) / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☐ OK ☐ LOW

LEAK CHECK ☐ OK

OBSERVATIONS: PROGRAM START: CLEAR & DRY

PROGRAM STOP:

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3318
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: MDG
SAMPLE I.D. NUMBER 14005
JOB NUMBER: 18909/.03
BAG NUMBER N/A
SAMPLE LOCATION: NW 24 hr.
EQUIPMENT I.D. NUMBER 1A
SAMPLE STATION NUMBER: DOWN 24
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9/10/90 TIME: 10:00 HRS
PROGRAM STOP: (DATE): 9/11/90 TIME: 10:00 HRS

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)		*	4	32.2		
	(2)		*	4	31.4		
	(3)		*	4	31.3		
	(4)						
	(5)						
PROGRAM STOP	(1)						
	(2)						
	(3)						
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(TOXIC CORE GROUP)	(AIR) LFG
SUPPLIMENTAL GROUP	AIR / LFG
(TOTAL ORGANICS AS METHANE)	(AIR) LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START:

* ROTOMETER HAS STICKY BALLS

PROGRAM STOP:

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3316
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: MDG
SAMPLE I.D. NUMBER 14006
JOB NUMBER: 189091.03
BAG NUMBER N/A
SAMPLE LOCATION: NW C24
EQUIPMENT I.D. NUMBER 1B
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 9/10/90 TIME: 23:00
PROGRAM STOP: (DATE): 9/11/90 TIME: 5:00

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)		31	10	19.6		
	(2)		31	10	21.3		
	(3)		31	10	21.6		
	(4)						
	(5)						
PROGRAM STOP	(1)						
	(2)						
	(3)						
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	AIR / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: clear & dry
* Rotometer sticks slightly

PROGRAM STOP:

1150.1 - 7 / 89

AMBIENT AIR FIELD LOGS FOR MONTH OF OCTOBER

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-2315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: MDG / OJ.
SAMPLE I.D. NUMBER 1407 (10/03)
JOB NUMBER: 189091.03
BAG NUMBER 1407
SAMPLE LOCATION: NW 24
EQUIPMENT I.D. NUMBER 2A
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/15/90 TIME: 10:00 HRS
PROGRAM STOP: (DATE): 10/16/90 TIME: 10:00 HRS

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)		9	7	53	6.8	
	(2)		9	7	59	7	
	(3)		9	7	58	7	
	(4)						
	(5)						
PROGRAM STOP	(1)		8	7	53		
	(2)						
	(3)		8	7	58		
	(4)						
	(5)		6	7	59		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(TOXIC CORE GROUP)	(AIR) LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: morning fog - winds ~ 2mph

PROGRAM STOP: fog, winds ≈ 2mph

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3318
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: MDG / OS.
SAMPLE I.D. NUMBER 1406 (to lab)
JOB NUMBER: 189091.03
BAG NUMBER 1406
SAMPLE LOCATION: NW < 24
EQUIPMENT I.D. NUMBER 4B
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/15/90 TIME: 23:00 HRS
PROGRAM STOP: (DATE): 10/16/90 TIME: 05:00 HRS

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)		37	33	59	33	
	(2)		37	33	58	33	
	(3)		35	33	59	33	
	(4)						
	(5)						
PROGRAM STOP	(1)		32	30	55		
	(2)						
	(3)		32	30	54		
	(4)						
	(5)		32	30	57.		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
(TOXIC CORE GROUP)	(AIR) LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIELD GROUP	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: morning fog, clearing - winds ~ 2 mph

PROGRAM STOP: fog, winds ≃ 2 mph

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: MDG / O.J.
SAMPLE I.D. NUMBER 1403 (to lab)
JOB NUMBER: 189091.03
BAG NUMBER 1403
SAMPLE LOCATION: SG-24
EQUIPMENT I.D. NUMBER 1A
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/15/90 TIME: 10:00 HRS
PROGRAM STOP: (DATE): 10/16/90 TIME: 10:00 HRS

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)		8	7	61	7	
	(2)		8	7	57	7	
	(3)		8	7	65	6.8	
	(4)						
	(5)						
PROGRAM STOP	(1)		6	7	80		
	(2)		6	7	81		
	(3)		6	7	78		
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	(AIR) / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Morning fog - wind ~ 1 mph

PROGRAM STOP: fog, winds ≈ 2 mph

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: MDG / OJ.
SAMPLE I.D. NUMBER 1404 (to 1406)
JOB NUMBER:
BAG NUMBER 1404
SAMPLE LOCATION: SE < 24
EQUIPMENT I.D. NUMBER 1a
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/15/90 TIME: 23:00 HRS
PROGRAM STOP: (DATE): 10/16/90 TIME: 05:00 HRS

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)		35	33	61		
	(2)		35	33	55		
	(3)		35	33	58		
	(4)						
	(5)						
PROGRAM STOP	(1)		25	30	85		
	(2)						
	(3)		25	30	81		
	(4)						
	(5)		25	30	84		

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	(AIR) LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☐ OK ☑ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: morning fog - wind ~ 1 mph
Pump flow problems in & out fluctuations
PROGRAM STOP: Wind from north, overnight; fog, winds ≈ 2mph

SCAQMD 1150.1 - FIELD DATA SHEET

SCS ENGINEERS
ENVIRONMENTAL ENGINEERS
3711 LONG BEACH BLVD.
NINTH FLOOR
LONG BEACH, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL: MDG / 05
SAMPLE I.D. NUMBER 1401 (to/ab)
JOB NUMBER: 18909.03
BAG NUMBER 1401
SAMPLE LOCATION: SE < 24
EQUIPMENT I.D. NUMBER 3B
SAMPLE STATION NUMBER:
OTHER:

SAMPLE TYPE: (AMBIENT AIR) / INTEGRATED SURFACE SAMPLE / LFG / MIGRATION PROBES

PROGRAM START: (DATE): 10/15/90 TIME: 23:00 HRS
PROGRAM STOP: (DATE): 10/16/90 TIME: 05:00 HRS

PUMP FLOW CALIBRATION TESTS:

		ROTOMETER READING		BUBBLE FLOW METER			AVERAGE FLOW
		BAG ON	BAG OFF	DIS. VOL (cc)	TIME (SEC)	FLOW (cc/min)	(cc/min)
PROGRAM START	(1)		32	33	55		
	(2)		32	33	54		
	(3)		32	33	58		
	(4)						
	(5)						
PROGRAM STOP	(1)		28	30	77		
	(2)		28	30	71		
	(3)		28	30	70		
	(4)						
	(5)						

SAMPLE ANALYSIS:

COMPOUNDS	DETECTION LIMITS
TOXIC CORE GROUP	(AIR) / LFG
SUPPLIMENTAL GROUP	AIR / LFG
TOTAL ORGANICS AS METHANE	AIR / LFG
FIXED GASES	AIR / LFG
OTHER	

SAMPLE AVERAGE FLOW cc/mm

BATTERY CHECK: ☑ OK ☐ LOW

LEAK CHECK ☑ OK

OBSERVATIONS: PROGRAM START: Morning fog - wind ~ 1 mph
fluctuations in rotometer

PROGRAM STOP: Wind from north overnight; fog, winds ≈ 2 mph

AMBIENT AIR FIELD LOGS FOR MONTH OF NOVEMBER

WMNA - EMD

SITE DESCRIPTION FORM

SITE NAME AND NUMBER: BRADLEY 234

STREET ADDRESS:

CITY: ZIP CODE

SITE BOUNDED BY: NORTH. DWP

EAST. GLENOAKS BLVD

SOUTH. CAL MAT

WEST. DWP

THOMAS BROS. MAP: — REFERENCE PAGE/GRID NO.: —

U.S. GEOLOGICAL SURVEY MAP: —

REFERENCE COORDINATES: — SURFACE ELEVATION ABOVE MEAN SEA LEVEL (FEET):

SURROUNDING LAND USE CATEGORY (RES./COMMERCIAL/INDUSTRIAL/ AGRICULTURAL, ETC.): —

NEAREST SCHOOLS AND HOSPITALS (WITHIN 2-MILE RADIUS FROM SITE):

AMBIENT AIR SAMPLING STATION

INLET PROBE HEIGHT: 6'

SAMPLING EXPOSURE (MUST BE MIN. 60 FT. FROM OBSTACLES): YES

LOCAL EXPOSURES AND OBSTRUCTIONS FROM SAMPLERS:

DIRECTION:	NORTH	TYPE: STRONG ODOR SPRAYING DEODOR
HEIGHT:		DISTANCE: 50'
DIRECTION:	EAST S.E	TYPE: GAS WELL DRILLING
HEIGHT:		DISTANCE: 200'
DIRECTION:	SOUTH	TYPE:
HEIGHT:		DISTANCE:
DIRECTION:	WEST	TYPE:
HEIGHT:		DISTANCE:

WMNA - EMD

AMBIENT AIR SAMPLING STATION
SITE DESCRIPTION FORM

SAMPLER LOCATION

INDICATE LOCATION OF SAMPLER ON THE ATTACHED LANDFILL SITE MAP, DRAWN TO SCALE. (THE SAMPLER MUST BE AT OR NEAR THE PERIMETER OF THE WASTE DISPOSAL SITE.)

SAMPLER DESIGNATION (CHECK WHERE APPROPRIATE):

___ UPWIND X DOWNWIND
X 24-HOUR ___ LESS-THAN-24-HOUR (DIRECTIONALLY-CONTROLLED) ___ COLLOCATED

AIR FLOW AROUND INLET PROBE: 360 DEGREES

(AIR FLOW RESULT BE UNRESTRICTED IN ARC OF LEAST 270 DEGREE PREDOMINAT WIND DIRECTION FOR GREATEST POLLUTANT CONCENTRATION POTENTIAL MUST BE INCLUDED IN THE 270 DEGREE ARC.)

PREDICTED PREVAILING WIND PATTERN FOR SAMPLING DATE: DUE SOUTH

(PREDOMINANT WIND FLOW DIRECTION MUST BE ACROSS MAIN BODY OF DISPOSAL SITE TO DOWNWIND SAMPLING STATION.)

WMNA - EMD
AMBIENT AIR SAMPLER CHECKLIST

PRIOR TO COMPLETION OF THIS FORM ENSURE THAT THE SITE DESCRIPTION FORM HAS BEEN COMPLETED AND LOCATION CRITERIA HAVE BEEN MET.

WEATHER CONDITIONS: FAIR
SAMPLER NUMBER: 9001 PUMP I.D. NUMBER: —
PROJECT/SITE: 234 SITE
SAMPLER LOCATION: DOWNWIND 24 HR
BAG NUMBER: VPA47 RUN DATE: 11/13/92 PREPARED BY: ED.

PRE BAG INSTALLATION CHECK

LEAK CHECK PERFORMED: (YES) NO
FLOW SETTING: 30 6.9 cc/min 30 scale
(MUST BE WITHIN +3 THRU -6 MINOR GRADUATIONS FOR 3 MIN.)
CONTROLLER PROGRAMMED: (YES) NO
BAG INSTALLED BY: ED DATE: 11/13/92
BAG VALVE OPEN: [✓] FLOW AT START: —
TIME (ACTUAL): 10:10 CLOCK (PST): _____ (MUST BE WITHIN 3 MINUTES)
SAMPLER LOCK SECURED _____ YES _____ NO
COMMENTS: SPRAYING DESTOX 50' FROM SAMPLER. GAS WELL DRILLING 200'

LEAVE SHEET IN BAG AT SAMPLER DURING RUN. IF THERE ARE ANY PROBLEMS AT SITE MAKE NOTE IN COMMENTS.

BAG REMOVAL

BAG REMOVED BY: R. Cell DATE: 11/16/90

BAG VALVE CLOSED: [✓] FLOW AT END: _____
BAG STATUS: FULL [ ] 3/4 FULL [ ] 1/2 FULL [✓] EMPTY [ ]
TIME (ACTUAL): _____ CLOCK (PST): _____
SAMPLER STATUS (WORKING SIDE) WORKING [ ] NOT WORKING [ ]
(SPECIFY IN COMMENTS)
SIDE 1 WORKING: YES [ ] NO [ ] SIDE 2 WORKING: YES [ ] NO [ ]
REVIEWED BY: _____ FILED BY: _____

WMNA - EMD

SITE DESCRIPTION FORM

SITE NAME AND NUMBER: Bradley Landfill #234

STREET ADDRESS: _____

CITY: _____ ZIP CODE _____

SITE BOUNDED BY: NORTH. Sheldon

EAST. ~~San Fernando Rd / Balboa~~ Tujunga / Glenoaks

SOUTH. Roscoe

WEST. San Fernando Rd.

THOMAS BROS. MAP: _____ REFERENCE PAGE/GRID NO.: _____

U.S. GEOLOGICAL SURVEY MAP: _____

REFERENCE COORDINATES: _____ SURFACE ELEVATION ABOVE MEAN SEA LEVEL (FEET): _____

SURROUNDING LAND USE CATEGORY (RES./COMMERCIAL/INDUSTRIAL/ AGRICULTURAL, ETC.): _____

NEAREST SCHOOLS AND HOSPITALS (WITHIN 2-MILE RADIUS FROM SITE):

_____

AMBIENT AIR SAMPLING STATION

INLET PROBE HEIGHT: 4 ft.

SAMPLING EXPOSURE (MUST BE MIN. 60 FT. FROM OBSTACLES): _____

LOCAL EXPOSURES AND OBSTRUCTIONS FROM SAMPLERS:

DIRECTION:	NORTH	TYPE:	Cal Mat gravel conveyer belt
HEIGHT:		DISTANCE:	70 ft.
DIRECTION:	EAST	TYPE:	
HEIGHT:		DISTANCE:	
DIRECTION:	SOUTH	TYPE:	Truck Traffic
HEIGHT:		DISTANCE:	400 ft.
DIRECTION:	WEST	TYPE:	
HEIGHT:		DISTANCE:	

WMNA - EMD

AMBIENT AIR SAMPLING STATION
SITE DESCRIPTION FORM

SAMPLER LOCATION

INDICATE LOCATION OF SAMPLER ON THE ATTACHED LANDFILL SITE MAP, DRAWN TO SCALE. (THE SAMPLER MUST BE AT OR NEAR THE PERIMETER OF THE WASTE DISPOSAL SITE.)

SAMPLER DESIGNATION (CHECK WHERE APPROPRIATE):

X UPWIND
X 24-HOUR
X DOWNWIND
X LESS-THAN-24-HOUR (DIRECTIONALLY-CONTROLLED)
____ COLLOCATED

AIR FLOW AROUND INLET PROBE: 360 DEGREES

(AIR FLOW RESULT BE UNRESTRICTED IN ARC OF LEAST 270 DEGREE PREDOMINAT WIND DIRECTION FOR GREATEST POLLUTANT CONCENTRATION POTENTIAL MUST BE INCLUDED IN THE 270 DEGREE ARC.)

PREDICTED PREVAILING WIND PATTERN FOR SAMPLING DATE: NW

(PREDOMINANT WIND FLOW DIRECTION MUST BE ACROSS MAIN BODY OF DISPOSAL SITE TO DOWNWIND SAMPLING STATION.)

WMNA - EMD
AMBIENT AIR SAMPLER CHECKLIST

PRIOR TO COMPLETION OF THIS FORM ENSURE THAT THE SITE DESCRIPTION FORM HAS BEEN COMPLETED AND LOCATION CRITERIA HAVE BEEN MET.

WEATHER CONDITIONS: Clear
SAMPLER NUMBER: 9001 PUMP I.D. NUMBER.
PROJECT/SITE: 1150.1 / 234
SAMPLER LOCATION: Downwind 24 hr.
BAG NUMBER: VRAA006 RUN DATE: 11/13/90 PREPARED BY: R. Collins

PRE BAG INSTALLATION CHECK

LEAK CHECK PERFORMED: X YES ____ NO
FLOW SETTING: 30±5 @ 6.9 cc/min
(MUST BE WITHIN +3 THRU -6 MINOR GRADUATIONS FOR 3 MIN.)
CONTROLLER PROGRAMMED: X YES ____ NO
BAG INSTALLED BY: E. Dragan DATE: 11/13/90
BAG VALVE OPEN: [✓] FLOW AT START: ~~N/A~~ 6.9
TIME (ACTUAL): 1000 CLOCK (PST): 10:00 (MUST BE WITHIN 3 MINUTES)
SAMPLER LOCK SECURED X YES ____ NO
COMMENTS:

LEAVE SHEET IN BAG AT SAMPLER DURING RUN. IF THERE ARE ANY PROBLEMS AT SITE MAKE NOTE IN COMMENTS.

BAG REMOVAL

BAG REMOVED BY: R. Collins DATE: 11/16/90

BAG VALVE CLOSED: [✓] FLOW AT END: 0
BAG STATUS: FULL [ ] 3/4 FULL [✓] 1/2 FULL [ ] EMPTY [ ]
TIME (ACTUAL): 1530 CLOCK (PST): 1530
SAMPLER STATUS (WORKING SIDE) WORKING [ ] NOT WORKING [ ]
(SPECIFY IN COMMENTS)
SIDE 1 WORKING: YES [ ] NO [ ] SIDE 2 WORKING: YES [ ] NO [ ]
REVIEWED BY: ____ FILED BY: ____

WMNA - EMD

SITE DESCRIPTION FORM

SITE NAME AND NUMBER: BRADLEY 234

STREET ADDRESS: —

CITY: — ZIP CODE

SITE BOUNDED BY: NORTH. —

EAST. —

SOUTH. —

WEST. —

THOMAS BROS. MAP: — REFERENCE PAGE/GRID NO.:

U.S. GEOLOGICAL SURVEY MAP: —

REFERENCE COORDINATES: — SURFACE ELEVATION ABOVE MEAN SEA LEVEL (FEET):

SURROUNDING LAND USE CATEGORY (RES./COMMERCIAL/INDUSTRIAL/ AGRICULTURAL, ETC.): — INDUSTRIAL, COMMERCIAL

NEAREST SCHOOLS AND HOSPITALS (WITHIN 2-MILE RADIUS FROM SITE):

AMBIENT AIR SAMPLING STATION

INLET PROBE HEIGHT: 6'

SAMPLING EXPOSURE (MUST BE MIN. 60 FT. FROM OBSTACLES):

LOCAL EXPOSURES AND OBSTRUCTIONS FROM SAMPLERS:

DIRECTION: NORTH — TYPE: NONE

HEIGHT: — DISTANCE: —

DIRECTION: EAST — TYPE: SLOPE DOWNHILL - 200' VERTICAL

HEIGHT: — DISTANCE: 15

DIRECTION: SOUTH TYPE:

HEIGHT: DISTANCE:

DIRECTION: WEST TYPE: CONVEYOR BELT

HEIGHT: 4' DISTANCE: 40'

WMNA - EMD

AMBIENT AIR SAMPLING STATION
SITE DESCRIPTION FORM

SAMPLER LOCATION

INDICATE LOCATION OF SAMPLER ON THE ATTACHED LANDFILL SITE MAP, DRAWN TO SCALE. (THE SAMPLER MUST BE AT OR NEAR THE PERIMETER OF THE WASTE DISPOSAL SITE.)

SAMPLER DESIGNATION (CHECK WHERE APPROPRIATE):

_____ UPWIND X DOWNWIND
_____ 24-HOUR X LESS-THAN-24-HOUR _____ COLLOCATED
(DIRECTIONALLY-CONTROLLED)

AIR FLOW AROUND INLET PROBE: 360 DEGREES

(AIR FLOW RESULT BE UNRESTRICTED IN ARC OF LEAST 270 DEGREE PREDOMINAT WIND DIRECTION FOR GREATEST POLLUTANT CONCENTRATION POTENTIAL MUST BE INCLUDED IN THE 270 DEGREE ARC.)

PREDICTED PREVAILING WIND PATTERN FOR SAMPLING DATE: _____

(PREDOMINANT WIND FLOW DIRECTION MUST BE ACROSS MAIN BODY OF DISPOSAL SITE TO DOWNWIND SAMPLING STATION.)

WMNA - EMD
AMBIENT AIR SAMPLER CHECKLIST

PRIOR TO COMPLETION OF THIS FORM ENSURE THAT THE SITE DESCRIPTION FORM HAS BEEN COMPLETED AND LOCATION CRITERIA HAVE BEEN MET.

WEATHER CONDITIONS: FAIR
SAMPLER NUMBER: 9004 PUMP I.D. NUMBER.
PROJECT/SITE: Downwind Lake
SAMPLER LOCATION: BRAD EAST SOUTH
BAG NUMBER: VRAA8 RUN DATE: 11/14/90 PREPARED BY: [illegible]

PRE BAG INSTALLATION CHECK

LEAK CHECK PERFORMED: YES NO
FLOW SETTING: 100 scale @ 28 cc/min
(MUST BE WITHIN +3 THRU -6 MINOR GRADUATIONS FOR 3 MIN.)
CONTROLLER PROGRAMMED: YES NO
BAG INSTALLED BY: [illegible] DATE: 11/13/90
BAG VALVE OPEN: [✓] FLOW AT START: 100
TIME (ACTUAL): 1105A CLOCK (PST): — (MUST BE WITHIN 3 MINUTES)
SAMPLER LOCK SECURED YES NO
COMMENTS:

LEAVE SHEET IN BAG AT SAMPLER DURING RUN. IF THERE ARE ANY PROBLEMS AT SITE MAKE NOTE IN COMMENTS.

BAG REMOVAL

BAG REMOVED BY: R. Colt DATE: 11/16/90

BAG VALVE CLOSED: [X] FLOW AT END: 0
BAG STATUS: FULL [ ] 3/4 FULL [ ] 1/2 FULL [ ] EMPTY [ ]
TIME (ACTUAL): CLOCK (PST):
SAMPLER STATUS (WORKING SIDE) WORKING [ ] NOT WORKING [ ]
(SPECIFY IN COMMENTS)
SIDE 1 WORKING: YES [ ] NO [ ] SIDE 2 WORKING: YES [ ] NO [ ]
REVIEWED BY: FILED BY:

WMNA - EMD

SITE DESCRIPTION FORM

SITE NAME AND NUMBER: BRADLEY 234

STREET ADDRESS: —

CITY: — ZIP CODE

SITE BOUNDED BY: NORTH. —

EAST. —

SOUTH. —

WEST. —

THOMAS BROS. MAP: — REFERENCE PAGE/GRID NO.:

U.S. GEOLOGICAL SURVEY MAP: —

REFERENCE COORDINATES: — SURFACE ELEVATION ABOVE MEAN SEA LEVEL (FEET):

SURROUNDING LAND USE CATEGORY (RES./COMMERCIAL/INDUSTRIAL/ AGRICULTURAL, ETC.): —

NEAREST SCHOOLS AND HOSPITALS (WITHIN 2-MILE RADIUS FROM SITE):

AMBIENT AIR SAMPLING STATION

INLET PROBE HEIGHT: 6'

SAMPLING EXPOSURE (MUST BE MIN. 60 FT. FROM OBSTACLES):

LOCAL EXPOSURES AND OBSTRUCTIONS FROM SAMPLERS:

DIRECTION: NORTH TYPE: DEOTOC SPRAYING

HEIGHT: 4' DISTANCE: 40'

DIRECTION: EAST TYPE: NEW GAS WELL DRILLING

HEIGHT: DISTANCE: 200'

DIRECTION: SOUTH TYPE: TRUCK TRAFFIC

HEIGHT: DISTANCE: 30'

DIRECTION: WEST TYPE:

HEIGHT: DISTANCE:

WMNA - EMD

AMBIENT AIR SAMPLING STATION
SITE DESCRIPTION FORM

SAMPLER LOCATION

INDICATE LOCATION OF SAMPLER ON THE ATTACHED LANDFILL SITE MAP, DRAWN TO SCALE. (THE SAMPLER MUST BE AT OR NEAR THE PERIMETER OF THE WASTE DISPOSAL SITE.)

SAMPLER DESIGNATION (CHECK WHERE APPROPRIATE):

X UPWIND ____ DOWNWIND
____ 24-HOUR X LESS-THAN-24-HOUR ____ COLLOCATED
(DIRECTIONALLY-CONTROLLED)

AIR FLOW AROUND INLET PROBE: 360 DEGREES

(AIR FLOW RESULT BE UNRESTRICTED IN ARC OF LEAST 270 DEGREE PREDOMINAT WIND DIRECTION FOR GREATEST POLLUTANT CONCENTRATION POTENTIAL MUST BE INCLUDED IN THE 270 DEGREE ARC.)

PREDICTED PREVAILING WIND PATTERN FOR SAMPLING DATE: NE

(PREDOMINANT WIND FLOW DIRECTION MUST BE ACROSS MAIN BODY OF DISPOSAL SITE TO DOWNWIND SAMPLING STATION.)

WMNA - EMD
AMBIENT AIR SAMPLER CHECKLIST

PRIOR TO COMPLETION OF THIS FORM ENSURE THAT THE SITE DESCRIPTION FORM HAS BEEN COMPLETED AND LOCATION CRITERIA HAVE BEEN MET.

WEATHER CONDITIONS: FAIR
SAMPLER NUMBER: 9003 PUMP I.D. NUMBER: —
PROJECT/SITE: 1234
SAMPLER LOCATION: UPWIND <24 HR
BAG NUMBER: VRAM10 RUN DATE: 11/15 PREPARED BY: CD

PRE BAG INSTALLATION CHECK

LEAK CHECK PERFORMED: YES NO
FLOW SETTING: 100 @ 28 cc/min
(MUST BE WITHIN +3 THRU -6 MINOR GRADUATIONS FOR 3 MIN.)
CONTROLLER PROGRAMMED: YES NO
BAG INSTALLED BY: CD DATE: 11/13/90
BAG VALVE OPEN: [X] FLOW AT START: 100
TIME (ACTUAL): 0:06 CLOCK (PST): 12:06 (MUST BE WITHIN 3 MINUTES)
SAMPLER LOCK SECURED YES NO
COMMENTS:

LEAVE SHEET IN BAG AT SAMPLER DURING RUN. IF THERE ARE ANY PROBLEMS AT SITE MAKE NOTE IN COMMENTS.

BAG REMOVAL

BAG REMOVED BY: CD DATE: 11/13/90

BAG VALVE CLOSED: [X] FLOW AT END: —
BAG STATUS: FULL [ ] 3/4 FULL [X] 1/2 FULL [ ] EMPTY [ ]
TIME (ACTUAL): 11:00 AM CLOCK (PST): 11:00 AM
SAMPLER STATUS (WORKING SIDE) WORKING [ ] NOT WORKING [ ]
(SPECIFY IN COMMENTS)
SIDE 1 WORKING: YES [ ] NO [ ] SIDE 2 WORKING: YES [ ] NO [ ]
REVIEWED BY: FILED BY:

WMNA - EMD

SITE DESCRIPTION FORM

SITE NAME AND NUMBER: BRADLEY 234

STREET ADDRESS: —

CITY: — ZIP CODE

SITE BOUNDED BY: NORTH. —

EAST. —

SOUTH. —

WEST. —

THOMAS BROS. MAP: — REFERENCE PAGE/GRID NO.: —

U.S. GEOLOGICAL SURVEY MAP: —

REFERENCE COORDINATES: — SURFACE ELEVATION ABOVE MEAN SEA LEVEL (FEET):

SURROUNDING LAND USE CATEGORY (RES./COMMERCIAL/INDUSTRIAL/ AGRICULTURAL, ETC.): —

NEAREST SCHOOLS AND HOSPITALS (WITHIN 2-MILE RADIUS FROM SITE):

AMBIENT AIR SAMPLING STATION

INLET PROBE HEIGHT: 6'

SAMPLING EXPOSURE (MUST BE MIN. 60 FT. FROM OBSTACLES):

LOCAL EXPOSURES AND OBSTRUCTIONS FROM SAMPLERS:

DIRECTION: NORTH TYPE: NONE

HEIGHT: DISTANCE:

DIRECTION: EAST TYPE: NONE

HEIGHT: DISTANCE:

DIRECTION: SOUTH TYPE: ROOM

HEIGHT: DISTANCE:

DIRECTION: WEST TYPE: CONVEYOR BELT

HEIGHT: 4' DISTANCE: 40'

WMNA - EMD

AMBIENT AIR SAMPLING STATION
SITE DESCRIPTION FORM

SAMPLER LOCATION

INDICATE LOCATION OF SAMPLER ON THE ATTACHED LANDFILL SITE MAP, DRAWN TO SCALE. (THE SAMPLER MUST BE AT OR NEAR THE PERIMETER OF THE WASTE DISPOSAL SITE.)

SAMPLER DESIGNATION (CHECK WHERE APPROPRIATE):

_____ UPWIND _____ DOWNWIND
_____ 24-HOUR X LESS-THAN-24-HOUR X COLLOCATED
(DIRECTIONALLY-CONTROLLED)

AIR FLOW AROUND INLET PROBE: 360 DEGREES

(AIR FLOW RESULT BE UNRESTRICTED IN ARC OF LEAST 270 DEGREE PREDOMINAT WIND DIRECTION FOR GREATEST POLLUTANT CONCENTRATION POTENTIAL MUST BE INCLUDED IN THE 270 DEGREE ARC.)

PREDICTED PREVAILING WIND PATTERN FOR SAMPLING DATE: _____

(PREDOMINANT WIND FLOW DIRECTION MUST BE ACROSS MAIN BODY OF DISPOSAL SITE TO DOWNWIND SAMPLING STATION.)

WMNA - EMD
AMBIENT AIR SAMPLER CHECKLIST

PRIOR TO COMPLETION OF THIS FORM ENSURE THAT THE SITE DESCRIPTION FORM HAS BEEN COMPLETED AND LOCATION CRITERIA HAVE BEEN MET.

WEATHER CONDITIONS: FAIR
SAMPLER NUMBER: 9005 PUMP I.D. NUMBER.
PROJECT/SITE: 234
SAMPLER LOCATION: -
BAG NUMBER: VRAP9 RUN DATE: 11/14/90 PREPARED BY: D

PRE BAG INSTALLATION CHECK

LEAK CHECK PERFORMED: YES NO
FLOW SETTING: 900
(MUST BE WITHIN +3 THRU -6 MINOR GRADUATIONS FOR 3 MIN.)
CONTROLLER PROGRAMMED: YES NO
BAG INSTALLED BY: DD DATE: 11/13/90
BAG VALVE OPEN: [X] FLOW AT START: 100 @
TIME (ACTUAL): CLOCK (PST): (MUST BE WITHIN 3 MINUTES)
SAMPLER LOCK SECURED YES NO
COMMENTS:

LEAVE SHEET IN BAG AT SAMPLER DURING RUN. IF THERE ARE ANY PROBLEMS AT SITE MAKE NOTE IN COMMENTS.

BAG REMOVAL

BAG REMOVED BY: ROD COLLINS DATE: 11/15/90

BAG VALVE CLOSED: [✓] FLOW AT END:
BAG STATUS: FULL [ ] 3/4 FULL [✓] 1/2 FULL [ ] EMPTY [ ]
TIME (ACTUAL): CLOCK (PST):
SAMPLER STATUS (WORKING SIDE) WORKING [ ] NOT WORKING [ ]
(SPECIFY IN COMMENTS)
SIDE 1 WORKING: YES [ ] NO [ ] SIDE 2 WORKING: YES [ ] NO [ ]
REVIEWED BY: FILED BY:

INTERNAL COLLECTION SYSTEM FIELD LOG FOR MONTH OF NOVEMBER

WMNA - EMD

FIELD SAMPLING LOG

DATE: 11/14/90

LOCATION: BRADLEY

TECHNICIAN: E.D.

WEATHER CONDITION: FAIR

BAROMETRIC PRESSURE START: 29.95

BAROMETRIC PRESSURE FINISH: 29.95

WEATHER STATION: Climatronics

INSTRUMENTS USED & SERIAL #'S Klinfelter sampling Pump #90

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Gas Flare	—					10:00	10:10	MRIC5001	10:00

REVIEWED BY: DATE:

NOTE: ATTACH CALIBRATION LOG

PERIMETER PROBE FIELD LOGS FOR FORTH QUARTER

WMNA - EMD

GAS MIGRATION PROBE SAMPLING CHECKLIST

DATE 11/14/90 TIME 1614 TECHNICAN [illegible]

PROBE NUMBER/LOCATION VW 9 / Bradley West

INSTRUMENT USED TO MEASURE TOTAL ORGANICS AS METHANE: 40%

INSTRUMENT NAME Gas Tech SERIAL NO. NP204

INSTRUMENT NAME _____ SERIAL NO. _____

1. IS A LANDFILL GAS COLLECTION SYSTEM IN OPERATION AT THE SITE?	YES/NO
2. WAS THE LANDFILL GAS COLLECTION SYSTEM IN OPERATION AT THE TIME OF SAMPLING?	YES/NO
3. IS THE NUMBER AND LOCATION OF THE PROBE ACCURATELY MARKED ON THE TOPOGRAPHICAL MAP?	YES/NO
4. ATTACH THE SAMPLING PUMP AND EVACUATE THE PROBE TO THREE TIMES ITS VOLUME:	COMPLETE/OTHER
5. IS THE TEDLAR BAG STILL SEALED?	YES/NO
6. ATTACH THE TEDLAR BAG TO THE SAMPLING PUMP AND COLLECT THE SAMPLE FROM THE PROBE.	COMPLETE/OTHER
7. ATTACH AN OXYGEN ANALYZER TO THE TEDLAR BAG AND DETERMINE THE PERCENTAGE OF OXYGEN IN THE TEST SAMPLE. RECORD THE RESULTS OF THE TESTING IN THE FIELD SAMPLING LOG.	COMPLETE/OTHER
8. SELECT THE PROPER INSTRUMENT NEEDED TO MEASURE FOR TOTAL ORGANICS AS METHANE. (THE OVA 128 REQUIRES A MINIMUM OF 12 PERCENT OXYGEN FOR ACCURATE READINGS IN THE PPM RANGE.)	COMPLETE/OTHER
9. ATTACH THE SELECTED INSTRUMENT TO THE TEDLAR SAMPLE BAG AND MEASURE FOR TOTAL ORGANICS AS METHANE. IF THE READING IS OVER SCALE THE SELECTED INSTRUMENT, TEST THE SAMPLE WITH THE INSTRUMENT WITH THE NEXT HIGHEST SCALE. RECORD THE RESULTS OF THE TESTING IN THE FIELD LOG.	COMPLETE/OTHER

CONTINUED

WMNA - EMD

10. UPON COMPLETION OF TESTING ALL THE PROBES AT THE SITE PERFORM THE FOLLOWING: COMPLETE/OTHER

    A. IF TOC CONCENTRATION DOES NOT EXCEED 5% BY VOLUME IN ANY OF THE PROBES, COLLECT 1 BAG SAMPLE FROM 1 PROBE WITH THE HIGHEST CONCENTRATION.

    B. IF TOC CONCENTRATION OF ANY PROBES EXCEEDS 5% BY VOLUME, COLLECT 1 BAG SAMPLE PER PROBE FROM THE PROBES WITH HIGHEST CONCENTRATIONS ABOVE 5% BY VOLUME (UP TO A MAXIMUM OF 5 PROBES).

11. PREPARE A CHAIN-OF-CUSTODY FOR EACH SAMPLE. COMPLETE/OTHER

12. SUBMIT THE SAMPLE TO THE LABORATORY FOR ANALYSIS AS SOON AS POSSIBLE. THE SAMPLE MUST BE ANALYZED WITHIN 72 HOURS AFTER SAMPLE IS DRAWN FROM THE PROBE.

Sampling rate : 1 L/min 25 scale

WMNA - EMD

FIELD SAMPLING LOG

DATE: _____

LOCATION: Bradley West Probe W9

TECHNICIAN: E. Dragone / D. Collier

WEATHER CONDITION: Fair

BAROMETRIC PRESSURE START: 28.85 in/Hg

BAROMETRIC PRESSURE FINISH: 28.85 in/Hg

WEATHER STATION: Climatronics

INSTRUMENTS USED & SERIAL #'S Gas Tech NP204

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
W-9			40			1618	1614	VR PP002	1620

REVIEWED BY: DATE:

NOTE: ATTACH CALIBRATION LOG

WMNA - EMD

FIELD SAMPLING LOG

DATE: 11/14/90

LOCATION: Building [illegible] (Hole [illegible])

TECHNICIAN: R. Collins / E. Dragan

WEATHER CONDITION: Fair

BAROMETRIC PRESSURE START: 29.95

BAROMETRIC PRESSURE FINISH: 29.95

WEATHER STATION: Climatronics

INSTRUMENTS USED & SERIAL #'S ~~[illegible]~~ Gas Tech NP204

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
1			3E			1530	1531	[illegible]	1532

REVIEWED BY: DATE:

NOTE: ATTACH CALIBRATION LOG

WMNA - EMD

GAS MIGRATION PROBE SAMPLING CHECKLIST

DATE 1-1-93 TIME ~~1400~~ 1530 TECHNICAN E. Drayer/C. Gallo

PROBE NUMBER/LOCATION Emilia East EE-SD

INSTRUMENT USED TO MEASURE TOTAL ORGANICS AS METHANE:

INSTRUMENT NAME Gas Tech SERIAL NO. NP 204

INSTRUMENT NAME _____ SERIAL NO. _____

1. IS A LANDFILL GAS COLLECTION SYSTEM IN OPERATION AT THE SITE?	YES/NO
2. WAS THE LANDFILL GAS COLLECTION SYSTEM IN OPERATION AT THE TIME OF SAMPLING?	YES/NO
3. IS THE NUMBER AND LOCATION OF THE PROBE ACCURATELY MARKED ON THE TOPOGRAPHICAL MAP?	YES/NO
4. ATTACH THE SAMPLING PUMP AND EVACUATE THE PROBE TO THREE TIMES ITS VOLUME:	COMPLETE/OTHER
5. IS THE TEDLAR BAG STILL SEALED?	YES/NO
6. ATTACH THE TEDLAR BAG TO THE SAMPLING PUMP AND COLLECT THE SAMPLE FROM THE PROBE.	COMPLETE/OTHER
7. ATTACH AN OXYGEN ANALYZER TO THE TEDLAR BAG AND DETERMINE THE PERCENTAGE OF OXYGEN IN THE TEST SAMPLE. RECORD THE RESULTS OF THE TESTING IN THE FIELD SAMPLING LOG.	COMPLETE/OTHER
8. SELECT THE PROPER INSTRUMENT NEEDED TO MEASURE FOR TOTAL ORGANICS AS METHANE. (THE OVA 128 REQUIRES A MINIMUM OF 12 PERCENT OXYGEN FOR ACCURATE READINGS IN THE PPM RANGE.)	COMPLETE/OTHER
9. ATTACH THE SELECTED INSTRUMENT TO THE TEDLAR SAMPLE BAG AND MEASURE FOR TOTAL ORGANICS AS METHANE. IF THE READING IS OVER SCALE THE SELECTED INSTRUMENT, TEST THE SAMPLE WITH THE INSTRUMENT WITH THE NEXT HIGHEST SCALE. RECORD THE RESULTS OF THE TESTING IN THE FIELD LOG.	COMPLETE/OTHER

CONTINUED

WMNA - EMD

10. UPON COMPLETION OF TESTING ALL THE PROBES AT THE SITE PERFORM THE FOLLOWING: COMPLETE/OTHER

    A. IF TOC CONCENTRATION DOES NOT EXCEED 5% BY VOLUME IN ANY OF THE PROBES, COLLECT 1 BAG SAMPLE FROM 1 PROBE WITH THE HIGHEST CONCENTRATION.

    B. IF TOC CONCENTRATION OF ANY PROBES EXCEEDS 5% BY VOLUME, COLLECT 1 BAG SAMPLE PER PROBE FROM THE PROBES WITH HIGHEST CONCENTRATIONS ABOVE 5% BY VOLUME (UP TO A MAXIMUM OF 5 PROBES).

11. PREPARE A CHAIN-OF-CUSTODY FOR EACH SAMPLE. COMPLETE/OTHER

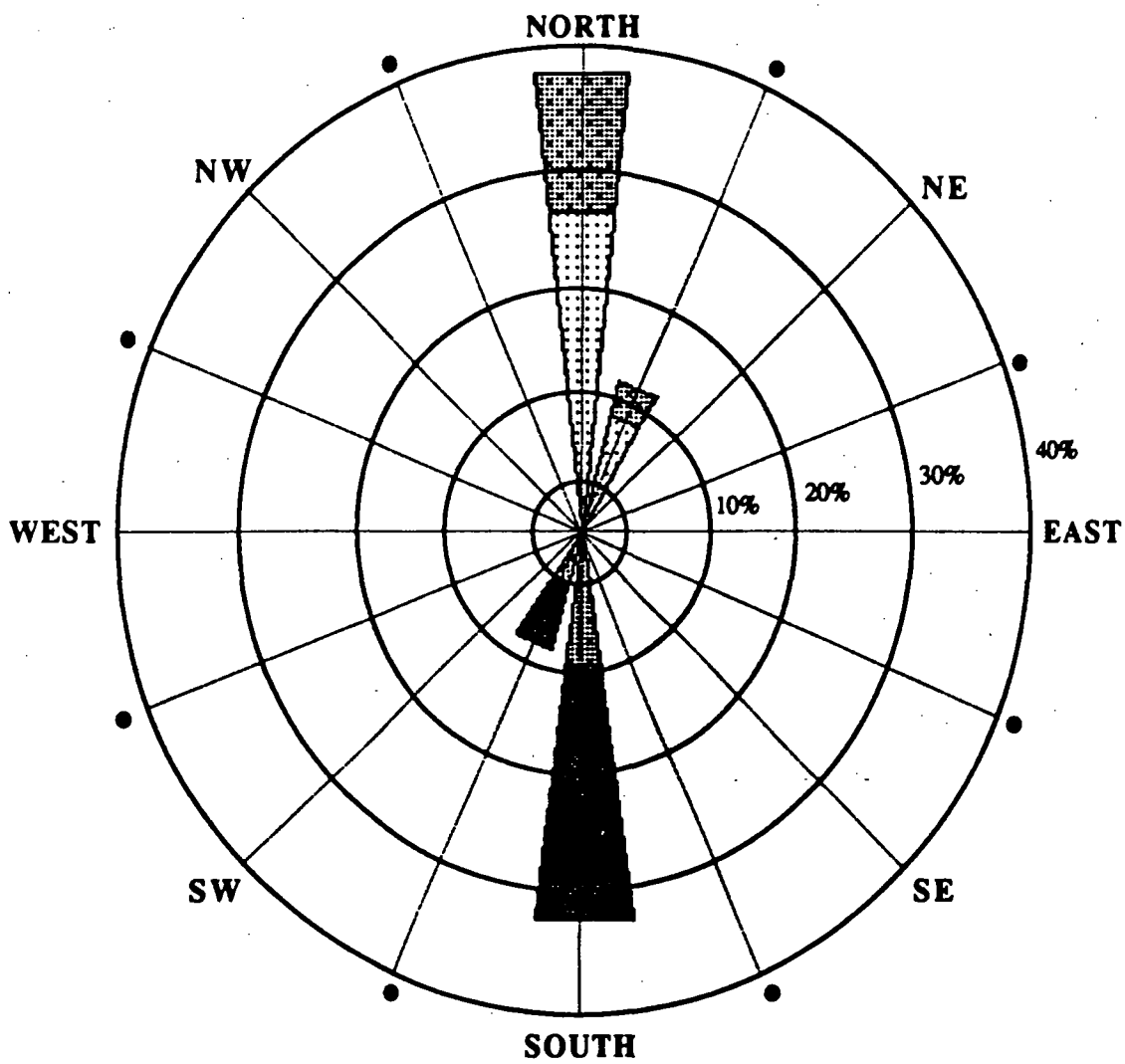
12. SUBMIT THE SAMPLE TO THE LABORATORY FOR ANALYSIS AS SOON AS POSSIBLE. THE SAMPLE MUST BE ANALYZED WITHIN 72 HOURS AFTER SAMPLE IS DRAWN FROM THE PROBE.

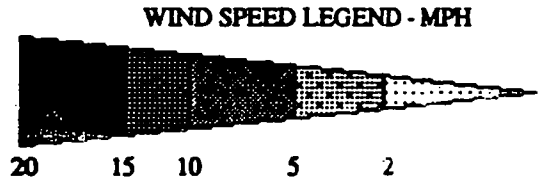
Sampling rate : 1 L/min 25 scale

APPENDIX C

MEAN WIND SPEED AND DIRECTION INFORMATION

WINDROSE





NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

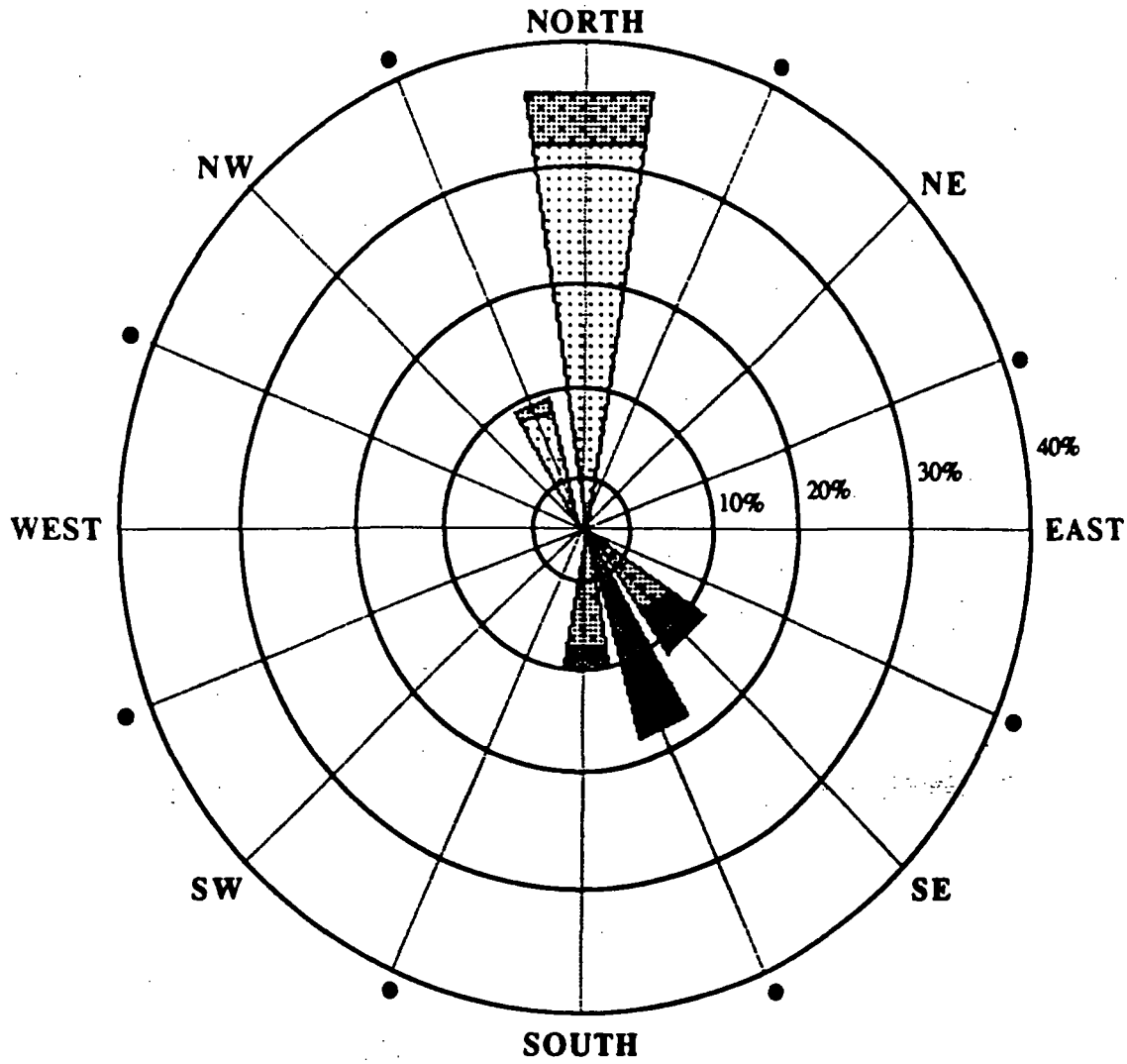
EXAMPLE - THE WIND IS BLOWING FROM THE NORTH __33__ PERCENT OF THE TIME.

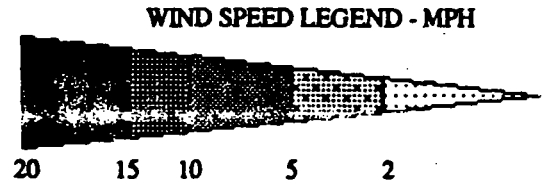
WINDROSE PERIOD

September 10 thru 11, 1990

SCS ENGINEERS

WINDROSE





NOTES:

A WINDROSE DIGRAMS THE FREQUENCY OF OCCURANCE FOR EACH WIND DIRECTION. WIND DIRECTION IS INDICATED AS THE DIRECTION FROM WHICH THE WIND IS BLOWING.

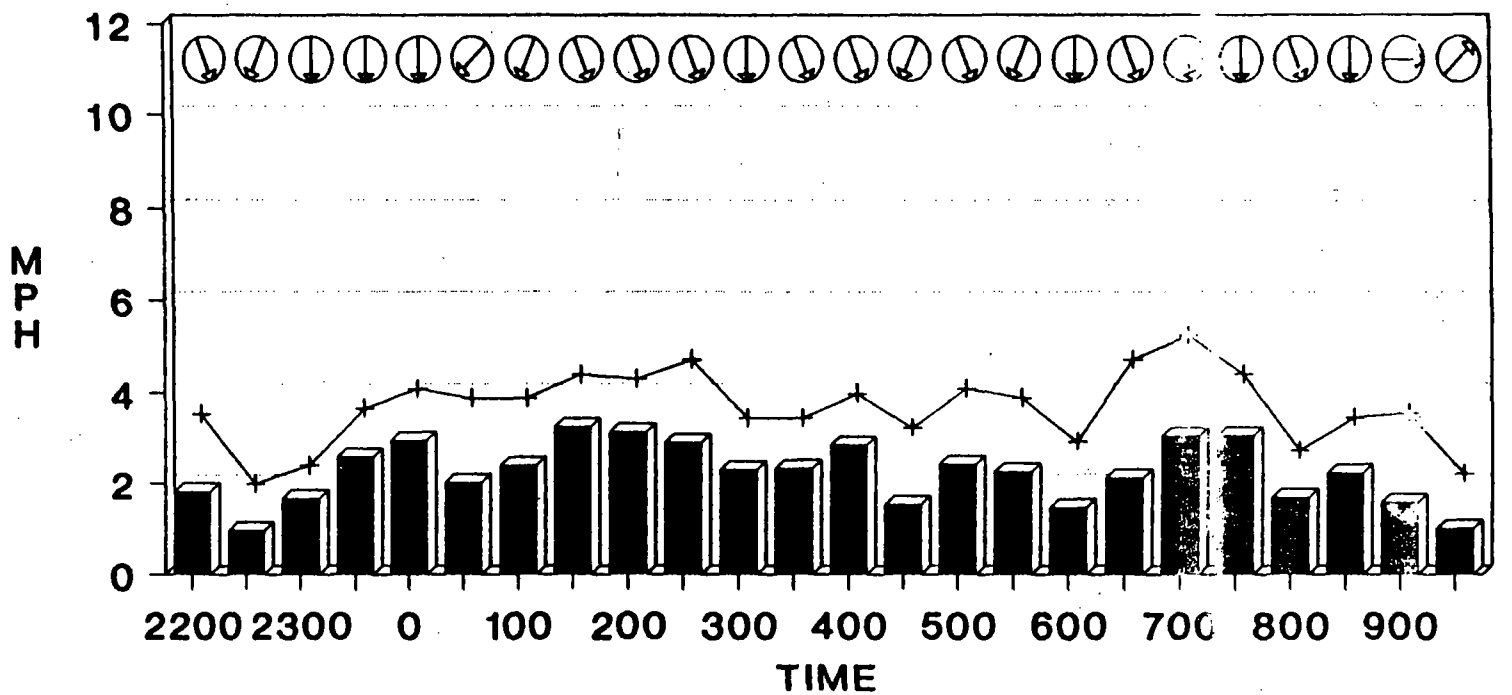
EXAMPLE - THE WIND IS BLOWING FROM THE NORTH __36__ PERCENT OF THE TIME.

WINDROSE PERIOD

October 15 thru 16, 1990

SCS ENGINEERS

VALLEY RECLAMATION
MEAN WIND SPEED AND DIRECTION
NOVEMBER 15-16, 1990



LEGEND

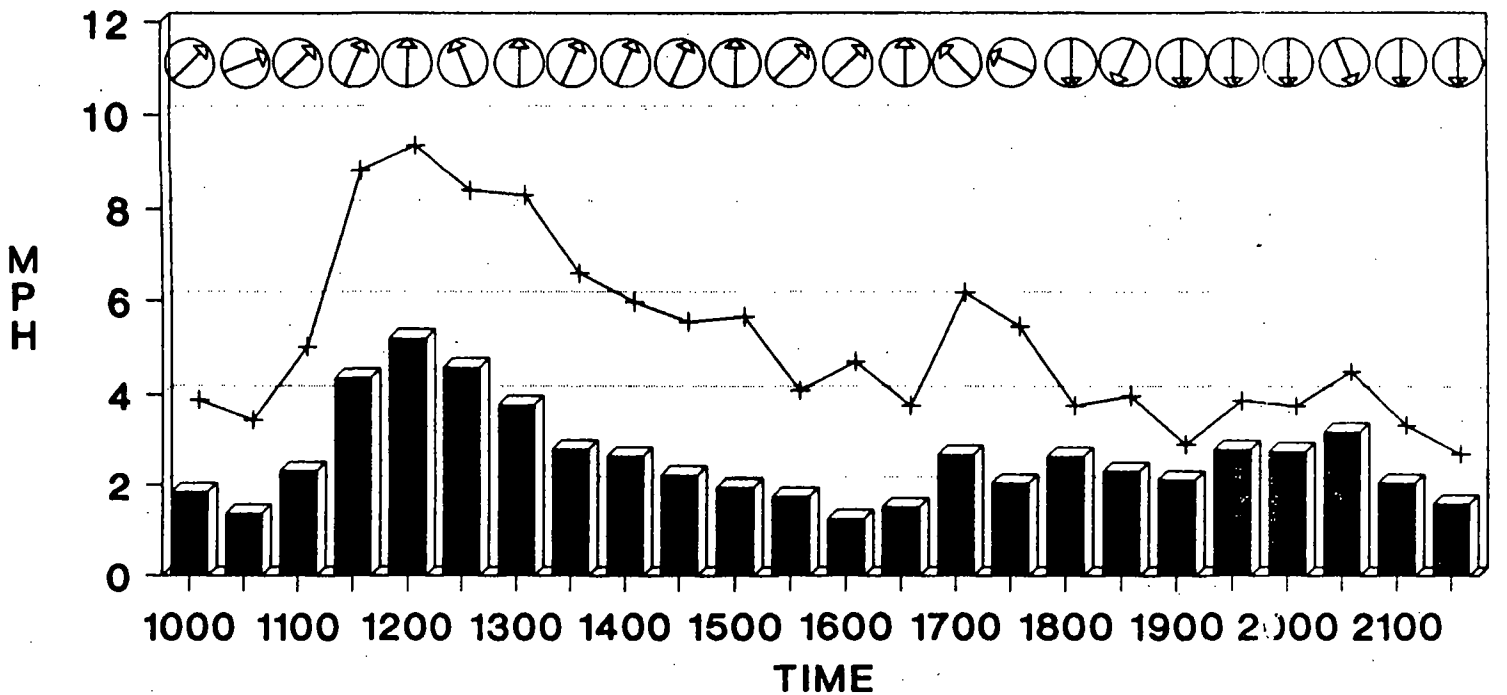
MEAN WIND SPEED

MAXIMUM WIND SPEED

MEAN WIND DIRECTION

NORTH ORIENTATION

VALLEY RECLAMATION
MEAN WIND SPEED AND DIRECTION
NOVEMBER 15, 1990



LEGEND

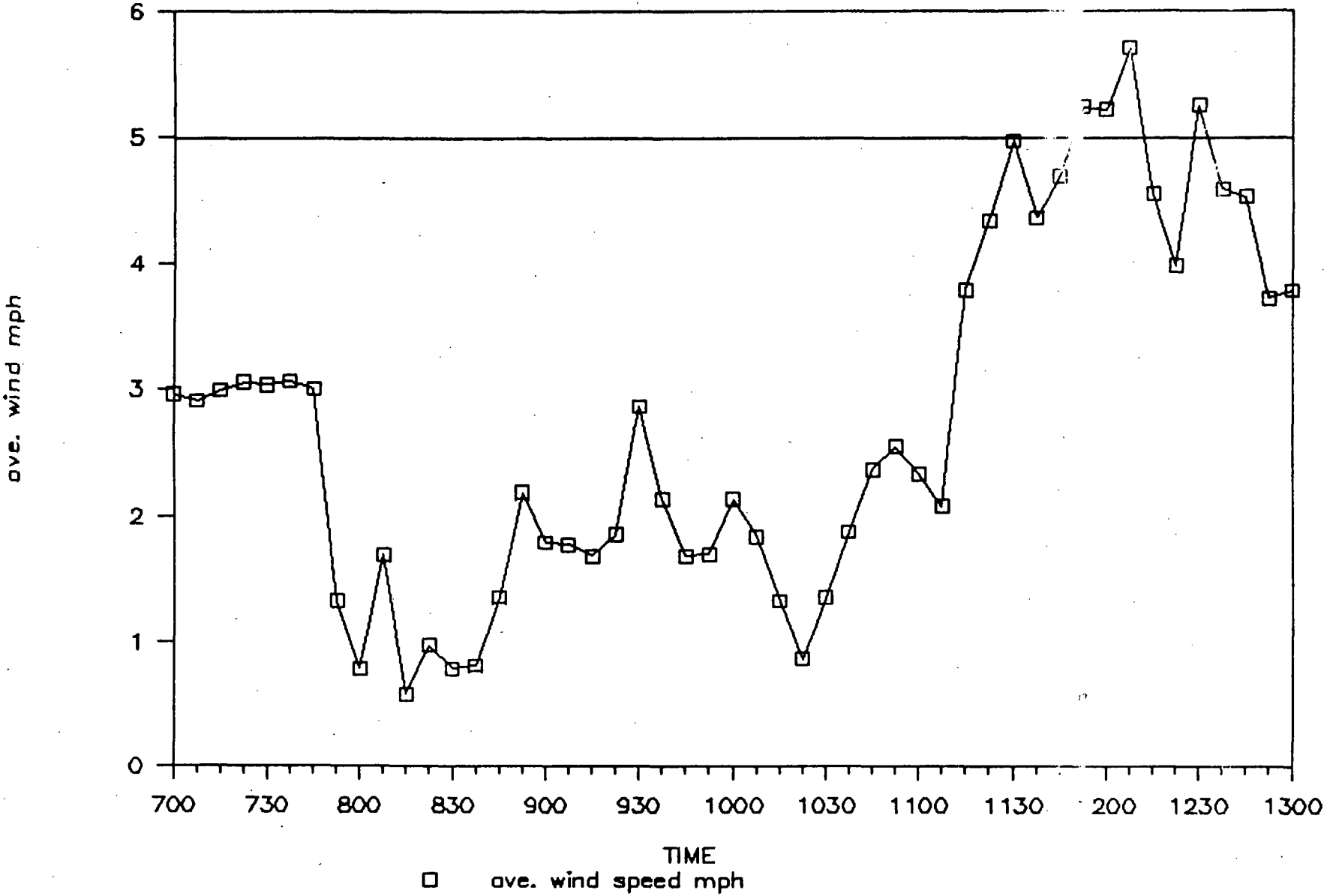
MEAN WIND SPEED — MAXIMUM WIND SPEED

MEAN WIND DIRECTION

NORTH ORIENTATION

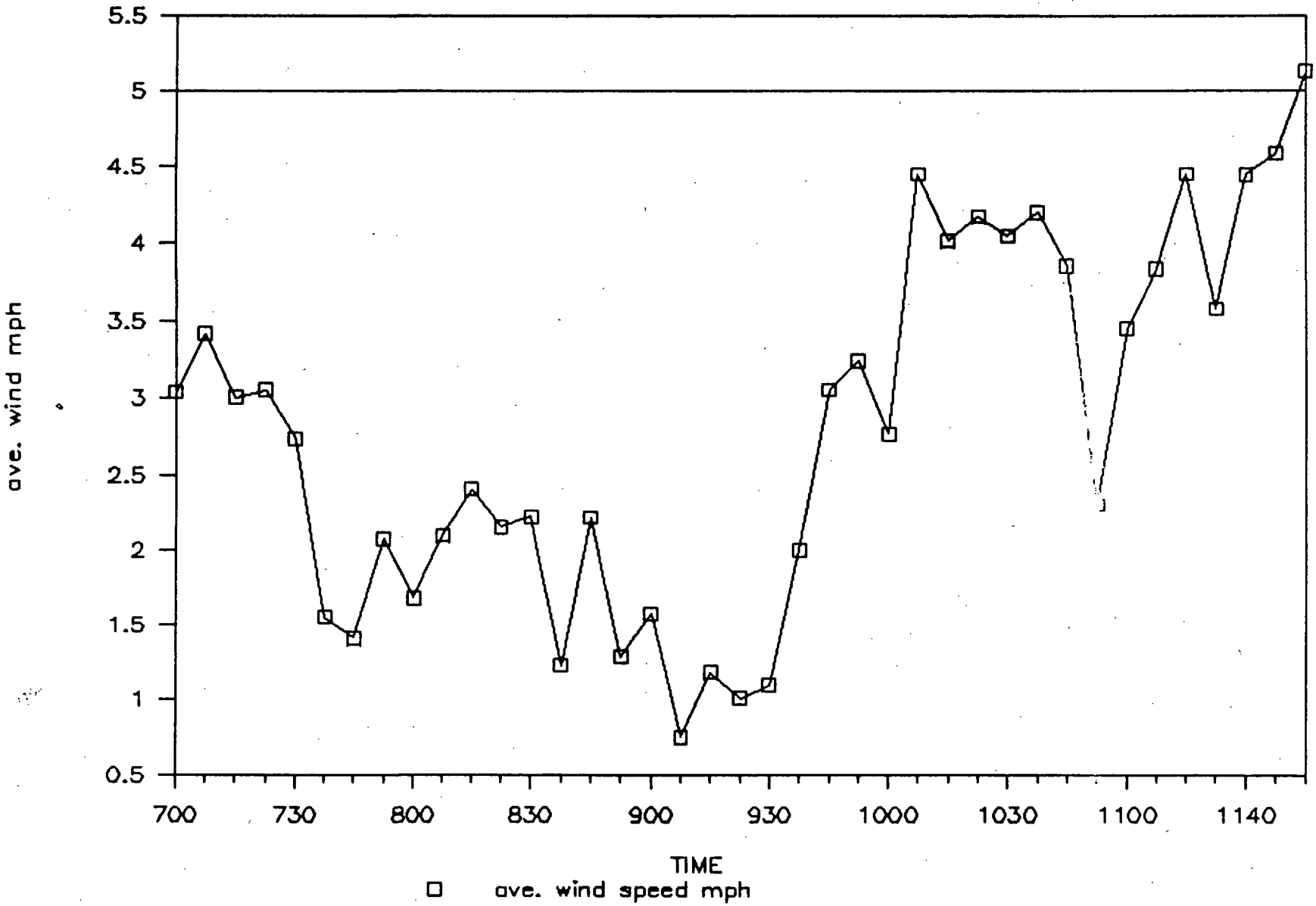
November 15, 1990

MEAN WIND SPEED INFORMATION



November 16, 1990

MEAN WIND SPEED INFORMATION



WIND MONITORING DATA

Date	Time	Mean	Dir.	Max.
11 15	1000	2.135	251	3.47
11 15	1010	1.324	276.5	2.208
11 15	1020	.855	241	2.103
11 15	1030	1.879	243.3	3.259
11 15	1040	2.37	246.1	3.995
11 15	1050	2.547	215.3	4.836
11 15	1100	2.077	207.3	4.626
11 15	1110	3.797	190.5	5.572
11 15	1120	4.347	206.2	7.25
11 15	1130	4.973	193.9	8.62
11 15	1140	4.704	184.7	7.99
11 15	1150	5.24	188.7	8.52
11 15	1200	5.699	179.9	9.15
11 15	1210	4.56	162.4	8.2
11 15	1220	3.989	145.7	6.414
11 15	1230	5.251	177.4	7.57
11 15	1240	4.537	180.8	8.1
11 15	1250	3.724	177.5	6.834
11 15	1300	3.096	198.2	5.888
11 15	1310	3.422	216.6	6.414
11 15	1320	2.3	210.8	4.731
11 15	1330	2.733	201	5.993
11 15	1340	2.153	169.1	5.152
11 15	1350	3.387	185.3	5.572
11 15	1400	2.475	223.3	5.783
11 15	1410	2.673	203.2	4.521
11 15	1420	2.252	197.2	5.362
11 15	1430	1.799	171.5	3.89
11 15	1440	2.109	173.2	3.259
11 15	1450	2.68	185.4	5.467
11 15	1500	1.093	224.4	2.523
11 15	1510	1.351	265.2	3.259
11 15	1520	2.272	233.9	3.89
11 15	1530	1.599	202.7	3.47
11 15	1540	2.05	223.3	4.521
11 15	1550	.887	205.1	2.418
11 15	1600	.789	247.1	1.577
11 15	1610	1.154	206.6	2.103
11 15	1620	1.963	167.2	3.575
11 15	1630	1.411	154.6	2.628
11 15	1640	1.384	112.2	2.944
11 15	1650	3.208	127.1	4.942
11 15	1700	3.548	138.9	5.993
11 15	1710	2.766	133.7	5.257
11 15	1720	1.711	95.5	3.364
11 15	1730	1.675	50.9	2.418
11 15	1740	2.166	5.343	3.154
11 15	1750	2.912	11.05	3.575
11 15	1800	2.922	11.83	3.575
11 15	1810	2.938	21.21	3.785
11 15	1820	2.012	6.484	2.734
11 15	1830	2.065	2.09	2.944
11 15	1840	2.16	358.8	2.734
11 15	1850	2.231	4.679	2.628
11 15	1900	2.022	13.69	2.523
11 15	1910	2.687	15.36	3.575

11	15	1920	2.803	6.062	3.68
11	15	1930	2.964	4.851	3.68
11	15	1940	2.873	10.66	3.47
11	15	1950	2.503	7.65	3.154
11	15	2000	2.946	356.2	3.575
11	15	2010	3.203	2.249	3.89
11	15	2020	3.166	358.1	3.68
11	15	2030	3.257	354.5	4.311
11	15	2040	2.542	6.691	3.154
11	15	2050	1.864	37.43	2.523
11	15	2100	1.778	352.2	2.523
11	15	2110	1.655	353	2.523
11	15	2120	1.405	8.5	1.998
11	15	2130	1.722	9.15	2.313
11	15	2140	2.621	345.4	3.364
11	15	2150	1.717	334.8	2.418
11	15	2200	1.122	279	1.787
11	15	2210	.72	23.24	1.787
11	15	2220	.977	18.41	1.682
11	15	2230	1.154	7.27	1.682
11	15	2240	1.585	16.57	2.208
11	15	2250	1.662	14.61	1.998
11	15	2300	1.766	1.808	2.208
11	15	2310	2.151	5.813	2.944
11	15	2320	2.886	6.808	3.47
11	15	2330	2.745	359.5	3.259
11	15	2340	2.575	2.494	3.364
11	15	2350	3.204	358	3.89
11	16	0	3.128	5.036	3.785
11	16	10	2.812	22.71	3.68
11	16	20	1.441	46.45	2.523
11	16	30	1.776	69.17	3.049
11	16	40	1.553	27.63	2.418
11	16	50	2.535	13.12	3.364
11	16	100	3.092	16	3.68
11	16	110	3.247	357.7	3.68
11	16	120	3.234	350.9	4.206
11	16	130	3.301	356.7	3.995
11	16	140	2.984	1.647	3.995
11	16	150	3.051	354.2	3.47
11	16	200	3.381	.925	4.1
11	16	210	3.651	354.8	4.521
11	16	220	2.795	353	4.1
11	16	230	2.291	358.5	3.47
11	16	240	2.405	359	3.259
11	16	250	2.082	6.967	2.734
11	16	300	2.38	4.727	3.049
11	16	310	2.174	5.475	2.839
11	16	320	2.16	359.2	2.734
11	16	330	2.637	352.2	3.259
11	16	340	2.948	344.8	3.259
11	16	350	3.264	331.2	3.785
11	16	400	2.35	331.5	3.364
11	16	410	1.048	151.9	1.682
11	16	420	1.088	357.4	2.103
11	16	430	2.468	18.81	3.049
11	16	440	2.391	10.01	2.839
11	16	450	2.225	350.3	2.839
11	16	500	2.644	349.7	3.89
11	16	510	3.23	13.5	3.68
11	16	520	2.64	24.09	3.47

11	16	530	.855	169.1	1.893
11	16	540	.904	231.4	2.523
11	16	550	1.361	353	2.208
11	16	600	2.128	10.33	2.734
11	16	610	1.574	7.85	2.208
11	16	620	1.922	349.7	3.259
11	16	630	2.794	323.3	4.521
11	16	640	4.018	301.9	5.047
11	16	650	2.326	9.46	3.154
11	16	700	2.778	8.36	3.47
11	16	710	3.418	5.815	4.206
11	16	720	3.006	1.379	3.89
11	16	730	2.733	358.3	3.68
11	16	740	1.549	309.9	2.523
11	16	750	1.411	1.92	1.998
11	16	800	2.071	4.65	2.523
11	16	810	2.092	357.6	3.154
11	16	820	2.401	.721	3.049
11	16	830	2.146	15.62	3.259
11	16	840	1.222	315.9	2.523
11	16	850	2.209	267.5	3.364
11	16	900	1.282	261.9	2.208
11	16	910	.748	16.41	1.367
11	16	920	1.174	261.2	1.787
11	16	930	1.086	170.4	1.998
11	16	940	1.995	187.2	3.785
11	16	950	3.051	195.2	4.416
11	16	1000	3.238	179.4	4.521

APPENDIX D

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS, AND QA/QC SUMMARY

APPENDIX E

WEEKLY PROBE READINGS

GAS PROBE READINGS

9227 Tujunga Avenue
Sun Valley, CA 91352
(818) 767-618

EQUIPMENT USED

MAKE ____ MAKE NP204

MODEL 20M MODEL 203

CALIBRATION: DIGIFLAM ____

GASTECH 9/4/91

FID ____

BY: ROD COLLINS
ERNIE DRAGAN

DATE: ____ TIME: ____

BRADELY WEST BAROMETER: ____

PROBE	CH4%	PRESS	WELL #	N2/O2	CH4	PH	PW	D/P	CFM	TIME (MIN)
M-1	4%	+.12								9
M-2										2
M-2A	DECOMMISSIONED PROBE									4 sec
M-3	0%	±0.0								6
M-4	0%	+0.04								2
M-5	0%	+.03								2
M-6	20%	+.04								2
M-7	0	-.05								10
M-8	43%	+.03								2
M-9	34%	+0.06								2
M-10	0.5%	+0.02								10
M-11	0%	±0.0								2
M-12	0%	+0.04								2
M-13	BROKEN COUPLING									6
M-14	0%	±0.0								2

COMMENTS:

GAS PROBE READINGS

9227 Tujunga Avenue
Sun Valley, CA 91352
(818) 767-618

EQUIPMENT USED

MAKE GASTECH MAKE NP204

MODEL PDM- MODEL-2025

CALIBRATION: DIGIFLAM

GASTECH 9/4/90

FID

BY: E DRAGAN
R CALLINS

DATE: 9/4/90 TIME: 14:00

BRADELY EAST BAROMETER: ------

PROBE	CH4%	PRESS	WELL #	N2/O2	CH4	PH	PW	D/P	CFM	TIME (SEC)
E-1	25%	+0.04								4
E-2S	1.5% ~~SUBMOR~~	—								4
E-2M	0	—								16
E-2D	0	—								28
E-3	0	±0.0								4
E-4	0	+0.03								4
E-5S	0	+0.02								4
E-5M	0	+0.04								4
E-5D	0	+0.06								16
E-6	0	-0.02								32
E-7	0	-0.03								4
E-8S	0	0								4
E-8M	0	-0.01								4
E-8D	1%	+0.05								16
E-9	0% ENCASED IN	—	CLAY/MUD							32
E-10	.5%	+0.03								4
E-11S	15%	+0.03								4
E-11M	0%	-.05								4
E-11D	0%	+.02								32
E-12	0%	-0.02								4
E-13	0%	-0.03								4
E-14S	0%	±0.0								4
E-14M	0%	0								12
E-14D	0%	-0.09								20

COMMENTS:

GAS PROBE READINGS

9227 Tujunga Avenue
Sun Valley, CA 91352
(818) 767-618

EQUIPMENT USE IN

MAKE GasTech MAKE PDM

MODEL NP204 MODEL 205

CALIBRATION: DIGIFLAM →

GASTECH 9/11/90

FID →

BY: E DRAGAN
R COLLINS

DATE: 9/11/90 TIME: 12:00

BRADELY EAST BAROMETER: 29.93

PROBE	CH4%	PRESS	WELL #	N2/O2	CH4	PH	PW	D/P	CFM	TIME (SEC)
E-1	0	-0.11								4
E-2S	0	-1.48								4
E-2M	0	-3.93	UNDER H_2O							16
E-2D	0	+.12								28
E-3	0	+0.07								4
E-4	7	+0.08								4
E-5S	0	+0.04								4
E-5M	0	+0.13								4
E-5D	0	+0.31								16
E-6	0	+0.14								32
E-7	0	+0.24	— MUD IN COUPLING							4
E-8S	5%	+0.11								4
E-8M	0	+0.14								4
E-8D	2	+0.38								16
E-9	H_2O IN PROBE READINGS N/A									32
E-10	3%	+0.05								4
[illegible]	18%	+0.06								4
E-11M	0	+0.21								4
E-11D	0	+0.06								32
E-12	0	+0.11								4
E-13	0	+0.08								4
E-14S	0	+0.07								4
E-14M	0	+0.06								12
E-14D	0	+0.21								20

GAS PROBE READINGS

227 (Tujunga Avenue
un Valley, CA 91352
(818) 767-618

EQUIPMENT USED

MAKE GASTECH MAKE PDM

MODEL NP204L MODEL 205

CALIBRATION: ~~DIGIFLAM~~

GASTECH 9/18/90

~~PID~~

Y: E. DRAGAN
R. COLLINS

DATE: 9/18/90 TIME: 14:00

BRADELY WEST BAROMETER: 29.95

PROBE	CH4%	PRESS	WELL #	N2/O2	CH4	PH	PW	D/P	CFM	TIME (MIN)
1	0	+0.12								9
2	N/A									2
2A	30%	+0.07								4 sec
3	0	+0.11								6
4	0	+0.05								2
5	0	+0.09								2
6	26%	+0.06								2
7	25%	+0.28								10
8	38%	+0.05								2
9	34%	+0.04								2
10	0	+0.10								10
11	0	+0.01								8
12	0	±0.0								2
13	0	+0.04								6
14	0	±0.0								2

COMMENTS:

GAS PROBE READINGS

9222 Tujunga Avenue
Sun Valley, CA 91352
(818) 767-618

EQUIPMENT USED:

MAKE GASTECH MAKE PDM

MODEL NP204 MODEL 205

CALIBRATION: ~~DIGIFLAM~~

GASTECH 9/18/90

~~FID~~

BY: ROD COLLINS
ERNIE DRAGAN

DATE: 9/18/90 TIME: 2:30

BRADELY EAST BAROMETER: 29.95

PROBE	CH4%	PRESS	WELL #	N2/O2	CH4	PH	PW	D/P	CFM	TIME (SEC)
E-1	0	-0.09								4
E-2S	0	+0.02								4
E-2M	0	+0.68								16
E-2D	0	-0.11								28
E-3	0	+0.02								4
E-4	0	+0.03								4
E-5S	0	+0.03								4
E-5M	0	+0.08								4
E-5D	0	+0.21								16
E-6	15%	+0.05								32
E-7	11%	+0.06								4
E-8S	0	+0.03								4
E-8M	0	+0.04								4
E-8D	2%	+0.37								16
E-9	0	—								32
E-10	8%	+0.04								4
E-11S	17%	+0.06								4
E-11M	0	+0.17								4
E-11D	0	+0.04								32
E-12	0	+0.08								4
E-13	0	+0.04								4
E-14S	0	+0.03								4
E-14M	0	+0.04								12
E-14D	0	+0.13								20

Valley Reclamation
9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

CALIBRATION: DIGIFLAM____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE_____MAKE_____
MODEL_____MODEL_____

BY: ROD COLLINS DATE: 9/24/90 TIME: 11:00

BRADLEY WEST BAROMETER 30.05

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	D/P	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
W-1	0	-0.07								
W-2	5%	+0.02								
W-3	0	+0.04								
W-4	0	+0.04								
V-5	0	+0.05								
W-6	24%	+0.04								
W-7	38%	+0.06								
W-8	38%	+0.07								
W-9	39%	+0.06								
W-10	1.5%	+0.07								
W-11	0%	0.00								
W-12	0%	+0.08								
W-13	0%	+0.03								
W-14	0%	+0.01								

COMMENTS:

* 5% at 2:30 pm.

Valle[illegible]ation
9227 Tuju[illegible]
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL NP204 MODEL 205

BY: ROD COLLINS DATE: 9/24/90 TIME: 11:00

BRADLEY WEST BAROMETER 30.05

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	D/P	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
E-1	0	-0.05								
E-2S	0	+1.67								
E-2M	0	+0.05								
E-2D	0	+0.27								
E-3	0	+0.07								
E-4	10%	+0.06								
E-5S	0	+0.06								
E-5M	0	+0.18								
E-5D	0	+0.44								
E-6	7%	+0.15								
E-7	15%	+0.17								
E-8S	0	+0.10								
E-8M	0	+0.15								
E-8D	0	+0.53								
E-9	0	0								
E-10	6%	+0.07								
E-11S	16%	-0.12								
E-11M	0	-0.12								
E-11D	0%	-0.27								
E-12	0	+0.13								
E-13	0	+0.10								
E-14S	0	+0.09								
E-14M	0	+0.06								
E-14D	0	+0.21								

COMMENTS:

Valley Reclamation
9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes . Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE Gastech MAKE PDM
MODEL NP204 MODEL 205

BY: ROD COLLINS DATE: 10/8/90 TIME: 1100

BRADLEY WEST BAROMETER 30.10

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
W-1	3%	-0.20								
W-2	0	-0.06								
W-3	0	-0.12								
W-4	0	-0.01								
W-5	2%	-0.01								
W-6	25%	+0.04								
W-7	0	-0.31								
W-8	55%	+0.07								
W-9	35%	0.00								
W-10	0	-0.20								
W-11	0	0.00								
W-12	0	+0.03								
W-13	0	+0.04								
W-14	0	+0.03								

COMMENTS:

Valley Reclamation
9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL NP204 MODEL 205

BY: ROD COLLINS DATE: 10/8/90 TIME: 1210

BRADLEY EAST BAROMETER 30-10

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
E-1	0	-0.06								
E-2S	0	+0.01								
E-2M	6%	+2.82								
E-2D	0	0.00								
E-3	0	+0.03								
E-4	0	0.80								
E-5S	0	+0.01								
E-5M	0	+0.05								
E-5D	0	-0.04								
E-6	0	+0.06								
* E-7	0	-0.03								
E-8S	0	+0.05								
E-8M	0	+0.04								
E-8D	0	+0.19								
* E-9	0	-0.03								
E-10	0	-0.01								
E-11S	0	+0.03								
E-11M	0	-0.03								
E-11D	0	-0.26								
E-12	0	0.00								
E-13	0	+0.02								
E-14S	0	-0.01								
E-14M	0	0.00								
E-14D	0	-0.30								

COMMENTS:

* denotes: submerged in water before monitoring

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BRADLEY LANDFILL
Gas Probes Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL MP204 MODEL 205

BY: ROD COLLINS DATE: 10/18/90 TIME: 1531

BRADLEY EAST BAROMETER 29.96

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
E-1	Ø	+0.02								
E-2S	Ø	+0.02								
E-2M	Ø	+0.00								
E-2D	Ø	+0.13								
E-3	Ø	0.00								
E-4	Ø	-0.02								
E-5S	Ø	-0.01								
E-5M	Ø	0.00								
E-5D	Ø	+0.16								
E-6	Ø	-0.02								
E-7	Ø	+0.01								
E-8S	Ø	+0.02								
E-8M	Ø	+0.02								
E-8D	4%	+0.40								
E-9	Ø	0.00								
E-10	Ø	+0.01								
E-11S	Ø	-0.01								
E-11M	Ø	-0.02								
E-11D	Ø	+0.22								
E-12	Ø	-0.03								
E-13	Ø	+0.02								
E-14S	Ø	-0.02								
E-14M	Ø	-0.03								
E-14D	Ø	+0.20								

COMMENTS:

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RADLEY LANDFILL
Gas Probes . Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL NP209 MODEL 205

BY: ROD COLLINS DATE: 10/18/90 TIME: 1430

BRADLEY WEST BAROMETER 29.96

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
W-1	24%	+0.30								
W-2	Ø	+0.04								
W-3	Ø	+0.20								
W-4	Ø	+0.10								
W-5	5%	+0.12								
W-6	25%	+0.07								
W-7	32%	+0.25								
W-8	54%	+0.08								
W-9	38%	+0.09								
W-10	14%	+0.25								
W-11	Ø	+0.02								
W-12	Ø	0.00								
W-13	Ø	+0.02								
W-14	Ø	0.00								

COMMENTS:

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RADLEY LANDFILL
Gas Probes Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL NP204 MODEL 205

BY: Rod Collins DATE: 10/25/90 TIME: 1100

BRADLEY EAST BAROMETER 30.05

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
E-1	Ø	+0.06								
E-2S	Ø	+0.04								
E-2M	Ø	+0.43								
E-2D	Ø	+0.20								
E-3	Ø	+0.05								
E-4	Ø	+0.06								
E-5S	Ø	+0.04								
E-5M	Ø	+0.13								
E-5D	Ø	+0.18								
E-6	Ø	+0.10								
E-7	Ø	+0.08								
E-8S	Ø	+0.01								
E-8M	Ø	+0.06								
E-8D	3.5%	-0.01								
E-9	Ø	+0.03								
E-10	Ø	+0.02								
E-11S	Ø	+0.01								
E-11M	Ø	+0.02								
E-11D	Ø	-0.12								
E-12	Ø	+0.02								
E-13	Ø	+0.02								
E-14S	Ø	0.00								
E-14M	Ø	-0.01								
E-14D	Ø	-0.23								

COMMENTS:

Valley Reclamation
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RADLEY LANDFILL
Gas Probes . Readings

CALIF TION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL NP 204 MODEL 205

BY: Rod Collins DATE: 10/25/90 TIME: 1530

BRADLEY WEST BAROMETER 30.05

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
W-1	3%	+0.16								
W-2	Ø	+0.04								
W-3	Ø	+0.10								
W-4	Ø	+0.05								
W-5	4%	+0.04								
W-6	34%	+0.04								
W-7	44%	+0.								
W-8	72%	+0.05								
W-9	75%	+0.05								
W-10	2%	+0.12								
W-11	Ø	+0.01								
W-12	Ø	0.00								
W-13	Ø	0.00								
W-14	Ø	0.00								

COMMENTS:

* ~~Bee tox spraying near probe~~

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BRADLEY LANDFILL
Gas Probes . Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL NP204 MODEL 205

BY: Dod Collins DATE: 11/5/90 TIME: 1530

BRADLEY WEST BAROMETER 29.97

PROBE	CH4%	PRESS	WELL#	PH (°wc)	PW (°wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW (°wc)
W-1	75%	+0.44								
W-2	48%	+0.10								
W-3	11%	+0.19								
W-4	0	+0.01								
W-5	1%	+0.09								
W-6	49%	+0.08								
W-7	54%	+0.70								
W-8	70%	+0.02								
W-9	70%	+0.08								
W-10	33%	+0.36								
W-11	0	+0.01								
W-12	0	+0.02								
W-13	0	0.00								
W-14	0	0.00								

OMMENTS: Deo-tec spraying in vicinity of probe

Audit

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BRADLEY LANDFILL
Gas Probes Readings

CALIBRATION: DIGIFLAM N/A
GASTECH Yes
FID ____

EQUIPMENT USED

MAKE [illegible] MAKE PDM
MODEL [illegible] MODEL 205

BY: E. DRAGAN DATE: 11/13/90 TIME: 11 30 AM

BRADLEY EAST BAROMETER 30.00

PROBE	CH4%	PRESS	WELL#	PH (°wc)	PW (°wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW (°wc)
E-1	0	+0.04								
E-2S	2.2	-0.02								
E-2M	0	+0.01								
E-2D	0	+0.23								
E-3	0	+0.03								
E-4	0	+0.03								
E-5S	0	-0.01								
E-5M	0	+0.02								
E-5D	0	+0.25								
E-6	0	-0.01								
E-7	0	-0.01								
E-8S	0	-0.01								
E-8M	0	-0.01								
E-8D	42%	+0.63								
E-9	0	±0.0								
E-10	0	+0.10								
E-11S	0	+0.14								
E-11M	0	+0.48								
E-11D	0	+0.18								
E-12	0	+0.24								
E-13	0	-0.13								
E-14S	0	+0.10								
E-14M	0	+0.09								
E-14D	0	+0.59								

COMMENTS:

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BRADLEY LANDFILL
Gas Probes . Readings

CALI TION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GASTECH MAKE FDM
MODEL IN P204 MODEL 30

BY: E. DRAGAN DATE: 11/13/90 TIME: 12.00 PM

BRADLEY WEST BAROMETER 30.00

PROBE	CH4%	PRESS	WELL#	PH (°wc)	PW (°wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW (°wc)
W-1	69	+0.27								
W-2	45	+0.08								
W-3	17	+0.13								
W-4	0	+0.06								
W-5	0.5	+0.04								
W-6	34	+0.04								
W-7	42	+0.34								
W-8	25	+0.03								
W-9	52	+0.03								
W-10	11	+0.16								
W-11	0	+0.01								
W-12	0	+0.01								
W-13	0	+0.01								
W-14	0	+0.01								

COMMENTS:

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BRADLEY LANDFILL
Gas Probe: Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL NP204 MODEL 205

BY: ROD COLLINS DATE: 11/20/90 TIME: 1600

BRADLEY EAST BAROMETER 29.92

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
E-1	2	-0.03								
E-2S	Ø	-0.03								
E-2M	Ø	+0.03								
E-2D	Ø	-0.22								
E-3	Ø	-0.08								
E-4	Ø	-0.05								
E-5S	Ø	-0.03								
E-5M	Ø	-0.08								
E-5D	Ø	-0.28								
* E-6	Ø	-0.39								
* E-7	Ø	-0.02								
E-8S	Ø	-0.22								
E-8M	Ø	-0.22								
E-8D	32	-0.34								
* E-9	Ø	+0.51								
E-10	Ø	-0.09								
E-11S	Ø	-0.18								
E-11M	Ø	-0.11								
E-11D	Ø	-0.29								
E-12	Ø	-0.11								
E-13	Ø	-0.07								
E-14S	Ø	-0.08								
E-14M	Ø	-0.06								
E-14D	Ø	-0.34								

COMMENTS: *Probes E-6, 7, & 9 were submerged in water before readings were taken

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Gas Probes Readings

EQUIPMENT USED

MAKE ~~Ga-Tech~~ MAKE PDM
MODEL ~~P204~~ MODEL 205

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

BY: ROD COLLINS DATE: 11/20/90 TIME: 1500

BRADLEY WEST BAROMETER 29.92

PROBE	CH4%	PRESS	WELL#	PH	PW	~~D/P~~ Gas Temp	CFM	N2/O2	CH4	WELL ADJ
W-1	30	-0.04								
	[redacted]	[redacted]								
W-2	46	-0.01								
W-3	16	-0.05								
W-4	Ø	0.00								
W-5	Ø	-0.10								
W-6	5	-0.04								
W-7	Ø	-0.29								
W-8	20	-0.13								
W-9	14	0.00								
W-10	4.5	-0.19								
W-11	Ø	0.00								
W-12	Ø	0.00								
W-13	Ø	0.00								
W-14	Ø	0.00								

COMMENTS:

	Calibration Gas	Actual Reading	Accuracy
Audit:	44 %	40	91 %
	2.5 %	2.5	100%

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BRADLEY LANDFILL
Gas Probes Readings

CAL. ATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE Gastech MAKE PDM
MODEL NP204 MODEL 205

BY: ROD COLLINS DATE: 11/26/90 TIME: 1410

BRADLEY EAST BAROMETER 29.92

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
E-1	Ø	-0.04								
E-2S	Ø	-0.06								
E-2M	Ø	-0.01								
E-2D	Ø	-0.01								
E-3	Ø	-0.03								
E-4	Ø	-0.10								
E-5S	Ø	-0.02								
E-5M	Ø	-0.10								
E-5D	Ø	-0.02								
E-6	Ø	-0.22								
E-7	Ø	-0.36								
E-8S	Ø	-0.20								
E-8M	Ø	-0.83								
E-8D	Ø	-0.33								
E-9	Ø	-0.01								
E-10	Ø	-0.05								
E-11S	Ø	-0.25								
E-11M	Ø	-0.08								
E-11D	Ø	-0.33								
E-12	Ø	-0.02								
E-13	Ø	-0.02								
E-14S	Ø	+0.02								
E-14M	Ø	+0.03								
E-14D	Ø	-0.15								

COMMENTS:

	Calibration Gas	Actual Reading	Accuracy
Audit	2.5 %	1.5 %	60 %
	44 %	42 %	96 %

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EQUIPMENT USED

MAKE Gastech MAKE PDM
MODEL NR204 MODEL 205

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

BY: Rod Collins DATE: 11/26/90 TIME: 1315

BRADLEY WEST BAROMETER 29.92

PROBE	CH4%	PRESS	WELL#	PH	PW	GAS TEMP	CFM	N2/O2	CH4	WELL ADJ
W-1	25	-0.02								
W-2	42	+0.01								
W-3	2	-0.03								
W-4	0	-0.04								
W-5	0	-0.03								
W-6	2.5	-0.04								
W-7	0	-0.22								
W-8	1	+0.05								
W-9	20	-0.03								
W-10	2	-0.15								
W-11	Ø	+0.00								
W-12	Ø	+0.01								
W-13	Ø	0.00								
W-14	Ø	+0.02								

COMMENTS:

Well Being Drilled	Well Shut Down	Effected Probe(s)
40	40, 42, 59	W-1

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EQUIPMENT USED

MAKE Gastech MAKE PDM
MODEL 1820 MODEL 205

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

BY: Don Collins DATE: 12/3/90 TIME: 0930

BRADLEY WEST BAROMETER 30.26

PROBE	CH4%	PRESS	WELL#	PH	PW	GAS TEMP	CFM	N2/O2	CH4	WELL ADJ
W-1	Ø	-0.16								
W-2	1	-0.05								
W-3	Ø	-0.09								
W-4	Ø	-0.05								
W-5	Ø	-0.03								
W-6	Ø	-0.02								
W-7	Ø	-0.28								
W-8	Ø	0.00								
W-9	2	0.00								
W-10	Ø	-0.21								
W-11	Ø	0.00								
W-12	Ø	0.00								
W-13	Ø	0.00								
W-14	Ø	0.00								

COMMENTS:

	Calibration Gas %	Audit Reading %	Accuracy
Field Audit:	2.5	2.5	100%
	44	50	88%

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BRADLEY LANDFILL
Gas Probes Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL NP204 MODEL 205

BY: ROD COLLINS DATE: 12/3/90 TIME: 1020

BRADLEY EAST BAROMETER 30.26

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
E-1	Ø	-0.26								
E-2S	Ø	+0.06								
E-2M	Ø	0.00								
E-2D	Ø	+0.19								
E-3	Ø	+0.11								
E-4	Ø	+0.08								
E-5S	Ø	+-0.01								
E-5M	Ø	+0.01								
E-5D	Ø	+0.09								
E-6	Ø	+0.07								
E-7	Ø	+0.04								
E-8S	Ø	+0.09								
E-8M	Ø	+0.14								
E-8D	28	-0.05								
E-9	Ø	0.00								
E-10	Ø	+0.04								
E-11S	Ø	+0.04								
E-11M	Ø	+0.05								
E-11D	Ø	-0.32								
E-12	Ø	+0.04								
E-13	Ø	+0.04								
E-14S	Ø	+0.03								
E-14M	Ø	+0.03								
E-14D	Ø	-0.24								

COMMENTS:

AMBIENT AIR

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS, AND QA/QC SUMMARY FOR THE MONTH OF SEPTEMBER

SEPTEMBER AMBIENT AIR SAMPLE SUMMARY

Sample Location	Sample Identification
Upwind 24-Hour	Sample I.D. No. 14001
Upwind less than 24-Hour	Sample I.D. No. 14006
Downwind 24-Hour	Sample I.D. No. 14005
Downwind less than 24-Hour	Sample I.D. No. 14002
Duplicate Downwind <24 Hour	Sample I.D. No. 14004

Atmosphere Assessment Associates
21354 Nordhoff St., Suite 113, Chatsworth, CA 91311 (818) 718-6070

environmental consultants
laboratory services

September 21, 1990

LTR/250/90
2902

Mike Geyer
SCS Engineers
3711 Long Beach Blvd.
9th Floor
Long Beach, CA 90807-3315

re: P.O. #01-1919

Dear Mike:

Please find enclosed the laboratory analysis report, quality assurance summary, and the original COC form for six ambient air samples and two integrated surface samples received on September 11, 1990 from the Bradley Landfill.

The samples were analyzed within the required holding time for 1150.1 toxic components, methane and total volatile non-methane hydrocarbons (NMHC).

Sincerely,

Atmosphere Assessment Associates

Michael L. Porter
Laboratory Director

Encl.
MLP/kp

Atmosphere Assessment Associates
21354 Nordhoff St., Suite 113, Chatsworth, CA 91311 (818) 718-6070

environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air & Integrated Surface Samples

P.O. No.: 01-1919
Project No.: 189091.03
Site : Bradley Landfill
Date Received : September 11, 1990
Date Analyzed : September 11, & 12, 1990

AAA Lab No.:	92540-1	92540-2	92540-3
Sample I.D. No.:	14001	14002	14004
	SE, 24	SE, <24	SE <24
Component	(Concentration in ppm, v/v)		
Methane	1.95	2.55	2.71
NMHC	<1	1.60	4.28
Total Hydrocarbon	1.95	4.15	6.99
Component	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	2.34	2.88	3.26
Benzyl chloride	<0.08	<0.08	<0.08
Chlorobenzene	<0.1	0.15	<0.1
Dichlorobenzene*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	0.14	0.14	0.15
Dichloromethane	1.12	1.82	1.85
Perchloroethene	0.60	0.90	0.91
Carbon Tetrachloride	0.10	0.10	0.10
Toluene	9.98	15.0	10.6
1,1,1-trichloroethane	7.03	7.93	7.80
Trichloroethene	0.26	0.38	0.27
Chloroform	<0.08	<0.08	<0.08
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	3.28	4.15	4.33
o-xylenes	2.52	2.76	2.91

* total amount containing meta, para & ortho isomers

NMHC is total volatile non-methane hydrocarbons as methane

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air & Integrated Surface Samples

P.O. No.: 01-1919
Project No.: 189091.03
Site : Bradley Landfill
Date Received : September 11, 1990
Date Analyzed : September 11, & 12, 1990

AAA Lab No.:	92540-4	92540-5	92540-6
Sample I.D. No.:	14005	14006	14007
	NW, 24	NW, <24	ISS
Component	(Concentration in ppm, v/v)		
Methane	2.19	1.70	2.66
NMHC	3.63	6.23	2.76
Total Hydrocarbon	5.82	7.93	5.32
Component	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	2.30	1.92	7.58
Benzyl chloride	<0.08	<0.08	<0.08
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	0.32
Dichloromethane	1.25	1.73	3.05
Perchloroethene	0.57	0.44	2.60
Carbon Tetrachloride	0.10	0.90	0.12
Toluene	8.16	9.89	15.6
1,1,1-trichloroethane	6.74	6.52	24.7
Trichloroethene	0.29	0.28	0.17
Chloroform	<0.08	<0.08	0.083
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	2.62	3.13	8.14
o-xylenes	2.09	1.35	6.48

* total amount containing meta, para & ortho isomers

NMHC is total volatile non-methane hydrocarbons as methane

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air & Integrated Surface Samples

P.O. No.:	01-1919
Project No.:	189091.03
Site :	Bradley Landfill
Date Received :	September 11, 1990
Date Analyzed :	September 11, & 12, 1990

AAA Lab No.:	92540-7	92540-8
Sample I.D. No.:	14008	14009
	ISS	Blank

Component	(Concentration in ppm, v/v)	
Methane	2.76	<1
NMHC	8.75	<1
Total Hydrocarbon	11.41	2.76

Component	(Concentration in ppb, v/v)	
Acetonitrile	<0.8	<0.8
Benzene	7.04	0.15
Benzyl chloride	<0.08	<0.08
Chlorobenzene	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2
1,1-dichloroethylene	0.26	<0.1
Dichloromethane	3.08	0.52
Perchloroethene	3.10	0.24
Carbon Tetrachloride	0.12	<0.06
Toluene	16.4	3.14
1,1,1-trichloroethane	25.2	0.57
Trichloroethene	0.20	0.23
Chloroform	0.13	<0.08
Vinyl chloride	<0.1	<0.1
m+p-xylenes	8.04	0.63
o-xylenes	7.19	1.03

* total amount containing meta, para & ortho isomers

NMHC is total volatile non-methane hydrocarbons as methane

Michael L. Porter
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. #: 01-1919
AAA Project #: 2902
Client Project #: 189091.03
Site: Bradley Landfill

Ambient Air & Integrated Surface Samples

Date Received: September 11, 1990
Date Analyzed: September 11, & 12, 1990

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Methane	14009	<1	<1	---	---
NMHC	14004	4.06	4.50	4.28	5.1
		(Concentration in ppb, v/v)			
Acetonitrile	14001	<0.8	<0.8	---	---
	14007	<0.8	<0.8	---	---
Benzene	14001	2.34	2.31	2.32	0.64
	14008	7.04	7.25	7.14	1.5
Benzyl chloride	14008	<0.08	<0.08	---	---
Chlorobenzene	14001	<0.1	<0.1	---	---
	14008	<0.1	<0.1	---	---
Dichlorobenzenes*	14008	<1.1	<1.1	---	---
1,1-dichloroethane	14004	<0.4	<0.4	---	---
1,2-dichloroethane	14004	<0.2	<0.2	---	---
1,1-dichloro-ethylene	14004	0.15	0.15	0.15	0.0
Dichloromethane	14008	3.20	2.97	3.08	3.7

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Perchloroethene	14008	3.05	3.15	3.10	1.6
Carbon Tetrachloride	14008	0.12	0.12	0.12	0.0
Toluene	14001	9.98	10.2	10.1	1.1
	14008	16.6	16.1	16.4	1.5
1,1,1-trichloro-ethane	14008	25.0	25.3	25.2	0.60
Trichloroethene	14008	0.20	0.19	0.20	2.6
Chloroform	14008	0.14	0.12	0.13	7.7
Vinyl chloride	14004	<0.1	<0.1	---	---
m&p-xylene	14001	3.17	3.40	3.28	3.5
	14008	7.97	8.10	8.04	0.81
o-xylene	14001	2.32	2.73	2.52	8.1
	14008	7.16	7.22	7.19	0.42

A set of 8 samples, laboratory numbers 92540-(1-8) was analyzed for 1150.1 components, methane, and total volatile non-methane hydrocarbons. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AAA's quality assurance program. The average % Difference from Mean for 16 duplicate measurements from the sample set of 6 ambient air and 2 integrated surface samples is 2.4%.

CHAIN OF CUSTODY RECORD

SCS ENGINEERS
Environmental Engineers
3711 Long Beach Blvd
Ninth Floor
Long Beach, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL

Sampler (Signature) [illegible]

Phone

Field Crew Supervisor

Field Company SCS Engineers

Project Geologist/Engineer M. Geyer

SITE INFORMATION

Job Name Bradley Landfill

Job Number 189098.03

Sample Location Bradley Landfill
Sun Valley, CA

P.O. Number

Relinquished by (Signature)	Received by (Signature)	Date	Time
[illegible]	[illegible]	9/11/90	11:30 pm
Relinquished by (Signature)	Received by (Signature)	Date	Time

Analysis laboratory should complete "sample cond. upon receipt" section below, sign, and return copy to Shipper

Sample Number	Sample Type	No. of Cont.	Site Identification	Date Sampled	Analysis Requested	Sample Cond. Upon Receipt
14001	Air	1	SE-24	9/10	Toxic Core Group	
14002	Air	1	SE-<24	9/10	(w/o H_2S) and	
14004	Air	1	SE-<24	9/10	Total Non-Methane	
14005	Air	1	NW-24	9/10	Organics	
14006	Air	1	NW-<24	9/10		
14007	Air	1	ISS	9/10		
14008	Air	1	ISS	9/10		
14009	Air	1	BLANK	9/10		

Remarks:

AMBIENT AIR

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS, AND QA/QC SUMMARY FOR THE MONTH OF OCTOBER

OCTOBER AMBIENT AIR SAMPLE SUMMARY

Sample Location	Sample Identification
Upwind 24-Hour	Sample I.D. No. 1403
Upwind less than 24-Hour	Sample I.D. No. 1406
Downwind 24-Hour	Sample I.D. No. 1407
Downwind less than 24-Hour	Sample I.D. No. 1404
Duplicate Downwind <24 Hour	Sample I.D. No. 1401

21354 Nordhoff St., Suite 113, Chatsworth, CA 91311 (818) 718-6070 • FAX (818) 718-9779

environmental consultants
laboratory services

October 22, 1990

LTR/281/90
2902

Mike Geyer
SCS Engineers
3711 Long Beach Blvd.
9th Floor
Long Beach, CA 90807-3315

re: P.O. #01-2073

Dear Mike:

Please find enclosed the laboratory analysis report, quality assurance summary, and the original COC form for six ambient air samples and two integrated surface samples received on October 16, 1990, from the Bradley Landfill.

The samples were analyzed within the required holding time for 1150.1 toxic components, methane and total volatile non-methane hydrocarbons (NMHC).

Sincerely,

AtmAA, Inc.

Michael L. Porter
Laboratory Director

Encl.
MLP/kp

21354 Nordhoff St., Suite 113, Chatsworth, CA 91311 (818) 718-6070 • FAX (818) 718-9779

environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants Analysis
in Ambient Air & Integrated Surface Samples

Report Date :	October 22, 1990
P.O. No.:	01-2073
Project No.:	0189091-03
Site :	Bradley Landfill
Date Received :	October 16, 1990
Date Analyzed :	October 16 & 17, 1990

AtmAA Lab No.:	92890-6	92890-7	92890-8
Sample I.D. No.:	1403	1404	1407
	SE 24	Down-L24	NW 24
Component	(Concentration in ppm, v/v)		
Methane	1.21	1.48	1.53
NMHC	1.18	2.20	2.14
Total Hydrocarbon	2.39	3.68	3.67
Component	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	4.39	5.58	3.75
Benzyl chloride	<0.8	<0.8	<0.8
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	<0.1
Dichloromethane	1.64	1.36	1.97
Perchloroethene	0.94	0.67	0.89
Carbon Tetrachloride	0.10	0.10	0.10
Toluene	9.58	13.2	9.32
1,1,1-trichloroethane	5.86	2.72	6.72
Trichloroethene	[illegible]	[illegible]	0.49
Chloroform	<0.08	<0.08	<0.08
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	5.81	9.93	5.03
o-xylenes	3.40	4.75	3.29

* total amount containing meta, para & ortho isomers
NMHC is total volatile non-methane hydrocarbons as methane

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants Analysis
in Ambient Air & Integrated Surface Samples

Report Date :	October 22, 1990
P.O. No.:	01-2073
Project No.:	0189091-03
Site :	Bradley Landfill
Date Received :	October 16, 1990
Date Analyzed :	October 16 & 17, 1990

AtmAA Lab No.:	92890-9	92890-10	92890-11
Sample I.D. No.:	1401	1406	19083
	Down-L24	UP-L24	ISS #1
Component	(Concentration in ppm, v/v)		
Methane	1.58	1.55	1.32
NMHC	1.50	<1	2.97
Total Hydrocarbon	3.08	1.55	4.29
Component	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	6.80	4.03	4.65
Benzyl chloride	<0.8	<0.8	<0.8
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	<0.1
Dichloromethane	1.27	1.35	8.13
Perchloroethene	0.67	0.78	2.42
Carbon Tetrachloride	0.12	0.11	0.10
Toluene	16.0	9.31	12.1
1,1,1-trichloroethane	2.07	3.36	10.4
Trichloroethene	0.15	[illegible]	0.24
Chloroform	<0.08	<0.08	0.09
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	12.2	5.96	7.21
o-xylenes	5.72	2.82	4.37

* total amount containing meta, para & ortho isomers
NMHC is total volatile non-methane hydrocarbons as methane

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants Analysis
in Ambient Air & Integrated Surface Samples

Report Date :	October 22, 1990
P.O. No.:	01-2073
Project No.:	0189091-03
Site :	Bradley Landfill
Date Received :	October 16, 1990
Date Analyzed :	October 16 & 17, 19990

AtmAA Lab No.:	92890-12	92890-13
Sample I.D. No.:	19084	19171
	ISS #4	Blank
Component	(Concentration in ppm, v/v)	
Methane	1.65	<1
NMHC	1.67	1.61
Total Hydrocarbon	3.32	1.61
Component	(Concentration in ppb, v/v)	
Acetonitrile	<0.8	<0.8
Benzene	4.99	0.36
Benzyl chloride	<0.8	<0.8
Chlorobenzene	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1
Dichloromethane	9.86	5.17
Perchloroethene	2.61	1.37
Carbon Tetrachloride	0.10	<0.06
Toluene	13.6	5.05
1,1,1-trichloroethane	9.45	0 32
Trichloroethene	0.19	<0 06
Chloroform	0.08	<0.08
Vinyl chloride	<0.1	<0.1
m+p-xylenes	7.28	3.02
o-xylenes	1.74	2.32

* total amount containing meta, para & ortho isomers
NMHC is total volatile non-methane hydrocarbons as methane

Michael L. Porter
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. #: 01-2073
AtmAA Project #: 2902
Client Project #: 0189091-03
Site: Bradley Landfill

Ambient Air & Integrated Surface Samples

Date Received: October 16, 1990
Date Analyzed: October 16 & 17, 1990

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Methane	1407	1.50	1.56	1.53	2.0
NMHC	1407	2.31	1.98	2.14	7.7
		(Concentration in ppb, v/v)			
Acetonitrile	19084	<0.8	<0.8	---	---
Benzene	1401	6.85	6.75	6.80	0.74
Benzyl chloride	1404	<0.8	<0.8	---	---
Chlorobenzene	1401	<0.1	<0.1	---	---
Dichlorobenzenes*	1404	<0.1	<0.1	---	---
1,1-dichloroethane	19171	<0.4	<0.4	---	---
1,2-dichloroethane	19171	<0.2	<0.2	---	---
1,1-dichloro-ethylene	19171	<0.1	<0.1	---	---
Dichloromethane	1407	1.96	1.98	1.97	0.51
	19084	10.1	9.62	9.86	2.4
Perchloroethene	19083	2.49	2.34	2.42	3.1
Carbon Tetrachloride	19083	0.10	0.091	0.10	5.3

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Toluene	1401	16.1	16.0	16.0	0.31
1,1,1-trichloro-ethane	19083	10.4	10.4	10.4	0.0
Trichloroethene	19083	0.23	0.25	0.24	4.2
Chloroform	19083	0.10	0.08	0.08	11
Vinyl chloride	19171	<0.1	<0.1	---	---
m&p-xylene	1401	12.2	12.2	12.2	0.0
o-xylene	1401	5.46	5.99	5.72	4.6

A set of 8 samples, laboratory numbers 92890-(6-13) was analyzed for Calderon components. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 13 duplicate measurements from the sample set of 8 ambient air and integrated surface samples is 2.4%.

CHAIN OF CUSTODY RECORD

SCS ENGINEERS
Environmental Engineers
3711 Long Beach Blvd
Tenth Floor
Long Beach, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL

Sampler (Signature) Patrick L. Sullivan
Phone (213) 426-9544

Field Crew Supervisor Pat Sullivan
Field Company SCS
Project Geologist/Engineer Mike Geyer

SITE INFORMATION

Job Name Bradley
Job Number 0159091-03
Sample Location Sun Valley, CA

P.O. Number Please call Mike Geyer for P.O.#

Relinquished by (Signature)	Received by (Signature)	Date	Time
Patrick L. Sullivan	Karen Porter	10/16/90	1:30
Relinquished by (Signature)	Received by (Signature)	Date	Time

Analysis laboratory should complete "sample cond. upon receipt" section below, sign, and return copy to Shipper

Sample Number	Sample Type	No. of Cont.	Site Identification	Date Sampled	Analysis Requested	Sample Cond. Upon Receipt
1403	Air	1	SE 24	10-16-90	see	
1404	↓	↓	Down-L24	↓	below	
1407	↓	↓	NW 24	↓	↓	
1401	↓	↓	Down-L24	↓	↓	
1406	↓	↓	Up-L24	↓	↓	
19083	↓	↓	ISS #1	↓	↓	
14084	↓	↓	ISS #4	↓	↓	
19171	↓	↓	Blank	↓	↓	

Remarks: (1) Total Organics as Methane (2) Total Non-Methane Organics (3) Toxic Core Group (no hydrogen sulfide) - Rule 1150.1

AMBIENT AIR

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS AND QA/QC SUMMARY FOR THE MONTH OF NOVEMBER

NOVEMBER AMBIENT AIR SAMPLE SUMMARY

Sample Location	Sample Identification
Upwind 24-Hour	Sample I.D. No. VRAA006
Upwind less than 24-Hour	Sample I.D. No. VRAA010
Downwind 24-Hour	Sample I.D. No. VRAA007
Downwind less than 24-Hour	Sample I.D. No. VRAA008
Duplicate Downwind <24 Hour	Sample I.D. No. VRAA009

AtmAA
21354 Nordhoff St., Suite 113, Chatsworth, CA 91311 (818) 718-6070 • FAX (818) 718-9779
environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air Samples

Report Date : November 20, 1990
P.O. No.: V6482
Project No.: None Given
Site : Valley Reclamation
Date Received : November 16, 1990
Date Analyzed : November 17, 1990

AtmAA Lab No.:	93200-38	93200-39	93200-40
Sample I.D. No.:	VRAA006	VRAA007	VRAA008
Component	(Concentration in ppm, v/v)		
Methane	2.61	2.08	2.92
TGNMO	6.20	4.42	4.74
Component	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	5.48	5.15	3.23
Benzyl chloride	<0.8	<0.8	<0.8
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	<0.1
Dichloromethane	2.22	2.58	1.46
Perchloroethene	1.13	0.85	0.63
Carbon Tetrachloride	0.12	0.12	0.12
Toluene	11.5	11.8	7.06
1,1,1-trichloroethane	10.6	17.5	4.10
Trichloroethene	0.14	0.14	0.072
Chloroform	<0.08	<0.08	<0.08
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	7.31	7.14	5.54
o-xylenes	4.71	9.44	3.09

* total amount containing meta, para & ortho isomers

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air Samples

Report Date :	November 20, 1990
P.O. No.:	V6482
Project No.:	None Given
Site :	Valley Reclamation
Date Received :	November 16, 1990
Date Analyzed :	November 17, 1990

AtmAA Lab No.:	93200-41	93200-42
Sample I.D. No.:	VRAA009	VRAA0010
Component	(Concentration in ppm, v/v)	
Methane	13.4	2.32
TGNMO	3.83	2.80
Component	(Concentration in ppb, v/v)	
Acetonitrile	<0.8	<0.8
Benzene	3.26	2.36
Benzyl chloride	<0.8	<0.8
Chlorobenzene	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1
Dichloromethane	1.53	1.38
Perchloroethene	0.67	0.43
Carbon Tetrachloride	0.11	0.11
Toluene	7.22	5.60
1,1,1-trichloroethane	4.03	11.5
Trichloroethene	0.11	0.11
Chloroform	<0.08	<0.08
Vinyl chloride	<0.1	<0.1
m,p-xylenes	5.50	3.83
o-xylenes	3.59	2.50

* total amount containing meta, para & ortho isomers

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. No.: V6482
AtmAA Project No.: 8000
Client Project No.: None Given
Site: Valley Reclamation

Ambient Air & Integrated Surface Samples

Date Received: November 16, 1990
Date Analyzed: November 17, 1990

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Methane	VRAA007	2.15	2.00	2.08	3.6
TGNMO	VRAA007	4.50	4.34	4.42	1.8
		(Concentration in ppb, v/v)			
Acetonitrile	VRAA007	<0.8	<0.8	---	---
Benzene	VRISS002	11.2	11.2	11.2	0.0
Benzyl chloride	VRAA009	<0.8	<0.8	---	---
Chlorobenzene	VRISS002	<0.1	<0.1	---	---
Dichlorobenzenes*	VRAA009	<1.1	<1.1	---	---
1,1-dichloro-ethane	VRAA006	<0.4	<0.4	---	---
1,2-dichloro-ethane	VRAA006	<0.2	<0.2	---	---
1,1-dichloro-ethylene	VRAA006	<0.1	<0.1	---	---
Dichloromethane	VRISS002	7.04	7.03	7.04	0.07
Perchloroethene	VRISS002	2.54	2.41	2.48	2.6
Carbon Tetrachloride	VRISS002	0.11	0.11	0.11	0.0

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
Toluene	VRISS002	19.8	20.2	20.0	1.0
1,1,1-trichloro-etane	VRISS002	15.6	15.7	15.6	0.32
Trichloroethene	VRISS002	0.24	0.22	0.23	4.3
Chloroform	VRISS002	0.11	0.14	0.12	12
Vinyl chloride	VRAA006	<0.1	<0.1	---	---
m&p-xylene	VRISS002	13.3	13.2	13.2	0.38
o-xylene	VRISS002	7.29	8.12	7.71	5.4

A set of 7 ambient air and integrated surface samples, laboratory numbers 93200-(38-44) were analyzed for 1150.1 toxic components, methane, & TGNMO. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 12 duplicate measurements from the sample set of 7 ambient air & integrated surcace samples is 2.6%.

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA INC.	No.

Site / Facility#: VALLEY RECLAMATION 9188 GLENOAKS

~~Site Name~~: SUN VALLEY CA 91352

Sampler: (Signature) Ernest Drag

Bag Identification Number	Date	Time	Type Of Sample	Analyses: TOTAL ORGANIC CPDS	Analyses: TOXIC AIR CONTAMINANTS					Field Testing			Field Comments	Lab* Comments
-42 VRAA010	11/16/90	16:00	AMBIENT AIR	X	X									

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Drag	11/16/90	4:50	Karen Portle	11/16/90	4:50
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CUS[illegible]Y RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA. INC.	No.

Site / Facility#: VALLEY RECLAMATION

Site Name: 9188 GLEN OAKS BLVD SUN VALLEY CA 91352

Sampler: (Signature) [signature]

Bag Identification Number	Date	Time	Type Of Sample	TOTAL ORGANIC COMPOUNDS	TOXIC AIR CONTAMINANTS								Field Comments	Lab* Comments
VRAA009	11/16/90	15:00	AMBIENT AIR	X	X									

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	11/16/90	4:50	Karen Porter	11/16/90	4:50
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA INC	No.

Site / Facility#: Valley Reclamation

Site Name: 9188 Glenoaks Blvd Sun Valley 91552

Sampler: (Signature): Rodney Cole

Bag Identification Number	Date	Time	Type Of Sample	Toxic Organic Compds	Toxic Air Contaminants								Field Comments	Lab* Comments
-4 VRAA00A	11/16/90	1530	Ambient Air	X	X									

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Rodney L. Cole	11/16/90	1545	Ernest Drago	11/16/90	15:30
Ernest Drago	11/16/90	4:50	Karen Porter	11/16/90	4:50
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMDA INC.	No.

Site / Facility#: VALLEY RECLAMATION 9188 GLENDALE

Site Name: SUN VALLEY CA 91352

Sampler: (Signature) [signature]

Bag Identification Number	Date	Time	Type Of Sample	TOTAL ORGANIC CARBON	TOXIC AIR CONTAMINANTS									Field Comments	Lab* Comments
-39 YRAA007	11/16/90	16:00	AMBIENT AIR	X	X										

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	11/16/90	4:50	Karen Potter	11/16/90	4:50
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CU[illegible]Y RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA INC	No.

Site / Facility#
VALLEY RECLAMATION 9188 GLENOAKS
~~Site Name~~
SUN VALLEY CA 91352
Sampler: (Signature)
Ernest Dang

Bag Identification Number	Date	Time	Type Of Sample	TOTAL ORGANIC CPDS	TOXIC AIR CONTAMINANTS								Field Comments	Lab* Comments
			Analyses							Field Testing				
38 VRAA006	11/16/90	15:30	AMBIENT AIR	X	X									

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Dang	11/16/90	4:50	Karen Porter	11/16/90	4:50
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

INTEGRATED SURFACE SAMPLES

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS, AND QA/QC SUMMARY
FOR THE MONTHS OF
SEPTEMBER, OCTOBER, NOVEMBER

INTEGRATED SURFACE SAMPLE SUMMARY

Sample Location	Sample Identification
September	September
I.S.S. GRID No. 10	Sample I.D. No. 14007
I.S.S. GRID No. 11	Sample I.D. No. 14008
October	
I.S.S. GRID No. 1	Sample I.D. No. 19083
I.S.S. GRID No. 4	Sample I.D. No. 19084
December	
I.S.S. GRID No. 2	Sample I.D. No. VRISS011
I.S.S. GRID No.12	Sample I.D. No. VRISS002

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air & Integrated Surface Samples

P.O. No.:	01-1919
Project No.:	189091.03
Site :	Bradley Landfill
Date Received :	September 11, 1990
Date Analyzed :	September 11, & 12, 1990

AAA Lab No.:	92540-7	92540-8
Sample I.D. No.:	14008	14009
	ISS	Blank
Component	(Concentration in ppm, v/v)	
Methane	2.76	<1
NMHC	8.75	<1
Total Hydrocarbon	11.41	2.76
Component	(Concentration in ppb, v/v)	
Acetonitrile	<0.8	<0.8
Benzene	7.04	0.15
Benzyl chloride	<0.08	<0.08
Chlorobenzene	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2
1,1-dichloroethylene	0.26	<0.1
Dichloromethane	3.08	0.52
Perchloroethene	3.10	0.24
Carbon Tetrachloride	0.12	<0.06
Toluene	16.4	3.14
1,1,1-trichloroethane	25.2	0.57
Trichloroethene	0.20	0.23
Chloroform	0.13	<0.08
Vinyl chloride	<0.1	<0.1
m/p-xylenes	8.04	0.63
o-xylenes	7.19	1.03

* total amount containing meta, para & ortho isomers

NMHC is total volatile non-methane hydrocarbons as methane

Michael L. Porter
Laboratory Director

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air & Integrated Surface Samples

P.O. No.: 01-1919
Project No.: 189091.03
Site : Bradley Landfill
Date Received : September 11, 1990
Date Analyzed : September 11, & 12, 1990

AAA Lab No.:	92540-4	92540-5	92540-6
Sample I.D. No.:	14005	14006	14007
	NW, 24	NW, <24	ISS
Component	(Concentration in ppm, v/v)		
Methane	2.19	1.70	2.66
NMHC	3.63	6.23	2.76
Total Hydrocarbon	5.82	7.93	5.32
Component	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	2.30	1.92	7.58
Benzyl chloride	<0.08	<0.08	<0.08
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	0.32
Dichloromethane	1.25	1.73	3.05
Perchloroethene	0.57	0.44	2.60
Carbon Tetrachloride	0.10	0.90	0.12
Toluene	8.16	9.89	15.6
1,1,1-trichloroethane	6.74	6.52	24.7
Trichloroethene	0.29	0.28	0.17
Chloroform	<0.08	<0.08	0.083
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	2.62	3.13	8.14
o-xylenes	2.09	1.85	6.48

* total amount containing meta, para & ortho isomers

NMHC is total volatile non-methane hydrocarbons as methane

CHAIN OF CUSTODY RECORD

SCS ENGINEERS
Environmental Engineers
3711 Long Beach Blvd
Ninth Floor
Long Beach, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL

Sampler (Signature) [illegible]

Phone

Field Crew Supervisor

Field Company SCS Engineers

Project Geologist/Engineer W. Geyer

SITE INFORMATION

Job Name Bradley Landfill

Job Number 189098.03

Sample Location Bradley Landfill
San Valley, CA

P.O. Number

Relinquished by (Signature)	Received by (Signature)	Date	Time
[illegible]	[illegible]	9/11/90	11:30 am
Relinquished by (Signature)	Received by (Signature)	Date	Time

Analysis laboratory should complete "sample cond. upon receipt" section below, sign, and return copy to Shipper

Sample Number	Sample Type	No. of Cont.	Site Identification	Date Sampled	Analysis Requested	Sample Cond. Upon Receipt
14001	Air	1	SE-24	9/10	Toxic Core Group	
14002	Air	1	SE-<24	9/10	(w/o H_2S) and	
14004	Air	1	SE-<24	9/10	Total Non-Methane	
14005	Air	1	NW-24	9/10	Organics	
14006	Air	1	NW-<24	9/10		
14007	Air	1	ISS	9/10		
14008	Air	1	ISS	9/10		
14009	Air	1	BLANK	9/10		

Remarks:

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants Analysis
in Ambient Air & Integrated Surface Samples

Report Date :	October 22, 1990
P.O. No.:	01-2073
Project No.:	0189091-03
Site :	Bradley Landfill
Date Received :	October 16, 1990
Date Analyzed :	October 16 & 17, 1990

AtmAA Lab No.:	92890-9	92890-10	92890-11
Sample I.D. No.:	1401	1406	19083
	Down-L24	UP-L24	ISS #1
Component	(Concentration in ppm, v/v)		
Methane	1.58	1.55	1.32
NMHC	1.50	<1	2.97
Total Hydrocarbon	3.08	1.55	4.29
Component	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	6.80	4.03	4.65
Benzyl chloride	<0.8	<0.8	<0.8
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	<0.1
Dichloromethane	1.27	1.35	8.13
Perchloroethene	0.67	0.78	2.42
Carbon Tetrachloride	0.12	0.11	0.10
Toluene	16.0	9.31	12.1
1,1,1-trichloroethane	2.87	3.16	10.4
Trichloroethene	0.15	0.20	0.24
Chloroform	<0.08	<0.08	0.09
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	12.2	5.96	7.21
o-xylenes	5.72	2.82	4.37

* total amount containing meta, para & ortho isomers
NMHC is total volatile non-methane hydrocarbons as methane

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants Analysis
in Ambient Air & Integrated Surface Samples

Report Date :	October 22, 1990
P.O. No.:	01-2073
Project No.:	0189091-03
Site :	Bradley Landfill
Date Received :	October 16, 1990
Date Analyzed :	October 16 & 17, 19990

AtmAA Lab No.:	92890-12	92890-13
Sample I.D. No.:	19084	19171
	ISS #4	Blank
Component	(Concentration in ppm, v/v)	
Methane	1.65	<1
NMHC	1.67	1.61
Total Hydrocarbon	3.32	1.61
Component	(Concentration in ppb, v/v)	
Acetonitrile	<0.8	<0.8
Benzene	4.99	0.36
Benzyl chloride	<0.8	<0.8
Chlorobenzene	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1
Dichloromethane	9.86	5.17
Perchloroethene	2.61	1.37
Carbon Tetrachloride	0.10	<0.06
Toluene	13.6	5.05
1,1,1-trichloroethane	9.45	0.32
Trichloroethene	0.19	<0.06
Chloroform	0.08	<0.08
Vinyl chloride	<0.1	<0.1
m+p-xylenes	7.28	3.02
o-xylenes	1.74	2.32

* total amount containing meta, para & ortho isomers
NMHC is total volatile non-methane hydrocarbons as methane

Michael L. Porter
Laboratory Director

CHAIN OF CUSTODY RECORD

SCS ENGINEERS
Environmental Engineers
3711 Long Beach Blvd
Ninth Floor
Long Beach, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL

Sampler (Signature) Patrick L. Sullivan
Phone (213) 426-9544
Field Crew Supervisor Pat Sullivan
Field Company SCS
Project Geologist/Engineer Mike Geyer

SITE INFORMATION

Job Name Bradley
Job Number 0189091-03
Sample Location Sun Valley, CA
P.O. Number Please call Mike Geyer for P.O. #

Relinquished by (Signature)	Received by (Signature)	Date	Time
Patrick L. Sullivan	Karen Poole	10/16/90	1:30
Relinquished by (Signature)	Received by (Signature)	Date	Time

Analysis laboratory should complete "sample cond. upon receipt" section below, sign, and return copy to Shipper

Sample Number	Sample Type	No. of Cont.	Site Identification	Date Sampled	Analysis Requested	Sample Cond. Upon Receipt
1403	Air	1	SE 24	10-16-90	See	
1404			Down-L24		below	
1407			NW 24			
1401			Down-L24			
1406			Up-L24			
19083			ISS #1			
19084			ISS #4			
19171			Blank 2			

Remarks: (1) Total Organics as Methane (2) Total Non-Methane Organics (3) Toxic Core Group (no hydrogen sulfide) - Rule 1150.1

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. No.: V6482
AtmAA Project No.: 8000
Client Project No.: None Given
Site: Valley Reclamation

Ambient Air & Integrated Surface Samples

Date Received: November 16, 1990
Date Analyzed: November 17, 1990

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Methane	VRAA007	2.15	2.00	2.08	3.6
TGNMO	VRAA007	4.50	4.34	4.42	1.8
		(Concentration in ppb, v/v)			
Acetonitrile	VRAA007	<0.8	<0.8	---	---
Benzene	VRISS002	11.2	11.2	11.2	0.0
Benzyl chloride	VRAA009	<0.8	<0.8	---	---
Chlorobenzene	VRISS002	<0.1	<0.1	---	---
Dichlorobenzenes*	VRAA009	<1.1	<1.1	---	---
1,1-dichloro-ethane	VRAA006	<0.4	<0.4	---	---
1,2-dichloro-ethane	VRAA006	<0.2	<0.2	---	---
1,1-dichloro-ethylene	VRAA006	<0.1	<0.1	---	---
Dichloromethane	VRISS002	7.04	7.03	7.04	0.07
Perchloroethene	VRISS002	2.54	2.41	2.48	2.6
Carbon Tetrachloride	VRISS002	0.11	0.11	0.11	0.0

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID.	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
Toluene	VRISS002	19.8	20.2	20.0	1.0
1,1,1-trichloro-etane	VRISS002	15.6	15.7	15.6	0.32
Trichloroethene	VRISS002	0.24	0.22	0.23	4.3
Chloroform	VRISS002	0.11	0.14	0.12	12
Vinyl chloride	VRAA006	<0.1	<0.1	---	---
m&p-xylene	VRISS002	13.3	13.2	13.2	0.38
o-xylene	VRISS002	7.29	8.12	7.71	5.4

A set of 7 ambient air and integrated surface samples, laboratory numbers 93200-(38-44) were analyzed for 1150.1 toxic components, methane, & TGNMO. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 12 duplicate measurements from the sample set of 7 ambient air & integrated surcace samples is 2.6%.

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Integrated Surface Samples

Report Date :	November 20, 1990
P.O. No.:	V6482
Project No.:	None Given
Site :	Valley Reclamation
Date Received :	November 16, 1990
Date Analyzed :	November 17, 1990

AtmAA Lab No.:	93200-43	93200-44
Sample I.D. No.:	VRISS002	VRISS011
Component	(Concentration in ppm, v/v)	
Methane	2.67	6.20
TGNMO	2.92	4.70
Component	(Concentration in ppb, v/v)	
Acetonitrile	<0.8	<0.8
Benzene	11.2	16.8
Benzyl chloride	<0.8	<0.8
Chlorobenzene	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1
Dichloromethane	7.04	3.46
Perchloroethene	2.48	2.06
Carbon Tetrachloride	0.11	0.12
Toluene	20.0	41.1
1,1,1-trichloroethane	15.6	50.7
Trichloroethene	0.23	0.28
Chloroform	0.12	0.11
Vinyl chloride	<0.1	<0.1
m+p-xylenes	13.2	28.1
o-xylenes	7.71	18.5

* total amount containing meta, para & ortho isomers

Michael L. Porter
Laboratory Director

CHAIN OF CUS JDY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WRNA Environmental Mgmt. Dept.	ATRMA INC.	No.

Site / Facility#: Valley Reclamation Company

Site Name: 9188 Glenoaks Blvd, Sun Valley CA 91352

Sampler: (Signature) [signature]

Bag Identification Number	Date	Time	Type Of Sample	Toxic Air Contaminant	Total Organic Compd.								Field Comments	Lab* Comments
-44 VRISS011	11/16/90	1545	Integrated Surface	X	X									

Analyses / Field Testing

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	11/18/90	4:50	Karen Porter	11/16/90	4:50
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMMA Inc	No.

Site / Facility#: Valley Reclamation Company

Site Name: 9188 Glenoaks Blvd. Sun Valley, CA 91352

Sampler: (Signature) [signature]

Bag Identification Number	Date	Time	Type Of Sample	Analyses: Toxic Air Contaminants	Analyses: Total Organic Compds						Field Testing		Field Comments	Lab* Comments
43 VRISS002	11/16/90	1100	Interrupted surface	X	X									

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	11/16/90	4:50	Karen Porter	11/16/90	4:50
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

INTERNAL COLLECTION SYSTEM

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS AND QA/QC SUMMARY
FOR THE MONTH OF SEPTEMBER

SCS ANALYTICAL LABORATORY
2960 WALNUT AVENUE
LONG BEACH CALIFORNIA 90806
(213) 595-9324
FAX (213) 595-6705

MEMO

To: Michael Geyer

From: David Sincerbeaux — October 25, 1990

Job No.: 9000011.06 —

-- REVISED -- LABORATORY REPORT -- REVISED --

Sample: One (1) gas sample from Bradley Landfill, received 9/28/90 analyzed 9/29/90.

Sample ID	TNMO (EPA 25A) ---ppm v/v---
12415	188
Detection Limit	10

Sample ID	CO_2	O_2	N_2	CH_4
	---% v/v---			
12415	37.7	3.2	19.9	39.2

Calderon Gas Analysis - see attached sheet

David Mikesell
Chemist

David Sincerbeaux
Laboratory Manager

brad28.rep

SCS ANALYTICAL LABORATORY
2866 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90806
(213) 595-7334
FAX (213) 595-[illegible]

SCS ANALYTICAL LABORATORY
Addendum Report, Page 2 of 2
Calderon Gas Analysis - Landfill Gas Sample

Sample I.D.: 12415
Date Received: 9/28/90
Date Analyzed: 10/17/90
Matrix: Gas
Project #: 9000011.06
File #: brad28.rep

Compound	Result	D.L.
	------ppb v/v------	
Acetonitrile	ND	5000
Benzene	13,000	500
Benzyl Chloride	ND	500
Chlorobenzene	ND	500
Dichlorobenzenes	ND	2000
1,1-Dichloroethane (Ethylidene Chloride)	20,000	20
1,2-Dichloroethane (Ethylene Dichloride)	2,050	20
1,1-Dichloroethene (Vinylidene Chloride)	ND	20
Dichloromethane (Methylene Chloride)	70,000	60
Hydrogen Sulfide	70,000	500
Tetrachloroethylene (Perchloroethylene)	>475	10
Tetrachloromethane (Carbon Tetrachloride)	ND	5
Toluene	8,000	500
1,1,1 Trichloroethane (Methyl Chloroform)	>1,500	10
Trichloroethylene	>3,350	10
Trichloromethane (Chloroform)	90	2
Vinyl Chloride	ND	500
Xylene	>25,000	500

D.L. = Detection Limit
ND = Not Detected

CHAIN OF CUSTODY RECORD

SCS ENGINEERS
Environmental Engineers
3711 Long Beach Blvd
Ninth Floor
Long Beach, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL

Sampler (Signature) Patrick J. Sullivan
Phone 426-9544

Field Crew Supervisor Pat Sullivan
Field Company SCS
Project Geologist/Engineer Mike Geyer

SITE INFORMATION

Job Name Bradley
Job Number 0189091.03
Sample Location Sun Valley, CA

P.O. Number

Relinquished by (Signature)	Received by (Signature)	Date	Time
Patrick J. Sullivan	[illegible]	9/12/90	11:[illegible]
Relinquished by (Signature)	Received by (Signature)	Date	Time

Analysis laboratory should complete "sample cond. upon receipt" section below, sign, and return copy to Shipper

Sample Number	Sample Type	No. of Cont.	Site Identification	Date Sampled	Analysis Requested	Sample Cond. Upon Receipt
14003	LF6	1	LF6-1	9-12-90	(see below)	O.K

please analyze today, don't let sit
Any questions — call Mike Geyer

Remarks: (1) 4 majors (2) total Non-methane Organics
(3) Toxic Core Group (plus H_2S)

CHAIN OF CUSTODY RECORD

SCS ANALYTICAL LABORATORY

2860 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90806
(213) 595-9324
Fax (213) 595-6709

PERSONNEL

Name (signature) [signature]
Name (print) M GEYER
Company SCS ENGINEERS
Address
City, State, Zip
Telephone

SITE INFORMATION

Job Name BRADLEY LANDFILL
Job Number 189091.03
Sample Location
P.O. Number

Relinquished by (Signature)	Received by (Signature)	Date	Time
[signature]	Nancy Gobel	9/20/90	13:15
Relinquished by (Signature)	Received by (Signature)	Date	Time

Analysis laboratory should complete "sample cond. upon receipt" section below, sign, and return copy to Shipper

Sample Number	Sample Type	No. of Cont.	Site Identification	Date Sampled	Analysis Requested	Sample Cond. Upon Receipt
001	LFG	1		9/20	4 MAJORS	D.L
002	LFG	1				

Remarks:

CHAIN OF CUSTODY RECORD

SCS ENGINEERS
Environmental Engineers
3711 Long Beach Blvd.
Ninth Floor
Long Beach, CA
90807-3315
(213) 426-9544
FAX (213) 427-0885

PERSONNEL

Sampler (Signature) Pat Sullivan
Phone 476-9544
Field Crew Supervisor Pat S
Field Company SCS
Project Geologist/Engineer Mike Geyer

SITE INFORMATION

Job Name Bradley
Job Number 1
Sample Location Sun Valley, CA
P.O. Number

Relinquished by (Signature)	Received by (Signature)	Date	Time
Patrick X Sullivan	Nancy Gabel	9/25/90	11/5
Relinquished by (Signature)	Received by (Signature)	Date	Time

Analysis laboratory should complete "sample cond. upon receipt" section below, sign, and return copy to Shipper

Sample Number	Sample Type	No. of Cont.	Site Identification	Date Sampled	Analysis Requested	Sample Cond. Upon Receipt
13-15	LFG	1	LFG 1	9-28-90		O.K
1	LFG	1	LFG-2	↓	See	↓
	LFG	1	LFG-3	↓	below	↓
	LFG	1	LFG-4	↓		

Remarks: Analysis for ABIRD Rule 1150.1. Dave S. knows what needs to be run. Tell him the Bradley samples are in.

INTERNAL COLLECTION SYSTEM FIELD LOG FOR MONTH OF OCTOBER

SCS ANALYTICAL LABORATORY
2860 WALNUT AVENUE
LONG BEACH, CALIFORNIA
213 595-9324
FAX 213 595-

MEMO

To: Michael Geyer

From: Lam V. Ho

October 31, 1990

Job No.: 189091.03

LABORATORY REPORT

Sample: One (1) gas sample from Bradley Landfill, received 10/16/90 analyzed 10/17/90.

Sample ID	TNMO (EPA 25A) ---ppm v/v---
19081	824
Detection Limit	10

Sample ID	CO_2	O_2	N_2	CH_4
	% v/v			
19081	39.4	1.4	17.3	41.9

Calderon Gas Analysis - see attached sheet

David Sincerbeaux
Chemist

Lam V. Ho
Laboratory Director

brad29.rep

SCS ANALYTICAL LABORATORY
2860 WALNUT AVENUE
LONG BEACH, CALIFORNIA
(213) 595-9324
FAX (213) 595-6[illegible]

SCS ANALYTICAL LABORATORY
Addendum Report, Page 2 of 2
Calderon Gas Analysis - Landfill Gas Sample

Sample I.D.: 19081
Date Received: 10/16/90
Date Analyzed: 10/17/90
Matrix: Gas
Project #: 189091.03
File #: brad29.rep

Compound	Result	D.L.
	------ppb v/v------	
Acetonitrile	ND	5000
Benzene	13,120	500
Benzyl Chloride	ND	500
Chlorobenzene	ND	500
Dichlorobenzenes	ND	2000
1,1-Dichloroethane (Ethylidene Chloride)	13,200	20
1,2-Dichloroethane (Ethylene Dichloride)	395	20
1,1-Dichloroethene (Vinylidene Chloride)	245	20
Dichloromethane (Methylene Chloride)	10,300	60
Hydrogen Sulfide	13,800	500
Tetrachloroethylene (Perchloroethylene)	>470	10
Tetrachloromethane (Carbon Tetrachloride)	ND	5
Toluene	7,640	500
1,1,1 Trichloroethane (Methyl Chloroform)	>510	10
Trichloroethylene	>1,300	10
Trichloromethane (Chloroform)	14	2
Vinyl Chloride	ND	500
Xylene	22,750	500

D.L. = Detection Limit
ND = Not Detected

CHAIN OF CUSTODY RECORD

SCS ENGINEERS
Environmental Engineers
3711 Long Beach Blvd
Ninth Floor
Long Beach, CA
90807-3315
(213) 426-9544
FAX (213) 427-0805

PERSONNEL

Sampler (Signature) Patrick S. Sullivan
Phone 426-9544
Field Crew Supervisor Pat Sullivan
Field Company SCS
Project Geologist/Engineer [illegible] Geyer

SITE INFORMATION

Job Name Bradley
Job Number 01 S9041.03
Sample Location Sun Valley, CA
P.O. Number

Relinquished by (Signature)	Received by (Signature)	Date	Time
Patrick S. Sullivan	[illegible]	[illegible]	[illegible]
Relinquished by (Signature)	Received by (Signature)	Date	Time

Analysis laboratory should complete "sample cond. upon receipt" section below, sign, and return copy to Shipper

Sample Number	Sample Type	No. of Cont.	Site Identification	Date Sampled	Analysis Requested	Sample Cond. Upon Receipt
19-81	LFG	1	LFG-1	10-16-90	(see below)	

Remarks: [illegible]

INTERNAL COLLECTION SYSTEM

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS AND QA/QC SUMMARY
FOR THE MONTH OF NOVEMBER

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. No.: V6467
AtmAA Project No.: 8000
Client Project No.: Not Given
Site: Valley Reclamation

Landfill Gas & Probe Samples

Date Received: November 14, 1990
Date Analyzed: November 14, 15, & 16, 1990

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in %, v/v)			
Methane	VRPP002	36.1	36.3	36.2	0.28
	VRICS001	44.2	43.6	43.9	0.68
Carbon Dioxide	VRPP002	30.3	30.4	30.4	0.16
	VRICS001	41.5	41.5	41.5	0.0
Oxygen	VRPP002	4.98	5.03	5.00	0.50
Nitrogen	VRPP002	28.2	28.2	28.2	0.0
		(Concentration in ppm, v/v)			
TGMNO	VRPP001	350	325	338	3.7
		(Concentration in ppb, v/v)			
Acetonitrile	No Repeat				
Benzene	VRPP002	1420	1390	1400	1.1
	VRICS001	941	1100	1020	7.8
Benzyl chloride	VRPP002	<100	<100	---	---
Chlorobenzene	VRPP002	<100	<100	---	---
	VRICS001	<100	<100	---	---
Dichlorobenzenes*	VRPP002	287	281	284	1.1
1,1-dichloro-ethane	VRPP001	112	93.9	103	8.8
	VRPP002	4490	4440	4460	0.56

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
1,2-dichloro-ethane	VRPP001	83.9	86.1	85.0	1.3
1,1-dichloro-ethylene	VRPP001	204	169	186	6.6
Dichloromethane	VRPP001	60.7	66.4	63.6	4.5
	VRPP002	482	466	474	1.7
Perchloroethene	VRPP002	2050	2320	2180	6.2
Carbon Tetrachloride	VRPP001	<1	<1	---	---
Toluene	VRPP002	1030	1080	1060	2.4
	VRICS001	66100	59200	62600	5.5
1,1,1-trichloro-ethane	VRPP001	3.39	3.34	3.36	0.74
	VRPP002	129	129	129	0.0
Trichloroethene	VRP0001	170	203	186	8.8
Chloroform	VRPP001	<2	<2	---	---
Vinyl chloride	VRPP001	1290	1130	1210	6.6
m&p-xylene	VRPP002	279	304	292	4.2
	VRICS001	17700	18600	18200	2.5
o-xylene	VRPP002	227	232	230	1.1
	VRICS001	17600	17200	17400	1.1

* total amount containing meta, para, and ortho isomers

A set of 3 samples, laboratory numbers 93180-(21-23) was analyzed for SCAQMD Rule 1150.1 components, permanent gases, & TGMNO.
Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 27 duplicate measurements from the sample set of 3 ambient air samples is 2.9%.

AtmAA Inc.
21354 Nordhoff St., Suite 113, Chatsworth, CA 91311 (818) 718-6070 • FAX (818) 718-9779
environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Landfill Gas & Probe Samples

Report Date : November 17, 1990
P.O. No.: V6467
Project No.: Not Given
Site : Valley Reclamation
Date Received : November 14, 1990
Date Analyzed : November 14, 15, & 16, 1990

AtmAA Lab No.:	93180-21	93180-22	93180-23
Sample I.D. No.:	VRPP001	VRPP002	VRICS001
Component	(Concentration in %, v/v)		
Methane	30.6	36.2	43.9
Carbon Dioxide	22.5	30.4	41.5
Oxygen	2.60	5.00	0.96
Nitrogen	44.2	28.2	13.5
	(Concentration in ppm, v/v)		
TGNMO	338	1690	8610
Component	(Concentration in ppb, v/v)		
Acetonitrile	<5	<5	61.1
Benzene	128	1400	1020
Benzyl chloride	<100	<100	<100
Chlorobenzene	<100	<100	<100
Dichlorobenzene*	<100	284	7900
1,1-dichloroethane	103	4460	7180
1,2-dichloroethane	85.0	523	638
1,1-dichloroethylene	204	467	792
Dichloromethane	63.6	474	15500
Perchloroethene	325	2180	17800
Carbon Tetrachloride	<1	<1	<1
Toluene	472	1060	[illegible]
1,1,1-trichloroethane	3.36	129	940
Trichloroethene	186	620	6530
Chloroform	<2	<2	18.7
Vinyl chloride	1210	5150	2660
m+p-xylenes	287	292	18200
o-xylenes	266	230	[illegible]

* total amount containing meta, para & ortho isomers

Michael L. Porter
Laboratory Director

CHAIN OF C[illegible]DY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
[illegible]MNA Environmental Mgmt. Dept.	ATMAA INC	No.

Site / Facility#: VALLEY RECLAMATION 9188 GLENOAKS BLVD

Site Name: SUN VALLEY CA. 91352

Sampler: (Signature): Ernie Dragon

Bag Identification Number	Date	Time	Type Of Sample	TOXIC CORE AIR CONTAMINANTS	TOTAL ORGANIC COMPOUNDS								Field Comments	Lab* Comments
VRICS001	11/14/96	15:[illegible]	INTERNAL GAS COLLECTION SYSTEM	X	X									

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Dragon	11/14/96	1715	Nathan Miller	11/14/96	5:15
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

SAMPLERS COPY

GAS PROBE SAMPLES

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS, AND QA/QC SUMMARY
FOR THE MONTH OF
NOVEMBER

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. No.: V6467
AtmAA Project No.: 8000
Client Project No.: Not Given
Site: Valley Reclamation

Landfill Gas & Probe Samples

Date Received: November 14, 1990
Date Analyzed: November 14, 15, & 16, 1990

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in %, v/v)			
Methane	VRPP002	36.1	36.3	36.2	0.28
	VRICS001	44.2	43.6	43.9	0.68
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	VRICS001	41.5	41.5	41.5	0.0
Oxygen	VRPP002	4.98	5.03	5.00	0.50
Nitrogen	VRPP002	28.2	28.2	28.2	0.0
		(Concentration in ppm, v/v)			
TGMNO	VRPP001	350	325	338	3.7
		(Concentration in ppb, v/v)			
Acetonitrile	No Repeat				
Benzene	VRPP002	1420	1390	1400	1.1
	VRICS001	941	1100	1020	7.8
Benzyl chloride	VRPP002	<100	<100		---
Chlorobenzene	VRPP002	<100	<100	---	---
	VRICS001	<100	<100	---	---
Dichlorobenzenes*	VRPP002	287	281	284	1.1
1,1-dichloro-	VRPP001	112	93.9	103	8.8
ethane	VRPP002	4490	4440	4460	0.56

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
1,2-dichloro-ethane	VRPP001	83.9	86.1	85.0	1.3
1,1-dichloro-ethylene	VRPP001	204	169	186	6.6
Dichloromethane	VRPP001	60.7	66.4	63.6	4.5
	VRPP002	482	466	474	1.7
Perchloroethene	VRPP002	2050	2320	2180	6.2
Carbon Tetrachloride	VRPP001	<1	<1	---	---
Toluene	VRPP002	1030	1080	1060	2.4
	VRICS001	66100	59200	62600	5.5
1,1,1-trichloro-ethane	VRPP001	3.39	3.34	3.36	0.74
	VRPP002	129	129	129	0.0
Trichloroethene	VRP0001	170	203	186	8.8
Chloroform	VRPP001	<2	<2	---	---
Vinyl chloride	VRPP001	1290	1130	1210	6.6
m&p-xylene	VRPP002	279	304	292	4.2
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o-xylene	VRPP002	227	232	230	1.1
	VRICS001	17600	17200	17400	1.1

* total amount containing meta, para, and ortho isomers

A set of 3 samples, laboratory numbers 93180-(21-23) was analyzed for SCAQMD Rule 1150.1 components, permanent gases, & TGMNO.
Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 27 duplicate measurements from the sample set of 3 ambient air samples is 2.9%.

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	No.
WMNA Environmental Mgmt. Dept.	ATMAA. INC.	

Site / Facility#: VALLEY RECLAMATION 9188 GLENOAKS

~~Site Name~~: SUN VALLEY CA 91352

Sampler: (Signature): Ernest Dragon

Bag Identification Number	Date	Time	Type Of Sample	TOTAL ORGANIC COMPOUNDS	TOXIC AIR CONTAMINANTS								Field Comments	Lab* Comments
VRPP001	11/14/90	1530	PERIMETER PROBE SAMPLE	X	X									

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Dragon	11/14/90	1715	Nathan Miller	11/14/90	5:16
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

SAMPLERS COPY

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	No.
WMNA Environmental Mgmt. Dept.	ATMAR INC.	

Site / Facility#: VALLEY RECLAMATION 9188 GLENOAKS

Site Name: SUN VALLEY CA. 91352

Sampler: (Signature) [signature]

Bag Identification Number	Date	Time	Type Of Sample	Analyses: TOTAL ORGANIC COMPOUNDS	Analyses: TOXIC AIR CONTAMINANTS	Analyses	Analyses	Analyses	Analyses	Analyses	Field Testing	Field Testing	Field Testing	Field Comments	Lab* Comments
VRPP002	11/14/90	1530	PERIMETER PROBE SAMPLE	X	X										

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	11/14/90	1715	[signature]	11/14/90	5:16
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

SAMPLERS COPY

APPENDIX F

FIELD SPECIFICATIONS AND PROCEDURES

The program to comply with Rule 1150.1 is as follows:

1. Monitoring Landfill Surface Methane Levels.

   A. Surface Sweeps
   Surface sweeps will be conducted on a monthly basis consistent with present practice. A Century OVA analyzer will be used to instantaneously monitor the concentration of organic compounds (measured as methane) on the landfill surface. Sampling will be conducted according to "Guidelines For Implementation of Rule 1150.1". Concentrations will be recorded on a topographic map marked with 100 square foot grids. TOC as methane concentrations will be marked every 100 feet on the grid map or at any "hot spot" where TOC as methane exceeds 50 ppm.

   The following meteorological data will be reported by the field technician on each day of sampling:

   - Wind speed taken once per hour during sampling using a hand held anemometer. Also, instantaneous wind speed when it exceed 15 mph.
   - Precipitation data for the day of sampling and 3 days preceding sampling.

   No sampling will be conducted when the following meteorological conditions exist:

   - Within 24 hours after a rainfall.
   - Average wind speeds of greater than 15 mph or instantaneous wind speeds greater than 25 mph.

B. Integrated Surface Sampling

Integrated surface sampling will be performed monthly beginning June 1989 through October 1989. After accumulation of three months of data (in September) Valley Reclamation will request a revised sampling program if results warrant less frequent monitoring. The areas of the landfill (shown on a grid map) to be sampled will be proposed to the District in writing 30 days prior to beginning sampling, and will be based on:

- results of surface sweeps
- construction activities ongoing at the landfill
- age and type of waste underlying the surface

The areas to be sampled will be divided into a series of 50,000-square-foot grids. One integrated sample will be collected from each grid. This sampling, analysis, and reporting shall be scheduled and performed in accordance with "Guidelines for Implementation of Rule 1150.1.

Sampling Conditions

Sampling will be conducted during a period when the average wind speed is less than five miles per hour, as determined on a 10-minute average. Surface sampling will be terminated when the average wind speed exceeds five miles per hour, or the instantaneous wind speed exceeds ten miles per hour. Surface monitoring will be conducted only when the landfill is dry and when no rain has fallen for the preceding 72 hours.

Sampling Equipment

A portable integrated surface sampler will be used for sample collection. The sampler will consist of a stainless steel collection probe, flow meter, pump, and a 10-liter Tedlar bag enclosed in a light-sealed cardboard box. This equipment will meet the SCAQMD specifications delineated in "Guidelines For Implementation of Rule 1150.1".

Sampling Procedure

One integrated surface sample will be collected from each 50,000-square-foot grid using the portable bag sampler. During sampling, the probe will be placed approximately 2 to 3

inches above the landfill surface. The volume of each sample will be approximately 8 to 10 liters. The sampler flow rate will be set at approximately 333 cubic centimeters per minute. The technician will walk through a course of approximately 2,600 liner feet over a continuous 25-minute period. To measure wind speed throughout the sampling period, a wind speed monitor with continuous recorder will be installed in an area with unobstructed wind flow from all quarters. A compass will be used to orient the wind direction transmitter to true north.

Quality Control Procedure

The following quality control procedure will be implemented during surface sampling operations:

A. Assign an identification number to each sampling bag.
B. Clearly mark and number each grid on a landfill topographic map drawn to scale.
C. Record the date and time the bag is in operation and the grid location.
D. Verify that the pump is running.
E. Check the rotameter reading to ensure the flow rate is approximately 333 cubic centimeters per minute.
F. Ensure that the bag valve is in the open position.

Data for each sample collected will be entered on a quality control sheet

Prior to use, the Tedlar bags will be evacuated and filled with purified nitrogen three times to flush out the old sample. Before the bags are sent into the field, they will be checked to ensure the vacuum has been maintained. The bags will be removed from service if leakage has occurred. All bag samples will be kept in light-sealed containers to avoid photochemical reactions.

Analytical Procedures

All samples will be analyzed within 72 hours of collection for total organic compounds. In addition, the following samples will be analyzed within 72 hours of collection for the core group toxic air contaminants and any supplemental group contaminants specified by the District:

1. Ten percent of all samples which have a concentration of total organic compounds greater than 50 ppmv as methane; or
2. Two samples if all samples contain total organic compound concentrations of 50 ppmv or less, or if fewer than 20 samples contain total organic compound concentrations above 50 ppmv.

Analytical methods for toxic air contaminants will be derived from those specified in the "Guidelines For Implementation of Rule 1150.1", Appendix A, Table 1. These samples will be selected at random. Upon request by the District, samples will be split to allow confirmation of analytical results by the SCAQMD.

Chain of Custody

A custody sheet will accompany the bag samples. Each time a bag changes hands, the individual receiving the sample will sign for it on the custody sheet and record the time of custody transfer. Laboratory personnel will record the condition of the sample (full, one-half full, on-fourth full, or empty).

Reporting Results

The following data will be submitted to the Director of Engineering 45 days after the analytical results are available.

A. Volume concentration of total organic compounds, reported as methane and total non-methane hydrocarbons.
B. Volume concentration of toxic air contaminants (all core group contaminants plus specific supplemental group contaminants required by SCAQMD for each landfill).
C. Sea level barometric pressure (inches of mercury) on the days the samples were collected.
D. Wind speed data.
E. Landfill topographic map, drawn to scale, with sampling grids clearly marked and numbered.
F. Quality control data sheets.
G. Chain-of-custody sheets.

2. **Landfill Gas Sample From Gas Collection System**

Following SCAQMD approval of this plan beginning June 1989, once per month for three consecutive months, one sample of landfill gas will be collected from the main gas collection header line entering gas treatment and/or gas disposal facilities. Pending analytical results of the gas samples, Valley Reclamation will propose less frequent sampling.Approximately a 10-liter sample will be collected in a Tedlar bag over a continuous ten-minute period using EPA Method 25.

Quality Control Procedure

The following quality control procedures will be implemented for sampling the gas collection system:

A. Assign an identification number to each sampling bag.
B. Document the date and time the samples are collected.

Data for each sample will be entered on a quality control sheet . Prior to use, the Tedlar bags will be evacuated and filled with purified nitrogen three times to flush out the old sample. Before equipment is sent into the field, it will be checked to ensure there is no leak in the system. If leakage has occurred, the equipment will be removed from service.

Analytical Procedures

Samples will be analyzed within 72 hours of collection for total organic compounds and toxic air contaminants using analytical methods identified in the "Guidelines For Implementation of Rule 1150.1", Appendix A, Table 1. All bag samples will be kept in light-sealed containers.

Reporting Results

The following data will be submitted to the District within 45 days after the analytical results are available:

A. Volume concentration of total organic compounds, reported as methane and total gaseous non-methane hydrocarbons.
B. Volume concentration of toxic air contaminants (core group contaminants plus specific supplemental group contaminants required by SCAQMD).
C. Quality control data sheets.

3. Landfill Gas Samples From Perimeter Probes

Following District approval of this plan, starting in 1989, and once per month thereafter, all perimeter gas probes will be monitored for total organic compounds measured as methane using a GasTech NP204. If the concentration of total organic compounds does not exceed five percent by volume in any of the probes, one bag sample will be collected from one probe with the highest concentration on a semiannual basis. If the concentration of total organic compounds exceeds five percent by volume in any of the probes, one bag sample per probe will be collected from the probes with the highest concentrations above five percent by volume (up to a maximum of three probes).

Sampling Procedure

Prior to collection of gas samples, the perimeter gas probes will be evacuated, with the probes sealed during evacuation. The probes will be evacuated until the concentration of total organic compounds measured as methane remains constant for at least 30 seconds. The constant total organic compounds concentration will be measured using the NP204 the results recorded. Following evacuation of a probe, approximately a 10-liter gas sample will be collected in a Tedlar bag over a continuous 10-minute period, using either the evacuated container sampling procedure described in Section 7.1.1 or the direct pump sampling procedure described in Section 7.1.2 of EPA Method 18.

Quality Control Procedure

The following quality control procedure will be implemented for perimeter probe sampling:

A. Maintain and calibrate the GasTech NP204 as recommended by the manufacturer.
B. Assign an identification number to each sampling bag.
C. Document the date and time that the measurements are made and the bag samples are collected.
D. Clearly mark and identify each probe location on a landfill topographic map drawn to scale.

Data for each sample will be entered on a quality control sheet Prior to use, the Tedlar bags will be evacuated and filled with purified nitrogen three times flush out the old sample. Before equipment is sent into the field, it will be checked to ensure there is no leakage in

the system. If leakage has occurred, the equipment will be removed from service.

Analytical Procedures
All bag samples will be analyzed within 72 hours following collection for total organic compounds and toxic air contaminants using the analytical methods identified in the "Guidelines For Implementation of Rule 1150.1", Appendix A, Table 1. All bag samples will be kept in light-sealed containers.

Reporting Results
The following data will be submitted to the District within 45 days after the analytical results are available:

A. Volume concentration of total organic compounds measured as methane for each perimeter probe.
B. Volume concentration of total organic compounds, reported as methane and total non-methane hydrocarbons, for selected probes.
C. Volume concentration of toxic air contaminants for selected probes (core group contaminants plus specific supplemental group contaminants required by SCAQMD).
D. Quality control data sheets.
E. Landfill topographic map, drawn to scale, with the perimeter probe locations clearly marked and identified.

4. Ambient Air Samples At Landfill Perimeter
Following District approval of this plan, once monthly beginning June through October, ambient air samples will be collected at the perimeter of the landfill. Samplers will be sited to provide good meteorological exposure to the predominant offshore and onshore wind flow patterns. All proposed sampling locations will be identical to locations chosen for testing performed under the SWAT program. Equipment approved by the District for the SWAT program will also be used. After accumulation and evaluation of data Valley Reclamation Company will propose less frequent sampling if results of the sampling warrant it.

Sampling Conditions
Ambient air sampling will be conducted on days when stable (offshore drainage) and unstable (onshore sea breeze) meteorological conditions are representative for the season. Preferable sampling conditions will be characterized by clear cool nights with wind speeds two miles per hour or less. No sampling will be conducted during periods of rain; when average wind speeds are greater than 15 miles per hour for

any 30-minute period; or when instantaneous wind speeds exceed 25 miles per hour. Continuously-recorded onsite wind speed and direction measurements will be used to verify that the meteorological criteria were met during sampling.

Equipment Description

Ambient air samples will be collected using a self-contained portable sampling unit which meets the specifications noted in "Guidelines For Implementation of Rule 1150.1".

Sampling Procedures

Using the portable sampling units, ambient air samples will be collected at the perimeter of the landfill over a 24-hour period beginning between 10 a.m. and 11 a.m. The samplers will be placed at the locations previously used in the testing program for the Air SWAT. One or more wind speed and direction monitors with continuous recorders will be installed and operated in the areas to measure wind speed and direction throughout the entire sampling period. The wind direction transmitter will be oriented to true north using a compass.

Quality Control Procedure

The following quality control procedure will be implemented for the ambient air sampling operation:

A. Assign an identification number to each sampling bag.
B. Clearly mark sampling locations on a landfill topographic map drawn to scale.
C. Document the date and time the bag was put into operation, the sampling location, and the date and time the bag was pulled from service.
D. Check the clock timer to ensure clock time and actual time agree with 3 minutes.
E. Ensure that the pump is running.
F. Check the rotameter reading to ensure that the float is within ±3 and [illegible] minor graduations of the marked setting for 6.0 cubic centimeters per minute. Adjust the bypass valve to correct the flow rate if the rotameter setting exceeds the above limits. Ensure that the flow has stabilized (at least three minutes of constant flow)
G. Ensure the bag valve is in the open position, and record the time on the quality control sheet.
H. Remove the bag for analysis at the end of the 24-hour period. Keep the bag in a light-sealed container at all times.

Data for each sample will be recorded on a quality control sheet Prior to use, the Tedlar bags will be evacuated and filled with purified nitrogen three times to flush out the old sample. Before the bags are sent into the field, they will be checked to ensure the vacuum has been maintained. Any bag that has experienced any leakage will be removed from service.

Analytical Procedures

Bag samples will be analyzed within 72 hours of collection for total organic compounds and toxic air contaminants using analytical methods identified in the "Guidelines For Implementation of Rule 1150.1", Appendix 1, Table 1. All bag samples will be kept in light-sealed containers.

Reporting Results

The following data will be submitted to the Director of Engineering within 45 days after the analytical results are available, whichever is sooner:

A. Volume concentration of total organic compounds, reported as methane and total non-methane hydrocarbons.
B. Volume concentration of toxic air contaminants (core group contaminants plus any supplemental group contaminants required by SCAQMD).
C. Sea level barometric pressure (in inches of mercury) on the days the samples were collected.
D. Wind speed and direction data.
E. Landfill topographic map drawn to scale, with sampling locations clearly marked and numbered.
F. Quality control data sheets.

5. Mitigation Measures For Hydrocarbon Exceedances

For areas of the landfill that do not have a gas collection system in place, when there are several incidents in which the 50 ppm emission standard for total organic compounds has been exceeded in the surface sweeps or integrated air samples, a gas migration control system will be recommended to bring the site into compliance if repairs of cracks in the cover do not resolve the emissions problem.

If the landfill has a gas migration system in place and TOC concentrations in excess of 50ppm are measured during surface sweeps the following remedial action will be performed:

- surface cracks will be repaired by placement and compaction of cover

- necessary repairs will be done to the existing wells and header system
- flow adjustments will be made to existing wells

If these measures fail to achieve compliance additional wells will be installed.

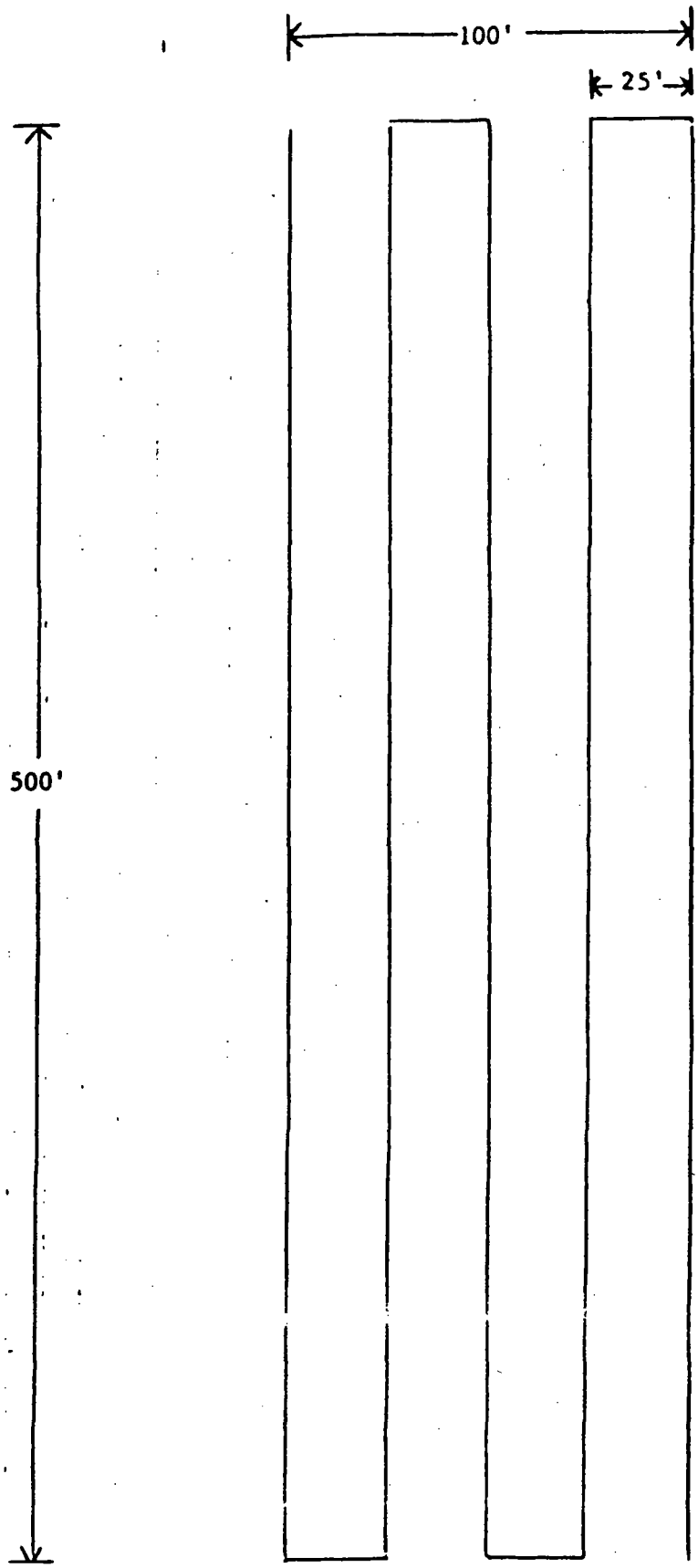
6. **Evaluation of Landfill Gas Combustion Efficiency**
The efficiency of the combustion equipment and/or gas treating facility used to dispose of the landfill gas collected from the Bradley landfill will be evaluated following District approval of this plan and subsequently on an efficiency of methane, non-methane organic compounds, and each toxic air source tests will be conducted within 30 days of the anniversary of the initial source test. A complete source test report will be submitted to the SCAQMD Engineering Division within 45 days following each source test. A copy of the source test results and efficiency calculations will be maintained for two years after each test, and will be made available for District inspection upon request. All efficiency calculations will be performed on a mass basis. The source testing and analytical methods identified in the guidelines (or equivalent methods approved by the Executive Officer) will be employed to determine the disposal efficiencies.

The destruction efficiency of the combustion device used to dispose of the collected landfill gas or gas treating facility waste stream a the Azusa Landfill will be calculated on a mass basis (dry) by source testing for the following:

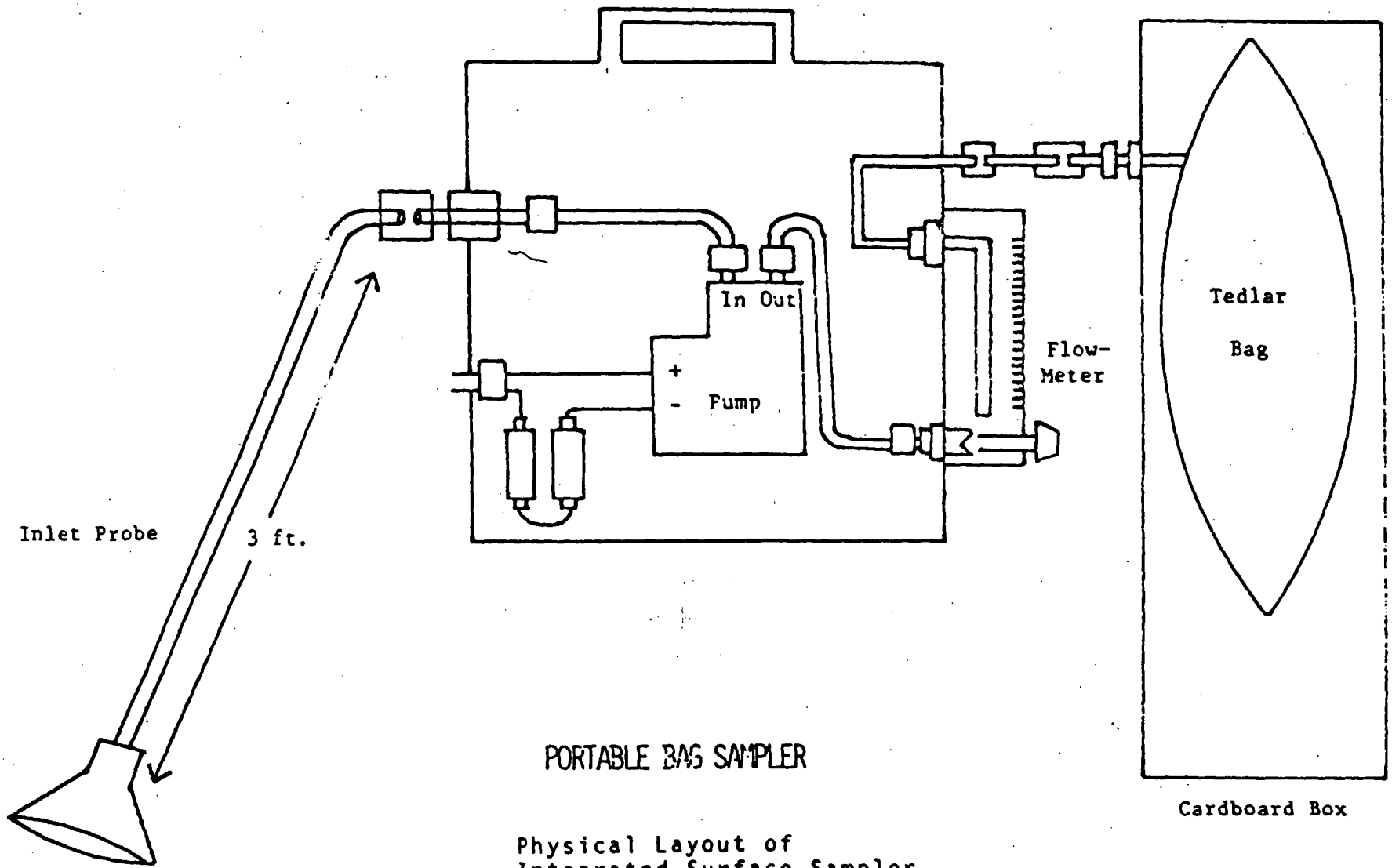
1. The volumetric concentrations of methane, non-methane organic compounds, and speciated toxic air contaminants in the collected landfill gas, combustion effluent, and treated landfill gas (or gas treating facility waste stream)

2. The volumetric flow rate in standard cubic feet per minute (using SCAQMD velocity traverse procedures of the collected landfill gas, combustion effluent, and treated landfill gas (or gas treating facility waste stream)

3. The volumetric concentrations of criteria pollutants in the combustion effluent.

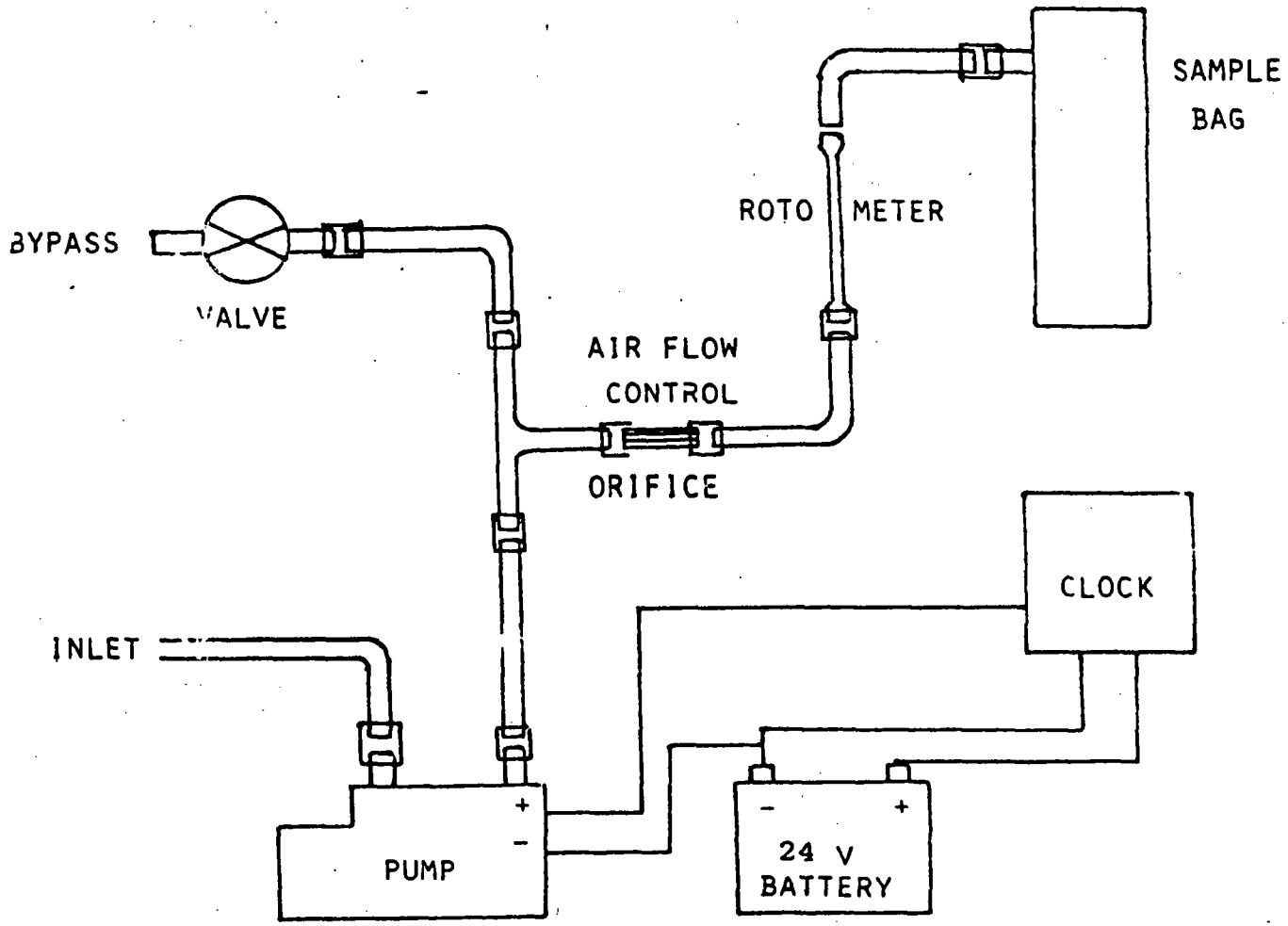


Typical Walk Pattern for Surface Monitoring



PORTABLE BAG SAMPLER

Physical Layout of
Integrated Surface Sampler



Physical Layout of
Ambient Air Sampler

GAS PROBE SAMPLE SUMMARY

SAMPLE LOCATION	SAMPLE IDENTIFICATION
Probe East 8 deep	VRPP001
Probe West 9	VRPP002

AtmAA Inc.
21354 Nordhoff St., Suite 113, Chatsworth, CA 91311 (818) 718-6070 • FAX (818) 718-9779
environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Landfill Gas & Probe Samples

Report Date : November 17, 1990
P.O. No.: V6467
Project No.: Not Given
Site : Valley Reclamation
Date Received : November 14, 1990
Date Analyzed : November 14, 15, & 16, 1990

AtmAA Lab No.:	93180-21	93180-22	93180-23
Sample I.D. No.:	VRPP001	VRPP002	VRICS001
Component	(Concentration in %, v/v)		
Methane	30.6	36.2	43.9
Carbon Dioxide	22.5	30.4	41.5
Oxygen	2.60	5.00	0.96
Nitrogen	44.2	28.2	13.5
	(Concentration in ppm, v/v)		
TGNMO	338	1690	8610
Component	(Concentration in ppb, v/v)		
Acetonitrile	<5	<5	61.1
Benzene	128	1400	1020
Benzyl chloride	<100	<100	<100
Chlorobenzene	<100	<100	<100
Dichlorobenzene*	<100	284	7900
1,1-dichloroethane	103	4460	7180
1,2-dichloroethane	85.0	523	638
1,1-dichloroethylene	204	467	792
Dichloromethane	63.6	474	15500
Perchloroethene	325	2180	17800
Carbon Tetrachloride	<1	<1	<1
Toluene	477	1060	62600
1,1,1-trichloroethane	3.36	129	940
Trichloroethene	186	620	6530
Chloroform	<2	<2	18.7
Vinyl chloride	1210	5150	2660
m+p-xylenes	287	292	18200
o-xylenes	266	230	17400

* total amount containing meta, para & ortho isomers

Michael L. Porter
Laboratory Director

2166-05416

LANDFILL AIR EMISSIONS MONITORING

BRADLEY LANDFILL

FIRST QUARTER 1991
LANDFILL AIR EMISSIONS MONITORING

Prepared:

Valley Reclamation Company
9188 Glenoaks Boulevard
Sun Valley, California 91352

EXECUTIVE SUMMARY

Landfill Air Emissions Monitoring results at the Bradley Landfill for the first quarter of 1991 (for months December 1990, January, and February 1991) are presented in this report. Data is reported pursuant to the *"Guidelines for Implementation of Rule 1150.1"*, as published by the South Coast Air Quality Management District.

The data indicates that Valley Reclamation Company, owner/operator of the Bradley Landfill, is in compliance with Rule 1150.1 and all Variance conditions (Case Number 3824) from Rule 1150.1.

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G. LABORATORY RESULTS AND QA/QC SUMMARY

1.0 INTRODUCTION

This report presents the results of landfill air emission monitoring performed at Bradley Landfill during the months of December 1990, January and February 1991 by Waste Management of North America personnel. Monitoring was performed in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1150.1 Monitoring plan developed by Valley Reclamation Company (VRC), a subsidiary of Waste Management of North America.

Rule 1150.1 requires that monthly monitoring and quarterly reporting of emissions of specified toxic compounds in the landfill environment be performed. Specific types of monitoring include:

- Instantaneous landfill surface monitoring;
- Ambient air sampling upwind and downwind of the site;
- Integrated surface sampling;
- Internal Landfill Gas Sampling;
- Perimeter probe sampling and weekly readings.

Landfill site

The Bradley Landfill is located in the Sun Valley District of Los Angeles California, in the northwest corner of the Los Angeles metropolitan area. The landfill is owned and operated by VRC. The site was formerly a sand and gravel pit operated by Conrock Company. The landfill is currently a Class III waste disposal facility occupying approximately 209 acres. Current refuse filling activities are taking place at Bradley West. An active landfill gas (LFG) migration/emissions control system has been operational at the site since 1982. The LFG Collection System produces in excess of 2 million cubic feet per day. During normal operating periods of the day, LFG is collected, processed and piped to Pacific Lighting Energy Systems (PLES). During high energy demand the Los Angeles Department of Water and Power (LADWP) Valley Steam Generating Station accepts the gas. When the LFG is not in demand by PLES and or LADWP, it is routed to an on-site flare station where it is incinerated in accordance with SCAQMD rules, and permit conditions.

2.0 SAMPLING PROCEDURES

This section outlines the procedures used in performing each activity. Sampling was conducted on a monthly basis during December 1990, January and February 1991. All field and analytical procedures were performed in accordance with the guidelines for implementing Rule 1150.1 published by the SCAQMD. All field equipment utilized at the site complies with SCAQMD standards.

2.1 INSTANTANEOUS LANDFILL SURFACE MONITORING

Each month the entire landfill disposal area is monitored for Total Organic Compounds (TOC) measured as methane, using a Flame Ionizing Detector, OVA Model 128. This monitoring consists of walking the landfill over a pre-established 100 ft. by 100 ft. grid while maintaining a 3 inch monitoring distance above the surface. Any detections of TOC in excess of 50 ppm are marked on the grid site map (Appendix A) giving location and concentration. Any excess of 500 ppm or greater are reported. Prior to each surface area sweep, the equipment is calibrated using a three point method and the weather is monitored to ensure favorable conditions. Wind speed was monitored and recorded during the sampling event from the onsite meteorological station. Ten minute averages that were obtained and diagramed in graphs representing the average wind speed are depicted in Appendix B.

Instantaneous surface monitoring information is included on the intercompany memorandums along with details on weather conditions, instrument operation, laboratory calibration, and field audits are in Appendix A.

Portions of the landfill were prevented from monitoring due to activities including dirt stock piling, heavy truck traffic, landfill covering on active face, and steep landfill slopes. The 100 square foot grid pattern monthly site maps for the instant surface sweep are shown on Appendix A.

2.2 INTEGRATED SURFACE SAMPLING

Integrated Surface Samples (ISS) were obtained from accessible areas overlying deposited refuse materials. The majority of the ISS grids were 100 ft. by 500 ft. rectangles. However, several altered rectangular grids were utilized due to access limitations such as changes to on-site traffic flow, location of working face, drilling of new gas recovery wells and stock piling of soil. The altered grid shapes were used to adequately cover the landfill surface while maintaining the required 50,000 square foot aerial coverage. All ISS samples were collected by walking an equivalent 50,000 square foot (2,600 linear feet) grid over a 25 minute period. The locations of all ISS grids are shown in Appendix C. Field equipment specifications and procedures are in Appendix D.

Wind speed was monitored and recorded during the sampling event from the onsite meteorological station. Ten minute averages that were obtained and diagramed in

graphs representing the average wind speed are depicted in Appendix B. Sampling was performed using a back pack mounted, hand held sampling apparatus. A 10 litre Tedlar bag enclosed in a light proof container was attached to the sampling apparatus. The gas was directed to the bag via Teflon tubing. Field sheets detailing the calibration and setup of each of the samplers, barometer and checklist, are presented in Appendix E.

Following collection, the air samples were transported to the Atmospheric Assessment Associates Inc. (AtmAA Inc.) Laboratory for analysis. The samples were analyzed within 72 hours for SCAQMD Rule 1150.1 toxic components, methane, and Total gaseous non-methane organics (TGNMO).

2.3 AMBIENT AIR SAMPLING

Ambient air monitoring stations were positioned up and downwind of the site. On each test date, two 24-hour samples and three less-than-24 hour samples (including one duplicate) were obtained from upwind and downwind locations. These sampler locations are shown in Appendix B. Sample locations were determined based on information generated during meteorological monitoring performed as part of the air Solid Waste Assessment Test in May 1988 and information gathered from the onsite meteorological station. Twenty-four hour meteorological surveys were conducted prior to each ambient air sampling event. Samples were not obtained unless weather conditions and wind conditions were within the rule 1150.1 specifications. Wind speed and direction were continuously recorded using a onsite meteorological station, and is summarized in Appendix B.

The 24-hour samplers were programmed to sample from 10:00 a.m. until 10:00 a.m. the following day. The less-than-24-hour samplers were programmed to sample during the peak drainage hours as shown by the meteorological station. Flow rates were adjusted to provide an approximate 10-liter sample for the programmed sample duration. Field sheets detailing the calibration and setup of each of the samplers, barometer and checklist, are presented in Appendix E.

Following collection, the air samples were transported to AtmAA Inc. laboratory, and analyzed within 72 hours for SCAQMD Rule 1150.1 toxic components, methane, and TGNMO.

2.4 INTERNAL LANDFILL GAS SAMPLING

Each month, one sample was collected from the LFG collection system header pipe. The sample was obtained over a 10-minute period into a 10-liter Tedlar bag, that was enclosed in a light-proof container. The gas was directed to the Tedlar bag via Teflon tubing. All sample hoses and fittings were made of stainless steel or Teflon materials. Following collection, the air samples were transported to the AtmAA Inc.laboratory,and analyzed within 72 hours for SCAQMD Rule 1150.1 toxic components, methane, Hydrogen Sulfide, and TGNMO.

2.5 PERIMETER PROBE SAMPLING

Each week the perimeter probes are monitored for pressure and methane content using a Gastech NP204 combustible gas indicator. Weekly probe results are listed in Appendix F. Field equipment specifications and procedures are located in Appendix D.

Monthly gas samples are collected from two samples measuring the highest gas content from two perimeter probes. Prior to sampling, each probe was evacuated until the TOC remained constant for 30 seconds. Samples were then collected in a 10-liter Tedlar bag, that was enclosed in a light-proof container. The gas was directed to the Tedlar bag via Teflon tubing. All sample hoses and fittings were made of stainless steel or Teflon materials. The sample was obtained over a ten minute period.

Following collection, two monthly probe samples were transported to the AtmAA Inc. laboratory, and analyzed within 72 hours for SCAQMD Rule 1150.1 toxic components, methane, and TGNMO.

3.0 RESULTS AND DISCUSSION

3.1 INSTANTANEOUS SURFACE MONITORING

Landfill surface monitoring was performed at the Bradley East, West and West Extension locations during the months of December, January, and February. Grid maps showing the landfill areas surveyed and locations of notable emissions are included in Appendix A. The results and discussion of the survey of the findings are provided below.

DECEMBER

There were no detections of TOC as methane above 500ppm noted.

JANUARY

There were no detections of TOC as methane above 500ppm noted.

FEBRUARY

There were no detections of TOC as methane above 500ppm noted.

Reports and their responses to the Instantaneous Landfill Surface Monitoring are included in Appendix A. Details on weather conditions, instrument operation, laboratory calibration, and field audits are presented in Appendix A.

3.2 INTEGRATED SURFACE SAMPLING

The number of ISS collected during the three month period are as follows:

December	12 ISS grids
January	8 ISS grids
February	16 ISS grids

Each ISS was tested in the field for TOC as methane using a Century OVA Model 128. Throughout the quarter, there were no excess of the 50 ppm as TOC levels in any of the 36 grids sampled. During each month of the quarter, two samples were selected for laboratory testing. Table 1 presents a summary of the analytical results obtained for this quarter. Complete laboratory reports are included in Appendix G.

The analytical results for this quarter are all within Rule 1150.1 guidelines; no exceedances were detected and all levels of measured compounds were within normal background for this area. The results shown in Table 1 are of similar magnitude. Due to adverse weather conditions during the month of January, only a limited number of grids could be sampled.

It should be noted that the ISS were not necessarily collected from the same area

of the landfill (grid) as the previous month (i.e., ISS locations in Table 1 vary from month to month). The locations of each ISS are shown on Appendix C.

It is Waste Management intent to test the entire landfill over the course of the year 1991 by selecting grided areas that have not been laboratory tested.

3.3 AMBIENT AIR SAMPLING

Sample results for 24 and less-than 24-hour samples that were collected in December 1990, January, and February 1991 are shown in Table 4,5,6 respectively. A duplicate (collocated) sample was obtained at the downwind, less-than-24-hour sample location (the point of maximum expected contaminant concentrations). Table 2 presents the 24-hour upwind and downwind analytical results for each of the day tested. Table 3 presents the less-than-24-hour upwind and downwind analytical results, and Table 4 presents the less-than-24-hour downwind collocated analytical results. The complete laboratory results are located in Appendix G. The locations of the air samplers are depicted in Appendix C.

The upwind to downwind 24-hour and less-than 24-hour samples indicated no significant differences between the two results.

3.4 INTERNAL LANDFILL GAS SAMPLING

Table 5 lists the results of the first quarter. The complete laboratory results are located in Appendix G.

3.5 PERIMETER PROBE SAMPLING

Two perimeter probe samples were analyzed this quarter for toxic components, methane, and TGNMO at AtmAA Inc. laboratory. One probe sample each from the East (E-8D) and West Section (W-9) were chosen to be analyzed based on methane concentrations. Laboratory results are located in Appendix G.

During the past quarter, weekly probe readings were taken for pressure and percent methane. The results of the monitoring are listed in Appendix F.

TABLE 1. INTERGRATED SURFACE SAMPLES – ANALYTICAL RESULTS

Concentrations are reported as ppb. unless noted.
Referenced grid locations are shown in Appendix A.

			December		January		February	
COMPOUNDS	Detection Limits (ppb)	Sample bag I.D. No.	Grid #10 VR008 (ppb)	Grid #11 VR007	Grid #4 VR009 (ppb)	Grid #8 VRISS014	Grid #2 VR022 (ppb)	Grid #5 VR015
Acetonitrile	0.8		ND	ND	ND	ND	ND	ND
Benzene	0.1		2.89	4.17	2.36	3.10	1.08	2.18
Benzyl Chloride	0.8		ND	ND	ND	ND	ND	ND
Chlorobenzene	0.1		ND	ND	ND	ND	ND	ND
Dichlorobenzene	1.1		ND	ND	ND	ND	ND	ND
1,1-dichloroethane	0.4		ND	ND	ND	ND	ND	ND
1,2-dichloroethane	0.2		ND	ND	ND	ND	ND	ND
1,1-dichloroethylene	0.1		ND	ND	ND	ND	ND	ND
Dichloromethane	0.2		1.25	1.28	2.20	0.72	1.00	0.38
Perchloroethene	0.1		3.39	1.79	0.54	0.62	0.20	0.13
Carbon Tetrachloride	0.06		0.11	0.11	0.12	0.12	0.10	0.10
Toluene	0.1		5.40	8.78	6.11	8.36	2.60	5.00
1,1,1-trichloroethane	0.06		3.18	2.73	9.96	9.96	1.58	4.22
Trichloroethene	0.06		ND	ND	0.13	ND	ND	ND
Chloroform	0.08		ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.1		ND	ND	ND	ND	ND	ND
m+p-xylenes	0.4		3.16	5.28	4.98	6.89	1.12	2.36
o-xylenes	0.2		1.61	2.92	3.69	4.26	1.02	1.91
Total Methane (ppmv)	1.0 ppm		2.20ppm	2.22ppm	2.20ppm	2.01ppm	1.18ppm	2.23ppm
Total Non Methane Organics (ppmv)	1.0 ppm		3.05ppm	3.12ppm	<1ppm	<1ppm	1.51ppm	1.91ppm

Grid locations vary from month to month, regardless of the grid number.

TABLE 2. 24 HOUR AMBIENT AIR SAMPLES - ANAYLTICAL RESULTS

Concentrations are reported as ppbv unless otherwise noted

		DECEMBER		JANUARY		FEBRUARY	
		Upwind	Downwind	Upwind	Downwind	Upwind	Downwind
Compounds	Sample	VR002	VR005	VR006	1407	VR024	VR023
		(ppb)		(ppb)		(ppb)	
Acetonitrile		ND	ND	ND	ND	ND	ND
Benzene		4.08	3.57	1.38	1.38	1.90	2.00
Benzyl Chloride		ND	ND	ND	ND	ND	ND
Chlorobenzene		ND	ND	ND	0.1	ND	ND
Dichlorobenzene		ND	ND	ND	ND	ND	ND
1,1-dichloroethane		ND	ND	ND	ND	ND	ND
1,2-dichloroethane		ND	ND	ND	ND	ND	ND
1,1-dichloroethene		ND	ND	ND	ND	ND	ND
Dichloromethane		1.80	2.08	0.58	0.68	0.61	0.72
Perchloroethene		0.68	0.66	0.44	0.18	0.36	0.39
Carbon Tetrachloride		0.10	0.10	0.12	0.12	0.10	0.11
Toluene		9.04	8.34	4.80	4.28	4.67	5.38
1,1,1-trichloroethane		10.3	6.43	8.29	2.42	7.41	3.40
Trichloroethane		ND	ND	ND	ND	ND	ND
Chloroform		ND	ND	0.08	ND	ND	ND
Vinyl Chloride		ND	ND	ND	ND	ND	ND
m+p-xylenes		4.68	4.1	3.90	3.52	2.34	2.79
o-xylenes		2.88	2.81	3.85	3.06	1.44	1.68
Total methane in ppm		2.98 ppm	2.11 ppm	2.20 ppm	1.86 ppm	3.27ppm	2.26ppm

TABLE 3. LESS THAN 24 HOUR AMBIENT AIR SAMPLES – ANAYLTICAL RESULTS

Concentrations are reported as ppbv unless otherwise noted

		DECEMBER		JANUARY		FEBRUARY	
		Upwind	Downwind	Upwind	Downwind	Upwind	Downwind
Compounds	Sample	VR003	VR001	VR011	VR013	VR031	VR029
		(ppb)		(ppb)		(ppb)	
Acetonitrile		ND	ND	ND	ND	ND	ND
Benzene		1.77	2.60	0.99	0.74	1.11	1.44
Benzyl Chloride		ND	ND	ND	ND	ND	ND
Chlorobenzene		ND	ND	ND	ND	ND	ND
Dichlorobenzene		ND	ND	ND	ND	ND	ND
1,1-dichloroethane		ND	ND	ND	ND	ND	ND
1,2-dichloroethane		ND	ND	ND	ND	ND	ND
1,1-dichloroethene		ND	ND	ND	ND	ND	ND
Dichloromethane		1.16	1.54	ND	ND	0.38	0.55
Perchloroethene		0.21	0.64	ND	ND	0.14	0.25
Carbon Tetrachloride		0.10	0.12	0.12	0.12	0.10	0.11
Toluene		5.32	6.02	3.37	4.38	3.64	4.93
1,1,1-trichloroethane		4.74	3.42	0.75	0.39	1.09	1.10
Trichloroethane		ND	ND	ND	ND	ND	NDND
Chloroform		ND	ND	ND	ND	ND	ND
Vinyl Chloride		ND	ND	ND	ND	ND	ND
m+p-xylenes		2.74	3.50	2.75	8.26	2.08	3.14
o-xylenes		1.34	2.00	2.40	8.84	1.31	1.78
Total methane in ppm		1.70 ppm	2.55 ppm	1.82 ppm	1.97 ppm	3.14 ppm	3.37 ppm

TABLE 4. LESS THAN 24 HOUR CO-LOCATED AMBIENT AIR SAMPLES – ANAYLTICAL RESULTS

Concentrations are reported as ppbv unless otherwise noted

		DECEMBER		JANUARY		FEBRUARY	
		Downwind	Co-located	Downwind	Co-located	Downwind	Co-located
Compounds	Sample	VR001	VR004	VR013	VR014	VR029	VR030
		ppb		ppb		ppb	
Acetonitrile		ND	ND	ND	ND	ND	ND
Benzene		2.60	2.52	0.74	0.68	1.44	1.42
Benzyl Chloride		ND	ND	ND	ND	ND	ND
Chlorobenzene		ND	ND	ND	ND	ND	ND
Dichlorobenzene		ND	ND	ND	ND	ND	ND
1,1-dichloroethane		ND	ND	ND	ND	ND	ND
1,2-dichloroethane		ND	ND	ND	ND	ND	ND
1,1-dichloroethene		ND	ND	ND	ND	ND	ND
Dichloromethane		1.54	1.58	ND	0.31	0.55	0.54
Perchloroethene		0.64	0.54	ND	0.20	0.25	0.22
Carbon Tetrachloride		0.12	0.11	0.12	0.12	0.11	0.10
Toluene		6.02	5.95	4.38	3.33	4.93	3.66
1,1,1-trichloroethane		3.42	3.39	0.39	1.82	1.10	1.07
Trichloroethane		ND	0.06	ND	ND	NDND	ND
Chloroform		ND	ND	ND	ND	ND	ND
Vinyl Chloride		ND	ND	ND	ND	ND	ND
m+p-xylenes		3.50	3.36	8.26	3.57	3.14	1.99
o-xylenes		2.00	1.80	8.84	3.74	1.78	1.28
Total methane in ppm		3.91 ppm	3.77 ppm	1.97 ppm	1.98 ppm	3.37 ppm	3.36 ppm

TABLE 5. LANDFILL GAS SAMPLES - ANALYTICAL RESULTS

	Detection Limits	Bag ID #	December V21	January VRISS5	February VRISS012
COMPONENTS measured in concentration in ppm V/V					
Total Gaseous Non-methane Organics	1ppm		10200	9520	10100
COMPONENTS measured in percentage % V/V					
Methane	0.2%		42.4	34.6	41.4
Carbon Dioxide	0.2%		40.4	39.2	39.4
Oxygen	0.2%		0.89	2.01	1.25
Nitrogen	0.2%		16.8	25.5	17.3
COMPOUNDS measured in concentration in ppb, V/V					
Acetonitrile	5.0ppb		37.7	77.6	35.5
Benzene	50ppb		1080	1020	1160
Benzyl Chloride	100ppb		ND	ND	ND
Chlorobenzene	50ppb		1460	1330	ND
Dichlorobenzene	100ppb		4590	7360	425
1,1-dichloroethane	100ppb		6880	11200	5490
1,2-dichloroethane	20ppb		ND	646	223
1,1-dichloroethylene	30ppb		954	973	787
Dichloromethane	15ppb		14600	26200	16200
Perchloroethene	2ppb		14500	17400	20100
Carbon Tetrachloride	1ppb		ND	ND	ND
Toluene	75ppb		77600	99200	73700
1,1,1-trichloroethane	5ppb		517	1000	632
Trichloroethene	4ppb		4570	7480	5030
Chloroform	2ppb		18.7	21.1	4.16
Vinyl Chloride	20ppb		3560	2570	2300
m+p-xylenes	100ppb		33600	30800	32900
o-xylenes	60ppb		20400	25400	21600

3.6 QUALITY ASSURANCE/QUALITY CONTROL PROVISIONS

Quality assurance/quality control (QA/QC) provisions were strictly maintained during sample collection and analysis. The provisions for field quality assurance and sampling methodology included:

- Adherence to sample handling and chain-of-custody provisions, as out-lined in the Guidelines for Implementing Rule 1150.1.
- Use of field data sheets to record sampling date and location, initials of field personnel, sample flow rates, regular equipment checks and calibration, weather conditions, etc.
- Collection of Ambient Air Co-located samples.
- Regular service checks and calibration of all field equipment.
- Prior to each use, the Tedlar bags were purged three times with purified Nitrogen and then vacuum tested for leakage.

Co-located Sample

Co-located samples were obtained on all test dates at the downwind less-than-24-hour sampler location. No significant changes between the two samples were noticed. Analytical results are summarized in Table 4 and are included in Appendix C.

APPENDIX A

INSTANTANEOUS SURFACE MONITORING REPORTS AND RESPONSES
OVA SITE PLANS

INSTANTANEOUS SURFACE MONITORING, REPORTS AND RESPONSES FOR THE MONTH OF DECEMBER

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: DECEMBER 21, 1990

TO: JOHN MAYS

FROM: RODNEY COLLINS

SUBJECT: **GAS EMISSION SURVEY CARRIED OUT ON BRADLEY WEST, BRADLEY WEST EXTENSION AND BRADLEY EAST LANDFILLS ON DECEMBER 19-20, 1990.**

A sweep was conducted using a Century Organic Vapor Analyzer Model OVA 128, to locate potential surface landfill gas emissions. Monthly emission surveys are carried out at Bradley landfill making note of detections exceeding 500 ppm TOC as methane.

Weather conditions were within sampling limits; noting that no rainfall was observed three days prior to the survey. Details on the weather conditions, instrument operation, performance checklist, laboratory calibration and field audits are attached.

The results of the survey and a discussion of the findings are provided below.

BRADLEY WEST

Time of Sweep: 14:00 - 15:30 December 20, 1990

There were no detections of methane as TOC in excess of 500 ppm at Bradley West.

A portion of Bradley West was not surveyed due to active trash disposal and dirt stock piling.

BRADLEY WEST EXTENSION

Time of Sweep: 15:30 - 16:00 Demember 20, 1990

There were no detections in excess of 500 ppm TOC as methane observed at Bradley West extension.

Printed on recycled paper

BRADLEY EAST (NORTH SECTION)

Time of Sweep: 09:30 - 11:00 December 19, 1990

There were no detections in excess of 500 ppm TOC as methane observed at Bradley East (North section).

A portion of Bradley East (North section) was not surveyed due to dirt stock piling.

BRADLEY EAST (SOUTH SECTION)

Time of Sweep: 11:00 - 1400 December 19, 1990

There were no detections in excess of 500 ppm TOC as methane observed at Bradley East (South section).

No other detections of organic vapor was observed.

c.c. Eric Davies
Bob Austin
Susan Kilgore

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: Bradley

PURPOSE: Surface Emissions Screening

OPERATOR: R. Collins

DATE: **Start** 0900 **Finish** 1530

Model # OVA 128
Serial # 40501

INSTRUMENT INTEGRITY CHECKLIST	
Battery Test	Pass/Fail
Reading Following Ignition	0 ppm
Leak Test	Pass/Fail
Clean System Check (Check Valve Chatter)	Pass/Fail
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail

INSTRUMENT CALIBRATION

Perform Three Point Internal Calibration Before Use.

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
95	94	98.9	Ø
900	1000	90.0	Ø

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1. 1530	95	150	63
2. 1530	900	820	91

Instrument calibrated to Methane gas

COMMENTS: Two point calibration utilized

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: Bradley

PURPOSE: Surface Emissions Screening

OPERATOR: R. Collins

DATE: 12/20/90 **Start** 1330 **Finish** 1520

Model # OVA 128
Serial # 40501

INSTRUMENT INTEGRITY CHECKLIST	
Battery Test	Pass/Fail
Reading Following Ignition	1 ppm
Leak Test	Pass/Fail
Clean System Check (Check Valve Chatter)	Pass/Fail
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail

INSTRUMENT CALIBRATION

Perform Three Point Internal Calibration Before Use.

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
95	140	67.8	Ø
900	850	94.7	Ø
7	9	77.7	Ø

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1551	9	7	67.8
1. 1551	900	750	83.3
2. 1551	95	95	100%

Instrument calibrated to Methane gas

COMMENTS: Three point calibration utilized; problem calibrating at 1X & 10X scales.

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: DECEMBER 24, 1990

TO: JOHN MAYS

FROM: SUSAN KILGORE

SUBJECT: RESPONSE TO POINT SOURCE EMISSIONS DECEMBER 19-20, 1990

In response to the Gas Emission survey performed by Environmental Technician, Rod Collins on December 19 and 20, 1990, the following responses were taken:

Bradley West

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

Bradley West Extension

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

Bradley East (North Section)

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

Printed on recycled paper

Bradley East (South Section)

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

cc: Rod Collins
Ernie Dragan
Bob Austin
Eric Davies

F/VR/Rule 1150.1 Dec. 1990

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INSTANTANEOUS SURFACE MONITORING, REPORTS AND RESPONSES FOR THE MONTH OF JANUARY

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: JANUARY 25, 1991

TO: JOHN MAYS

FROM: ERNIE DRAGAN

SUBJECT: GAS EMISSION SURVEY CARRIED OUT ON BRADLEY WEST, BRADLEY WEST EXTENSION AND BRADLEY EAST LANDFILLS ON JANUARY 17-18, 1990.

A sweep was conducted using a Century Organic Vapor Analyzer Model OVA 128, to locate potential surface landfill gas emissions. Monthly emission surveys are carried out at Bradley landfill making note of detections exceeding 500 ppm TOC as methane.

Weather conditions were within sampling limits; noting that no rainfall was observed three days prior to the survey. Details on the weather conditions, instrument operation, performance checklist, laboratory calibration and field audits are attached.

The results of the survey and a discussion of the findings are provided below.

BRADLEY EAST (SOUTH SECTION)

Time of Sweep: 0800 - 0930 January 17, 1991

There were no detections in excess of 500 ppm TOC as methane observed at Bradley East (South section).

No other detections of organic vapor was observed.

BRADLEY EAST (NORTH SECTION)

Time of Sweep: 09:30 - 10:30 January 17, 1991, 8:00 - 9:30 January 18, 1991

There were no detections in excess of 500 ppm TOC as methane observed at Bradley East (North section) during the time of the sweep. Instantaneous wind speed exceeded 25mph at 10:30 thus terminating the sweep. The sweep was completed on the 18.

A portion of Bradley East (North section) was not surveyed due to dirt stock piling.

BRADLEY WEST

Time of Sweep: 09:30 - 12:30 January 18, 1991

There were no detections of methane as TOC in excess of 500 ppm at Bradley West.

A portion of Bradley West was not monitored due to active trash disposal and dirt stock piling.

BRADLEY WEST EXTENSION

Time of Sweep: 12:30 - 1400 January 18, 1991

There were no detections in excess of 500 ppm TOC as methane observed at Bradley West extension.

c.c. Eric Davies
Bob Austin
Susan Kilgore

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: BRADLEY / 284

PURPOSE: OVA SWEEP

OPERATOR: DRAGAN

DATE: 1/18/91 **Start** 8:15 **Finish** 1:30 pm

Model # OVA 128 CENTURY
Serial # 40501

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery Test	Pass/Fail	Perform Three Point Internal Calibration Before Use.
Reading Following Ignition	4.2 ppm	**CALIBRATION CHECK**
Leak Test	Pass/Fail	
Clean System Check (Check Valve Chatter)	Pass/Fail	
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail	

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
10	10		
95	95		
900	1000		

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1. 1:30	95	82	
	900	740	
2.			

Instrument calibrated to CH_4 gas

COMMENTS: Barometer 30.11

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: BRADLEY/234

PURPOSE: INSTANTANEOUS SURFACE SWEEP

OPERATOR: E. DRAGAN

DATE: 1/17/91 **Start** 8:53am **Finish** 10:30am

Model # OVA
Serial # 40501

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery Test	(Pass)/Fail	Perform Three Point Internal Calibration Before Use.
Reading Following Ignition	1.6 ppm	**CALIBRATION CHECK**
Leak Test	(Pass)/Fail	
Clean System Check (Check Valve Chatter)	(Pass)/Fail	
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	(Pass)/Fail 13	

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
900ppm	1000ppm		1.6
95	95		
9	9		

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1.			
2.			

Instrument calibrated to _____ gas

Wind sp	Time
800	9:10

COMMENTS: wind speed exceeded 25mph ∴ continue sweep on Friday. Sweep ended @ 10:30 am

Barometer = 30.20

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: JANUARY 28, 1991

TO: JOHN MAYS

FROM: SUSAN KILGORE

SUBJECT: RESPONSE TO POINT SOURCE EMISSIONS JANUARY 17-18, 1991

In response to the Gas Emission survey performed by Environmental Technician, Ernie Dragan on January 17 and 18, 1991, the following responses were taken:

Bradley West

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

Bradley West Extension

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

Bradley East (North Section)

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

Bradley East (South Section)

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

cc: Rod Collins
Ernie Dragan
Bob Austin
Eric Davies

F/VR/Rule 1150.1 Jan. 1991

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INSTANTANEOUS SURFACE MONITORING, REPORTS AND RESPONSES FOR THE MONTH OF FEBRUARY

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: FEBRUARY 28, 1991

TO: JOHN MAYS

FROM: ROD COLLINS

SUBJECT: **GAS EMISSION SURVEY PERFOMED AT BRADLEY WEST, BRADLEY WEST EXTENSION AND BRADLEY EAST LANDFILLS ON FEBRUARY 25-26, 1991.**

A sweep was conducted using a Century Organic Vapor Analyzer Model OVA 128, to locate potential surface landfill gas emissions. Monthly emission surveys are carried out at Bradley landfill making note of detections exceeding 500 ppm TOC as methane.

Weather conditions were within sampling limits; noting that no rainfall was observed three days prior to the survey. Details on the weather conditions, instrument operation, performance checklist, laboratory calibration and field audits are attached.

The results of the survey and a discussion of the findings are provided below:

BRADLEY EAST (SOUTH SECTION)

Time of Sweep: 10:00 - 11:35 February 25, 1991

Total organic carbon as methane was detected at a concentration of 100 ppm at grid W36 of the site topographical map. The point source was a result of a PVC pipe utilized by Gas Recovery as a depth markers.

No other detections of organic vapor was observed.

BRADLEY EAST (NORTH SECTION)

Time of Sweep: 11:15 - 13:10 February 25, 1991

There were no detections in excess of 500 ppm TOC as methane observed at Bradley East (North section) during the time of the sweep.

A portion of Bradley East (North section) was not surveyed due to dirt stock piling.

BRADLEY WEST

Time of Sweep: 09:20 - 10:35 February 26, 1991

Total organic carbon as methane was detected at concentrations of 100 ppm near grid Z7 at two point sources. The sources of the emissions where two PVC pipes utilized by Gas Recovery as depth markers. There were no detections of methane as TOC in excess of 500 ppm at Bradley West.

A portion of Bradley West was not monitored due to active trash disposal and dirt stock piling.

BRADLEY WEST EXTENSION

Time of Sweep: 10:35 - 11:35 February 26, 1991

There were no detections in excess of 500 ppm TOC as methane observed at Bradley West extension.

c.c. Eric Davies
Bob Austin
Susan Kilgore

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: Bradley - 234

PURPOSE: OVA Sweep

OPERATOR: R. Collins

DATE: 2/25/91 **Start** 9:30 **Finish** 1500

Model # Century OVA 128
Serial # 40501

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery Test	Pass/Fail	Perform Three Point Internal Calibration Before Use.
Reading Following Ignition	7.5 ppm	**CALIBRATION CHECK**
Leak Test	Pass/Fail	
Clean System Check (Check Valve Chatter)	Pass/Fail	
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail	

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
10	11	97	1
95	60	63	Ø
1000	880	88	Ø

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1. 1500	10	9	90
1500	95	60	63
2. 1500	900	840	93

Instrument calibrated to CH_4 gas

COMMENTS: Barometer - 30.09 @ 10:00

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: Bradley 1234

PURPOSE: OVA sweep

OPERATOR: R - Collins

DATE: 2/26/91 **Start** 0900 **Finish** 1200

Model # Century OVA 128
Serial # 40561

INSTRUMENT INTEGRITY CHECKLIST	
Battery Test	Pass/Fail
Reading Following Ignition	Ø ppm
Leak Test	Pass/Fail
Clean System Check (Check Valve Chatter)	Pass/Fail
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail

INSTRUMENT CALIBRATION

Perform Three Point Internal Calibration Before Use.

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
10	12	83	Ø
95	82	96	Ø
900	820	91	Ø

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1. 1140	10	10	100
1140	95	83	87
2. 1140	900	610	68

Instrument calibrated to Methane gas

COMMENTS: Barometer = 30-06 @ 900

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: MARCH 6, 1991

TO: JOHN MAYS

FROM: SUSAN KILGORE

SUBJECT: **RESPONSE TO POINT SOURCE EMISSIONS FEBRUARY 25-26, 1991**

In response to the Gas Emission Survey performed by Environmental Technician Rod Collins on February 25 and 26, 1991, the following responses were taken:

Bradley West

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary. There was a detection of 100 ppm where a PVC pipe was utilized as a depth marker. Dirt was piled on the PVC pipe the same day as the detection.

Bradley West Extension

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

Bradley East (North Section)

Exceeded Limits: No exceeded limits were noted.

Response: There was a detection of 100 ppm where a PVC pipe was utilized a depth marker. Dirt was piled on the PVC pipe the same day as the detection.

Bradley East (South Section)

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

cc: Rod Collins
Ernie Dragan
Bob Austin
Eric Davies

F/VR/Rule 1150.1 Feb. 1991

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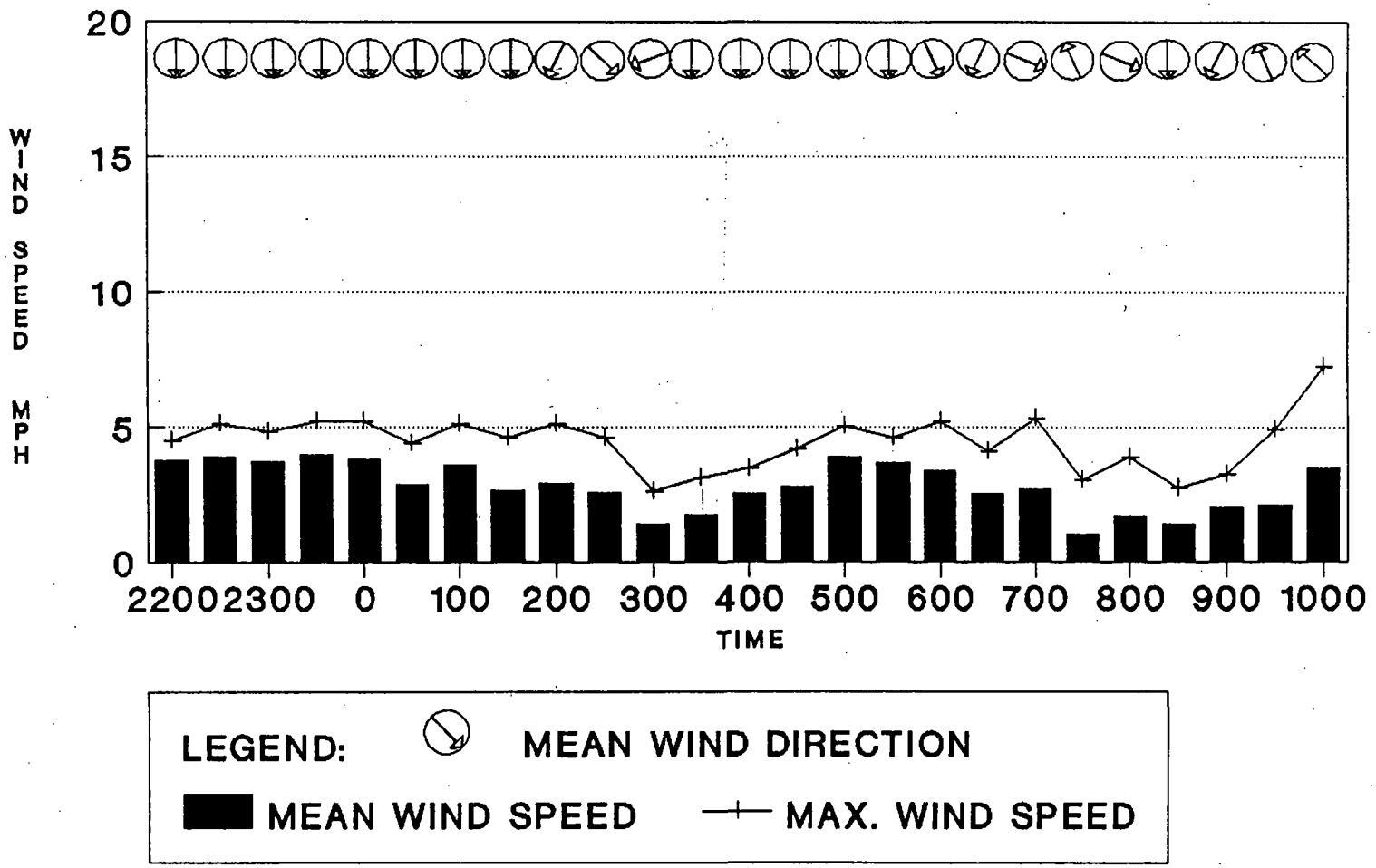
APPENDIX B

WIND SPEED AND DIRECTION INFORMATION

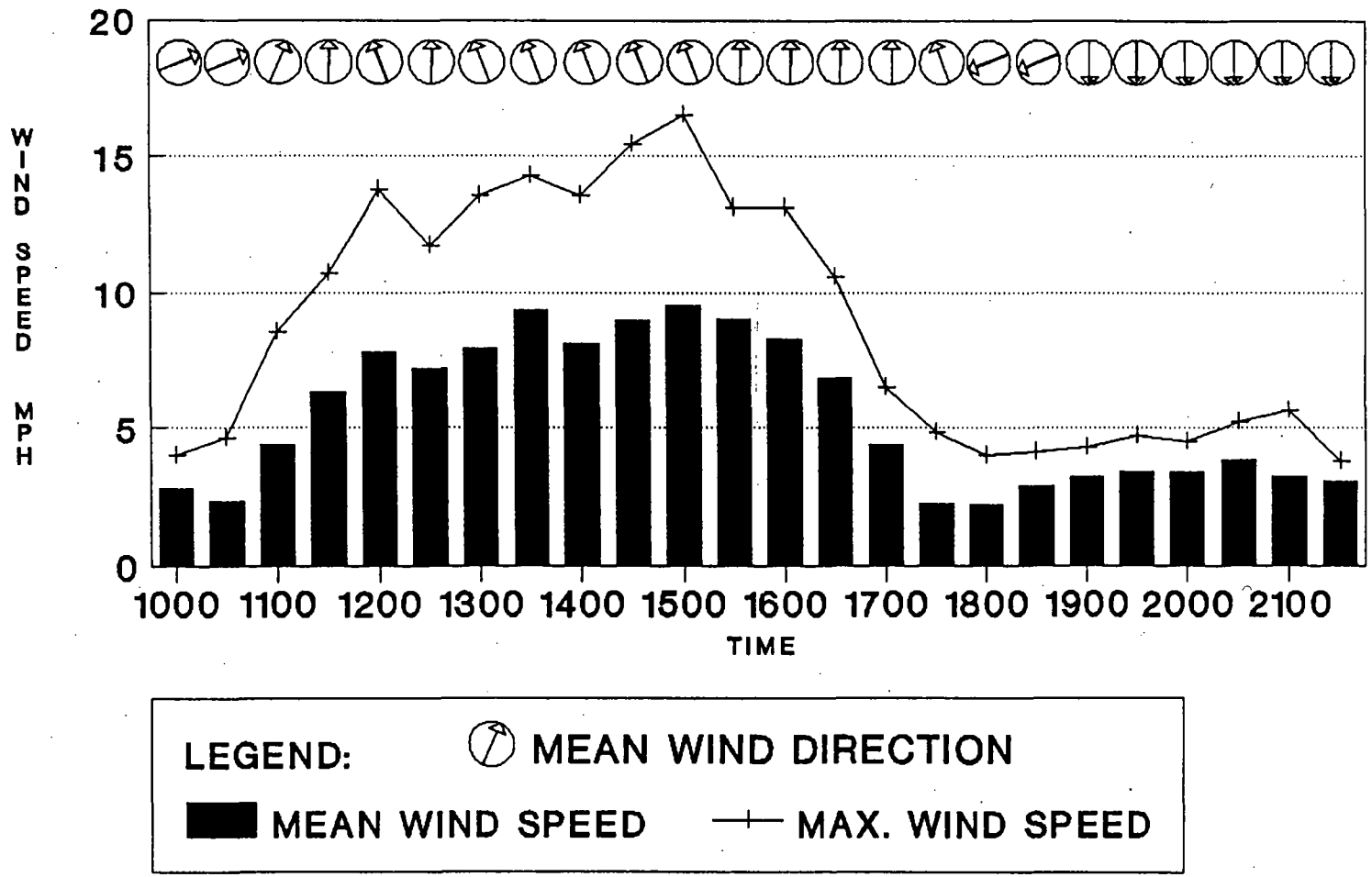
WIND SPEED AND DIRECTION INFORMATION

FOR THE MONTH OF DECEMBER

BRADLEY LANDFILL
AMBIENT AIR SAMPLING METEOROLOGICAL DATA
DECEMBER 10-11, 1990

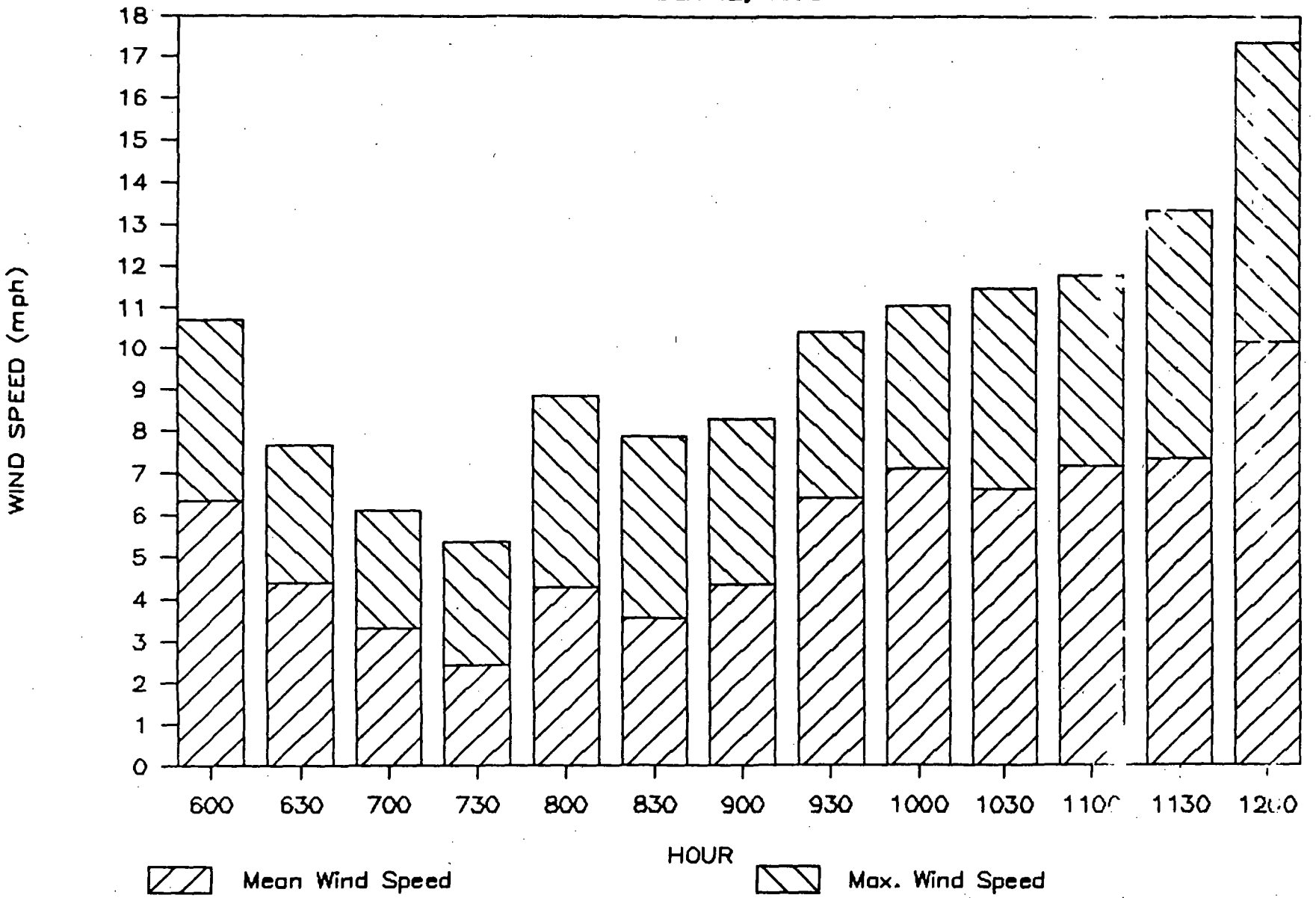


BRADLEY LANDFILL
AMBIENT AIR SAMPLING METEOROLOGICAL DATA
DECEMBER 10, 1990



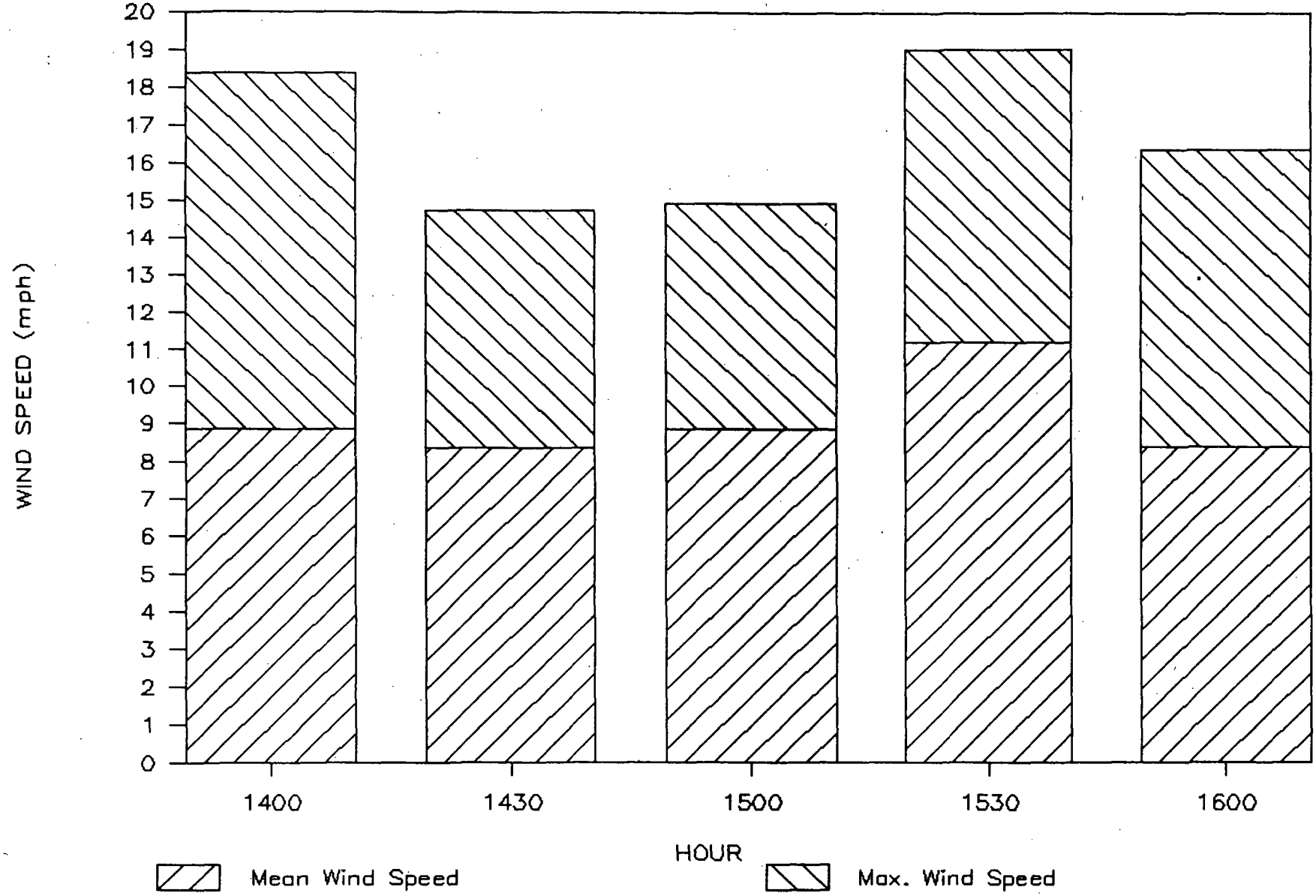
Monitoring Wind Conditions

DECEMBER 12, 1990



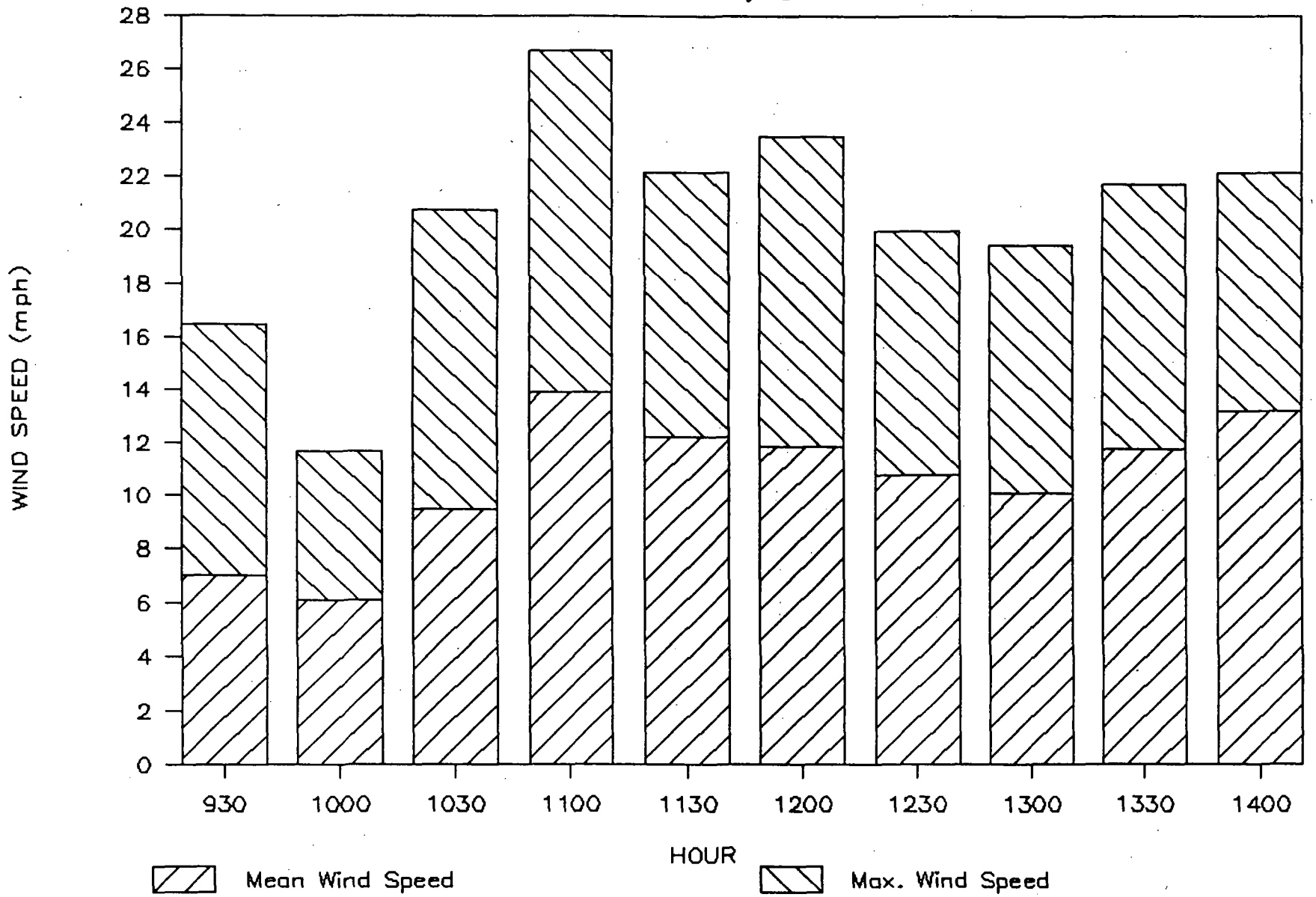
Monitoring Wind Conditions

DECEMBER 20, 1990



Monitoring Wind Conditions

DECEMBER 19, 1990



AIR MONITORING WIND DATA

Date	Time	Mean Wind Speed	Mean Wind Dir.	Max Wind Speed
12 10	1000	3.123	235.9	3.995
12 10	1010	2.091	234.9	3.575
12 10	1020	1.775	233.7	3.154
12 10	1030	3.055	226.8	4.626
12 10	1040	3.319	223.2	5.047
12 10	1050	4.667	198.6	8.52
12 10	1100	5.139	184.3	8.1
12 10	1110	6.187	184.2	9.46
12 10	1120	6.166	177.2	9.57
12 10	1130	6.712	178	10.72
12 10	1140	7.2	167.8	9.78
12 10	1150	8.92	171.4	13.77
12 10	1200	7.37	170.2	11.46
12 10	1210	8.07	170.5	11.78
12 10	1220	7.13	180.2	11.67
12 10	1230	6.487	175.6	9.57
12 10	1240	6.185	158.7	10.09
12 10	1250	8.65	159.1	12.51
12 10	1300	8.91	161.1	13.56
12 10	1310	9.3	161	14.3
12 10	1320	9.33	172.6	13.77
12 10	1330	9.49	166.6	14.3
12 10	1340	9.02	158.7	13.56
12 10	1350	7.35	154.6	11.57
12 10	1400	7.9	142.5	13.04
12 10	1410	7.91	148.1	13.46
12 10	1420	9.81	159.2	14.51
12 10	1430	9.24	150.6	15.46
12 10	1440	8.91	161.7	14.4
12 10	1450	10.69	166.8	16.51
12 10	1500	8.95	161.5	12.93
12 10	1510	8.84	189.2	12.41
12 10	1520	9.38	187.7	13.14
12 10	1530	8.87	183.7	12.62
12 10	1540	9.43	183.3	13.14
12 10	1550	8.07	179.2	12.09
12 10	1600	7.35	185.3	10.72
12 10	1610	7.81	188.4	10.2
12 10	1620	7.52	188.3	10.62
12 10	1630	5.226	184.1	7.36
12 10	1640	4.994	182.3	6.519
12 10	1650	4.143	191.6	5.783
12 10	1700	3.939	202.2	4.942
12 10	1710	2.827	190.3	4.836
12 10	1720	1.661	114.9	2.628
12 10	1730	2.159	117.6	3.154
12 10	1740	1.853	11.56	3.154
12 10	1750	1.752	12.65	2.313
12 10	1800	3.028	21.16	3.995
12 10	1810	3.085	18.73	3.995

AIR MONITORING WIND DATA

Date	Time	Mean Wind Speed	Mean Wind Dir.	Max Wind Speed
12 10	1820	2.596	13.42	3.575
12 10	1830	2.907	9.06	4.1
12 10	1840	3.412	13.51	4.311
12 10	1850	3.187	10.66	4.206
12 10	1900	3.085	5.897	3.68
12 10	1910	3.205	.369	3.995
12 10	1920	3.756	8.03	4.731
12 10	1930	3.225	358.9	4.206
12 10	1940	3.62	5.764	4.521
12 10	1950	3.274	5.94	3.785
12 10	2000	3.25	5.688	3.995
12 10	2010	3.884	3.32	4.626
12 10	2020	3.744	16.58	4.416
12 10	2030	3.836	9.94	5.257
12 10	2040	3.274	6.728	5.678
12 10	2050	2.91	5.98	4.206
12 10	2100	3.42	358	4.1
12 10	2110	2.802	357.9	3.47
12 10	2120	3.223	8.3	3.785
12 10	2130	3.122	357.7	3.68
12 10	2140	3.685	359.2	4.521
12 10	2150	3.859	12.87	4.311
12 10	2200	3.816	13.01	4.416
12 10	2210	3.509	5.486	4.206
12 10	2220	4.042	11.88	4.942
12 10	2230	4.166	11.54	5.152
12 10	2240	3.847	3.798	4.836
12 10	2250	3.745	6.04	4.836
12 10	2300	3.56	3.297	4.731
12 10	2310	3.842	359.5	4.942
12 10	2320	4.034	340.2	5.257
12 10	2330	4.103	1.231	4.731
12 10	2340	4.083	346.9	4.836
12 10	2350	3.901	356.7	5.257
12 11	0	3.433	15.7	4.206
12 11	10	2.806	.112	4.311
12 11	20	2.761	5.168	4.416
12 11	30	3.084	4.332	3.89
12 11	40	3.251	2.978	4.521
12 11	50	3.527	2.846	4.942
12 11	100	4.028	339.1	5.152
12 11	110	3.295	356.4	4.206
12 11	120	2.705	10.13	4.626
12 11	130	2.034	13.92	2.523
12 11	140	2.282	12.4	2.944
12 11	150	3.596	16.63	5.152
12 11	200	2.906	15.53	4.942
12 11	210	2.951	324.6	4.626
12 11	220	3.181	311.8	4.1
12 11	230	1.565	317.9	3.259

AIR MONITORING WIND DATA

Date	Time	Mean Wind Speed	Mean Wind Dir.	Max Wind Speed
12 11	240	1.481	86.9	2.628
12 11	250	1.401	107.5	2.313
12 11	300	1.374	17.12	2.418
12 11	310	1.757	.136	2.944
12 11	320	1.555	5.281	2.839
12 11	330	1.923	354.9	3.154
12 11	340	2.36	15.14	3.47
12 11	350	2.251	359.4	3.47
12 11	400	2.951	354.3	3.47
12 11	410	3.062	345.8	3.364
12 11	420	3.103	13.57	4.206
12 11	430	2.23	12.77	3.785
12 11	440	3.748	15.92	4.626
12 11	450	4.162	13.5	5.047
12 11	500	3.763	6.363	4.836
12 11	510	3.779	7.84	4.626
12 11	520	3.492	12.88	4.311
12 11	530	3.773	355.8	4.626
12 11	540	3.42	1.235	4.206
12 11	550	2.729	355.9	3.785
12 11	600	4.069	304.9	5.257
12 11	610	2.993	357.5	4.1
12 11	620	2.208	12.04	3.049
12 11	630	2.376	38.51	3.68
12 11	640	1.983	4.359	3.364
12 11	650	3.228	272.6	5.362
12 11	700	2.844	272	3.364
12 11	710	1.298	201.3	3.049
12 11	720	.863	105.9	1.787
12 11	730	.928	172.2	1.998
12 11	740	1.706	2.864	2.523
12 11	750	2.579	253.7	3.89
12 11	800	.926	257.1	2.628
12 11	810	.773	27.2	1.367
12 11	820	1.478	339.3	2.628
12 11	830	2.031	18.88	2.734
12 11	840	2.496	15.18	3.259
12 11	850	2.192	18.46	3.049
12 11	900	1.368	15.84	1.893
12 11	910	1.233	29.06	2.208
12 11	920	1.692	160.9	3.364
12 11	930	3.326	180	4.942
12 11	940	3.105	134.2	4.626
12 11	950	3.044	115.6	5.783
12 11	1000	4.404	157.6	7.25
12 11	1010	6.248	168.5	9.99
12 11	1020	6.208	159.1	10.62
12 11	1030	6.676	175.7	10.72
12 11	1040	5.715	184	10.09
12 11	1050	6.738	194	10.2

AIR MONITORING WIND DATA

Date	Time	Mean Wind Speed	Mean Wind Dir.	Max Wind Speed
12 11	1100	7.69	183.9	11.99
12 11	1110	9.94	171.2	14.93
12 11	1120	9.72	183.2	14.3
12 11	1130	9.74	174.3	14.09
12 11	1140	9.98	171.7	17.14
12 11	1150	9.67	156.8	14.72
12 11	1200	9.65	159.6	14.51
12 11	1210	9.77	145.4	15.35
12 11	1220	8.33	154.2	13.14
12 11	1230	7.5	151.6	12.3
12 11	1240	7.27	162.5	12.09
12 11	1250	7.63	148.9	10.93
12 11	1300	8.66	170.8	13.88
12 11	1310	8.03	186.3	14.51
12 11	1320	9.14	180.6	15.56
12 11	1330	8.32	176.3	12.2
12 11	1340	9.44	174.6	14.51
12 11	1350	8.79	173.3	13.46
12 11	1400	8.86	176.7	13.77
12 11	1410	8.78	187.1	13.56
12 11	1420	9	187.9	12.83
12 11	1430	9.82	179.9	13.56
12 11	1440	9.62	193.9	13.67
12 11	1450	9.14	190.4	13.67
12 11	1500	9.41	175.9	12.62
12 11	1510	8.55	174	11.14
12 11	1520	8.28	172.5	11.36
12 11	1530	7.34	169.6	9.78
12 11	1540	7.05	166	9.99
12 11	1550	7.87	168.2	10.3
12 11	1600	7.75	175	10.2
12 11	1610	6.991	179.3	9.57
12 11	1620	6.111	173.6	8.31
12 11	1630	5.409	175.1	8.41
12 11	1640	4.948	165.1	7.78
12 11	1650	3.952	169.4	5.888
12 11	1700	4.001	170.7	6.414
12 11	1710	4.063	184	5.993
12 11	1720	4.357	184.3	6.203
12 11	1730	4.615	173.4	7.04
12 11	1740	3.386	174.8	4.836
12 11	1750	4.101	172.3	5.993
12 11	1800	3.218	154.7	6.729
12 11	1810	3.723	152.2	5.467
12 11	1820	3.644	150.8	5.257
12 11	1830	4.391	172.9	6.729
12 11	1840	3.989	146.3	6.308
12 11	1850	5.001	146.1	6.939
12 11	1900	4.72	154.8	6.308
12 11	1910	5.734	179.7	7.15

AIR MONITORING WIND DATA

Date	Time	Mean Wind Speed	Mean Wind Dir.	Max Wind Speed
12 11	1920	3.724	196.8	5.678
12 11	1930	2.077	135.8	3.575
12 11	1940	2.375	149.4	3.995
12 11	1950	2.728	140.6	4.521
12 11	2000	3.931	170.1	5.888
12 11	2010	4.396	175.9	6.834
12 11	2020	3.769	177.9	6.519
12 11	2030	4.939	175.3	7.89
12 11	2040	4.541	184.1	7.99
12 11	2050	4.296	211.7	5.678
12 11	2100	3.209	208.6	5.362
12 11	2110	2.524	193.4	3.364
12 11	2120	2.772	191.5	4.521
12 11	2130	3.695	170.8	6.414
12 11	2140	4.434	167.8	7.78
12 11	2150	3.902	185.8	6.519
12 11	2200	2.567	215.7	3.995
12 11	2210	2.824	226.2	4.942
12 11	2220	4.292	213.2	5.783
12 11	2230	3.335	204.5	5.678
12 11	2240	2.727	163	3.995
12 11	2250	1.438	133.3	2.628
12 11	2300	2.22	121.8	3.364
12 11	2310	2.112	137.5	2.839
12 11	2320	1.878	64.83	3.259
12 11	2330	2.25	109.3	3.364
12 11	2340	2.986	126.1	4.311
12 11	2350	2.648	102.4	4.311
12 12	0	1.928	143.4	2.944
12 12	10	2.188	77.3	3.364
12 12	20	1.014	293.7	2.103
12 12	30	.881	46.08	1.787
12 12	40	1.032	98.1	1.893
12 12	50	1.641	176.6	2.839
12 12	100	2.185	173	3.575
12 12	110	2.794	206.5	4.311
12 12	120	2.593	194.8	3.785
12 12	130	1.827	146.6	2.628
12 12	140	2.329	121.2	4.311
12 12	150	4.097	93.1	5.467
12 12	200	3.008	132.2	4.731
12 12	210	3.236	158	5.047
12 12	220	2.795	168.3	4.521
12 12	230	2.978	187.5	4.626
12 12	240	4.259	169	7.04
12 12	250	4.667	155	7.04
12 12	300	4.455	167.1	6.203
12 12	310	5.416	172.6	7.36
12 12	320	4.982	180.8	7.25
12 12	330	4.182	167.5	6.098

AIR MONITORING WIND DATA

Date	Time	Mean Wind Speed	Mean Wind Dir.	Max Wind Speed
12 12	340	5.157	173.3	8.2
12 12	350	5.309	166	9.88
12 12	400	5.891	154.8	10.72
12 12	410	5.472	167.3	7.89
12 12	420	6.089	170	10.41
12 12	430	7.84	158.9	11.67
12 12	440	5.896	151.5	9.36
12 12	450	6.125	136.4	10.51
12 12	500	4.9	127.7	8.62
12 12	510	3.297	124.6	5.993
12 12	520	4.191	148.9	6.729
12 12	530	7.94	163.4	11.99
12 12	540	7.18	163.4	10.72
12 12	550	6.228	164.9	10.51
12 12	600	5.606	166.9	8.52
12 12	610	4.702	142.7	7.46
12 12	620	4.245	155.4	7.15
12 12	630	4.25	135.9	7.68
12 12	640	3.787	139.3	5.257
12 12	650	3.955	139.1	6.098
12 12	700	2.25	89.8	3.68
12 12	710	2.8	92.9	3.995
12 12	720	1.944	116.3	3.47
12 12	730	2.498	95.1	5.362
12 12	740	4.252	102.4	6.098
12 12	750	5.262	108.9	8.83
12 12	800	3.333	98.7	5.257
12 12	810	3.002	115.2	5.783
12 12	820	2.908	86.8	4.626
12 12	830	4.751	127.8	7.89
12 12	840	4.1	128.1	8.31
12 12	850	3.94	137.2	5.678
12 12	900	4.982	149.9	7.89
12 12	910	6.543	144.9	9.57
12 12	920	6.357	132.5	9.88
12 12	930	6.364	148.9	10.41
12 12	940	7.06	182.5	11.04
12 12	950	7.15	189.9	10.09
12 12	1000	7.16	175.4	10.83

AIR MONITORING WIND DATA

Date	Time	Mean Wind Speed	Max Wind Speed
12 19	930	7.05	16.51
12 19	1000	6.123	11.67
12 19	1030	9.44	20.82
12 19	1100	13.91	26.71
12 19	1130	12.21	22.18
12 19	1200	11.85	23.55
12 19	1230	10.73	19.98
12 19	1300	10.02	19.45
12 19	1330	11.71	21.76
12 19	1400	13.15	22.18

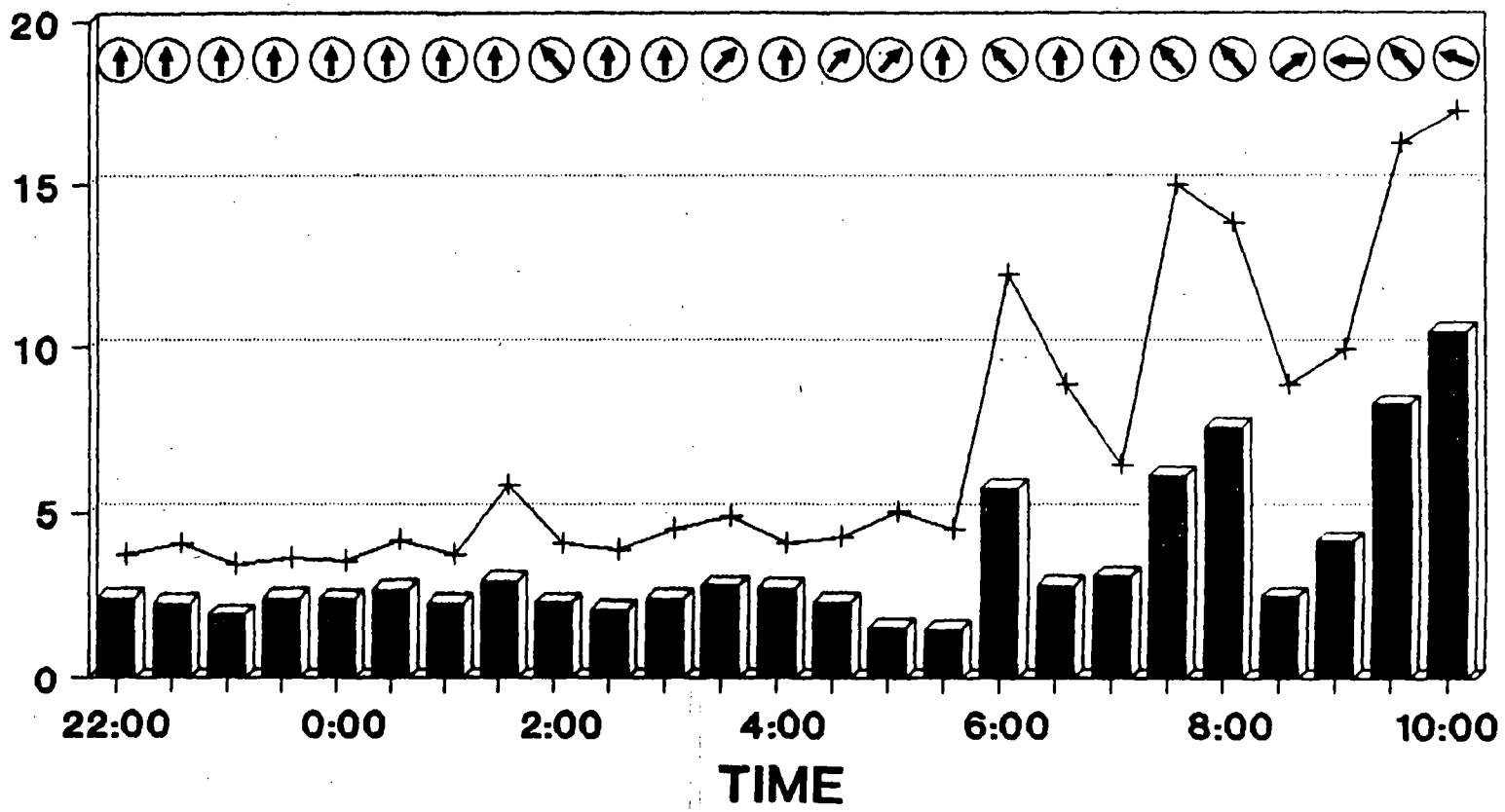
AIR MONITORING WIND DATA

Date	Time	Mean Wind Speed	Max Wind Speed
12 20	1400	8.88	18.4
12 20	1430	8.36	14.72
12 20	1500	8.87	14.93
12 20	1530	11.21	19.03
12 20	1600	8.41	16.4

WIND SPEED AND DIRECTION INFORMATION FOR MONTH OF JANUARY

AMBIENT AIR SAMPLING METEROLOGICAL DATA

January 22-23, 1991



MEAN WIND SPEEDS

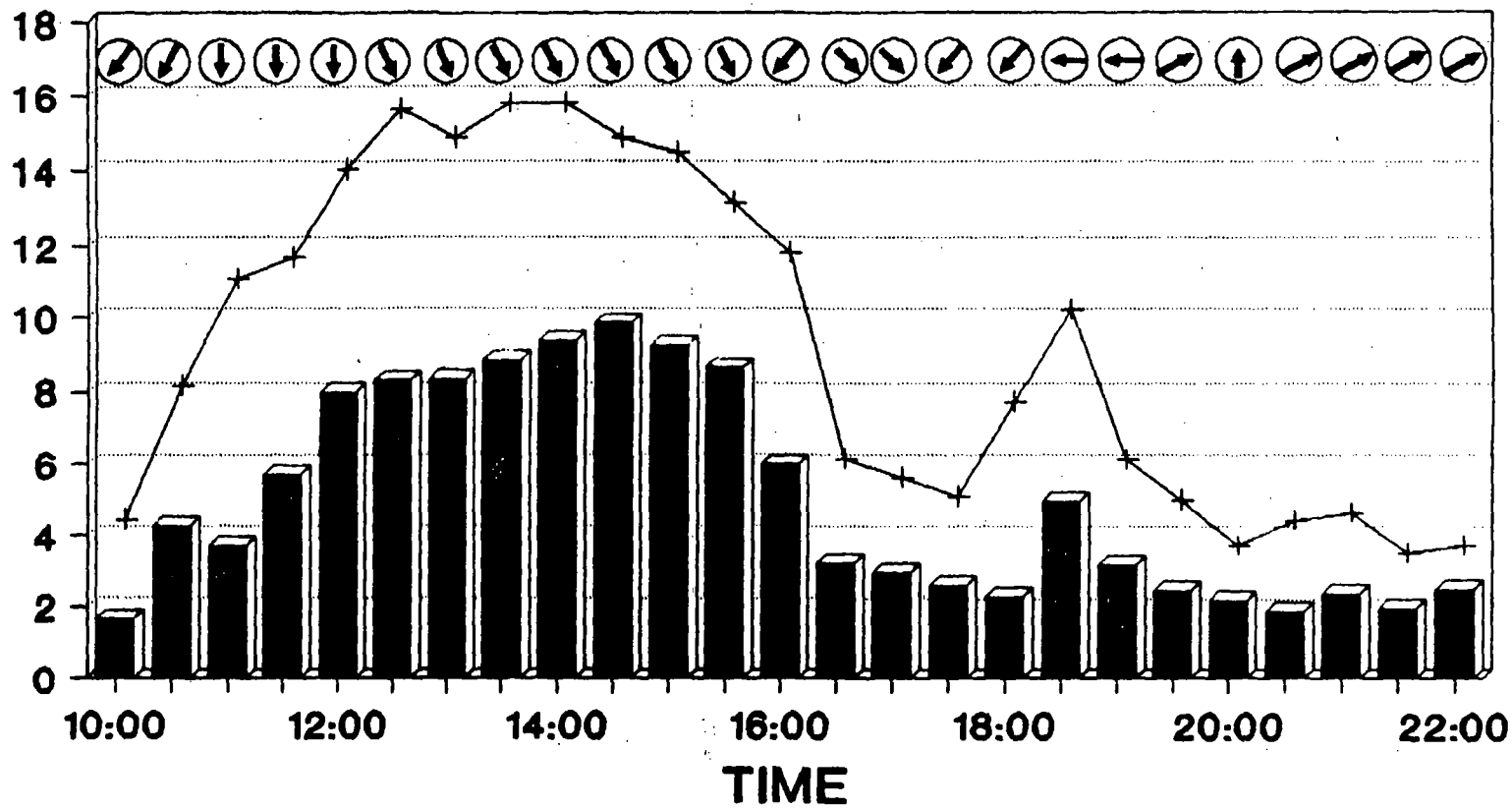
MAX. WIND SPEEDS

WIND DIRECTION

(speed in mph)

AMBIENT AIR SAMPLING METEROLOGICAL DATA

January 22, 1991



MEAN WIND SPEEDS

MAX. WIND SPEEDS

WIND DIRECTION

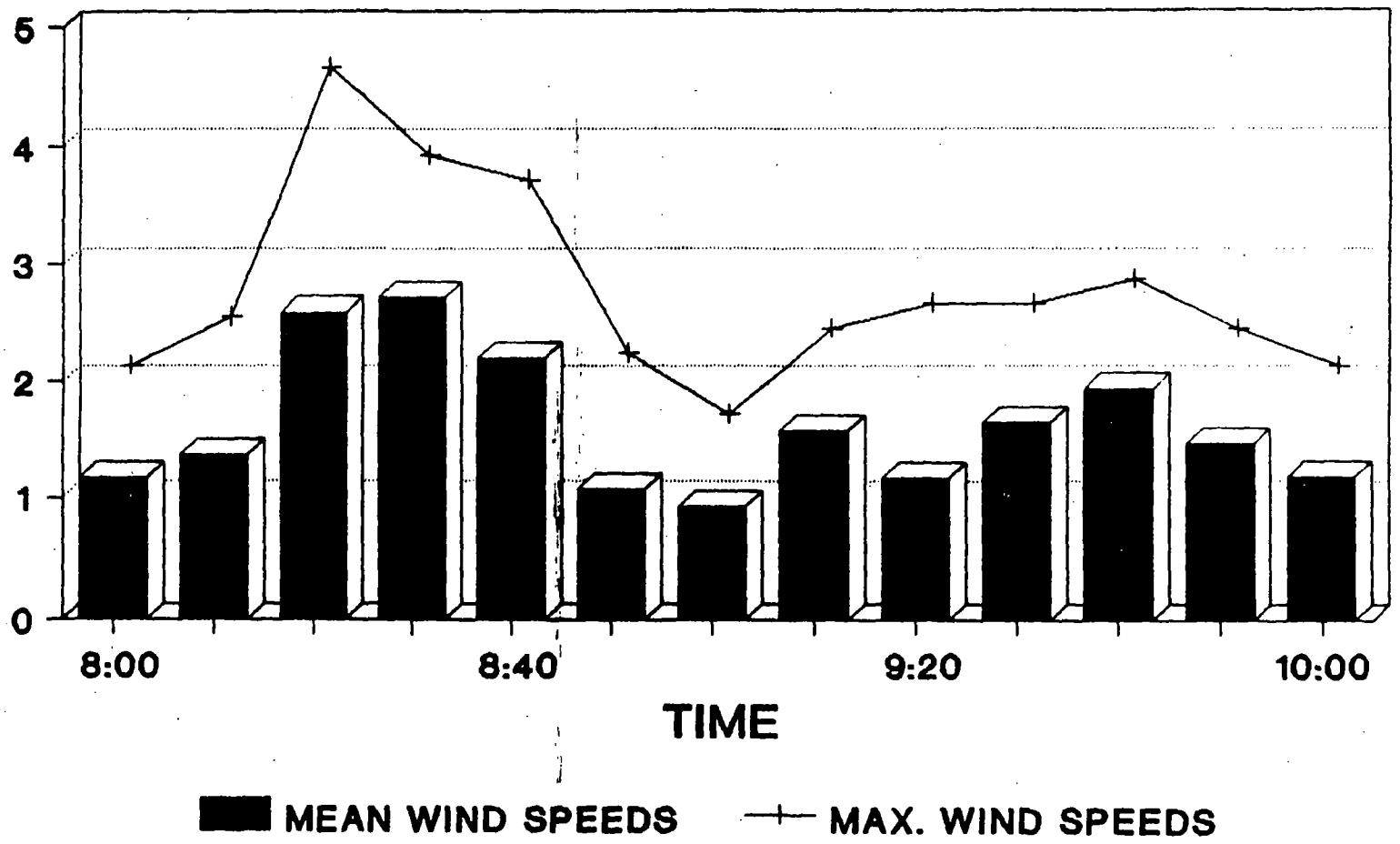
(speed in mph)

Date	Time	Mean Wind Speed	Max. Wind Speed	Mean Wind Direction	Actual Wind Direction
Jan 22	1000	1.66	4.206	243.3	SW
Jan 22	1030	4.289	7.89	205.1	SSW
Jan 22	1100	3.699	10.83	193.7	S
Jan 22	1130	5.679	11.46	176.1	S
Jan 22	1200	7.98	13.77	188.3	S
Jan 22	1230	8.31	15.35	166.9	SSE
Jan 22	1300	8.33	14.61	178	SSE
Jan 22	1330	8.85	15.56	163.1	SSE
Jan 22	1400	9.36	15.56	170.6	SSE
Jan 22	1430	9.86	14.61	165.9	SSE
Jan 22	1500	9.25	14.19	174.9	SSE
Jan 22	1530	8.65	12.93	175.3	SSE
Jan 22	1600	5.977	11.57	243.3	SE
Jan 22	1630	3.191	5.888	123.9	ESE
Jan 22	1700	2.935	5.362	148.6	SE
Jan 22	1730	2.601	4.836	177	SW
Jan 22	1800	2.276	7.46	235.5	SW
Jan 22	1830	4.948	9.99	291.1	W
Jan 22	1900	3.164	5.888	286.9	W
Jan 22	1930	2.47	4.731	32.42	NNE
Jan 22	2000	2.197	3.47	5.628	N
Jan 22	2030	1.885	4.206	19.4	NNE
Jan 22	2100	2.363	4.416	14.15	NNE
Jan 22	2130	1.994	3.259	18.41	NNE
Jan 22	2200	2.489	3.47	13.69	NNE
Jan 22	2230	2.359	3.785	4.019	N
Jan 22	2300	2.033	3.154	12.93	N
Jan 22	2330	2.493	3.364	3.025	N
Jan 22	0	2.469	3.259	5	N

Date	Time	Mean Wind Speed	Max. Wind Speed	Mean Wind Direction	Actual Wind Direction
Jan 23	130	2.99	5.572	3.27	N
Jan 23	200	2.373	3.785	355.7	NNW
Jan 23	230	2.157	3.575	7.79	N
Jan 23	300	2.51	4.206	14.77	N
Jan 23	330	2.851	4.626	30.21	NNE
Jan 23	400	2.769	3.785	17.45	N
Jan 23	430	2.394	3.995	27.42	NNE
Jan 23	500	1.646	4.731	37.66	NNE
Jan 23	530	1.578	4.206	14.05	N
Jan 23	600	5.747	11.99	344	NNW
Jan 23	630	2.864	8.62	4.242	N
Jan 23	700	3.136	6.203	13.7	N
Jan 23	730	6.142	14.72	335.1	NNW
Jan 23	800	7.61	13.56	354.3	NNW
Jan 23	830	2.56	8.62	80.8	NE
Jan 23	900	4.144	9.67	285.3	W
Jan 23	930	8.32	15.98	334	NNW
Jan 23	1000	10.52	16.93	329.1	NW

AMBIENT AIR SAMPLING METEROLOGICAL DATA

January 21, 1991

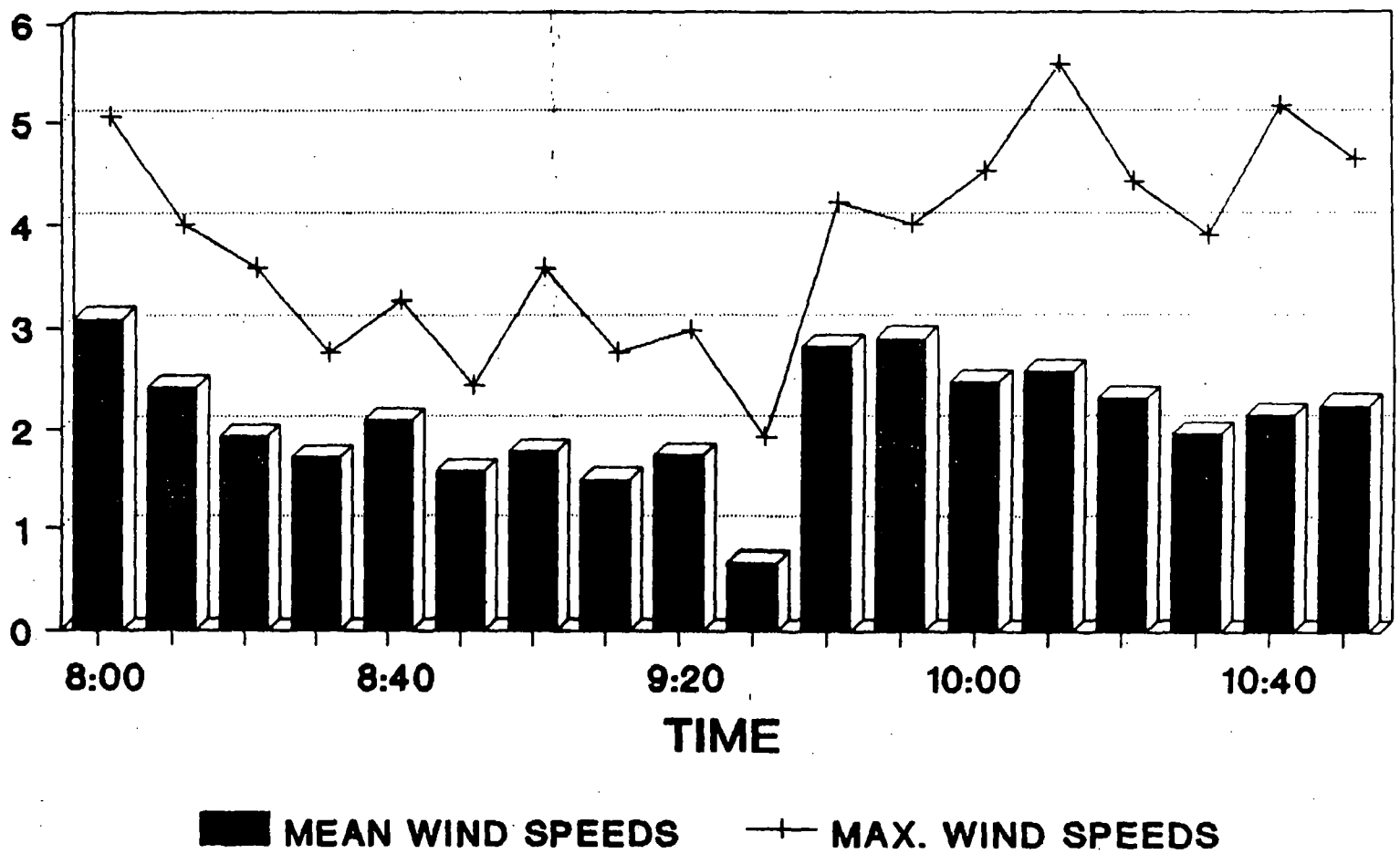


(speed in mph)

Date	Time	Mean Wind Speed	Max. Wind Speed
Jan 21	800	1.162	1.998
Jan 21	810	1.359	2.418
Jan 21	820	2.579	4.521
Jan 21	830	2.709	3.785
Jan 21	840	2.192	3.575
Jan 21	850	1.067	2.103
Jan 21	900	0.918	1.577
Jan 21	910	1.561	2.313
Jan 21	920	1.16	2.523
Jan 21	930	1.633	2.523
Jan 21	940	1.936	2.734
Jan 21	950	1.453	2.313
Jan 21	1000	1.171	1.998

AMBIENT AIR SAMPLING METEROLOGICAL DATA

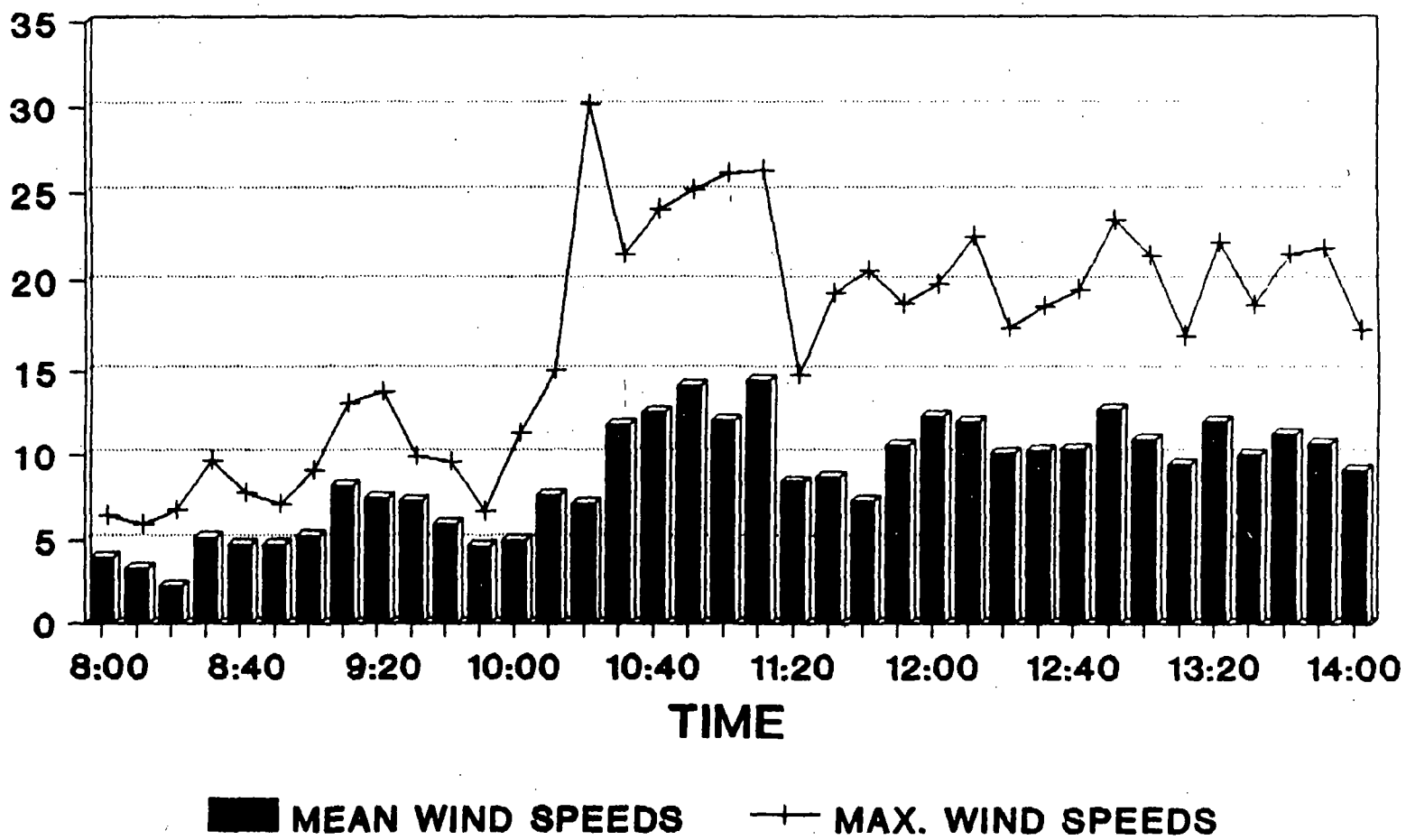
January 18, 1991



(speed in mph)

Date	Time	Mean Wind Speed	Max. Wind Speed
Jan 18	800	3.086	4.942
Jan 18	810	2.411	3.89
Jan 18	820	1.919	3.47
Jan 18	830	1.699	2.628
Jan 18	840	2.075	3.154
Jan 18	850	1.558	2.313
Jan 18	900	1.763	3.47
Jan 18	910	1.466	2.628
Jan 18	920	1.72	2.839
Jan 18	930	0.681	1.787
Jan 18	940	2.805	4.1
Jan 18	950	2.884	3.89
Jan 18	1000	2.46	4.416
Jan 18	1010	2.563	5.467
Jan 18	1020	2.293	4.311
Jan 18	1030	1.938	3.785
Jan 18	1040	2.122	5.047
Jan 18	1050	2.219	4.521

AMBIENT AIR SAMPLING METEROLOGICAL DATA
January 17, 1991

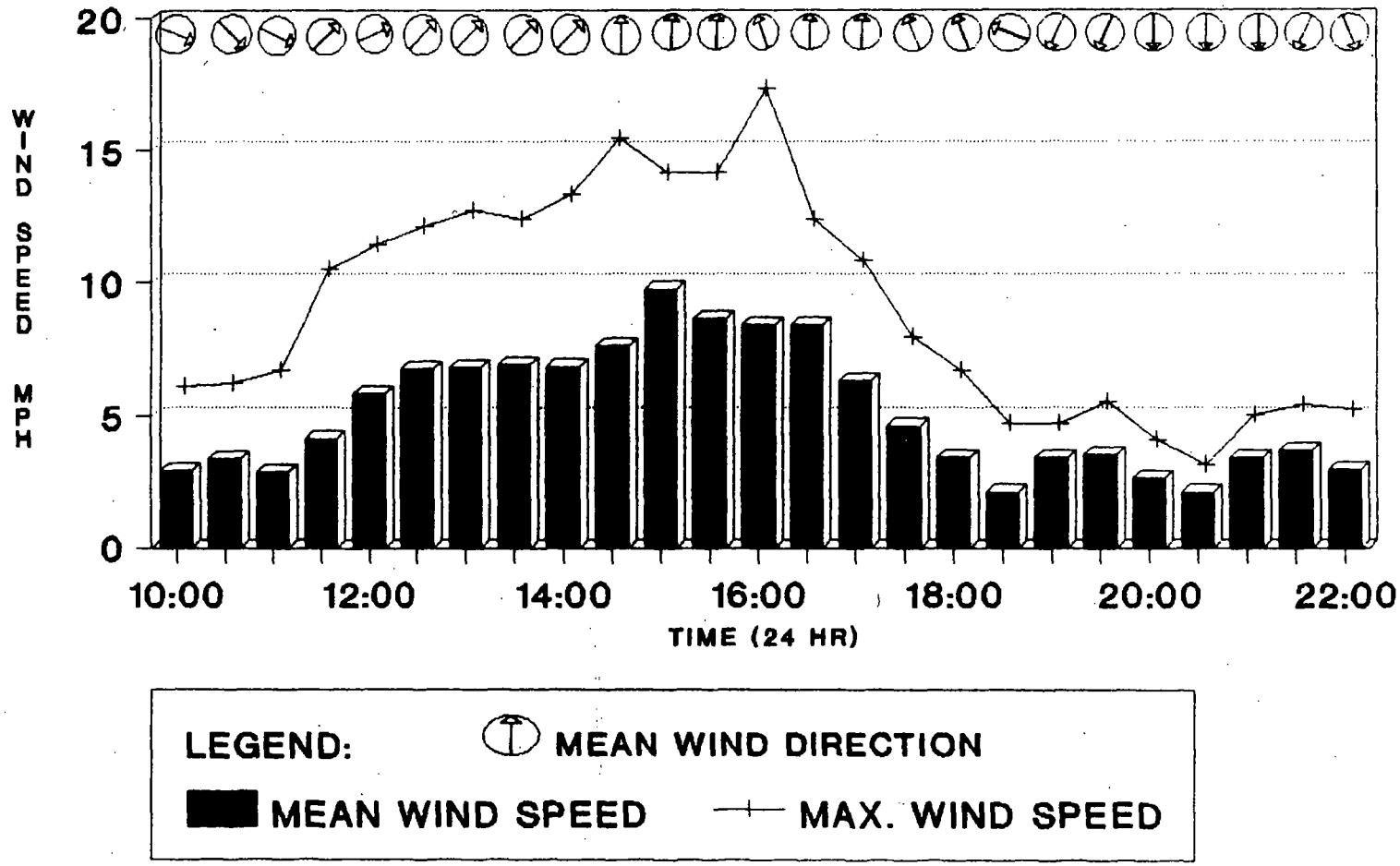


(speed in mph)

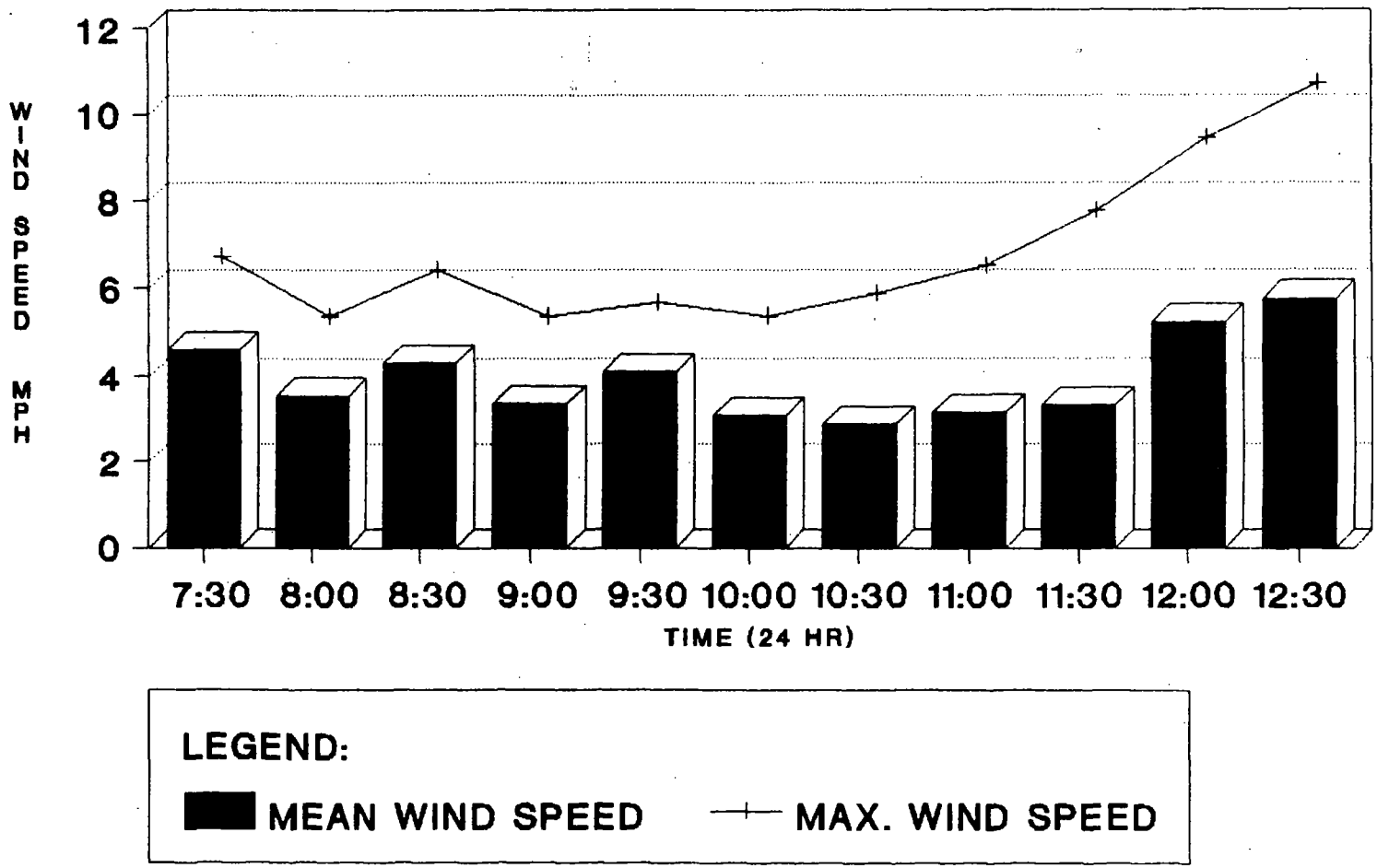
Date	Time	Mean Wind Speed	Max. Wind Speed
Jan 17	800	4.001	6.098
Jan 17	810	3.308	5.572
Jan 17	820	2.256	6.414
Jan 17	830	5.198	9.36
Jan 17	840	4.76	7.46
Jan 17	850	4.737	6.729
Jan 17	900	5.278	8.73
Jan 17	910	8.15	12.83
Jan 17	920	7.46	13.56
Jan 17	930	7.23	9.57
Jan 17	940	5.934	9.25
Jan 17	950	4.648	6.308
Jan 17	1000	5.029	11.04
Jan 17	1010	7.61	14.82
Jan 17	1020	7.11	29.86
Jan 17	1030	11.82	21.24
Jan 17	1040	12.6	23.76
Jan 17	1050	14.21	24.81
Jan 17	1100	12.13	25.76
Jan 17	1110	14.57	25.86
Jan 17	1120	8.39	14.51
Jan 17	1130	8.65	19.03
Jan 17	1210	12.03	22.18
Jan 17	1220	10.08	17.14
Jan 17	1230	10.26	18.29
Jan 17	1240	10.33	19.24
Jan 17	1250	12.76	23.13
Jan 17	1300	10.93	21.13
Jan 17	1310	9.44	16.72
Jan 17	1320	12.06	21.87
Jan 17	1330	9.98	18.4
Jan 17	1340	11.29	21.24
Jan 17	1350	10.66	21.55
Jan 17	1400	9.12	17.03

WIND SPEED AND DIRECTION INFORMATION
FOR MONTH OF FEBRUARY

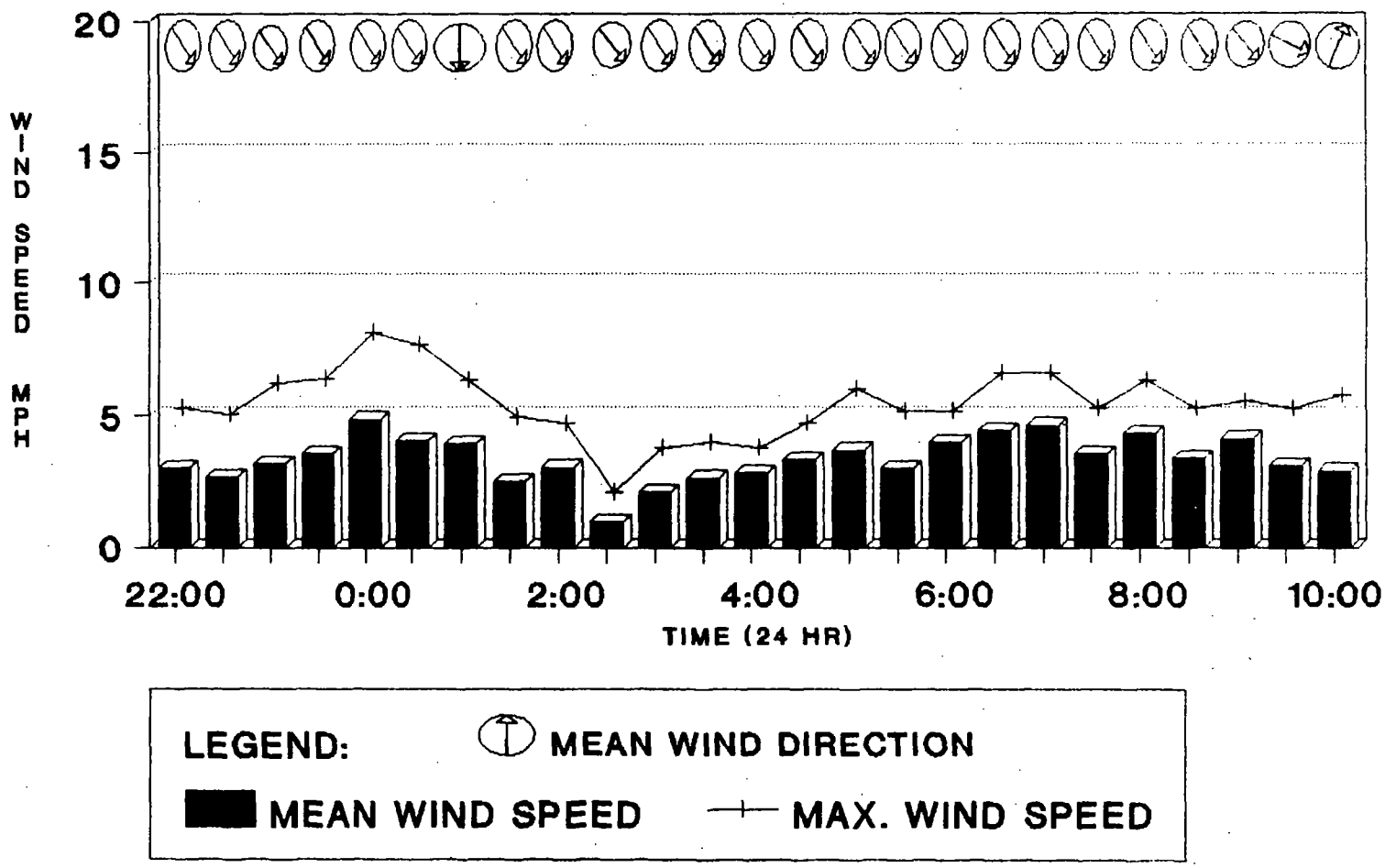
BRADLEY LANDFILL
AMBIENT AIR SAMPLING METEOROLOGICAL DATA
February 20



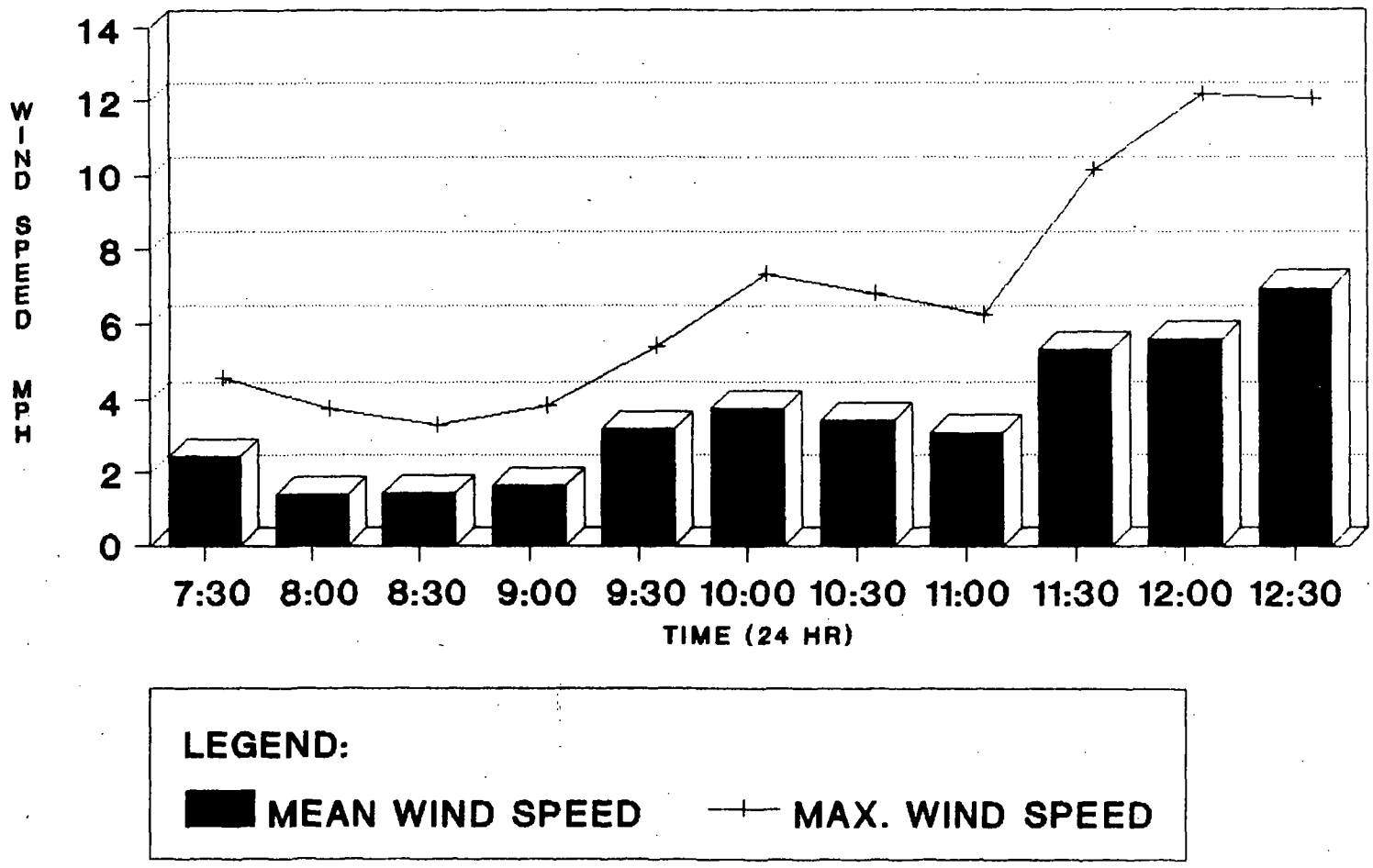
BRADLEY LANDFILL
AMBIENT AIR SAMPLING METEOROLOGICAL DATA
February 21



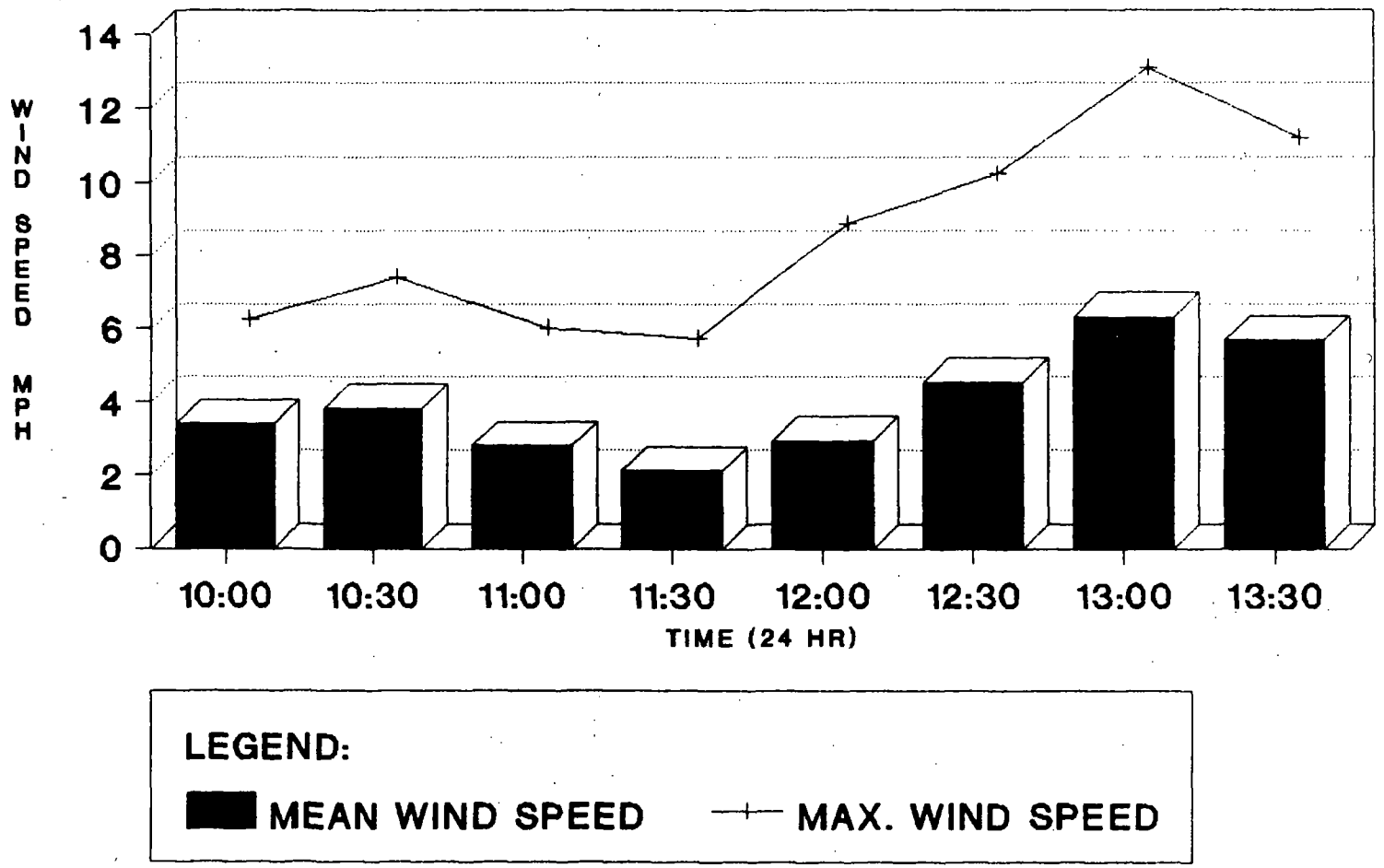
BRADLEY LANDFILL
AMBIENT AIR SAMPLING METEOROLOGICAL DATA
February 20-21



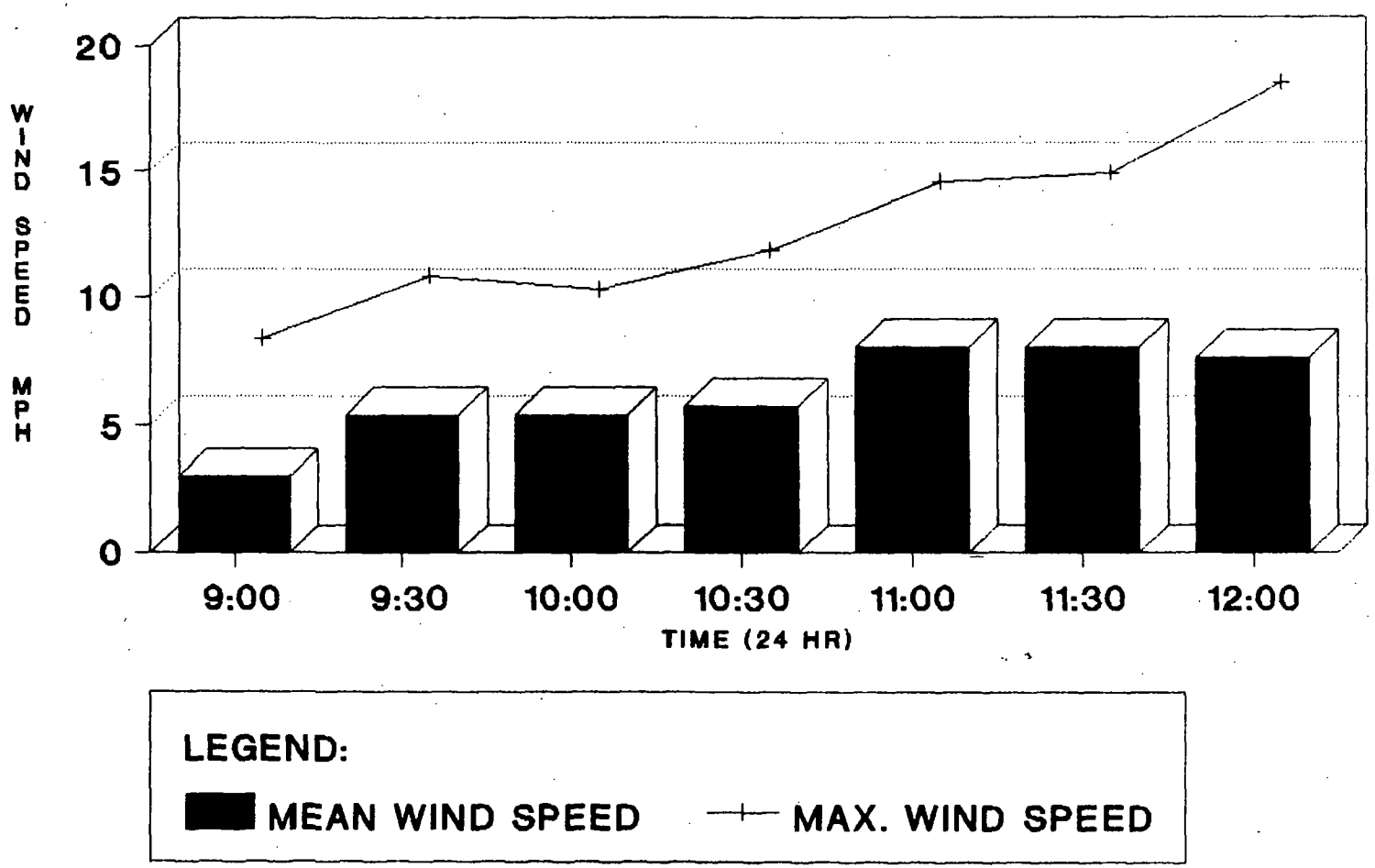
BRADLEY LANDFILL
AMBIENT AIR SAMPLING METEOROLOGICAL DATA
February 22



BRADLEY LANDFILL
AMBIENT AIR SAMPLING METEOROLOGICAL DATA
February 25



BRADLEY LANDFILL
AMBIENT AIR SAMPLING METEOROLOGICAL DATA
February 26



AMBIENT AIR METEOROLOGICAL DATA

DATE	TIME	AVE SPEED	WIND DIR.	MAX. SPEED
2 20	1000	2.888	298.6	5.783
2 20	1010	3.7	302.8	5.572
2 20	1020	2.877	306.4	5.888
2 20	1030	3.529	313.1	5.467
2 20	1040	2.96	308.9	5.047
2 20	1050	2.527	302.8	6.414
2 20	1100	3.075	280.3	6.308
2 20	1110	3.082	256.7	7.46
2 20	1120	3.485	194.7	7.36
2 20	1130	5.793	206	10.2
2 20	1140	5.528	241.1	10.09
2 20	1150	4.8	246.3	10.3
2 20	1200	7.1	235.6	11.14
2 20	1210	6.92	221.5	10.62
2 20	1220	6.438	232.8	11.04
2 20	1230	6.889	226.8	11.78
2 20	1240	6.929	250.5	12.41
2 20	1250	7.19	211.8	11.36
2 20	1300	6.265	211.3	10.83
2 20	1310	6.422	222.2	9.78
2 20	1320	7.07	235.4	12.09
2 20	1330	7.25	211.5	11.99
2 20	1340	6.372	209.6	13.04
2 20	1350	7.05	219.7	11.88
2 20	1400	7.1	211.9	11.67
2 20	1410	6.781	213.1	12.09
2 20	1420	6.762	192.3	11.46
2 20	1430	9.35	175.1	15.14
2 20	1440	10.58	184	13.88
2 20	1450	9.51	174.7	13.46
2 20	1500	9.11	183.9	13.14
2 20	1510	8.65	185.3	13.35
2 20	1520	8.62	185.1	13.88
2 20	1530	8.69	159.1	12.83
2 20	1540	7.94	159.1	12.51
2 20	1550	8.8	162.4	17.03
2 20	1600	8.5	170.8	12.2
2 20	1610	8.56	176	12.09
2 20	1620	8.35	178.6	11.99
2 20	1630	8.32	183.4	11.36
2 20	1640	6.903	170.1	10.51
2 20	1650	6.213	173.1	8.73
2 20	1700	5.815	174.5	8.31
2 20	1710	4.743	172.1	7.68
2 20	1720	4.757	162.6	6.519
2 20	1730	4.351	151.9	6.098
2 20	1740	3.771	148.2	6.414
2 20	1750	3.13	165.4	4.942
2 20	1800	3.323	167.4	5.467
2 20	1810	2.52	186.6	4.416
2 20	1820	1.675	88.6	3.049

AMBIENT AIR METEOROLOGICAL DATA

DATE	TIME	AVE SPEED	WIND DIR.	MAX. SPEED
2 20	1830	2.105	21.24	3.575
2 20	1840	3.656	21.14	4.416
2 20	1850	3.556	16.44	4.206
2 20	1900	3.041	16.41	3.68
2 20	1910	2.667	15.92	3.364
2 20	1920	3.588	5.768	4.626
2 20	1930	4.318	18.39	5.257
2 20	1940	2.783	12.51	3.785
2 20	1950	2.553	3.065	3.259
2 20	2000	2.539	358.5	3.259
2 20	2010	2.106	20.99	2.839
2 20	2020	1.974	2.737	2.628
2 20	2030	2.261	6.162	2.734
2 20	2040	2.717	357.7	3.259
2 20	2050	3.695	10.8	4.731
2 20	2100	3.844	13.06	4.626
2 20	2110	3.975	14.53	4.942
2 20	2120	3.57	16.28	5.152
2 20	2130	3.519	15.53	4.416
2 20	2140	3.155	2.679	4.521
2 20	2150	3.36	298.5	4.942
2 20	2200	2.401	2.196	3.785
2 20	2210	2.512	330.2	4.206
2 20	2220	2.25	337.5	3.154
2 20	2230	3.102	343.8	4.731
2 20	2240	1.504	340	2.734
2 20	2250	4.055	311.4	5.888
2 20	2300	3.894	337.9	5.678
2 20	2310	3.337	340.9	4.626
2 20	2320	4.041	358	6.098
2 20	2330	3.18	3.131	5.257
2 20	2340	3.672	348.3	4.836
2 20	2350	4.751	334.2	6.414
2 21	0	6.101	321.6	7.78
2 21	10	4.411	344.8	7.36
2 21	20	4.281	351.1	5.888
2 21	30	3.377	12.65	4.626
2 21	40	3.556	9.09	5.993
2 21	50	4.033	13.32	5.572
2 21	100	4.131	348.7	5.257
2 21	110	2.784	356.5	4.626
2 21	120	2.233	2.52	3.154
2 21	130	2.44	355.3	3.154
2 21	140	3.036	345.4	3.995
2 21	150	3.468	352.5	4.416
2 21	200	2.514	.591	3.47
2 21	210	.91	234.9	1.577
2 21	220	.818	279.7	1.577
2 21	230	1.148	329.7	1.787
2 21	240	1.508	327	2.418
2 21	250	2.463	341.2	3.47

AMBIENT AIR METEOROLOGICAL DATA

DATE	TIME	AVE SPEED	WIND DIR.	MAX. SPEED
2 21	300	2.223	354.7	3.364
2 21	310	2.286	345.6	3.049
2 21	320	2.672	358.1	3.154
2 21	330	2.887	342.5	3.68
2 21	340	2.867	348.3	3.364
2 21	350	2.806	350.2	3.47
2 21	400	2.79	349.1	3.259
2 21	410	3.05	353.4	3.68
2 21	420	3.11	1.452	3.785
2 21	430	3.712	356.5	4.416
2 21	440	3.847	348.9	4.416
2 21	450	4.257	358.3	5.678
2 21	500	2.873	358.9	3.575
2 21	510	1.751	28.43	2.734
2 21	520	3.061	345.6	3.785
2 21	530	4.086	336.1	4.836
2 21	540	3.81	342.9	4.521
2 21	550	4.162	355.4	4.836
2 21	600	3.986	356	4.626
2 21	610	4.326	342.7	5.152
2 21	620	4.783	335.9	6.308
2 21	630	4.145	347.7	5.362
2 21	640	4.766	342.9	5.678
2 21	650	4.426	343.5	6.308
2 21	700	4.608	357.6	5.783
2 21	710	3.728	357.3	4.942
2 21	720	2.966	352.3	3.575
2 21	730	3.913	341.5	4.731
2 21	740	4.043	342.5	5.152
2 21	750	4.828	342.8	5.993
2 21	800	4.019	355.4	5.152
2 21	810	3.653	357.5	4.942
2 21	820	3.055	348.6	4.1
2 21	830	3.336	341.8	4.626
2 21	840	3.487	310.5	4.416
2 21	850	4.391	317.7	5.257
2 21	900	4.428	321	5.257
2 21	910	3.722	321.5	4.942
2 21	920	2.758	307.6	4.942
2 21	930	2.728	272.4	4.836
2 21	940	3.619	271.2	4.731
2 21	950	2.344	225.6	4.311
2 21	1000	2.675	198.5	5.467
2 21	1010	2.869	217.4	4.731
2 21	1020	2.667	212.6	5.257
2 21	1030	3.928	210.4	6.098
2 21	1040	3.568	197.5	6.203
2 21	1050	2.889	203.6	5.257
2 21	1100	3.469	176.3	7.36
2 21	1110	5.034	154.3	9.04
2 21	1120	5.142	174.1	8.83

AMBIENT AIR METEOROLOGICAL DATA

DATE	TIME	AVE SPEED	WIND DIR.	MAX. SPEED
2 21	1130	5.514	173.3	8.94
2 21	1140	6.2	179.3	10.3
2 21	1150	5.05	162.7	9.36
2 21	1200	5.995	177.1	9.46
2 21	1210	5.236	166.1	9.46
2 21	1220	6.268	166.3	9.67
2 21	1230	6.571	178.8	10.83
2 21	1240	5.605	157.5	9.04
2 21	1250	6.207	170	10.83
2 21	1300	6.227	168.4	10.93
2 21	1310	7.07	186.4	12.62
2 21	1320	6.435	183.4	11.36
2 21	1330	7.4	183.7	12.62
2 21	1340	6.146	177.1	9.67
2 21	1350	6.362	182	9.88
2 21	1400	7.05	185.2	13.35
2 21	1410	8.86	195.4	13.98
2 21	1420	8.43	183.3	12.51
2 21	1430	8.03	185.1	14.19
2 21	1440	9.39	187.5	13.67
2 21	1450	9.65	172.3	14.72
2 21	1500	10.04	180.9	14.72
2 21	1510	10.36	172	15.04
2 21	1520	10.2	175.2	15.04
2 21	1530	10.42	169.1	14.3
2 21	1540	10.41	170.4	13.88
2 21	1550	9.6	165.6	14.09
2 21	1600	10.42	167.9	13.56
2 21	1610	9.91	176.9	13.98
2 21	1620	9.85	175.7	13.77
2 21	1630	9.02	169.2	12.62
2 21	1640	8.63	168.2	12.3
2 21	1650	7.6	153.9	11.88
2 21	1700	8.45	160	12.62
2 21	1710	6.881	166.2	11.46
2 21	1720	7.01	139.9	9.36
2 21	1730	6.175	149.3	9.46
2 21	1740	5.573	152.1	8.62
2 21	1750	4.987	145	7.57
2 21	1800	4.865	147.4	7.15
2 21	1810	3.348	137.1	5.257
2 21	1820	2.943	134.3	4.1
2 21	1830	1.966	138.1	2.734
2 21	1840	1.488	112.4	3.049
2 21	1850	2.248	24.15	3.049
2 21	1900	2.511	17.88	3.68
2 21	1910	2.911	29.79	3.575
2 21	1920	2.409	9.99	3.364
2 21	1930	2.379	21.33	2.944
2 21	1940	2.541	16.92	3.364
2 21	1950	3.394	17.84	4.311

AMBIENT AIR METEOROLOGICAL DATA

DATE	TIME	AVE SPEED	WIND DIR.	MAX. SPEED
2 21	2000	3.217	16.31	3.89
2 21	2010	2.984	7.02	3.68
2 21	2020	2.896	4.632	3.575
2 21	2030	3.271	13.16	3.785
2 21	2040	2.993	360	3.575
2 21	2050	2.998	4.351	3.785
2 21	2100	2.575	6.945	3.049
2 21	2110	3.069	351.4	3.68
2 21	2120	3.13	351.8	3.575
2 21	2130	2.943	5.343	3.575
2 21	2140	3.185	351.9	3.995
2 21	2150	2.721	354.9	3.47
2 21	2200	2.959	358.3	3.89
2 21	2210	2.872	359.5	3.575
2 21	2220	1.95	3.937	2.944
2 21	2230	1.268	61.83	1.893
2 21	2240	.45	42.95	1.577
2 21	2250	1.707	133.5	2.313
2 21	2300	.942	105.8	1.893
2 21	2310	1.53	145.9	2.313
2 21	2320	1.188	121.1	1.893
2 21	2330	1.023	42.24	1.787
2 21	2340	1.191	20.54	1.998
2 21	2350	1.645	14.13	2.208
2 22	0	1.96	14.03	2.208
2 22	10	2.275	16.78	3.049
2 22	20	2.297	7.14	3.364
2 22	30	3.155	5.849	3.785
2 22	40	3.868	11.94	4.626
2 22	50	3.604	17.89	4.626
2 22	100	3.28	15.74	3.785
2 22	110	3.641	20.38	4.731
2 22	120	2.493	15.7	3.785
2 22	130	2.781	248.7	4.1
2 22	140	3.087	220.1	3.995
2 22	150	2.268	190.1	3.049
2 22	200	2.684	274.1	3.995
2 22	210	2.988	303.9	4.521
2 22	220	2.907	348	4.731
2 22	230	2.366	16.9	2.839
2 22	240	2.146	15.57	2.734
2 22	250	2.606	16.85	3.47
2 22	300	2.532	6.163	3.259
2 22	310	3.081	6.759	4.206
2 22	320	2.41	4.613	3.154
2 22	330	2.181	15.18	2.628
2 22	340	2.574	355.9	3.259
2 22	350	1.67	13.53	2.523
2 22	400	2.275	359.9	3.364
2 22	410	1.946	15.32	3.259
2 22	420	2.684	2.778	3.259

AMBIENT AIR METEOROLOGICAL DATA

DATE	TIME	AVE SPEED	WIND DIR.	MAX. SPEED
2 22	430	3.066	1.672	3.575
2 22	440	2.817	4.6	3.575
2 22	450	3.933	13.32	4.731
2 22	500	3.278	4.433	4.311
2 22	510	2.858	9.29	3.68
2 22	520	3.166	1.839	4.731
2 22	530	3.844	6.75	5.047
2 22	540	3.222	18.06	4.1
2 22	550	4.198	4.564	5.257
2 22	600	4.35	359.5	5.362
2 22	610	3.862	6.866	4.626
2 22	620	4.213	8.97	4.836
2 22	630	3.645	5.746	4.521
2 22	640	3.429	357.5	4.1
2 22	650	2.682	353.3	3.364
2 22	700	1.247	10.84	1.893
2 22	710	1.078	11.24	1.682
2 22	720	.818	205.4	1.682
2 22	730	2.364	209.3	3.259
2 22	740	2.316	214.9	2.839
2 22	750	1.086	224.2	2.208
2 22	800	.973	212	1.682
2 22	810	1.01	170.3	2.734
2 22	820	1.84	151.5	3.049
2 22	830	2.059	140.3	3.364
2 22	840	3.607	160.7	4.942
2 22	850	2.961	157.7	4.206
2 22	900	2.992	156.3	4.731
2 22	910	3.686	176.4	5.783
2 22	920	3.586	179.5	6.834
2 22	930	3.999	187.7	5.888
2 22	940	3.72	189.3	6.308
2 22	950	3.243	157.6	5.467
2 22	1000	3.33	202.8	5.152
2 22	1010	3.316	198.1	5.257
2 22	1020	2.456	171.8	4.942
2 22	1030	3.515	176.5	5.783
2 22	1040	4.749	174.2	8.1
2 22	1050	5.519	171.8	8.83
2 22	1100	5.719	189.8	9.67
2 22	1110	5.946	177.2	9.25
2 22	1120	5.232	174.6	8.94
2 22	1130	5.684	171.7	11.67
2 22	1140	7.04	183.6	10.2
2 22	1150	6.972	176.4	11.57
2 22	1200	6.812	160.3	10.93
2 22	1210	7.32	158.1	11.36
2 22	1220	7.1	156.2	12.72

INSTANTANEOUS SURFACE SWEEP

Date	Time	Ave. wind speed	Max wind speed
2 25	1000	3.282	5.467
2 25	1010	3.365	5.257
2 25	1020	4.394	6.729
2 25	1030	3.684	5.467
2 25	1040	3.158	5.362
2 25	1050	2.931	5.257
2 25	1100	2.264	3.89
2 25	1110	2.447	4.942
2 25	1120	1.855	5.047
2 25	1130	1.989	3.785
2 25	1140	2.323	5.783
2 25	1150	2.679	5.467
2 25	1200	3.789	8.2
2 25	1210	4.522	7.57
2 25	1220	4.242	7.46
2 25	1230	4.816	9.57
2 25	1240	5.774	9.88
2 25	1250	7.42	12.41
2 25	1300	5.686	10.93
2 25	1310	5.371	10.51

INSTANTANEOUS SURFACE SWEEP

Date	Time	Ave. wind speed	Max wind speed
2 26	900	3.978	7.25
2 26	910	5.082	8.31
2 26	920	5.278	7.99
2 26	930	5.639	9.67
2 26	940	5.45	9.15
2 26	950	5.221	8.73
2 26	1000	5.401	8.52
2 26	1010	5.799	10.2
2 26	1020	4.641	8.2
2 26	1030	6.72	10.72
2 26	1040	7.13	11.46
2 26	1050	8.44	12.51
2 26	1100	8.46	13.46
2 26	1110	7.35	13.77
2 26	1120	7.58	13.67
2 26	1130	9.17	13.46
2 26	1140	7.84	12.72
2 26	1150	7.76	13.46
2 26	1200	7.26	17.35

APPENDIX C

ISS AND AMBIENT AIR SITE PLAN MAPS

INTEGRATED SURFACE SAMPLE SUMMARY

Sample Location	Sample Identification
December	December
I.S.S. GRID No. 10	Sample I.D. No. VR008
I.S.S. GRID No. 11	Sample I.D. No. VR007

DECEMBER AMBIENT AIR SAMPLE SUMMARY

Sample Location	Sample Identification
Upwind 24-Hour	Sample I.D. No. VR002
Upwind less than 24-Hour	Sample I.D. No. VR003
Downwind 24-Hour	Sample I.D. No. VR005
Downwind less than 24-Hour	Sample I.D. No. VR001
Duplicate Downwind <24 Hour	Sample I.D. No. VR004

INTEGRATED SURFACE SAMPLE SUMMARY

Sample Location	Sample Identification
January	January
I.S.S. GRID No. 4	Sample I.D. No. VR009
I.S.S. GRID No. 8	Sample I.D. No. VRISS014

JANUARY AMBIENT AIR SAMPLE SUMMARY

Sample Location	Sample Identification
Upwind 24-Hour	Sample I.D. No. VR006
Upwind less than 24-Hour	Sample I.D. No. VR011
Downwind 24-Hour	Sample I.D. No. VR012
Downwind less than 24-Hour	Sample I.D. No. VR013
Duplicate Downwind <24 Hour	Sample I.D. No. VR014

FEBRUARY AMBIENT AIR SAMPLE SUMMARY

Sample Location	Sample Identification
Upwind 24-Hour	Sample I.D. No. VR024
Upwind less than 24-Hour	Sample I.D. No. VR031
Downwind 24-Hour	Sample I.D. No. VR023
Downwind less than 24-Hour	Sample I.D. No. VR029
Duplicate Downwind <24 Hour	Sample I.D. No. VR030

INTEGRATED SURFACE SAMPLE SUMMARY

Sample Location	Sample Identification
February	February
I.S.S. GRID No. 2	Sample I.D. No. VR022
I.S.S. GRID No. 5	Sample I.D. No. VR015

PARTIALLY SCANNED
OVERSIZE ITEM(S)

See document # 2199225
for partially scanned image(s).

10 OF 19, 11 OF 19, 12 OF 19

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contact the Region IX Superfund Records Center at
(415) 536-2000

APPENDIX D

FIELD EQUIPMENT SPECIFICATIONS AND PROCEDURES

5.0 INTEGRATED LANDFILL SURFACE SAMPLING

(REQUIRED BY SUBPARAGRAPH (c)(4)(A) OF RULE 1150.1)

5.1 SAMPLING FREQUENCY

Once per month or at less frequent intervals to be determined by the Executive Officer. The landfill owner/operator must file a written request with the Executive Officer to sample less frequently. The minimum sampling frequency which will be approved is annually. Such requests must be supported with previous sampling results and other documentation. In determining if the requested sampling frequency is appropriate, the Executive Officer will consider previous sampling results, compliance history, current modifications in progress at the landfill and other applicable information. The Executive Officer will notify the landfill owner/operator of his decision in writing.

5.2 NUMBER OF SAMPLES

The number of samples collected will depend on the area of the landfill surface. Typically, the entire landfill disposal area will be divided into 50,000 square foot grids or other representative grids approved by the Executive Officer. One

sample will be collected from each grid. The landfill owner/operator must file a written request with the Executive Officer to use a grid size other than 50,000 square feet. Such a request must be supported with sampling results and other documentation which demonstrates that the proposed grid system will provide equivalent results. In evaluating the alternative proposal, the Executive Officer will consider previous sampling results, the provided documentation and other pertinent information. The Executive Officer will notify the landfill owner/operator of his decision in writing. Any area that the Executive Officer deems inaccessible or dangerous for a technician to enter will be excluded from the sampling grids monitored by the landfill owner/operator. To exclude an area from monitoring, the landfill owner/operator must file a written request with the Executive Officer. Such a request must include an explanation of the requested exclusion and photographs of the area. The Executive Officer will notify the landfill owner/operator in writing of his decision. Any exclusion granted is only for the monitoring requirement. The 50 ppmv limit specified in Rule 1150.1(c)(5) applies to excluded areas.

5.3 SAMPLING CONDITIONS

1. Average wind speed suitable for this sampling procedure is less than 5 miles per hour. Surface sampling must be

terminated when the average wind speed exceeds 5 miles per hour or the instantaneous wind speed exceeds 10 miles per hour. Average wind speed is determined on a 10 minute average.

2. Surface monitoring is to be conducted when the landfill is dry and no rain is falling. The landfill is considered dry when there has been no rain for the preceeding 72 hours prior to sampling. Most major newspapers report the amount of precipitation that has fallen in a 24-hour period throughout the Southern California area. Select the nearest reporting station that represents the landfill location.

5.4 EQUIPMENT DESCRIPTION

An integrated surface sampler is a portable self-contained unit with its own internal power source. The integrated sampler consists of a stainless steel collection probe, a flow meter, a pump, and a 10-liter Tedlar bag ENCLOSED IN A LIGHT-SEALED CARDBOARD BOX. The physical layout of the sampler is shown in Figure 1 (see Appendix A).

5.5 EQUIPMENT SPECIFICATIONS

A. Power: Two 9 volt batteries.

B. Pumps: One 12V DC pump. The diaphragm is made of non-lubricated Viton (Dupont trade name for co-polymer of hexafluoropropylene and vinylidene fluoride) rubber. The maximum pump unloaded flow rate is 4.5 liters per minute.

C. Bag: One 10-liter tedlar bag with a valve. Tedlar bag is contained in a light-sealed cardboard box to prevent photochemical reactions from occuring during sampling and transportation. The valve is a push-pull type constructed of aluminum and stainless steel, with a Viton o-ring seal.

D. Rotameter: Rotameter is made of borosilicate glass and has a flow range of 0 to 1 liter per minute. The scale is in milliliters with major graduations (labeled) every 5 ml and minor graduations every 1 ml.

E. Air flow control orifice: Needle valve in the flow meter.

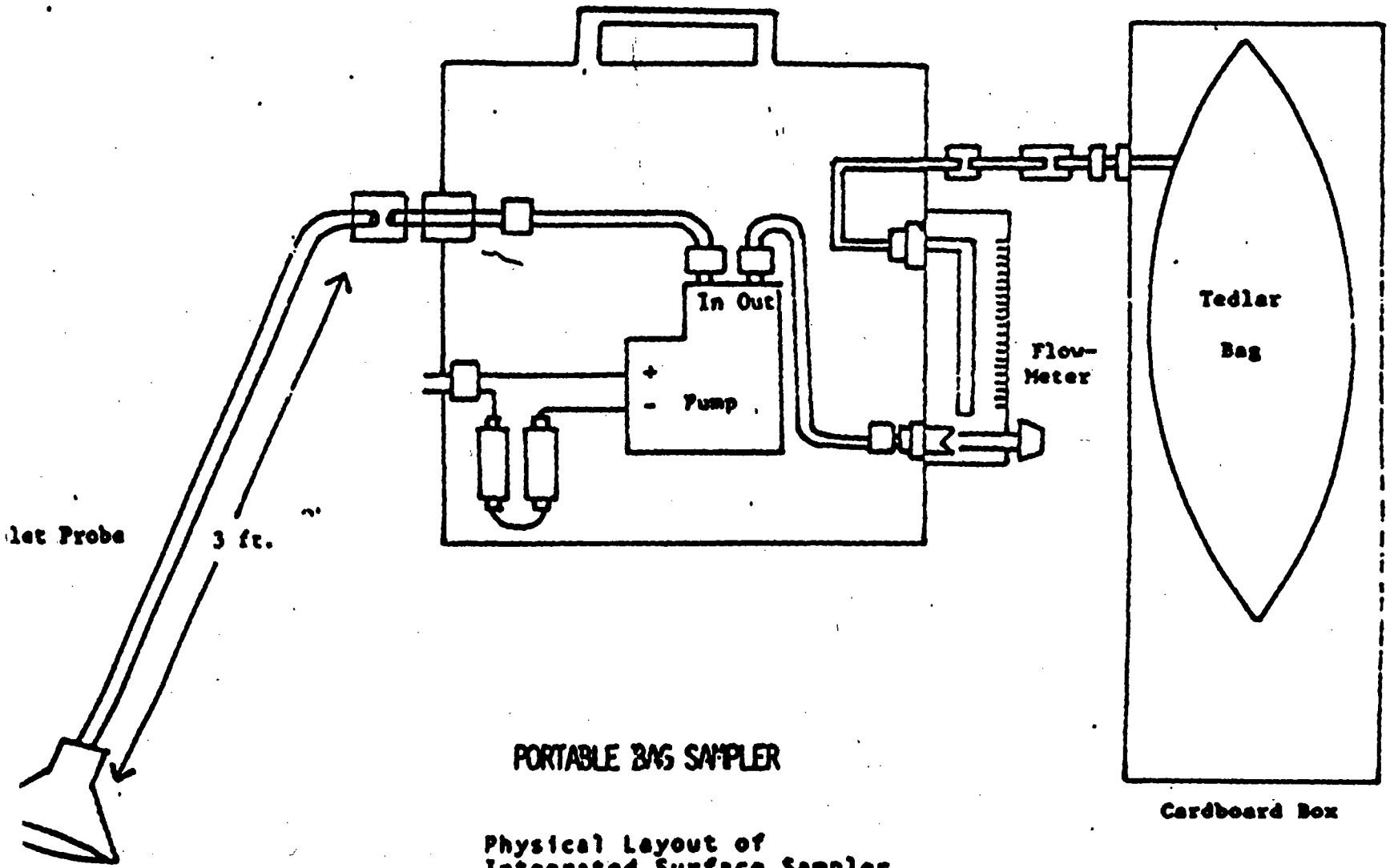
F. Funnel: 316 stainless steel.

G. Fittings, tubing and connectors: 316 stainless steel or Teflon.

H. Wind speed monitor with a continuous recorder: 3 cup assembly, range 0 - 50 miles per hour, with a threshold limit of 0.75 miles per hour or less.

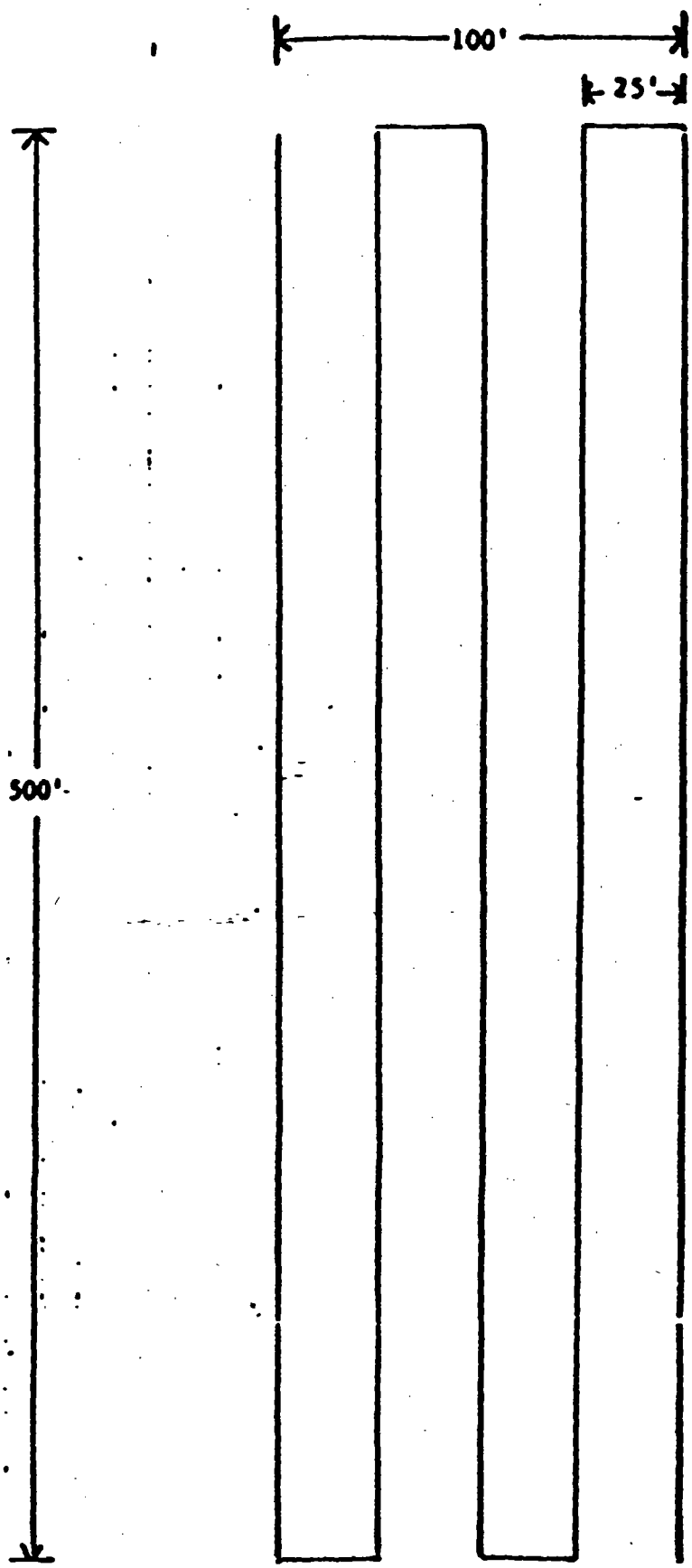
5.6 SAMPLING PROCEDURE

A portable bag sampler as described in the previous section will be used to collect a surface sample from each grid. The interval of time required to collect all of the grid samples must be submitted to and approved by the Executive Officer. During sampling, the probe is to be placed approximately 2 to 3 inches above the landfill surface. A separate gas sample of approximately 8 to 10 liters will be collected from each grid. When the typical 50,000 square foot grid is used, the sampler will be set at a flow rate of approximately 333 cubic centimeters per minute and the technician will walk through a course of approximately 2,600 linear feet over a continuous 25-minute period. Figure 2 (see Appendix A) shows a typical walk pattern for the 50,000 square foot grid. Other grid sizes, collection rates and walk patterns may be used if prior approval is obtained from the Executive Officer. Requests to use alternate methods must be filed with the Executive Officer.



PORTABLE BAG SAMPLER

Physical Layout of
Integrated Surface Sampler


100'
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Such requests must be supported with sampling results and other documentation which demonstrates that the proposed alternative will provide equivalent results. In determining if the requested alternative is acceptable, the Executive Officer will consider previous sampling results, the provided documentation and other applicable information. The Executive Officer will notify the landfill owner/operator of his decision in writing.

A wind speed monitor with continuous recorder will be installed at a site which is representative of the wind speed and direction in the areas being sampled. The wind velocity must be recorded throughout the sampling period. The wind direction transmitter must be oriented to true north using a compass.

5.7 QUALITY CONTROL PROCEDURE

The following quality control procedure is required for the surface sampling operation:

A. Assign an identification number to each sampling bag.

B. Clearly mark and number each grid on a landfill topographic map which is drawn to scale.

C. Document the date and time that the bag was in

operation and the grid location.

D. Check whether or not the pump is running.

E. Check the rotameter reading. The flow rate should be approximately 333 cubic centimeters per minute if the 50,000 square foot grid size is used.

F. Check whether the bag valve is in the open position. If the valve is in the closed position, open the valve.

Data for each sample collected must be entered on a quality control sheet as shown in Figure 3 (see Appendix A). Prior to use, the Tedlar bags should be evacuated and filled with purified nitrogen three times to flush out the old sample. Before sending the bags into the field, they should be checked to make sure that the vacuum has been maintained. If leakage has occurred, remove the bags from service.

5.9 ANALYTICAL PROCEDURES

All samples collected must be analyzed within 72 hours of collection for total organic compounds unless otherwise specified by the Executive Officer. In addition, the following specified number of samples must be analyzed within 72 hours of

collection, or shorter period if notified by the Executive Officer, for toxic air contaminants using analytical methods identified in Table 1 (see Appendix A) or equivalent methods approved by the Executive Officer:

1. Ten percent of all samples which have a concentration of total organic compounds greater than 50 ppmv as methane, or
2. Two samples if all samples are 50 ppmv or less of total organic compounds or two samples if there are less than 20 samples above 50 ppmv.

The above samples should be selected at random but in such a manner that with time the entire landfill surface is analyzed for toxic air contaminants. The Executive Officer may require more samples to be tested for toxic air contaminants if he determines that there is a potential problem. In order to minimize the number of samples speciated for toxic air contaminants, samples with similar total organic compound concentrations may be composited if prior approval is obtained from the Executive Officer. The landfill owner/operator must file a written request with the Executive Officer to composite samples or test fewer samples than required in the above guideline. Such a request must be supported with sampling results and other documentation which characterize the toxic emissions. The Executive Officer will evaluate the data

submitted and other pertinent information in reviewing the request. The Executive Officer will notify the landfill owner/operator of his decision in writing. Upon request, samples must be split to allow confirmation of the analysis by the SCAQMD. NOTE THAT ALL BAG SAMPLES MUST BE KEPT IN LIGHT-SEALED CONTAINERS TO AVOID PHOTOCHEMICAL REACTIONS.

5.10 CHAIN OF CUSTODY

A custody sheet must accompany the bag samples. Each time a bag changes hands it must be signed for on the custody sheet with the time of custody transfer recorded. Laboratory personnel will also record the condition of the sample (full, three-fourths full, one-half full, one-fourth full, or empty). An example of a custody sheet is shown in Figure 4 (see Appendix A).

5.11 REPORTING OF THE RESULTS

The following data must be submitted to the Director of Engineering within 45 days after the end of the quarterly reporting period for the landfill or 45 days after the analytical results are available whichever is sooner. A different submittal time may be implemented upon approval of the

Executive Officer.

A. Volume concentration of total organic compounds (reported as methane and total non-methane hydrocarbons).

B. Volume concentration of toxic air contaminants identified in these guidelines.

C. Wind speed data.

D. Topographic map of the landfill drawn to scale with the sampling grids clearly marked and numbered.

E. Quality control data sheets.

F. Chain of custody sheets.

5.12 ENFORCEMENT PROCEDURES

After January 1, 1989, the District may issue a Notice of Violation for each integrated landfill surface sample, collected from a 50,000 square foot grid or other previously approved grid size, that exceeds 50 ppmv total organic compounds. If a breakdown of the landfill gas collection system occurs and the landfill owner/operator suspects that a violation of the 50 ppmv limit is likely or exists, the procedures in Rule 430 shall be followed. In addition, if a landfill owner/operator determines or believes that the landfill is exceeding the 50 ppmv limitation and cannot be brought into compliance immediately, the Hearing Board may be petitioned for a variance according to the procedures in District Regulation V. An overview of the Hearing Board is provided in Appendix C.

6.0 LANDFILL GAS SAMPLE FROM GAS COLLECTION SYSTEM (REQUIRED BY SUBPARAGRAPH (c)(4)(B) OF RULE 1150.1)

6.1 SAMPLING FREQUENCY

Once per month or at less frequent intervals to be determined by the Executive Officer. The landfill owner/operator must file a written request with the Executive Officer to sample less frequently. Such a request must be supported with previous sampling results and other documentation. In determining if the requested sampling frequency is appropriate, the Executive Officer will consider the previous sampling results and other pertinent data. The Executive Officer will notify the landfill owner/operator of his decision in writing.

6.2 NUMBER OF SAMPLES

One sample from each main gas collection header line entering the gas treatment and/or gas disposal facilities.

6.3 SAMPLING PROCEDURE

Collect approximately a 10-liter sample in a Tedlar bag over a continuous ten minute period using EPA Method 25.

6.4 QUALITY CONTROL PROCEDURE

The following quality control procedure is required for sampling the gas collection system:

A. Assign an identification number to each sampling bag.

B. Document the date and time that the samples are collected.

Data for each sample collected must be entered on a quality control sheet as shown in Figure 3 (see Appendix A). Prior to use, the Tedlar bags should be evacuated and filled with purified nitrogen three times to flush out the old sample. Before sending the equipment into the field, it should be checked to make sure that there are no leaks in the system. If leakage has occurred, remove the equipment from service.

6.5 ANALYTICAL PROCEDURES

Samples collected must be analyzed within 72 hours of collection, or shorter period if notified by the Executive Officer, for total organic compounds and toxic air contaminants using analytical methods identified in Table 1 (see Appendix A) or equivalent methods approved by the Executive Officer. NOTE THAT ALL BAG SAMPLES MUST BE KEPT IN LIGHT-SEALED CONTAINERS TO

AVOID PHOTOCHEMICAL REACTIONS.

6.6 REPORTING OF THE RESULTS

The following data must be submitted to the Director of Engineering within 45 days after the end of the quarterly reporting period for the landfill or 45 days after the analytical results are available whichever is sooner. A different submittal time may be implemented upon approval of the Executive Officer.

A. Volume concentration of total organic compounds (reported as methane and total gaseous non-methane hydrocarbons).

B. Volume concentration of toxic air contaminants identified in these guidelines.

C. Quality control data sheets.

7.0 LANDFILL GAS SAMPLES FROM PERIMETER PROBES (REQUIRED BY SUBPARAGRAPH (c)(4)(C) OF RULE 1150.1)

7.1 SAMPLING FREQUENCY

Once per month or at less frequent intervals to be determined by the Executive Officer. The landfill owner/operator must file a written request with the Executive Officer to sample less frequently. Such a request must be supported with previous sampling results and other documentation. In determining if the requested sampling frequency is appropriate, the Executive Officer will consider the previous sampling results and other pertinent data. The Executive Officer will notify the landfill owner/operator of his decision in writing.

7.2 NUMBER OF SAMPLES

All perimeter gas probes will be monitored for total organic compounds measured as methane using a flame ionization detector (FID), explosimeter or other instrument approved by the Executive Officer. If the total organic compounds concentration does not exceed five (5) percent by volume in any of the probes, collect one bag sample from one probe with the highest concentration. If the total organic compounds concentration for

any of the probes exceeds five (5) percent by volume, collect one bag sample per probe from the probes with the highest concentrations above five (5) percent by volume (up to a maximum of five probes). The Executive Officer may require additional probes to be sampled. The landfill owner/operator will be notified in writing of any such requirement.

7.3 SAMPLING PROCEDURE

Prior to collecting gas samples, the perimeter gas probes must be evacuated (the probes must be sealed during evacuation) until the total organic compounds concentration measured as methane remains constant for at least 30 seconds. The constant total organic compounds concentration will be measured using the approved instrument and the results recorded. Bag samples will be collected after the probes are evacuated in the same above described manner. Once a probe is evacuated, collect approximately a 10-liter gas sample in a Tedlar bag over a continuous ten minute period using the evacuated container sampling procedure described in Section 7.1.1 or direct pump sampling procedure described in Section 7.1.2 of EPA Method 18.

7.4 QUALITY CONTROL PROCEDURES

The following quality control procedure is required for perimeter probes sampling:

A. Maintain and calibrate the flame ionization detector, explosimeter or other approved instrument as recommended by the manufacturer.
B. Assign an identification number to each sampling bag.
C. Document the date and time that the measurements are made and the bag samples are collected.
D. Clearly mark and identify each probe location on a topographic map of the landfill drawn to scale.

Data for each sample collected must be entered on a quality control sheet as shown in Figure 3 (see Appendix A). Prior to use, the Tedlar bags should be evacuated and filled with purified nitrogen three times to flush out the old sample. Before sending the equipment into the field, it should be checked to make sure that there is no leakage in the system. If leakage has occurred, remove the equipment from service.

7.5 ANALYTICAL PROCEDURES

Bag samples collected must be analyzed within 72 hours of

collection, or shorter period if notified by the Executive Officer, for total organic compounds and toxic air contaminants using analytical methods identified in Table 1 (see Appendix A) or equivalent methods approved by the Executive Officer. NOTE THAT ALL BAG SAMPLES MUST BE KEPT IN LIGHT-SEALED CONTAINERS TO AVOID PHOTOCHEMICAL REACTIONS.

7.6 REPORTING OF RESULTS

The following data must be submitted to the Director of Engineering within 45 days after the end of the quarterly reporting period for the landfill or 45 days after the analytical results are available whichever is sooner. A different submittal time may be implemented upon approval of the Executive Officer.

A. Volume concentration of total organic compounds measured as methane for each perimeter probe.

B. Volume concentration of total organic compounds (reported as methane and total non-methane hydrocarbons) for selected probes.

C. Volume concentration of toxic air contaminants identified in these guidelines for selected probes.

D. Quality control data sheets.

E. Topographic map of the landfill drawn to scale with the

perimeter probes clearly marked and identified.

8.0 AMBIENT AIR SAMPLES AT LANDFILL PERIMETER (REQUIRED BY SUBPARAGRAPH (c)(4)(D) OF RULE 1150.1)

8.1 SAMPLING FREQUENCY

Once per month or at less frequent intervals to be determined by the Executive Officer. The landfill owner/operator must file a written request with the Executive Officer to sample less frequently. Such a request must be supported with previous sampling results and other documentation. In determining if the requested sampling frequency is appropriate, the Executive Officer will consider previous ambient air sampling results, landfill surface sampling results, landfill gas composition and other pertinent data. The Executive Officer will notify the landfill owner/operator of his decision in writing.

8.2 NUMBER OF SAMPLES

The number of ambient air samples required will depend upon the topography and the size of the landfill. At a minimum, samplers will be sited to provide good meteorological exposure to the predominant offshore (drainage land breeze) and onshore (sea breeze) wind flow patterns. In areas with significant slopes, local nightly drainage patterns will also be sampled. All

sampling locations must be approved by the Executive Officer prior to sampling.

8.3 SAMPLING CONDITIONS

Ambient air sampling will be conducted on days when stable (offshore drainage) and unstable (onshore sea breeze) meteorological conditions are representative for the season. Preferable sampling conditions are characterized by the following meteorological conditions:

1. Clear cool nights with wind speeds two (2) miles per hour or less.
2. Onshore sea breezes with wind speeds 10 miles per hour or less.

No sampling will be conducted if the following adverse meteorological conditions exist:

1. Rain
2. Average wind speeds greater than 15 miles per hour for any 30 minute period.
3. Instantaneous wind speeds greater than 25 miles per hour.

Continuously recorded on site wind speed and direction measurements will characterize the micrometeorology of the site and serve to verify that the meteorological criteria have been met during sampling.

8.4 EQUIPMENT DESCRIPTION

An ambient air sampling unit consists of a 10-liter Tedlar (Dupont trade name for polyvinyl fluoride) bag, a DC operated pump, stainless steel capillary tubing to control the sample rate to the bag, a bypass valve to control the sample flow rate (and minimize back pressure on the pump), a rotameter for flow indication to aid in setting the flow, a 24-hour clock timer to shut off the sampler at the end of the 24-hour sampling period, and associated tubing and connections (made of stainless steel, teflon, or borosilicate glass to minimize contamination and reactivity). The physical layout of the sampler is shown in Figure 5 (see Appendix A).

8.5 EQUIPMENT SPECIFICATIONS

A. Power -- one 12V DC marine battery

The marine battery provides 12V DC to the pump and the clock.

B. Pump -- one 12V DC pump

The diaphragm is made of non-lubricated Viton (Dupont trade name for co-polymer of hexafluoropropylene and vinylidene fluoride) rubber. The maximum pump unloaded flow rate is 4.5 liters per minute.

C. Bag -- one 10-liter Tedlar bag with a valve

TEDLAR BAG IS ENCLOSED IN A LIGHT-SEALED CARDBOARD BOX TO

PREVENT PHOTOCHEMICAL REACTIONS FROM OCCURING DURING SAMPLING AND TRANSPORTATION. The valve is a push-pull type constructed of aluminum and stainless steel, with a Viton o-ring seal.

D. Rotameter

Rotameter is made of borosilicate glass and has a flow range of 3 to 50 cubic centimeters per minute. The scale is in millimeters with major graduations (labeled) every 5 mm and minor graduations every 1 mm.

E. Air flow control orifice -- 316 stainless steel capillary tubing

F. Bypass valve

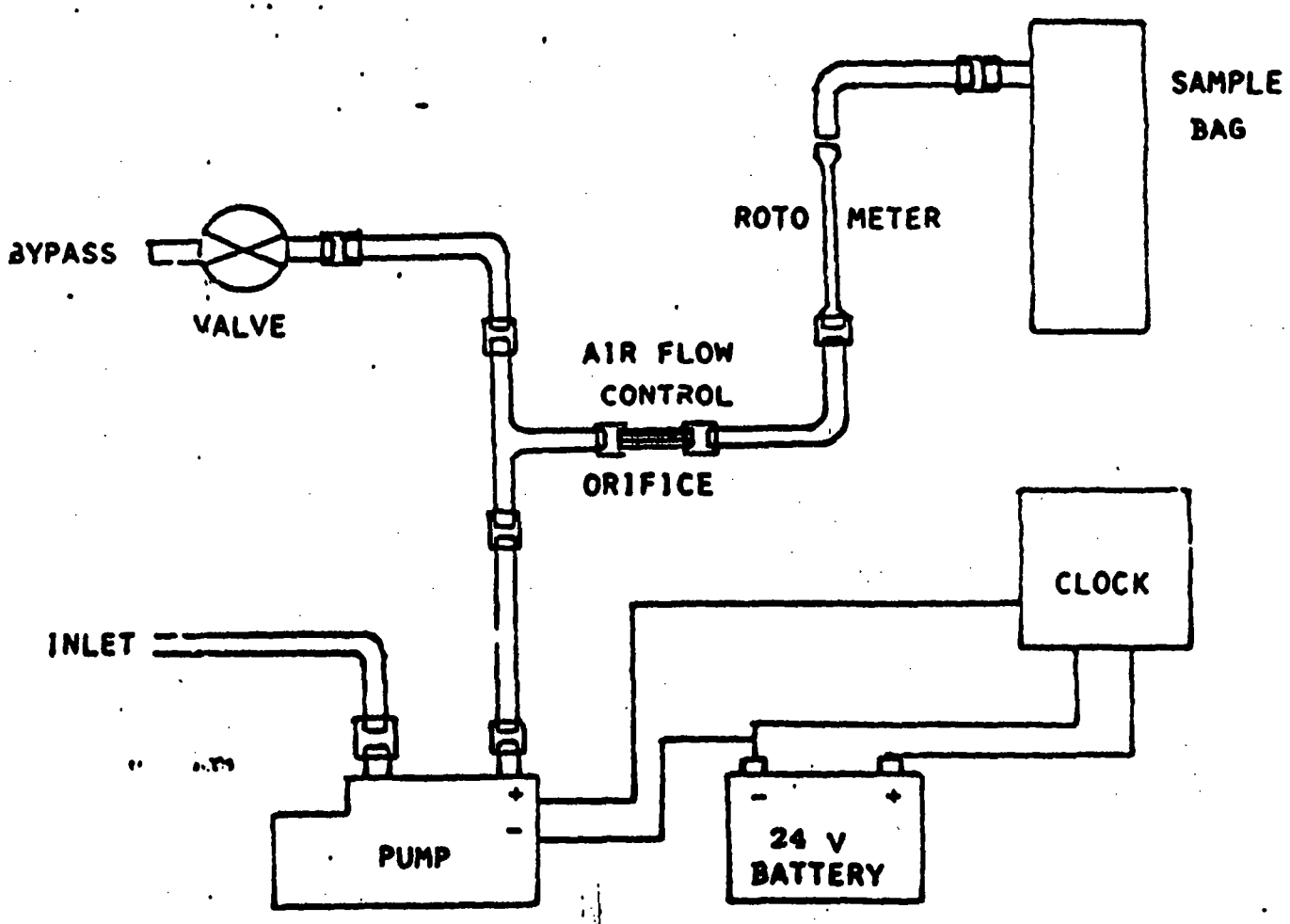
G. Fittings, tubing, and connectors -- 316 stainless steel or teflon

H. Clock timer

Accuracy should be better than 1%.

I. Wind speed and direction monitor with continuous recorder

1. Wind speed -- 3 cup assembly, range 0 - 50 miles per hour with a threshold of 0.75 mile per hour or less.
2. Wind direction -- Vane, range 0 - 540 degrees with a threshold of 0.75 mile per hour or less.



Physical Layout of
Ambient Air Sampler

8.6 SAMPLING PROCEDURES

Ambient air samples will be collected at the perimeter of the landfill over a 24-hour period beginning between 10 A.M. and 11 A.M. using the above described self-contained portable sampling units. The samplers will be placed at the approved locations as described previously. One or more wind speed and direction monitors with continuous recorders will be installed and operated in areas approved by the Executive Officer to measure wind speed and direction throughout the entire sampling period. The wind direction transmitter must be oriented to true north using a compass.

8.7 QUALITY CONTROL PROCEDURE

The following quality control procedure is required for the ambient air sampling operation:

A. Assign an identification number to each sampling bag.

B. Clearly mark sampling locations on a landfill topographic map which is drawn to scale.

C. Document the date and time that the bag was put into operation, the sampling location, and the date and time that it was removed from service.

D. Check the clock timer. The clock time and the actual time should agree within ± 3 minutes.

E. Check whether or not the pump is running.

F. Check the rotameter reading. The float (measured at the middle) should be within +3 and -6 minor graduations of the marked setting for 6.0 cubic centimeters per minute. If the rotameter setting exceeds the above limits adjust the bypass valve to correct the flow rate. Make sure that the flow has stabilized (at least three minutes at constant flow) since there may be a lag time between the adjustment and final flow.

G. Check whether the bag valve is in the open position. If the valve is in the closed position open the valve and and record the time on the quality control sheet.

H. Remove the bag for analyses at the end of the 24-hour period. KEEP THE BAG IN A LIGHT-SEALED CONTAINER AT ALL TIMES.

Data for each sample collected must be entered on a quality control sheet as shown in Figure 3 (see Appendix A). Prior to use, the Tedlar bags should be evacuated and filled with purified nitrogen three times to flush out the old sample. Before sending the bags into the field, they should be checked to make sure that the vacuum has been maintained. Remove from service any bag that has experienced any leakage.

8.8 ANALYTICAL PROCEDURES

Bag samples collected must be analyzed within 72 hours of collection, or shorter period if notified by the Executive Officer, for total organic compounds and toxic air contaminants using analytical methods identified in Table 1 (see Appendix A) or equivalent methods approved by the Executive Officer. NOTE THAT ALL BAG SAMPLES MUST BE KEPT IN LIGHT-SEALED CONTAINERS TO AVOID PHOTOCHEMICAL REACTIONS.

8.9 REPORTING OF THE RESULTS

The following data must be submitted to the Director of Engineering within 45 days after the end of the quarterly reporting period for the landfill or 45 days after the analytical results are available whichever is sooner. A different submittal time may be implemented upon approval of the Executive Officer.

A. Volume concentration of total organic compounds (reported as methane and total non-methane hydrocarbons).

B. Volume concentration of toxic air contaminants identified in these guidelines.

C. Wind speed and direction data.

D. Topographic map of the landfill drawn to scale with the

sampling locations clearly marked and numbered.

E. Quality control data sheets.

9.0 INSTANTANEOUS LANDFILL SURFACE MONITORING (REQUIRED BY SUBPARAGRAPH (c)(6) OF RULE 1150.1)

9.1 SAMPLING FREQUENCY

As necessary to ensure compliance.

9.2 SAMPLING SIZE

Entire landfill disposal area. Any area of the landfill that the Executive Officer deems as inaccessible or dangerous for a technician to enter will be excluded from the area to be monitored by the landfill owner/operator. To exclude an area from monitoring, the landfill owner/operator must file a written request with the Executive Officer. Such a request must include an explanation of why the area should be excluded and photograghs of the area. The Executive Officer will notify the landfill owner/operator in writing of his decision. Any exclusion granted is only for the monitoring requirement. The 500 ppm limit will still apply to the excluded areas.

9.3 EQUIPMENT DESCRIPTION

A portable flame ionization detector (FID) is to be used to instantaneously measure the concentration of organic compounds (measured as methane) on the landfill surface. The flame ionization detector should meet the following recommended specifications:

Range: 0 - 1,000 ppm (v/v) linear scale or 0 - 10,000 ppm (v/v) logarithmic scale

Minimum detectable limit: 5 ppm (or lower)

Response time: 15 seconds (or shorter)

Flame out indicator: audible and visual

Accuracy: ± 4% (or better)

Precision: ± 3% (or better)

Ambient temperature: 0 - 50 ^{0}C

Other equipment or any deviation from the recommended specifications must be approved by the Executive Officer prior to conducting surface monitoring.

9.4 SAMPLING PROCEDURE

An operator will monitor the entire landfill disposal area for organic compounds using the above described portable equipment. The sampling probe is to be placed at a distance no greater than

three inches above the landfill surface to take the readings. A spacer may be placed on the end of the probe to ensure that the probe is within three inches of the landfill surface. The monitoring equipment will be kept in good operating condition and will be calibrated regularly as recommended by the manufacturers.

9.5 REPORTING OF THE RESULTS

After an area of the landfill is monitored, it shall be portioned off on a map showing the entire landfill surface and the monitoring date recorded within the area. In addition, the location of any instantaneous readings greater than 500 ppmv is to be identified on the map and the concentration and time of the readings recorded. All records must be kept for at least two years and must be made available to the Executive Officer upon request.

9.6 ENFORCEMENT PROCEDURES

If District personnel determine that the concentration of total organic compounds exceeds 500 ppmv measured as methane from any point on the surface of a landfill after October 1, 1985, a Notice to Comply will typically be issued to the landfill

owner/operator for each source exceeding the 500 ppmv limit. However if the District determines that the exceedence is associated with an overt act, a failure to properly maintain the control equipment, an area of continual problems or an odor complaint, a Notice of Violation may be issued instead of a Notice to Comply. If a Notice to Comply is issued, it will describe the location and nature of the source of the excess emission and will provide the landfill owner/operator up to fourteen (14) calender days to complete the required remedial action depending on the nature of the emission source. If the nature of the emission source is such that the landfill owner/operator cannot bring the landfill into compliance within the specified time on the Notice to Comply, the District Hearing Board may be petitioned for a variance according to the procedures in District Regulation V. An overview of the Hearing Board is provided in Appendix C. If the necessary remedial action is not completed within the specified time on the Notice to Comply and a variance has not been obtained, a Notice of Violation may be issued if the 500 ppmv limit is still exceeded at the location identified on the Notice to Comply. In no case will the issuance of a Notice to Comply for an exceedance of the 500 ppmv limit prevent the District from taking other Enforcement action due to a violation of any other Rule.

GAS-TECH OPERATING PRINCIPLE

The Model NP-204 is essentially two instruments combined into one. In the LOW (0-5%) range, it is a combustible gas indicator - utilizing the catalytic detection principle. In the HIGH (0-100%) range, it is a thermal conductance indicator - utilizing the cooling effect of natural gas. Both detection methods employ the Wheatstone bridge measurement principle.

Low Range (0-5%)

The LOW range employs a catalytic platinum filament. The filament is initially heated by the battery current (based upon voltage setting), to a point where it will cause catalytic oxidation of combustible gas that comes in contact with the active surface. This oxidation produces a definite heat of combustion - correlating to the concentration of gas. The heat generated increases the temperature (i.e., higher electrical resistance) of the filament. This increase in resistance produces an upward deflection on the meter corresponding to gas concentration.

The catalytic method is only applicable in areas where gas concentrations are less than 5%, as oxygen is necessary to support catalytic oxidation. As gas concentrations exceed 5%, the heat of combustion no longer increases with increase in gas content (Refer to Sampling of Rich Mixtures).

High Range (0-100%)

The HIGH range employs a thermal conductance filament. The filament is initially heated by the battery current (based upon voltage setting), to a point where it assumes a definite temperature and resistance. As natural gas is introduced, the filament becomes cooler (i.e., lower

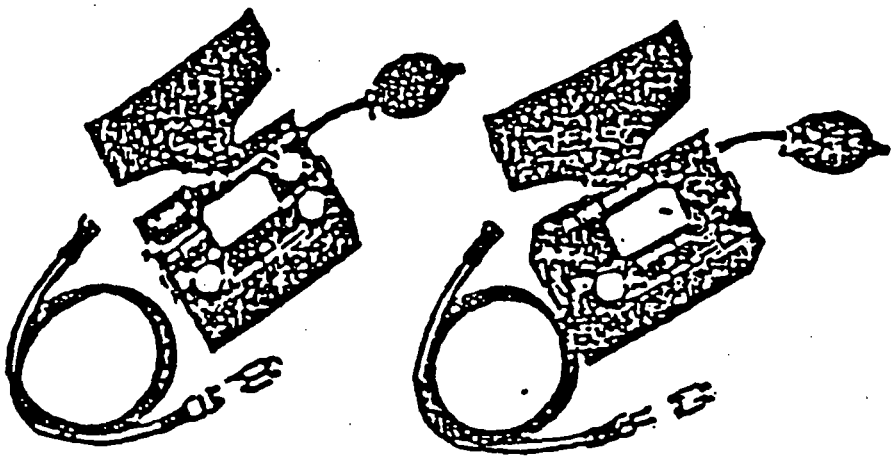
produ . . upward deflection on tl meter corresponding to gas concentration.

The thermal conductance method is not dependent on combustion, hence it is applicable regardless of the oxygen content of the sample. It is a relatively insensitive method, hence it is utilized at higher gas concentrations - greater than 5%.

HAND HELD PORTABLE COMBUSTIBLE GAS AND OXYGEN INDICATORS

P-200 SERIES

GAS|ECH



FEATURES

- Fast Response
- Light Weight
- Rugged Construction
- Simplicity of Operation
- Low Cost
- Gas Tech's Proven Dependab

DESCRIPTION

s P200, five lightweight, handheld portables for detecting bustible gases/vapors and monitoring atmospheric oxygen ent, represent the broadest line of common design instru- ents available. Engineered to serve the demanding field require- ents of industry, public works and public utilities, these instru- ments share many common features and offer the user distinct advantages in terms of economy, dependability, maintainability and ease of operation. Built to withstand rough field environ- ments, all Series P200 instruments are constructed with rugged cast aluminum housings, and incorporate highly reliable advanced electrical design characteristics. All active and passive components are mounted on easy-to-get-at, high quality, printed circuit boards. In operation, all P200 instruments are not only easy to use, sharing common functional characteristics, but they are extraordinarily fast in providing accurate readings. For gas indi- cators, the response time is no more than 4 seconds, and for oxygen indicators an accurate reading is attained within 6 seconds.

y maximizing the use of common components and operating characteristics, GasTech offers not only high quality field instru- ents, but has greatly simplified and expedited other very im- portant considerations, such as field service, personnel training d accessory interchangeability. And finally, and perhaps most portantly, the commonality of components can save valuable e when field service becomes necessary. Fundamental operat- g features are easy to understand and all components are very le for checkout, replacement or repair.

P-204 GENERAL COMBUSTIBLE GAS INDICATOR

general-purpose instrument for measuring or testing any area ere combustible gases or vapors may accumulate. Having a e of 0 to 100% LEL, and providing a reading within 4

exhibits outstanding zero stability, even as the level of the ba voltage decreases. Another important feature of GP-204 is span adjust capability, allowing for increased accuracy, espec in situations where different gases are being tested. Com: easy to hold in one hand, and weighing but 5 pounds, the GP is powered by either two D size rechargeable nickel-cadm batteries, or two D size flashlight batteries. The instrument h illuminated meter which together with the basic rugged cons tion makes it suitable for almost any work situation. Calibra is performed on methane, but other calibrations may b quested when ordering. As with all Series P200 instrum necessary accessories are provided in the standard packag include 3-foot Teflon-lined hose, end-of-line probe with int removable dust filter, leather carrying case with strap, and teries (charger included if required).

NP-204 NATURAL GAS LEAK DETECTOR

A dual-range instrument designed primarily for locating na gas leaks. Normally calibrated on natural gas, the instrumen two ranges, 0 to 5% natural gas by volume, and 0 to 100% which are displayed on the graduated illuminated scale. In a tion to all of the design characteristics of the GP-204, thi leak detector has a second complete Wheatstone bridge utili thermal conductivity filaments. When testing for gas leaks, second range is selected by an additional position on the sele switch marked "100% GAS". NP-204 operates from two D dry cell or rechargeable-type batteries and comes complete carrying case and all necessary accessories. Rechargeable batt substantially improve the accuracy of this version of the NP in comparison to any dry-cell type instrument on the 100% range where the reading at a given gas concentration is dire proportional to the detector circuit voltage. Especially usefu the gas distribution industry for bar-hole readings when

GP-204 DUAL-RANGE INDICAT

A dual-range version of the GP-204. [illegible] second more sensitive detection circuit for determining the [illegible] concentrations of certain hydrocarbon gases or vapors. This additional circuit has a range of from 0 to 10% LEL and is selected by an additional switch position. The advantage of this instrument is the fundamental practicality provided by the two ranges. With the EP-204, an industrial hygienist/safety officer can accomplish essential tests for leakage or accumulation of combustibles, as well as perform tests for low level concentration of toxic hydrocarbon vapors resulting from industrial processes. Circuit is powered by two D size rechargeable nickel-cadmium batteries. The optional pump described below is a very attractive addition to the Model EP-204, enhancing accuracy when testing for toxic concentrations. All necessary accessories are provided.

XP-204 OXYGEN DEFICIENCY INDICATOR

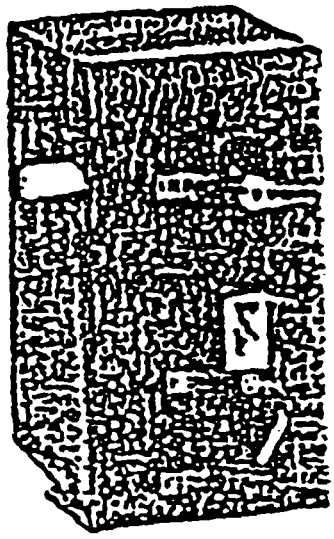
This very lightweight instrument, weighing only 3 pounds, is for use by workers who periodically need to enter work spaces where the atmosphere may be deficient in oxygen content. Model XP-204 enables the user to determine if the tested atmosphere is above the OSHA limit of 19.5% oxygen. Built-in, easy-to-read meter displays an accurate reading of atmospheric oxygen content within 6 seconds after sample draw on a graduated scale of from 0 to 25%. Detection method is with an electrochemical cell that is not only [illegible] fast in relative response time, but operate at temp[illegible] down to +15°F and is not affected angle or posi[illegible] the instrument. This cell is guaranteed fo months from date of shipment, and may be reactivated in nitely at a nominal cost. Amplification is through a highly s integrated circuit amplifier that matches cell output to m Amplification circuit also enables the user to zero Model XI on oxygen-free gas providing a true zero reading. This fe: combined with routine calibration on atmospheric air (21% gen), results in dependable accuracy at all points on the Power [illegible] through two 8.4V transistor-type batteries. All necessary accessories are included.

IP-204 INERTING INDICATOR

Dual-range indicator especially suited for utility and indu inerting operations where purged atmospheres need to be t for residual contents of oxygen. Typical applications of th 204 include periodic testing of transformer housings, testir gas handling equipment for initiation of service, testing for age into purged petrochemical process equipment, and te purged electrical and telephone conduit for leakage. In adc to having all the features of the XP-204 described above, instrument has a second, more sensitive range that provides r ings in the 0–5% range. This second range, also responsive w 6 seconds of sample draw, is selected by a two-position r switch.

SPECIFICATIONS

MODEL NO.	GP-204 COMBUSTIBLE INDICATOR	NP-204 NATURAL GAS DETECTOR	EP-204 EXPANDED SCALE INDICATOR	XP-204 OXYGEN DEFICIENCY	IP-204 INERTING INDICATOR
STOCK NO.	72-0101 / 72-0100	72-0121 / 72-0120	72-0116	72-0051	72-0052
PARAMETERS					
BATTERIES 1.5 V Alkaline D-Size	2	2	—	—	—
BATTERIES 1.2 V Ni-Cad D-Size	2	2	2	—	—
BATTERIES 8.4 V NEDA 1604A	—	—	—	2	2
Operating Hours	2 – 4	3 – 4	4	20	20
Combustible	Methane	Methane	Toluene	Oxygen	Oxygen
Range(s)	0–100% LEL	0–5% Gas 0–100% Gas	0–100% LEL 0–10% LEL	0–25%	0–25% 0–5%
Detection Method	Catalytic Combustion	Catalytic Thermal Cond.	Catalytic Combustion	Electrochemical Cell	Electrochemical Cell
Operating Temp.	0–120° F (–15 + 50° C)	0–120° F (–15 + 50° C)	0–120° F (–15 + 50° C)	10–110° F (–12 + 45° C)	10–110° F (–12 + 45° C)
Meter Legend	Std	Std (2)	Std	NA	NA
Time of Response	4 Sec.	4 Sec.	4 Sec.	6 Sec.	6 Sec.
[illegible]	3σ	3σ	3σ	3σ	3σ
[illegible]	8-1/2" × 5-1/4" × 4"				
Sampling Methods	Hose Attached with Detachable Pump Options				
Hose Time	One Second Lag Per Five Feet of Sample Line				
Accessories Included	Battery, End of Line Probe, 3 Foot Sample Hose w/Fittings Both Ends, Instruction Book, Leather Case and Strap, Recharger When Applicable				



80-0101—Minipump

A self-powered (rechargeable teryl pump useful as an acce to all instruments in the P200 Use of the pump eases the t involved in sampling from tanks with the GP-204, allows determination of leakage ra bar-hole testing with the NP and allows sampling of ex streams during purging opera for testing with the XP [illegible]

APPENDIX E

FIELD AND CALIBRATION LOGS

FIELD AND CALIBRATION LOGS
FOR MONTH OF DECEMBER

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel GD

site location 234

sample location I.C.S.

bag number VR21

sampler number 9013

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/10/90 TIME: 4:05

PROGRAM STOP: DATE 12/10/90 TIME: 4:15

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING: 25

FLOW RATE SETTING: 1 STDL/MIN

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
I.C.S.								VR21	

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location Bradley West Probe 1

sample location W - 1

bag number VR20

sampler number 9012

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/10/90 TIME: 1550

PROGRAM STOP: DATE 12/10/90 TIME: 1600

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING: 25

FLOW RATE SETTING:

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: BAROMETER = 30.03

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
W - 1			65					VR20	1550

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel E.D.

sample location EAST 8d

bag number VR19

site location 234

sampler number 9012

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/10/90 TIME: 2:55

PROGRAM STOP: DATE 12/10/90 TIME: 3:05

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING: 2.5

FLOW RATE SETTING: 1 STD L/MIN

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: BAROMETER : 30.03

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
E.8d	28%				+0.56			VR19	

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel ED

site location 234

sample location ~~UPWIND~~ DOWNWIND <24 HR

bag number VR001

sampler number 9001

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE ~~12/10/90~~ 12/11/90 TIME: 12:00 AM

PROGRAM STOP: DATE 12/11/90 TIME: 6:00 AM

PROGRAM TIMER SETTING: 9:20 ACTUAL TIME: 9:20

ROTOMETER SETTING: START 100 STOP: 97

FLOW RATE SETTING: 28

Barometer - 29.92

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel ED

site location 234

sample location ~~D.W.~~ UPWIND 24 HR

bag number VR002

sampler number 9004

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/10/90 TIME: 10:00AM

PROGRAM STOP: DATE 12/11/90 TIME: 10:00AM

PROGRAM TIMER SETTING: 9:06 ACTUAL TIME: 9:06

ROTOMETER SETTING: START 30 STOP: 35

FLOW RATE SETTING:

BAROMETER - 29.92

SAMPLE BAG TEST FOR METHANE NO

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel E.D.

site location 234

sample location UPWIND 224

bag number VR003

sampler number 9005

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE ~~12/11/90~~ 12/11/90 TIME: 12:00

PROGRAM STOP: DATE 12/11/90 TIME: 6:00 AM

PROGRAM TIMER SETTING: 11:04 ACTUAL TIME: 11:05

ROTOMETER SETTING: ~~30~~ 100 — 95

FLOW RATE SETTING: ~~6.9 cc/min~~ 28 cc/min

Barometer - 29.92

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: Located in an area where new GAS wells were placed.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel GD

site location 234

sample location D.W <24 HR DUP

bag number YR004

sampler number 9002

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/18/90 TIME: 12:04

PROGRAM STOP: DATE 12/18/90 TIME: 6:00PM

PROGRAM TIMER SETTING: 10:03 ACTUAL TIME: 10:04

ROTOMETER SETTING: 100 — 88 stop

FLOW RATE SETTING: 28

Barometer - 29.92

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location Bradley

sample location D.W. 24hs

bag number U2005

sampler number —

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/10/90 TIME: 10:50

PROGRAM STOP: DATE 12/11/90 TIME: 10:40

PROGRAM TIMER SETTING: N/A ACTUAL TIME:

ROTOMETER SETTING: 30 25

FLOW RATE SETTING:

SAMPLE BAG TEST FOR METHANE

Barometer: 29.99

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel GD

site location 234

sample location TRIP BLANK

bag number YR010

sampler number —

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/3/90 TIME: 8:30

PROGRAM STOP: DATE / TIME: /

PROGRAM TIMER SETTING: / ACTUAL TIME: /

ROTOMETER SETTING: /

FLOW RATE SETTING: /

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: TRIP BLANK FILLED W/ ULTRA PURE NITROGEN.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: Bradley

PURPOSE: ISS Bag Check for Methane

OPERATOR: R. Collins

DATE: 12/12/90 **Start** 0600 **Finish** 0900

Model # OVA 128
Serial # 40501

INSTRUMENT INTEGRITY CHECKLIST	
Battery Test	Pass/Fail
Reading Following Ignition	4 ppm
Leak Test	Pass/Fail
Clean System Check (Check Valve Chatter)	Pass/Fail
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail

INSTRUMENT CALIBRATION

Perform Three Point Internal Calibration Before Use.

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
9	6	66.7	1.5
95	90	95	Ø
900	700	77	Ø

AUDIT

	Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
	8:54	9	7	77.8
1.	8:54	95	90	94.7
2.	8:54	900	<1000	▶90

Instrument calibrated to Methane gas

COMMENTS: Barometer - 29.99 @ 07:00 am

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

sample location Grid #2

bag number VRI5003

site location Bradley East

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/10/90 TIME: 10:25

PROGRAM STOP: DATE 12/10/90 TIME: 10:53

PROGRAM TIMER SETTING: N/A ACTUAL TIME:

ROTOMETER SETTING: 19

FLOW RATE SETTING: 0.361 L/min

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: Area is located in vehicle storage area. May be gas & oil emission from decommissioned equipment.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 2	41.0							VRI55002	8:40 12/12/90

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

sample location Grid #1

bag number VA155005

site location Bradley East

sampler number 9010

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/10/90 TIME: 11:34

PROGRAM STOP: DATE 12/10/90 TIME: 12:00

PROGRAM TIMER SETTING: N/A ACTUAL TIME:

ROTOMETER SETTING: 19

FLOW RATE SETTING: 0.361 L/min

Barometer - 29.92

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: Sampled in vehicle storage area near decommissioned vehicles possible oil & gas vapors emitted.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 1	< 1.0							VA155005	8:40

12/12/90

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. C.

site location 234

sample location GRID # 3

bag number VRTSS004

sampler number 9010

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/10/90 TIME: 9:45

PROGRAM STOP: DATE 12/10/90 TIME: 10:10

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING: START .361 L/MIN STOP

FLOW RATE SETTING: START 19 STOP

BAROMETER

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: (OK) LOW

LEAK CHECK: (OK) LOW

OBSERVATIONS: ~~Grid~~ Grid # 3 is located near the vehicle storage area where oil and gas may be in the soil. Also well 35 is located in this grid

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID # 3	<1.0							VRTSS004	8:40

12/12/90

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel GD

sample location GRID #10

bag number WR155 014

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/11/90 TIME: 10:00

PROGRAM STOP: DATE TIME:

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING: 19

FLOW RATE SETTING:

BAROMETER 29.92

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: TRASH DEPOSITING DIRECTLY UPWIND
STRONG ODOR

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 10	<1.0							WR155014	8:04 12/12/90

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location Bradley East

sample location Grid #7

bag number ~~[illegible]~~ VR15500 8

sampler number 9010

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/11/90 TIME: 8:53

PROGRAM STOP: DATE 12/11/90 TIME: 9:18

PROGRAM TIMER SETTING: N/A ACTUAL TIME:

ROTOMETER SETTING: ~~[illegible]~~ 19

FLOW RATE SETTING: 0.361 L/Min

Barometer - 29.92

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: smell of methane coming from Gas wells located in grid

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 7	<1.0							VR15500 8	8:45

12/12/90

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel ED

sample location GRID #4

bag number VR155012

site location 234

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/11/90 TIME: 8:10

PROGRAM STOP: DATE 12/11/90 TIME: 8:30

PROGRAM TIMER SETTING: — ACTUAL TIME:

ROTOMETER SETTING: 20

FLOW RATE SETTING: 0.333 cc/min

BAROMETER: ~~30.~~ 29.92

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: TRUCK TRAFFIC LIGHT NEAR ACTIVE FACE ~200'

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID #4	<1.0							VR155012	12/12/90

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel ED

site location 234

sample location GRID 8

bag number VRISS 010

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/11/90 TIME: 9:20

PROGRAM STOP: DATE 12/11/90 TIME: 9:45

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING: 20

FLOW RATE SETTING: .33 cc/min

Barometer - 29.92

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME	
GRID #8	<1.0							VRISS 010	8:46	12/12/90

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

sample location Grid #9

bag number VRIS5009

site location Bradley East

sampler number

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/11/90 TIME: 9:35

PROGRAM STOP: DATE 12/11/90 TIME: 10:00

PROGRAM TIMER SETTING: N/A ACTUAL TIME:

ROTOMETER SETTING: 19

FLOW RATE SETTING: 0.36 l/min

SAMPLE BAG TEST FOR METHANE

BAROMETER: 29.99

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: strong methane oder in grid. New wells were drilled a week ago

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 9	<1.0							VRIS5009	8:46 12/12/90

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location Bradley East

sample location Grid #5

bag number VR009

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/11/90 TIME: 8:20

PROGRAM STOP: DATE 12/11/90 TIME: 8:45

PROGRAM TIMER SETTING: N/A ACTUAL TIME:

ROTOMETER SETTING: 25

FLOW RATE SETTING: .36 L/min

Barometer - 29.92

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: Site of Gas well redrills one week prior. Methane odor near vicinity of gas recovery

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #5	< 1.0							VR009	8:48

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel E. Dragan

site location 234

sample location GRID 6

bag number VR155007

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/11/90 TIME: 8:50

PROGRAM STOP: DATE 12/11/90 TIME: 9:14

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING: 20

FLOW RATE SETTING: 333cc/mm

Barometer - 29.92

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: APPROX ~ 200' FROM GAS RECOVERY PLANT
EXHAUST FUMES - GRID ENCOMPASSES ~ 4 GAS WELLS
ODOR OF LFG WAS NOTICED.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID 6	<1.0							VR155007	8:49

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel GD

sample location GRID 10

bag number VR008

site location 234

sampler number 9012

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/12 TIME: 7:00

PROGRAM STOP: DATE 12/12 TIME: 7:25

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING: 20

FLOW RATE SETTING: .3

BAROMETER: 29.99

SAMPLE BAG TEST FOR METHANE

WIND SPEED ~3.5mph

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: UPWIND STRONG ODOR OF TAR

- ROOF TARRED

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 10	<1.0							VR008	8:50 12/12

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location Bradley

sample location Grid # 11

bag number VR007

sampler number ~~VR007~~ 9011

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 12/12/90 TIME: 7:05

PROGRAM STOP: DATE 12/12/90 TIME: 7:30

PROGRAM TIMER SETTING: N/A ACTUAL TIME:

ROTOMETER SETTING: ~ 19

FLOW RATE SETTING: 0.561 L/min

BAROMETER: 29.99

SAMPLE BAG TEST FOR METHANE

WIND SPEED

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: Grid encompassed a road, which may contain oil or gas from leaking vehicles. Well drilling to the Northeast of Grid. Strong tar-like odor

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 11	<1.0							VR007	8:50 12/12/90

FIELD AND CALIBRATION LOGS
FOR MONTH OF JANUARY

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location 234

sample location Probe W-1

bag number 155004

sampler number

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE / LFG / PROBES / HEAD SPACE SAMPLE

PROGRAM START: DATE 1/9/91 TIME: 4:00 pm

PROGRAM STOP: DATE 1/9/91 TIME: 4:10 pm

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: 1L/mn Stop: 1L/mn

BAROMETER Start: 29.98 Stop: 29.98

WIND SPEED AVE. N/A

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: STRONG ODOR OF LFG PRESENT

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
W-1			6.7		+0.08			155004	

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel E. Dragun

sample location Gas Plant

bag number VRISS005

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE / LFG / PROBES/ HEAD SPACE SAMPLE

PROGRAM START: DATE 1/10/91 TIME: 1300

PROGRAM STOP: DATE 1/10/91 TIME: 1325

PROGRAM TIMER SETTING: ~~OFF~~ N/A ACTUAL TIME:

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: — Stop: —

BAROMETER Start: 29.98 Stop: 29.98

WIND SPEED AVE. N/A

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: collected at main header prior to the "knock out" scrubber station.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel E. Dragun

site location 2311

sample location G.P. E-8D

bag number VRZSS 3

sampler number

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE / LFG / PROBES / HEAD SPACE SAMPLE

PROGRAM START: DATE 1/9/91 TIME: 3:37

PROGRAM STOP: DATE 1/9/91 TIME: 3:48

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: ~25 Stop: ~25

FLOW RATE SETTING Start: 1500 cc/min Stop: 1L/min

BAROMETER Start: 29.98 Stop: 29.98

WIND SPEED AVE. N/A

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: Probes submerged in water

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D.	TESTING TIME
E-8D			34%		+0.10				

WMNA - EMD

GAS PROBE ANALYZER CALIBRATION LOG

SITE

MODEL #

SERIAL#

OPERATOR (Initials)	DATE	BATTERY TEST (PASS/FAIL)	CHECK TEST (PASS/FAIL)	INTEGRITY CHECK % LEL STD	INTEGRITY CHECK % LEL ACT	UNCORRECTED* READING 44% VOLUME CH_4 IN AIR STD	UNCORRECTED* READING 44% VOLUME CH_4 IN AIR ACT	UNCORRECTED* READING 2.5% CH_4 % OXYGEN STD	UNCORRECTED* READING 2.5% CH_4 % OXYGEN ACT	CORRECTED READING % LEL STD	CORRECTED READING % LEL ACT	CORRECTED READING VOLUME CH_4 IN AIR STD	CORRECTED READING VOLUME CH_4 IN AIR ACT	CORRECTED READING % OXYGEN STD	CORRECTED READING % OXYGEN ACT	COMMENTS
SD	1/9/91					44	44	2.5	2.5							used for Probe samples

* If instrument has autozero capabilities carry out the following:
a. If fails autozero, determine uncorrected readings and calibrate.
b. If passes, it is not necessary to calibrate. Indicate pass across uncorrected readings.

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location Bradley

sample location Grid #1

bag number VRISS003

sampler number OVRISS012

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE / LFG / PROBES/ HEAD SPACE SAMPLE

PROGRAM START: DATE 1/18/91 TIME: 9:16

PROGRAM STOP: DATE 1/18/91 TIME: 9:44

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: — Stop: —

BAROMETER Start: 3011 Stop: 3011

WIND SPEED AVE. <5 mph

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: Grid ~~is with~~ encompasses Gas Extraction wells 68 + 70. Methane oder emitted within grid possibly from wells

bag tested for methane using OVA 128

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #1	<1ppm								9:16

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WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location Bradley

sample location Grid #2

bag number VRS5009

sampler number ~~VRS5009~~

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 1/14/ TIME: 8:00 PROGRAM STOP: DATE 1/14/ TIME: 8:25

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start:	19	Stop:	19
FLOW RATE SETTING Start:	—	Stop:	—

BAROMETER Start: 3010 Stop: 3010

WIND SPEED AVE. < 5.0 mph

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: Grid #2 Encompasses Gas Extraction well # E7. Slight methane odor detected w/in Grid.

* bag tested for methane using an OVA 128

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #2	1.3ppm							VRS5009	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

site location Bradley

sample location Grid #3

bag number VRTS6010

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 1/18/91 TIME: 9:30 PROGRAM STOP: DATE 1/19/91 TIME: 9:30

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start:	Stop:
FLOW RATE SETTING Start:	Stop:

BAROMETER Start: Stop:

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: Gas Extraction Well #63 is located w/in Grid #3.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 3	0							VRTS6010	

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SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location Bradley

sample location Grid #4

bag number VRC09

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 1/2/91 TIME: 8:40 PROGRAM STOP: DATE 1/2/91 TIME: 8:05

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: — Stop: —

BAROMETER Start: 30.10 Stop: 30.10

WIND SPEED AVE. <5 mph

CONC. METHANE IN TEDLAR BAG - 0.2 ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: All ISS bag Tested for Methane using an OVA 128

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #4	0.2							VRC09	

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SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins/~~Deggan~~ Dragan

site location Bradley

sample location Grid 5

bag number VRISS 007

sampler number —

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 9/18 TIME: 9:18 PROGRAM STOP: DATE 9/21/91 TIME: 9:43

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: — Stop: —

BAROMETER Start: 30.00 Stop: 30.00

WIND SPEED AVE. <5 mph

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
	Ø								

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SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins/Dragan

site location Bradley

sample location Grid 6

bag number IS5008

sampler number —

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 1/19/91 TIME: 800 PROGRAM STOP: DATE 1/19/91 TIME: 825

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: — Stop: —

BAROMETER Start: 30.14 Stop: 30.14

WIND SPEED AVE. < 5 mph

CONC. METHANE IN TEDLAR BAG -

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
	Ø								

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SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins / Dragun

site location Bradley

sample location Grid #7

bag number UK0018

sampler number —

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 1/21/91 TIME: 7:52 PROGRAM STOP: DATE 1/21/91 TIME: 8:22

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start:	25	Stop:	25
FLOW RATE SETTING Start:	—	Stop:	

BAROMETER Start: 30.00 Stop: 30.00

WIND SPEED AVE. < 5 mph

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
	Ø								

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SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location Bradley

sample location Grid 8

bag number VRISSC14

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 1/24/91 TIME: 800 PROGRAM STOP: DATE 1/24/91 TIME: 825

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: Stop:

BAROMETER Start: 3010 Stop: 3010

WIND SPEED AVE. <5

CONC. METHANE IN TEDLAR BAG 0

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #8	0								

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE:

PURPOSE:

OPERATOR:

DATE: Start 1553 Finish 1630

Model # Century OVA 128
Serial # 40501

INSTRUMENT INTEGRITY CHECKLIST	
Battery Test	Pass/Fail
Reading Following Ignition	2 ppm
Leak Test	Pass/Fail
Clean System Check (Check Valve Chatter)	Pass/Fail
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail

INSTRUMENT CALIBRATION

Perform Three Point Internal Calibration Before Use.

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
10	10	100%	Ø
95	60	63%	Ø

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1.			
2.			

Instrument calibrated to CH_4 gas

COMMENTS: OVA is used to take concentrations of the Tedlar bags used in ISS Samples

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location 234

sample location TW/24 hr

bag number 1VR014

sampler number 9002

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE SAMPLE / LFG / PROBES

PROGRAM START: DATE 1/22/91 TIME: 12:00AM

PROGRAM STOP: DATE 1/22/91 TIME: 6:00 am

PROGRAM TIMER SETTING: 9:33 ACTUAL TIME: 9:33

ROTOMETER SETTING: 100 -

FLOW RATE SETTING: 28 cc/mn

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: Downwind < 24 hrs.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

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SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins / E. Dragun

sample location UN < 24 hr

bag number VR011

site location Bradley

sampler number —

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 1/23/91 TIME: 12:00 PROGRAM STOP: DATE 1/23/91 TIME: 6:00

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: 100 Stop: 100

FLOW RATE SETTING Start: 28 cc/min Stop: 28 cc/min

BAROMETER Start: 30.10 Stop: 30.10

WIND SPEED AVE. /

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

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SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins / E. Bragon

site location Bradley

sample location DW <24 hr

bag number VR 013

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 1/23/91 TIME: 12:00 PROGRAM STOP: DATE 1/23/91 TIME: 6:00

PROGRAM TIMER SETTING: — ACTUAL TIME: ~

ROTOMETER SETTING Start: 100 Stop: 100

FLOW RATE SETTING Start: 28 cc/m. Stop: 28 cc/min

BAROMETER Start: Stop:

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

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SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins / E. Dragan

site location Bradley

sample location D.N. 34th

bag number VR012

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 1/22/91 TIME: 1000 PROGRAM STOP: DATE 1/23/91 TIME: 1000

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: 30 Stop: 30

FLOW RATE SETTING Start: 6.9cc/mn Stop: 6.9cc/mn

BAROMETER Start: 30.10 Stop: 30.10

WIND SPEED AVE. < 5 mph

CONC. METHANE IN TEDLAR BAG - NA

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

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SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins/Dragan

site location Bradley

sample location up wind 24 m.

bag number V2006

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 1/23/91 TIME: 1000 PROGRAM STOP: DATE 1/23/91 TIME: 1600

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: 30 Stop: 30

FLOW RATE SETTING Start: 6.9cc/mn Stop: 6.9cc/mn

BAROMETER Start: — Stop: —

WIND SPEED AVE. —

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: set up at East (south) section near conveyor belt
* roll off bends.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

FIELD AND CALIBRATION LOGS
FOR MONTH OF FEBRUARY

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

site location Bradley

sample location UW <24 hr

bag number V RO 31

sampler number 9005

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE / LFG / PROBES/ HEAD SPACE SAMPLE

PROGRAM START: DATE 2/21/91 TIME: 0000

PROGRAM STOP: DATE 2/21/91 TIME: 0600

PROGRAM TIMER SETTING: 0000 ACTUAL TIME: 0000

ROTOMETER SETTING Start: 1000 Stop: 70

FLOW RATE SETTING Start: Stop:

BAROMETER Start: 30.26 Stop:

WIND SPEED AVE. ~ 5 mph

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: Bag ½ Full.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

site location Bradley

sample location DIN 224 DUP.

bag number VR029

sampler number 9602

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE / LFG / PROBES/ HEAD SPACE SAMPLE

PROGRAM START: DATE 2/21/91 TIME: 00:00

PROGRAM STOP: DATE 2/21/91 TIME: 6:00

PROGRAM TIMER SETTING: 0000 ACTUAL TIME: 0000

ROTOMETER SETTING Start: 100 Stop: 90

FLOW RATE SETTING Start: Stop:

BAROMETER Start: 30.26 Stop:

WIND SPEED AVE. ~ 7

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

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SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

site location 234

sample location UW24

bag number YR024

sampler number 9004

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE / LFG / PROBES/ HEAD SPACE SAMPLE

PROGRAM START: DATE 2/20/91 TIME: 10:00am

PROGRAM STOP: DATE 2/21/91 TIME: 10:00am

PROGRAM TIMER SETTING: 9:59 ACTUAL TIME: 9:59

ROTOMETER SETTING Start: 30 Stop: 30

FLOW RATE SETTING Start: Stop:

BAROMETER Start: 30.26 Stop: 30.12

WIND SPEED AVE. ——

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

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SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

sample location D.W. 224

bag number VR030

site location 234

sampler number 9001

SAMPLE TYPE: ~~AMBIENT AIR~~ / INTEGRATED SURFACE / LFG / PROBES/ HEAD SPACE SAMPLE

PROGRAM START: DATE 2/21/91 TIME: 12:00PM

PROGRAM STOP: DATE 2/21/91 TIME: 0600

PROGRAM TIMER SETTING: ~~[illegible]~~ 12:34 ACTUAL TIME: 12:34

ROTOMETER SETTING Start: 100 Stop: 96

FLOW RATE SETTING Start: — Stop: —

BAROMETER Start: ~~[illegible]~~ 30.26 Stop: 30.12

WIND SPEED AVE. —

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: ~~OK~~ LOW

LEAK CHECK: OK LOW

OBSERVATIONS: COLLECTED ON BRADLEY EAST SOUTH SECTION NEAR CONVEYOR BELT.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins/Dragan

sample location Down wind 24hrs

bag number VR023

site location Bradley

sampler number 9003

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE / LFG / PROBES/ HEAD SPACE SAMPLE

PROGRAM START: DATE 2/20/91 TIME: 1000

PROGRAM STOP: DATE 2/21/91 TIME: 1000

PROGRAM TIMER SETTING: 1000 ACTUAL TIME: 1000

ROTOMETER SETTING Start: 30 Stop: 30

FLOW RATE SETTING Start: Stop:

BAROMETER Start: 30.26 Stop: 30.12

WIND SPEED AVE.

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

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SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

site location Bradley

sample location Grid #1

bag number VR017

sampler number ____

SAMPLE TYPE: AMBIENT AIR / ~~INTEGRATED SURFACE~~ / LFG / PROBES/ HEAD SPACE SAMPLE

PROGRAM START: DATE 2/20/91 TIME: 1100

PROGRAM STOP: DATE 2/20/91 TIME: 1120

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 19 Stop: 15

FLOW RATE SETTING Start: Stop:

BAROMETER Start: 30.21 Stop: 30.21

WIND SPEED AVE. ~ 2.2

SAMPLE BAG TEST FOR METHANE

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: Wind speed @ 11:00 = 0.3; Wind speed @ 11:20 = 2.5
Well #37 located w/in Grid. Also, this is the vehicle storage yard.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #1	<1							VR017	12:07

WMNA - EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

sample location GRID #2

bag number VR022

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / INTEGRATED SURFACE / LFG / PROBES/ HEAD SPACE SAMPLE

PROGRAM START: DATE 2/20/91 TIME: 11:00

PROGRAM STOP: DATE 2/20/91 TIME: 11:25

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: Stop:

BAROMETER Start: 30.26 Stop: 30.26

WIND SPEED AVE. <5

SAMPLE BAG TEST FOR METHANE <1 ppm

BATTERY CHECK: OK LOW

LEAK CHECK: OK LOW

OBSERVATIONS: walk performed on West Extension Length ~950-1000 ft By - 40 ft.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID 1	<1 ppm								
GRID 2	<1 ppm							VR022	12:30 2/21/91

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SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location Bradley

sample location ISS #3

bag number ISS007

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 2/21/97 TIME: 7:40 PROGRAM STOP: DATE 2/21/97 TIME: 8:05

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 19 Stop: 15

FLOW RATE SETTING Start: N/A Stop:

BAROMETER Start: 30.12 Stop: 30-12

WIND SPEED AVE. <5.0

CONC. METHANE IN TEDLAR BAG <1PPM

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: Grid encompassed Gas Extraction Well #10 & Hn in cabled well.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #3	<1PPM							ISS007	12:30

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SCAQMD 1150.1 FIELD DATA SHEET

personnel E. DRAGAN

sample location GRID 5

bag number VR015

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 2/21 TIME: 8:17 PROGRAM STOP: DATE 2/21 TIME: 8:42

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: 20 Stop: 18

FLOW RATE SETTING Start: Stop:

BAROMETER Start: 30.12 Stop: 30.12

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG <1 ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: GRID COVERED SOIL STOCK PILE

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID 5	<1 ppm							VR015	2:45

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SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

sample location Grid #6

bag number VR016

site location Bradley

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 3/21/91 TIME: 8:20 PROGRAM STOP: DATE 3/21/91 TIME: 8:45

PROGRAM TIMER SETTING: W/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 19	Stop: 10
FLOW RATE SETTING Start: —	Stop: —

BAROMETER Start: 30.12 Stop: 30.12

WIND SPEED AVE. < 5 mph

CONC. METHANE IN TEDLAR BAG <1 ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: Gas Extration wells # 3, 4 and 15 located w/in Grid

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #6	<1.							VR016	12:45

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SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

sample location Grid #7

bag number ISS008

site location Bradley East

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 2/21/91 TIME: 11:10 PROGRAM STOP: DATE 2/21/91 TIME: 12:35

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start:	19	Stop:	19
FLOW RATE SETTING Start:	—	Stop:	—

BAROMETER Start: 30-12 Stop: 30-12

WIND SPEED AVE. <5 mph

CONC. METHANE IN TEDLAR BAG <1ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: Gas Extraction Well #2 located w/in Grid

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #7	<1ppm							~~VR~~ ISS008	12:40

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WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel E. DRAGAN

site location 234

sample location GRID 8

bag number VRISS 17

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 2/21 TIME: 9:10 PROGRAM STOP: DATE 2/21 TIME: 9:35

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20 Stop: 19

FLOW RATE SETTING Start: Stop:

BAROMETER Start: Stop:

WIND SPEED AVE. 25 mph

CONC. METHANE IN TEDLAR BAG 21 ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID 8	21 ppm							VRISS 17	12:45

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SCAQMD 1150.1 FIELD DATA SHEET

personnel R. COLLINS

sample location GRID 9

bag number V2018

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 7/21/97 TIME: 9:45 PROGRAM STOP: DATE 7/21/97 TIME: 10:10

PROGRAM TIMER SETTING: ~~[illegible]~~ ACTUAL TIME: N/A

ROTOMETER SETTING Start: 19	Stop: 19
FLOW RATE SETTING Start:	Stop:

BAROMETER Start: 30.12 Stop: 30.12

WIND SPEED AVE. < 5 mph

CONC. METHANE IN TEDLAR BAG < 1 ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID 9	~~[illegible]~~ < 1							V2018	12:40

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SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

site location Bradley

sample location Grid # 11

bag number VR034

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 8/6/9 TIME: 8:58 PROGRAM STOP: DATE 8/6/9 TIME: 8:23

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start:	19	Stop:	30
FLOW RATE SETTING Start:	—	Stop:	—

BAROMETER Start: 30.03 Stop: 30.03

WIND SPEED AVE. < 5

CONC. METHANE IN TEDLAR BAG 2 ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #11	2							VR034	2:30

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WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel E DRAGAN

sample location GRID #12

bag number VR035

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 2/22 TIME: 8:00 PROGRAM STOP: DATE 2/22 TIME: 8:25

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20 Stop: 19

FLOW RATE SETTING Start: Stop:

BAROMETER Start: 30.03 Stop: 30.03

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG 2 ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #12	2							VR035	12:10

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel E. DRAGAM

sample location GRID # 13

bag number YR040

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / (SS) / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 2/21 TIME: 8:50 PROGRAM STOP: DATE 2/21 TIME: 9:15

PROGRAM TIMER ~~SETTING:~~ ACTUAL TIME:

ROTOMETER SETTING Start: 19	Stop: 19
FLOW RATE SETTING Start:	Stop:

BAROMETER Start: 30.03 Stop: 30.03

WIND SPEED AVE. 5 mph

CONC. METHANE IN TEDLAR BAG 1 ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid # 13	1							YR040	12:20

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

site location 234

sample location Grid # 15

bag number VR038

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 2/22/4 TIME: 9:20 PROGRAM STOP: DATE 2/22/4 TIME: 9:55

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: — Stop: —

BAROMETER Start: 30.30 Stop: 30.30

WIND SPEED AVE. < 5 mph

CONC. METHANE IN TEDLAR BAG < 1 ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #15	< 1							VR038	12:30

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel C DRAGAN

sample location GRD 16

bag number VA037

site location

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 7/22 TIME: 9:30 PROGRAM STOP: DATE 7/22 TIME: 955

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 19	Stop: 19
FLOW RATE SETTING Start:	Stop:

BAROMETER Start: 30.03 Stop: 30.03

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grd #16	0							VA037	12:26

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

sample location GRID 4

bag number VR155712

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 7/11 TIME: 7:40 PROGRAM STOP: DATE TIME: 8:05

PROGRAM TIMER SETTING: — ACTUAL TIME:

ROTOMETER SETTING Start: 19	Stop: 19
FLOW RATE SETTING Start:	Stop:

BAROMETER Start: 30.12 Stop: 30.12

WIND SPEED AVE. <5

CONC. METHANE IN TEDLAR BAG <1 ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID 4	<1 ppm							VR155712	12:45

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

site location 234

sample location Grid #14

bag number VRIS5009

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 2/22/91 TIME: 8:45 PROGRAM STOP: DATE 2/22/91 TIME: 0910

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: — Stop: —

BAROMETER Start: 30.03 Stop: 30.03

WIND SPEED AVE. <5mph

CONC. METHANE IN TEDLAR BAG <1ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid #14	<1							VR5609	1223

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel E DRAGAN

site location 234

sample location GRID 10

bag number VRISS010

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 2/21 TIME: 9:45 PROGRAM STOP: DATE 2/21 TIME: 10:10

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20	Stop: 19
FLOW RATE SETTING Start:	Stop:

BAROMETER Start: 30.12 Stop: 30.12

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG <1 PPM

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: GRID PATTERN ENCOMPASSED 2 BAKER TANKS USED TO HOLD CONDENSATE FROM GAS RECOVERY

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID 10	~~VRISS~~ <1							VRISS10	10:40

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAKAN

sample location PROBE W9

bag number VRJ25017

site location BRADLEY

sampler number 9012

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 2/25 TIME: 10:40 PROGRAM STOP: DATE 2/25 TIME: 10:50

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: 25	Stop: 25
FLOW RATE SETTING Start:	Stop:

BAROMETER Start: 30.09 Stop: 30.09

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: HIGHEST PROBE READING AT W9 PROBE

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
W9			30%		+0.01				

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

sample location PROBE E8D

bag number YRISS 8

site location BRADLEY

sampler number 9012

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES / HEAD SPACE / OVA SWEEP

PROGRAM START: DATE 2/25/91 TIME: 10:15 PROGRAM STOP: DATE 2/25 TIME: 10:25

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: Stop:

BAROMETER Start: 30.09 Stop: 30.09

WIND SPEED AVE. N/A

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
E8D	[illegible]		1.8%		+0.00				

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAIN/COLLINS

sample location ICS

bag number VRESS012

site location BRADLEY 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 2/25 TIME: 11:05 PROGRAM STOP: DATE 2/25 TIME: 11:15

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: — Stop: —

BAROMETER Start: 30.09 Stop:

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG 43.8

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: ALL SYSTEMS ON LINE

* ICS - LOCATED AT HEADER SYSTEM BEFORE SCRUBBER. QUICK CONNECT PORT

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
* ICS			43.8		—				

PARTIALLY SCANNED
OVERSIZE ITEM(S)

See document # 2199225
for partially scanned image(s).
13 OF 19

For complete hardcopy version of the oversize document
contact the Region IX Superfund Records Center at
(415) 536-2000

APPENDIX F

WEEKLY PERIMETER GAS PROBE READINGS FOR MONTH OF DECEMBER

WEEKLY PERIMETER GAS PROBE READINGS
FOR MONTH OF DECEMBER

Valley Reclamation
9227 Tujunga Ave.
Sun Valley Ca 91352
(818)767-6180

EQUIPMENT USED

MAKE [illegible] MAKE PDM
MODEL [illegible] MODEL 205

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

BY: ROD COLLINS DATE: 12/24/90 TIME: 1645

BRADLEY WEST BAROMETER 30.10

PROBE	CH4%	PRESS	WELL#	PH	PW	GAS TEMP	CFM	N2/O2	CH4	WELL ADJ
W-1	60	+0.03								
W-2	Ø	+0.01								
W-3	Ø	+0.01								
W-4	Ø	0.00								
W-5	Ø	0.00								
W-6	Ø	0.00								
W-7	10	+0.03								
W-8	Ø	0.00								
W-9	11	0.00								
W-10	Ø	+0.02								
W-11	Ø	0.00								
W-12	Ø	0.01								
W-13	Ø	0.00								
W-14	Ø	0.00								

COMMENTS: Field Audit!

Standard	Audit	Accuracy
44	32	73%
2.5	2.3	[illegible]

Valley Reclamation
9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

CALIBRATION: DIGIFLAM ___
GASTECH ___
FID ___

EQUIPMENT USED

MAKE Gastech MAKE PDM
MODEL NP204 MODEL 205

BY: Rod Collins DATE: 7/24/90 TIME: 1530

BRADLEY EAST BAROMETER 30.10

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
E-1	-0.05	Ø								
E-2S	0.00	Ø								
E-2M	+0.02	Ø								
E-2D	+0.04	Ø								
E-3	-0.04	Ø								
E-4	0.00	Ø								
E-5S	+0.02	Ø								
E-5M	+0.02	Ø								
E-5D	+0.05	Ø								
E-6	+0.01	Ø								
E-7	0.00	Ø								
E-8S	0.00	Ø								
E-8M	+0.01	Ø								
E-8D	+0.06	11								
E-9	0.00	Ø								
E-10	0.00	Ø								
E-11S	0.00	Ø								
E-11M	+0.05	Ø								
E-11D	0.02	Ø								
E-12	+0.02	Ø								
E-13	+0.02	Ø								
E-14S	+0.01	Ø								
E-14M	+0.00	Ø								
E-14D	+0.01	Ø								

COMMENTS:

G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

Valley Reclamation
9227 Tujunga Ave.
Sun Valley Ca 91352
(818)767-6180

EQUIPMENT USED

MAKE [illegible] MAKE PDM
MODEL [illegible] MODEL 205

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

BY: Rod Collins DATE: 12/12/90 TIME: 10:50

BRADLEY WEST BAROMETER 30.24

PROBE	CH4%	PRESS	WELL#	PH	PW	GAS TEMP	CFM	N2/O2	CH4	WELL ADJ
W-1	Ø	-0.28								
W-2	Ø	-0.08								
W-3	Ø	-0.15								
W-4	Ø	-0.06								
W-5	Ø	-0.07								
W-6	Ø	-0.05								
W-7	Ø	-0.50								
W-8	Ø	-0.04								
*W-9	5/5	-0.02								
W-10	Ø	-0.32								
W-11	Ø	0.00								
W-12	Ø	0.00								
W-13	Ø	0.03								
W-14	Ø	0.02								

COMMENTS:

Field Audit:

Standard %	Audit %	Accuracy
44	44	100%
25	[illegible]	[illegible]

Valley Reclamation
9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probe: Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE Gastech MAKE PDM
MODEL NP204 MODEL 205

BY: ROD COLLINS DATE: 12/17/90 TIME: 1145

BRADLEY EAST BAROMETER 30.24

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
E-1	Ø	-0.08								
E-2S	Ø	0.00								
E-2M	Ø	-0.06								
E-2D	Ø	-0.02								
E-3	Ø	-0.03								
E-4	Ø	-0.02								
E-5S	Ø	0.00								
E-5M	Ø	0.04								
E-5D	Ø	-0.15								
E-6	Ø	-0.04								
E-7	Ø	-0.28								
E-8S	Ø	-0.08								
E-8M	Ø	-0.13								
* E-8D	~~32~~ 28	-0.41								
E-9	Ø	0.00								
E-10	Ø	-0.03								
E-11S	Ø	0.00								
E-11M	Ø	-0.02								
E-11D	Ø	-1.12								
E-12	Ø	+0.03								
E-13	Ø	-0.2								
E-14S	Ø	-0.02								
E-14M	Ø	-0.02								
E-14D	Ø	-0.45								

COMMENTS:

* Top values indicates reading prior to purging, bottom represents reading after purging.

G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore

Valley Reclamation
9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probe: Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE Gastech MAKE PDM
MODEL 1820 4 MODEL 205

BY: Rod Collins DATE: 12/13/90 TIME: 1400

BRADLEY EAST BAROMETER ~~30.08~~ 30.05

PROBE	CH4%	PRESS	WELL#	PH (°wc)	PW (°wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW (°wc)
E-1	Ø	+0.01								
E-2S	Ø	+0.02								
E-2M	Ø	-0.10								
E-2D	Ø	-0.01								
E-3	Ø	+0.07								
E-4	Ø	+0.03								
E-5S	Ø	+0.03								
E-5M	Ø	+0.02								
E-5D	Ø	+0.22								
E-6	Ø	+0.03								
E-7	Ø	-0.07								
E-8S	Ø	-0.02								
E-8M	Ø	-0.03								
E-8D	38	+0.28								
E-9	Ø	0.00								
E-10	Ø	-0.01								
E-11S	Ø	-0.05								
E-11M	Ø	-0.02								
E-11D	Ø	+0.21								
E-12	Ø	+0.17								
E-13	Ø	+0.04								
E-14S	Ø	+0.02								
E-14M	Ø	+0.02								
E-14D	Ø	+0.19								

COMMENTS:

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn

Valley Reclamation
9227 Tujunga Ave.
Sun Valley Ca 91352
(818)767-6180

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL UP200 MODEL 205

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

BY: ROD COLLINS DATE: 12/13/90 TIME: 1520

BRADLEY WEST BAROMETER ~~30.08~~ 30.05

PROBE	CH4%	PRESS	WELL#	PH	PW	GAS TEMP	CFM	N2/O2	CH4	WELL ADJ
W-1	Ø	+0.11								
W-2	Ø	+0.01								
W-3	Ø	+0.11								
W-4	Ø	+0.05								
W-5	Ø	+0.04								
W-6	Ø	+0.02								
W-7	Ø	+0.16								
W-8	Ø	+0.01								
W-9	7	+0.05								
W-10	Ø	+0.13								
W-11	Ø	0.00								
W-12	Ø	0.00								
W-13	Ø	0.00								
W-14	Ø	-0.03								

COMMENTS: Field Audit

Standard	Audit	Accuracy
44%	50%	88%

Valley Reclamation
9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL NP204 MODEL 205

BY: ROD COLLINS DATE: 12/3/90 TIME: 1020

BRADLEY EAST BAROMETER 30.26

PROBE	CH4%	PRESS	WELL#	PH ("wc)	PW ("wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW ("wc)
E-1	Ø	-0.26								
E-2S	Ø	+0.06								
E-2M	Ø	0.00								
E-2D	Ø	+0.19								
E-3	Ø	+0.11								
E-4	Ø	+0.08								
E-5S	Ø	+-0.01								
E-5M	Ø	+0.01								
E-5D	Ø	+0.09								
E-6	Ø	+0.07								
E-7	Ø	+0.04								
E-8S	Ø	+0.09								
E-8M	Ø	+0.14								
E-8D	28	-0.05								
E-9	Ø	0.00								
E-10	Ø	+0.04								
E-11S	Ø	+0.04								
E-11M	Ø	+0.05								
E-11D	Ø	-0.32								
E-12	Ø	+0.04								
E-13	Ø	+0.04								
E-14S	Ø	+0.03								
E-14M	Ø	+0.03								
E-14D	Ø	-0.24								

COMMENTS:

9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

EQUIPMENT USED

MAKE GASTECH MAKE PDM
MODEL 820 MODEL 205

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

BY: Rod Collins DATE: 12/3/90 TIME: 0930

BRADLEY WEST BAROMETER 30.26

PROBE	CH4%	PRESS	WELL#	PH	PW	GAS TEMP	CFM	N2/O2	CH4	WELL ADJ
W-1	Ø	-0.16								
W-2	1	-0.05								
W-3	Ø	-0.09								
W-4	Ø	-0.05								
W-5	Ø	-0.03								
W-6	Ø	-0.02								
W-7	Ø	-0.28								
W-8	Ø	0.00								
W-9	2	0.00								
W-10	Ø	-0.21								
W-11	Ø	0.00								
W-12	Ø	0.00								
W-13	Ø	0.00								
W-14	Ø	0.00								

COMMENTS:

	Calibration Gas %	Audit Reading %	Accuracy
Field Audit:	2.5	2.5	100%
	14	50	89%

WEEKLY PERIMETER GAS PROBE READINGS
FOR MONTH OF JANUARY

Valley Reclamation
9327 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probe Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL NP204 MODEL 205

BY: ERN DRAGAH

DATE: 1/9/91 TIME: 400pm

BRADLEY EAST

BAROMETER 30.15

PROBE	CH4%	PRESS	WELL#	PH (°wc)	PW (°wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW (°wc)
E-1	0	+0.02								
E-2S	0	-0.04								
E-2M	0	-2.10								
E-2D	N/A	N/A								
E-3	0	+0.02								
E-4	0	+0.29								
E-5S	0	+0.05								
E-5M	0	+0.11								
E-5D	0	-0.01								
E-6	0	+0.06								
E-7	0	-0.23								
E-8S	0	-0.12								
E-8M	0	-2.52								
E-8D	29	+0.34	No	Data	Taken					
E-9	0	+0.24								
E-10	0	+0.07								
E-11S	0	+0.10								
E-11M	0	+0.12								
E-11D	0	+0.09								
E-12	0	+0.15								
E-13	0	+0.09								
E-14S	0	+0.07								
E-14M	0	+0.07								
E-14D	0	+0.37								

COMMENTS: E7 - HAD A FLASH POINT OF 28%, THEN WENT TO ZERO
E2D - WELL CAP ON GAS PROBE BROKEN
E-9,10,11,12,13,14 TAKEN 1-8-91 @ 4:60pm. BAROMETER 29.99

G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn

Valley Reclamation
9227 Tujunga Ave.
Sun Valley Ca 91352
(818)767-6180

EQUIPMENT USED

MAKE [illegible] MAKE [illegible]
MODEL [illegible] MODEL 205

CC: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

BY: ERN DRAGAN ~~[illegible]~~

DATE: 1/~~8~~ 7/91

TIME: 4:00pm

BRADLEY WEST

BAROMETER 30.15

PROBE	CH4%	PRESS	WELL#	PH	PW	GAS TEMP	CFM	N2/O2	CH4	WELL ADJ (CFM)
W-1	39	+0.21	40	-25	-.3	106	30.5	34.1/.65	20.8	21.2
	0	+0.03	41	-30	-.33	104	29.5	443/.81	27.3	17.6
W-2	~~0~~	~~+0.06~~								
W-3	0	+0.06								
W-4	0	+0.02 ~~+0.02~~								
W-5	0	+0.02								
W-6	0	+0.02								
W-7	0.5	+0.18								
W-8	0	+0.06								
W-9	5	+0.02	51	-24	+.05	[illegible]	22.6	.49/29.6	34.1	17.6
W-10	0	+0.01								
W-11	0	+0.02								
W-12	0	+0.02								
W-13	0	+0.03								
W-14	0	+0.02								

COMMENTS: W-11, W-12, W-13, W-14 = TAKEN 1-8-91 @ 4:11 BAROMETER 29.99

Valley Reclamation
9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probe: Readings

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

EQUIPMENT USED

MAKE GasTech MAKE PDM
MODEL NP809 MODEL 205

BY: ROD COLLINS DATE: 1/15/91 TIME: 1300

BRADLEY EAST BAROMETER 30.01

PROBE	CH4%	PRESS	WELL#	PH (°wc)	PW (°wc)	GAS TEMP	FLOW (cfm)	N2+O2%	CH4%	ADJ PW (°wc)
E-1	Ø	+0.02								
E-2S	Ø	+0.29								
E-2M	Ø	+0.10								
E-2D	Ø	+0.25								
E-3	Ø	+0.06								
E-4	Ø	+0.06								
E-5S	Ø	+0.02								
E-5M	Ø	+0.25								
E-5D	Ø	+0.01								
E-6	Ø	0.00								
E-7	Ø	+0.13								
E-8S	Ø	+0.12								
E-8M	Ø	+0.18								
E-8D	35	+0.69								
E-9	Ø	+0.02								
E-10	Ø	+0.06								
x E-11S	Ø	-0.26								
E-11M	Ø	-0.82								
E-11D	Ø	-0.10								
E-12	Ø	+0.14								
E-13	Ø	+0.06								
E-14S	Ø	+0.09								
E-14M	Ø	+0.05								
E-14D	Ø	+0.48								

COMMENTS:

x Submerged in H_2O.

G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn

Valley Reclamation
9227 Tujunga Ave.
Sun Valley Ca 91352
(818)767-6180

EQUIPMENT USED

MAKE GUS MAKE PDM
MODEL 129 MODEL 205

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

CALIBRATION: DIGIFLAM ____
GASTECH ____
FID ____

BY: ROD COLLINS DATE: 1/15/91 TIME: 1150

BRADLEY WEST BAROMETER 30.09

PROBE	CH4%	PRESS	WELL#	PH	PW	GAS TEMP	CFM	N2/O2	CH4	WELL ADJ
W-1	85	+0.37								
W-2	Ø	+0.11								
W-3	Ø	+0.25								
W-4	Ø	+0.11								
W-5	Ø	+0.13								
W-6	Ø	+0.09								
W-7	3.5	+0.42								
W-8	Ø	+0.11								
W-9	4	+0.09								
W-10	Ø	+0.26								
W-11	Ø	+0.01								
W-12	Ø	0.00								
W-13	Ø	+0.01								
W-14	Ø	0.00								

COMMENTS: Field Audit : Calibrated 44 Standard 49 Audit Accuracy 100%

Valley Reclamation
9227 Tujunga Ave.
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
as Probes Readings

EQUIPMENT USED

MAKE GASTECH MAKE NEOTRONICS

MODEL NP204 MODEL TDM

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

(BEFORE)BAROMETER 30.06 1pm

BY: E. DRAGAN DATE: 1/21/91 TIME: 1:00pm

BRADLEY WEST (AFTER)BAROMETER 30.05 3:00pm

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH ("wc)	PW ("wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
W-1	16	+0.06								
W-2	0	+0.02								
W-3	0	+0.03								
W-4	0	+0.02								
V-5	0	+0.03								
W-6	0	±0.0								
W-7	0	-0.03								
V-8	0	+0.02								
V-9	3.4	± 0.00								
V-10	0	-0.07								
V-11	0	+0.01								
V-12	0	+0.01								
V-13	0	+0.01								
V-14	0	+0.01								

OMMENTS:

proval_____

9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

Gas Probes Readings

MAKE_____ MAKE_____

MODEL_____ MODEL_____

(BEFORE) BAROMETER_____

BY:_____ DATE:_____ TIME:_____

BRADLEY EAST

(AFTER) BAROMETER_____

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	0	-0.01								
E-2S	0	-0.04								
E-2M	0	-0.10								
E-2D	PROBE CAP BROKEN OFF									
E-3	0	+0.02								
E-4	0	+0.02								
E-5S	0	+0.02								
E-5M	0	+0.04								
E-5D	0	+0.02								
E-6	0	+0.04								
E-7	0	+0.02								
E-8S	0	0								
E-8M	0	+0.01								
E-8D	21	+0.10								
E-9	0	+0.0								
E-10	0	+0.02								
E-11S	PROBE INACCESSABLE; BURIED UNDER ROAD									
E-11M										
E-11D										
E-12	0	+0.04								
E-13	0	+0.01								
E-14S	0	+0.02								
E-14M	0	+0.02								
E-14D	0	0								

COMMENTS:

cc: G. Loughnane
J. Mays
B. Austin/approval_____
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

Valley Reclamation
9227 Tujunga Ave.
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

EQUIPMENT USED

MAKE- GAS TECH MAKE- NEOTONICS

MODEL-NP-204 MODEL-PDM 205

cc: G. Loughnane
J. Mays
APPR____B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

(BEFORE)BAROMETER 30.09

BY: R. Collins DATE: 1/29/91 START TIME: 1234 FINISH TIME: 1334

BRADLEY WEST (AFTER)BAROMETER 30.06

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH ("wc)	PW ("wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
W-1	13	-0.04								
W-2	15	+0.02								
W-3	17	+0.02								
W-4	Ø	+0.02								
W-5	Ø	0.00								
W-6	Ø	+0.01								
W-7	Ø	-0.13								
W-8	Ø	-0.01								
W-9	28	+0.01								
W-10	Ø	-0.10								
W-11	Ø	+0.04								
W-12	Ø	+0.02								
W-13	Ø	+0.04								
W-14	Ø	+0.01								

CALIBRATION: Standard 44 Audit 35 Accuracy 80%

* Ready was 23% CH_4 before

Valley Reclamation
9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

EQUIPMENT USED

MAKE- GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 30.09

BY: R. Collins DATE: 1/29/91 START TIME: 1112 FINISH TIME: 1230

BRADLEY EAST (AFTER) BAROMETER 30.06

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	Ø	-0.10								
E-2S	3	-0.01								
E-2M	Ø	+0.01								
E-2D	Ø	-0.08								
E-3	Ø	-0.03								
E-4	Ø	+0.01								
E-5S	Ø	+0.02								
E-5M	Ø	+0.05								
E-5D	Ø	+0.02								
E-6	Ø	-0.20								
E-7	Ø	-0.02								
E-8S	Ø	-0.04								
E-8M	Ø	-0.07								
* E-8D	24	-0.29								
E-9	Ø	0.00								
E-10	Ø	+0.01								
E-11S	Ø	-0.37								
E-11M	Ø	+0.01								
E-11D	Ø	-0.63								
E-12	Ø	+0.02								
E-13	Ø	+0.02								
E-14S	Ø	+0.02								
E-14M	Ø	+0.01								
E-14D	Ø	-0.37								

CALIBRATION:

cc: G. Loughnane
J. Mays
[illegible]. Austin/approval
[illegible]. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

* Reading was 26% CH_4 before purging w/ vaccum pump

WEEKLY PERIMETER GAS PROBE READINGS
FOR MONTH OF FEBRUARY

Valley Reclamation
9227 Tujunga Ave.
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

EQUIPMENT USED

MAKE- GAS TECH MAKE- NEOTONICS

MODEL-NP-204 MODEL-PDM 205

cc: G. Loughnane
J. Mays
APPR. RVA B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
~~EMD Techs~~

(BEFORE)BAROMETER 30.24

BY: DRAGAN DATE: 2/4/91 START TIME: 9:30 am FINISH TIME: 12:20 pm

BRADLEY WEST (AFTER)BAROMETER 30.19

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH ("wc)	PW ("wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
W-1	60	+0.27	40	98	-30	+.4	3.4	13/.18	47.8	6.32
			41	94	-34	+.4	2.8	24.4/.66	43.4	4.4
W-2	13	+0.10	42	104	-34	+.33	18.9	26.9/.6	41.2	
W-3	15	+0.16	43	94	-32	+.34	3.1	14.8/.41	35.6	
			44	94	25-30	+.44	3.4	14.1/.47	43.1	4.9
W-4	0	+0.06								
W-5	0	+0.11								
W-6	0	+0.07								
W-7	0	+0.23								
W-8	0	+0.07								
W-9	30	+0.08	51	100	-33	+.3	7.2	7.1/.26	52.3	8.3
W-10	0	+0.14								
W-11	0	+0.01								
W-12	0	+0.01								
W-13	0	+0.03								
W-14	0	+0.03								

CALIBRATION:
WELLS 40, 41, 43, 44, 45, 48, 49, 50, 51 all had .5" orifice plates put in them

Valley Reclamation
9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

EQUIPMENT USED

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 30.24

BY: DRAGAN DATE: 2/4/91 START TIME: 9:30 am FINISH TIME: 12:20pm

(BRADLEY EAST) (AFTER) BAROMETER 30.19

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH ("wc)	PW ("wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	0	+0.05								
E-2S	0	+0.02								
E-2M	0	+0.08								
E-2D	3.6	+0.02								
E-3	0	+0.05								
E-4	0	+0.04								
E-5S	0	+0.03								
E-5M	0	+0.12								
E-5D	0	+0.03								
E-6	0	+0.10								
E-7	0	+0.09								
E-8S	0	+0.05								
E-8M	0	+0.05								
E-8D	28.	+0.08	10	100	-27	+.11	12.4	16.2/.29	43.3	
E-9	0	+0.0								
E-10	0	+0.03								
E-11S	0	+0.04								
E-11M	0	+0.04								
E-11D	0	-0.27								
E-12	0	+0.03								
E-13	0	+0.02								
E-14S	0	+0.01								
E-14M	0	+0.02								
E-14D	0	-0.21								

CALIBRATION:

cc: G. Loughnane
J. Mays
B. Austin/approval RVA.
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

Valley Reclamation
9227 Tujunga Ave.
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BRADLEY LANDFILL
Gas Probes Readings

EQUIPMENT USED

MAKE- GAS TECH MAKE- NEOTONICS

MODEL-NP-204 MODEL-PDM 205

cc: G. Loughnane
J. Mays
APPR_____B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

(BEFORE)BAROMETER 30.05

BY: R. Collins DATE: 9/14/91 START TIME: 1100 FINISH TIME: 1140

BRADLEY WEST (AFTER)BAROMETER 30.04

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH ("wc)	PW ("wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
W-1	48	+0.12								
W-2	30	+0.04								
W-3	Ø	+0.07								
W-4	Ø	+0.02								
-5	Ø	+0.03								
W-6	Ø	+0.02								
W-7	Ø	-0.04								
W-8	Ø	+0.03								
W-9	30	+0.05								
W-10	Ø	-0.03								
W-11	Ø	0.00								
W-12	Ø	+0.01								
13	Ø	+0.02								
W-14	Ø	0.00								

CALIBRATION: Standard 50 Audit 45 Accuracy 91.9

Valley Reclamation
9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

EQUIPMENT USED

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 30.05

BY: R. Collins DATE: 2/14/91 START TIME: 0945 FINISH TIME: 10.57

BRADLEY EAST (AFTER) BAROMETER 30.04

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	Ø	+0.03								
E-2S	Ø	+0.01								
E-2M	Ø	0.00								
E-2D	Ø	-0.04								
E-3	Ø	+0.01								
E-4	Ø	+0.02								
E-5S	Ø	+0.02								
E-5M	Ø	+0.03								
E-5D	Ø	+0.03								
E-6	Ø	-0.01								
E-7	Ø	-0.05								
E-8S	Ø	-0.05								
E-8M	Ø	-0.07								
E-8D	22	-0.21								
E-9	Ø	0.00								
E-10	Ø	-0.03								
E-11S	Ø	-0.04								
E-11M	Ø	-0.06								
E-11D	Ø	-0.52								
E-12	Ø	-0.05								
E-13	Ø	-0.02								
E-14S	Ø	-0.04								
E-14M	Ø	-0.03								
E-14D	Ø	-0.29								

CALIBRATION:

cc: G. Loughnane
J. Mays
B. Austin/approval
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

Ave.
-y Ca 91352
,/67-6180

BRADLEY LANDFILL
Gas Probes Readings

cc: G. Loughnane
J. Mays
APPR RVA B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

EQUIPMENT USED

MAKE- GAS TECH MAKE- NEOTONICS

MODEL-NP-204 MODEL-PDM 205

(BEFORE)BAROMETER 30.06

BY: E. DRAGAN DATE: 2/18/91 START TIME: 1:45 FINISH TIME: 2:30

BRADLEY WEST (AFTER)BAROMETER 30.06

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH ("wc)	PW ("wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
W-1	5	+0.13	No Data							
W-2	30	+0.10	No Data							
W-3	13	+0.09	No Data							
W-4	0	+0.06								
W-5	0	+0.08								
W-6	1	+0.02								
W-7	0	+0.00								
W-8	5	+0.06								
W-9	34	+0.04	No Data							
W-10	0	+0.04								
W-11	0	+0.01								
W-12	0	+0.02								
W-13	0	+0.02								
W-14	0	+0.02								

CALIBRATION:

...ation
...unga Ave
... Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

EQUIPMENT USED

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 30.06

BY: E. DRAGAN DATE: 2/18/91 START TIME: 2:30 FINISH TIME: 3:30

BRADLEY EAST (AFTER) BAROMETER 30.06

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	0	+0.03								
E-2S	0	+0.02								
E-2M	0	+0.03								
E-2D	0	+0.02								
E-3	0	+0.05								
E-4	0	+0.03								
E-5S	0	+0.03								
E-5M	0	+0.04								
E-5D	0	+0.04								
E-6	0	+0.02								
E-7	0	-0.05								
E-8S	0	-0.04								
E-8M	0	-0.05								
E-8D	2.0	+0.06								
E-9	0	+0.02								
E-10	0	-0.03								
E-11S	0	+0.01								
E-11M	0	+0.02								
E-11D	0	+0.03								
E-12	0	+0.04								
E-13	0	+0.03								
E-14S	0	+0.02								
E-14M	0	+0.03								
E-14D	0	+0.07								

CALIBRATION:

cc: G. Loughnane
J. Mays
B. Austin/approval RVA
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

Valley Reclamation
9227 Tujunga Ave.
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

EQUIPMENT USED

MAKE- GAS TECH MAKE- NEOTONICS

MODEL-NP-204 MODEL-PDM 205

cc: G. Loughnane
J. Mays
APPR_____B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

(BEFORE)BAROMETER 29.98

BY: R. Collins DATE: 2/26/91 START TIME: 1300 FINISH TIME: 1530

BRADLEY WEST (AFTER)BAROMETER 29.93

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH ("wc)	PW ("wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
W-1	70	+0.45								
W-2	50	+0.15								
W-3	26	+0.24								
W-4	Ø	+0.11								
-5	Ø	+0.11								
W-6	1	+0.09								
W-7	Ø	+0.07								
W-8	17	+0.07								
W-9	42	+0.09								
W-10	1	+0.30								
W-11	Ø	+0.00								
W-12	Ø	+0.00								
W-13	Ø	+0.00								
W-14	Ø	+0.00								

CALIBRATION: Audit 40 Standard 50 Accuracy 80%

Valley Reclamation
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Sun Valley Ca 91352
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BRADLEY LANDFILL
Gas Probes Readings

EQUIPMENT USED

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 29.98

BY: R. Collins DATE: 2/26/91 START TIME: 1300 FINISH TIME: 1530

BRADLEY EAST (AFTER) BAROMETER 29.93

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (*wc)	PW (*wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	0	+0.01								
E-2S	1.5	+0.01								
E-2M	Ø	0.00								
E-2D	Ø	0.00								
E-3	Ø	0.00								
E-4	Ø	0.00								
E-5S	Ø	0.00								
E-5M	Ø	0.12								
E-5D	Ø	0.00								
E-6	Ø	0.00								
E-7	Ø	-1.96								
E-8S	Ø	0.00								
E-8M	Ø	+0.11								
E-8D	39	0.00								
E-9	Ø	+0.00								
E-10	Ø	+0.08								
E-11S	Ø	0.00								
E-11M	Ø	0.00								
E-11D	Ø	0.00								
E-12	Ø	0.00								
E-13	Probe needs Repair									
E-14S	Ø	+0.01								
E-14M	Ø	+0.01								
E-14D	Ø	+0.06								

CALIBRATION:

cc: G. Loughnane
J. Mays
B. Austin/approval_____
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

APPENDIX G

LABORATORY RESULTS AND QA/QC SUMMARY

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS, AND QA/QC SUMMARY FOR THE MONTH OF DECEMBER

AtmAA Inc.
21354 Nordhoff St., Suite 113, Chatsworth, CA 91311 (818) 718-6070 • FAX (818) 718-9779
environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air Samples

Report Date :	December 19, 1990
CSA No.:	81481460-01
Project No.:	Not Given
Site :	Bradley Landfill
Date Received :	December 11, 1990
Date Analyzed :	December 12 & 13, 1990

AtmAA Lab No.:	93450-35	93450-36	93450-37
Sample I.D. No.:	VR001	VR002	VR003
	D, <24	U, 24	U, <24
Component	(Concentration in ppm, v/v)		
Methane	3.91	2.98	2.06
TGNMO	2.88	3.54	1.16
Component	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	2.60	4.08	1.77
Benzyl chloride	<0.8	<0.8	<0.8
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	<0.1
Dichloromethane	1.54	1.80	1.16
Perchloroethene	0.64	0.68	0.21
Carbon Tetrachloride	0.12	0.10	0.10
Toluene	6.02	9.04	5.32
1,1,1-trichloroethane	3.42	10.3	4.74
Trichloroethene	<0.[illegible]	<0.06	<0.06
Chloroform	<0.08	<0.08	<0.08
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	3.50	4.68	2.74
o-xylenes	2.00	2.88	1.34

* total amount containing meta, para & ortho isomers

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air Samples

Report Date :	December 19, 1990
CSA No.:	81481460-01
Project No.:	Not Given
Site :	Bradley Landfill
Date Received :	December 11, 1990
Date Analyzed :	December 12 & 13, 1990

AtmAA Lab No.:	93450-38	93450-39	93450-40
Sample I.D. No.:	VR004	VR005	VR010
	D, <24, Co/Lo	D, 24	Trip Blank
Component	(Concentration in ppm, v/v)		
Methane	3.77	2.11	<1
TGNMO	1.69	1.09	<1
Component	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	2.52	3.57	0.19
Benzyl chloride	<0.8	<0.8	<0.8
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	<0.1
Dichloromethane	1.58	2.08	0.28
Perchloroethene	0.54	0.66	0.06
Carbon Tetrachloride	0.11	0.10	<0.02
Toluene	5.95	8.34	1.31
1,1,1-trichloroethane	3.39	6.43	0.84
Trichloroethene	0.06	<0.06	<0.06
Chloroform	<0.08	<0.08	<0.08
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	3.36	4.10	0.63
o-xylenes	1.80	2.81	0.65

* total amount containing meta, para & ortho isomers

Michael L. Porter
Laboratory Director

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Integrated Surface Samples

Report Date : December 20, 1990
CSA No.: 81481460-01
Project No.: Not Given
Site : Bradley Lanfill
Date Received : Decmeber 12, 1990
Date Analyzed : December 12 & 13, 1990

AtmAA Lab No.:	93460-10	93460-11
Sample I.D. No.:	VR008, ISS Grid #10	VR007, ISS Grid #11
Component	(Concentration in ppm, v/v)	
Methane	2.20	2.22
TGNMO	3.05	3.12
Component	(Concentration in ppb, v/v)	
Acetonitrile	<0.8	<0.8
Benzene	2.89	4.17
Benzyl chloride	<0.8	<0.8
Chlorobenzene	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1
Dichloromethane	1.25	1.28
Perchloroethene	3.39	1.79
Carbon Tetrachloride	0.11	0.11
Toluene	5.40	8.78
1,1,1-trichloroethane	3.18	2.73
Trichloroethene	<0.06	<0.06
Chloroform	<0.08	<0.08
Vinyl chloride	<0.1	<0.1
m+p-xylenes	3.16	5.28
o-xylenes	1.61	2.92

* total amount containing meta, para & ortho isomers

Michael L. Porter
Laboratory Director

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Probe & Internal Collection Samples

Report Date : December 12, 1990
CSA No.: 81481460-01 (consulting service agreement #)
Project No.: Not Given
Site : Bradley Landfill
Date Received : December 10, 1990
Date Analyzed : December 10, 11, & 12, 1990

AtmAA Lab No.:	93440-3	93440-4	93440-5
Sample I.D. No.:	V19, Probe E8d	V20, Probe W#1	V21, ICS
Component	(Concentration in %, v/v)		
Nitrogen	9.91	47.0	16.8
Oxygen	0.23	3.33	0.89
Methane	53.9	29.3	42.4
Carbon Dioxide	36.1	21.8	40.4
	(Concentration in ppm, v/v)		
TGNMO	1600	416	10200
Component	(Concentration in ppb, v/v)		
Acetonitrile	<5	<5	37.7
Benzene	260	134	1080
Benzyl chloride	<100	<100	<100
Chlorobenzene	1020	<100	1460
Dichlorobenzene*	486	<100	4590
1,1-dichloroethane	126	84.2	6880
1,2-dichloroethane	<20	<20	<20
1,1-dichloroethylene	131	243	954
Dichloromethane	<10	<10	14600
Perchloroethene	109	309	14500
Carbon Tetrachloride	<1	<1	<1
Toluene	1220	228	77600
1,1,1-trichloroethane	4.07	4.64	517
Trichloroethene	110	152	4570
Chloroform	<2	<2	18.7
Vinyl chloride	4580	1450	3560
m+p-xylenes	4730	<100	33600
o-xylenes	1920	<100	20400

* total amount containing meta, para & ortho isomers

Michael L. Porter
Laboratory Director

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LABORATORY ANALYSIS REPORT

Selected Volatile Sulfur Components
Analysis in Well Sample

Report Date :	December 13, 1990
CSA No.:	81481460-01 (consulting service agreement #)
Project No.:	Not Given
Site :	Bradley Landfill
Date Received :	December 10, 1990
Date Analyzed :	December 12, 1990

Hydrogen sulfide was analyzed by gas chromatography with a Hall electroyltic conductivity detector operated in the oxidative sulfur mode.

AtmAA Lab No.:	93440-5
Sample I.D. No.:	VR21, ICS

Component	(Concentration in ppm, v/v)	(repeat)
Hydrogen sulfide	14.7	14.4

Michael L. Porter
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01 (consulting service agreement #)
AtmAA Project No.: 8000
Client Project No.: Not Given
Site: Valley Reclamation

Probe & Internal Collection Samples

Date Received: December 10, 1990
Date Analyzed: December 10, 11, & 12, 1990

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in %, v/v)			
Nitrogen		No Repeat			
Oxygen		No Repeat			
Methane	V19, Probe E8d	53.8	54.0	53.9	0.18
	V21, ICS	42.4	42.3	42.4	0.12
Carbon Dioxide	V19, Probe E8d	36.1	36.1	36.1	0.0
	V21, ICS	40.5	40.3	40.4	0.24
		(Concentration in ppm, v/v)			
TGMNO	V19, Probe E8d	1570	1640	1600	2.2
		(Concentration in ppb, v/v)			
Acetonitrile		No Repeat			
Benzene	V19, Probe E8d	252	268	260	3.1
	V21, ICS	975	1180	1080	9.5
Benzyl chloride	V19, Probe E8d	<100	<100	---	---
Chloro-benzene	V19, Probe E8d	1020	1010	1020	0.49
	V21, ICS	1350	1570	1460	7.5
Dichloro-benzenes*	V21, ICS	4700	4480	4590	2.4

* total amount containing meta, para, and ortho isomers

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
1,1-di-chloroethene	V21, ICS	6940	6810	6880	0.94
1,2-di-chloroethane		No Repeat			
1,1-di-chloroethylene	V19, Probe E8d	134	127	131	2.7
Dichloro-methane	V21, ICS	14800	14500	14600	1.0
Perchloro-ethene	V21, ICS	14900	14100	14500	2.8
Carbon Tetrachloride	V19, Probe E8d	<1	<1	---	---
Toluene	V19, Probe E8d	1160	1270	1220	4.5
	V21, ICS	72400	82800	77600	3.6
1,1,1-tri chloro-ethane	V21, ICS	510	524	517	1.4
Trichloro-ethene	V21, ICS	4440	4700	4570	2.8
Chloroform	V19, Probe E8d	<2	<2	---	---
Vinyl chloride	V19, Probe E8d	4420	4740	4580	3.5
m&p-xylene	V19, Probe E8d	4680	4780	4730	1.1
	V21, ICS	30400	36800	33600	9.5
o-xylene	V21, ICS	19500	21400	20400	4.6

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

A set of 3 samples, laboratory numbers 93440-(3-5) was analyzed for SCAQMD Rule 1150.1 components, permanent gases, & TGMNO. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 22 duplicate measurements from the sample set of 2 Probe and 1 Internal Collection samples is 2.9%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01
AtmAA Project No.: 8000
Client Project No.: Not Given
Site: Bradley Landfill

Ambient Air Samples

Date Received: December 11, 1990
Date Analyzed: December 12 & 13, 1990

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Methane	VR003	2.08	2.05	2.06	0.73
TGNMO	VR003	1.00	1.33	1.16	14.0
		(Concentration in ppb, v/v)			
Acetonitrile	VR003	<0.8	<0.8	---	---
Benzene	VR002	4.32	3.94	4.08	3.4
Benzyl chloride	VR003	<0.8	<0.8	---	---
Chlorobenzene	VR002	<0.1	<0.1	---	---
Dichlorobenzenes*	VR003	<1.1	<1.1	---	---
1,1-dichloroethane	VR001	<0.4	<0.4	---	---
1,2-dichloroethane	VR001	<0.2	<0.2	---	---
1,1-dichloro-ethylene	VR004	<0.1	<0.1	---	---
Dichloromethane	VR004	1.61	1.56	1.58	1.6
Perchloroethene	VR001	0.67	0.61	0.64	0.47
Carbon Tetrachloride	VR001	0.12	0.11	0.12	4.3

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
Toluene	VR002	9.06	9.03	9.04	0.16
1,1,1-trichloro-ethane	VR001	3.41	3.42	3.42	0.15
Trichloroethene	VR001	<0.06	<0.06	---	---
Chloroform	VR001	<0.08	<0.08	---	---
Vinyl chloride	VR004	<0.1	<0.1	---	---
m&p-xylene	VR002	4.80	4.57	4.68	2.4
o-xylene	VR002	2.87	2.90	2.88	0.52

A set of 6 ambient air samples, laboratory numbers 93450-(35-40) was analyzed for 1150.1 components, methane, and TGNMO. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 10 duplicate measurements from the sample set of 6 ambient air samples is 2.8%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01
AtmAA Project No.: 8000
Client Project No.: Not Given
Site: Valley Reclamation

Integrated Surface Samples

Date Received: December 12, 1990
Date Analyzed: December 12 & 13, 1990

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Methane	VR008	2.22	2.18	2.20	0.91
TGNMO	No Repeat				
		(Concentration in ppb, v/v)			
Acetonitrile	VR008	<0.8	<0.8	---	---
Benzene	VR007	4.08	4.26	4.17	2.2
Benzyl chloride	VR008	<0.8	<0.8	---	---
Chlorobenzene	VR007	<0.1	<0.1	---	---
Dichlorobenzenes*	VR008	<1.1	<1.1	---	---
1,1-dichloroethane	VR007	<0.47	<0.47	---	---
1,2-dichloroethane	VR007	<0.2	<0.2	---	---
1,1-dichloro-ethylene	VR008	<0.1	<0.1	---	---
Dichloromethane	VR007	1.27	1.28	1.28	0.39
Perchloroethene	VR008	3.25	3.53	3.39	4.1
Carbon Tetrachloride	VR008	0.11	0.11	0.11	0.0

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Toluene	VR007	8.80	8.76	8.78	0.23
1,1,1-trichloro-ethane	VR008	3.16	3.19	3.18	0.47
Trichloroethene	VR008	<0.06	<0.06	---	---
Chloroform	VR008	<0.08	<0.08	---	---
Vinyl chloride	VR008	<0.1	<0.1	---	---
m&p-xylene	VR007	5.16	5.40	5.28	2.3
o-xylene	VR007	2.92	2.91	2.92	0.17

A set of 2 Integrated Surface samples, laboratory numbers 93460-(10 & 11) was analyzed for 1150.1 components, methane, and TGNMO. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 9 duplicate measurements from the sample set of 2 Integrated Surface samples is 1.2%.

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA INC.	No.

Site / Facility#: BRADLEY LANDFILL 9188 GLENOAKS

Site Name: SUN VALLEY CA 91352

Sampler: (Signature) Ernest Dragon

Bag Identification Number	Date	Time	Type Of Sample	1150.1 TOXIC COMPONENTS	METHANE	TGNMO							Field Comments	Lab* Comments
VR001	12/11/90		A.A.	✓	✓	✓							DOWNWIND <24hr	
VR002	12/11/90		A.A.	✓	✓	✓							UPWIND 24 hr.	
VR003	12/11/90		A.A.	✓	✓	✓							U.W. <24hr.	
VR004	12/11/90		A.A.	✓	✓	✓							D.W. <24 hr	CO LOCATED
VR005	12/11/90		A.A.	✓	✓	✓							D.W. 24 hr.	
VR010	12/10/90		TRIP BLANK											TRIP BLANK

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Dragon	12/11/90	3:40	Karen Porter	12/11/90	3:40
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA INC.	No.

Site / Facility#: BRADLEY LANDFILL 9188 GLENOAKS

Site Name: SUN VALLEY CA 91352

Sampler: (Signature) Ernest Drago

Bag Identification Number	Date	Time	Type Of Sample	Analyses: 11501 TOXIC COMPONENTS	Analyses: METHANE	Analyses: TGNMO					Field Testing			Field Comments	Lab* Comments
VR008	12/12/90	7:30	I.S.S.	✓	✓	✓								GRID#10	
VR007	12/12/90	7:30	ISS	✓	✓	✓								GRID# 11	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Drago	12/12/90	4:38	Karen Porter	12/12/90	4:38
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = 2; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAR INC.	No.

Site / Facility#: BRADLEY LANDFILL 9188 GLENOARS

~~Site Name~~: SUN VALLEY CA 91352

Sampler: (Signature): Ernest Diaz

WM#	Bag Identification Number	Date	Time	Type Of Sample	TGNMO	PERMANENT GASES	1150.1 TOXIC AIR COMPONENTS	H_2S			% CH_4			Field Comments	Lab* Comments
140-3	VR19	12/10/90	3:30	PROBE	✓	✓	✓				28%			PROBE ESd	INDICATE PROBE # ON LAB DATA
140-4	VR20	12/10	3:50	PROBE	✓	✓	✓				65%			PROBE W#1	" "
140-5	VR21	12/10	4:10	INTERNAL COLLECTION SYSTEM	✓	✓	✓	✓			43%			ICS	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Diaz	12/10/90	4:55	Karen Porter	12/10/90	5:00
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS, AND QA/QC SUMMARY FOR THE MONTH OF JANUARY

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air Samples

Report Date : January 30, 1991
CSA No.: 81481460-01
Site : Bradley/234
Date Received : January 22, 1991
Date Analyzed : January 22, 23, & 24, 1991

AtmAA Lab No.:	90221-59	90221-60	90221-61
Sample I.D. No.:	VR013	VR014	VR006
	<24, DW	<24, DW	24, UW
Component	(Concentration in ppm, v/v)		
Methane	1.97	1.98	2.20
TGNMO	<1	1.52	1.54
	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	0.74	0.68	1.38
Benzyl chloride	<0.8	<0.8	<0.8
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzenes*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	<0.1
Dichloromethane	<2	0.31	0.58
Perchloroethene	<0.1	0.20	0.44
Carbon Tetrachloride	0.12	0.12	0.12
Toluene	4.38	3.33	4.80
1,1,1-trichloroethane	0.39	1.82	8.29
Trichloroethene	<0.06	<0.06	<0.06
Chloroform	<0.08	<0.08	0.08
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	8.26	3.57	3.90
o-xylenes	8.84	3.74	3.85

* total amount containing meta, para & ortho isomers

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air Samples

Report Date :	January 30, 1991
CSA No.:	81481460-01
Site :	Bradley/234
Date Received :	January 22, 1991
Date Analyzed :	January 22, 23, & 24, 1991

AtmAA Lab No.:	90221-62	90221-63
Sample I.D. No.:	VR012	VR011
	24, DW	<24, UW
Component	(Concentration in ppm, v/v)	
Methane	1.86	1.82
TGNMO	2.24	2.14
	(Concentration in ppb, v/v)	
Acetonitrile	<0.8	<0.8
Benzene	1.38	0.99
Benzyl chloride	<0.8	<0.8
Chlorobenzene	0.1	<0.1
Dichlorobenzenes*	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1
Dichloromethane	0.68	<0.2
Perchloroethene	0.18	<0.1
Carbon Tetrachloride	0.12	0.12
Toluene	4.28	3.37
1,1,1-trichloroethane	2.48	0.75
Trichloroethene	<0.06	<0.06
Chloroform	<0.08	<0.08
Vinyl chloride	<0.1	<0.1
m+p-xylenes	3.52	2.75
o-xylenes	3.06	2.40

* total amount containing meta, para & ortho isomers

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Tedlar Bag Samples

Report Date : January 30, 1991
CSA No.: 81481460-01
Site : Bradley/234
Date Received : January 21, 1991
Date Analyzed : January 22, 23, & 24, 1991

AtmAA Lab No.:	90211-25	90211-26
Sample I.D. No.:	VR009, ISS Grid #4	VRISS014, ISS Grid #8
Component	(Concentration in ppm, v/v)	
Methane	2.20	2.01
TGNMO	<1	<1
	(Concentration in ppb, v/v)	
Acetonitrile	<0.8	<0.8
Benzene	2.36	3.10
Benzyl chloride	<0.8	<0.8
Chlorobenzene	<0.1	<0.1
Dichlorobenzenes*	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1
Dichloromethane	2.20	0.72
Perchloroethene	0.54	0.62
Carbon Tetrachloride	0.12	0.12
Toluene	6.11	8.36
1,1,1-trichloroethane	9.96	9.96
Trichloroethene	0.13	<0.06
Chloroform	<0.08	<0.08
Vinyl chloride	<0.1	<0.1
m+p-xylenes	4.98	6.89
o-xylenes	3.69	4.26

* total amount containing meta, para & ortho isomers

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Tedlar Bag Samples

Report Date : January 16, 1991
CSA No.: 81481460-01
Project No.: Not Given
Site : Bradley Landfill
Date Received : January 9, 1991
Date Analyzed : January 10 & 11, 1991

AtmAA Lab No.:	90091-15	90091-16	90101-7
Sample I.D. No.:	VRISS3 Probe, E-8D	VRISS4 Probe, W-1	VRISS5 I.C.S.
Component	(Concentration in %, v/v)		
Nitrogen	43.5	9.20	25.5
Oxygen	1.22	0.39	2.01
Methane	31.7	56.0	34.6
Carbon Dioxide	24.3	37.2	39.2
	(Concentration in ppm, v/v)		
TGNMO	392	1740	9520
	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	77.6
Benzene	160	277	1020
Benzyl chloride	<100	<100	<100
Chlorobenzene	<100	<100	1330
Dichlorobenzene*	<100	206	7360
1,1-dichloroethane	99.5	140	11200
1,2-dichloroethane	<20	<20	646
1,1-dichloroethylene	193	63.7	973
Dichloromethane	<20	<20	26200
Perchloroethene	378	90.6	17400
Carbon Tetrachloride	<1	<1	<1
Toluene	543	1250	99200
1,1,1-trichloroethane	3.22	2.90	1000
Trichloroethene	178	86.0	7480
Chloroform	2.04	0.59	21.1
Vinyl chloride	1240	3450	2570
m+p-xylenes	149	4530	30800
o-xylenes	234	898	25400

* total amount containing meta, para & ortho isomers

Michael L. Porter
Laboratory Director

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LABORATORY ANALYSIS REPORT

Selected Volatile Sulfur Components
Analysis in Tedlar Bag Sample

Report Date :	January 16, 1991
CSA No.:	81481460-01
Project No.:	Not Given
Site :	Bradley Landfill
Date Received :	January 9, 1991
Date Analyzed :	January 10 & 11, 1991

Hydrogen sulfide was analyzed by gas chromatography with a Hall electroyltic conductivity detector operated in the oxidative sulfur mode.

AtmAA Lab No.:	90101-7
Sample I.D. No.:	VRISS5

Component	(Concentration in ppm, v/v)	(repeat)
Hydrogen sulfide	12.6	12.6

Michael L. Porter
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01
AtmAA Project No.: 8000
Client Project No.: Not Given
Site: Bradley Landfill

Tedlar Bag Samples

Date Received: January 9, 1991
Date Analyzed: January 10 & 11, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in %, v/v)			
Nitrogen	VRISS5	25.0	25.0	25.0	0.0
	VRISS3	43.5	43.5	43.5	0.0
Oxygen	VRISS5	2.01	2.01	2.01	0.0
	VRISS3	1.28	1.51	1.22	5.3
Methane	VRISS5	34.6	34.5	34.6	0.14
	VRISS4	56.1	56.0	56.0	0.09
Carbon Dioxide	VRISS5	39.2	39.3	39.2	0.13
	VRISS4	37.3	37.2	37.2	0.13
		(Concentration in ppm, v/v)			
TGNMO	VRISS5	9180	9850	9520	3.5
		(Concentration in ppb, v/v)			
Acetonitrile	VRISS4	<0.8	<0.8	---	---
Benzene	VRISS5	1020	1020	1020	0.0
Benzyl chloride	No Repeat				
Chlorobenzene	VRISS5	1420	1240	1330	6.8
Dichlorobenzenes*	No Repeat				
1,1-dichloroethane	VRISS5	10500	12000	11200	6.7
	VRISS4	128	151	140	8.2

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
1,2-dichloroethane	No Repeat				
1,1-dichloro-ethylene	VRISS4	63.3	64.1	63.7	0.63
Dichloromethane	VRISS5	25900	26600	26200	1.3
Perchloroethene	VRISS5	17400	17400	17400	0.0
Carbon Tetrachloride	VRISS5	<1	<1	---	---
Toluene	VRISS5	108000	90300	99200	8.9
1,1,1-trichloro-ethane	VRISS5	977	1030	1000	2.6
Trichloroethene	VRISS4	90.4	81.7	86.0	5.0
Chloroform	No Repeat				
Vinyl chloride	VRISS3	1150	1340	1240	7.6
	VRISS4	3130	3770	3450	9.3
m&p-xylene	VRISS5	30000	31600	30800	2.6
o-xylene	VRISS5	23400	27400	25400	7.9

A set of 3 samples, laboratory numbers 90091-(15 & 16) & 90101-7 were analyzed for 1150.1 components, permanent gases, methane and total non-methane organcis. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 23 duplicate measurements from the sample set of 3 Tedlar bag samples 3.3%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
1,1,1-trichloro-ethane	VR012	2.51	2.44	2.48	1.4
Trichloroethene	VR012	<0.06	<0.06	---	---
Chloroform	VR012	<0.08	<0.08	---	---
Vinyl chloride	VR011	<0.1	<0.1	---	---
m&p-xylene	VR012	3.50	3.54	3.52	0.57
o-xylene	VR012	3.20	2.92	3.06	4.6

A set of 5 ambient air samples, laboratory numbers 90221-(59-63) was analyzed for 1150.1 toxic components, methane and total gaseous non-methane organics (TGNMO). Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 9 duplicate measurements from the sample set of 5 ambient air samples is 1.6%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01
AtmAA Project No.: 8000
Site: Bradley/234

Ambient Air Samples

Date Received: January 22, 1991
Date Analyzed: January 22, 23, & 24, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Methane	VR014	1.95	2.01	1.98	1.5
TGNMO	VR014	1.20	1.85	1.52	21
		(Concentration in ppb, v/v)			
Acetonitrile	VR011	<0.8	<0.8	---	---
Benzene	VR012	1.36	1.39	1.38	1.1
Benzyl chloride	VR006	<0.8	<0.8	---	---
Chlorobenzene	VR012	<0.1	<0.1	---	---
Dichlorobenzenes*	VR006	<1.1	<1.1	---	---
1,1-dichloroethane	VR013	<0.4	<0.4	---	---
1,2-dichloroethane	VR013	<0.2	<0.2	---	---
1,1-dichloro-ethylene	VR011	<0.1	<0.1	---	---
Dichloromethane	VR012	0.72	0.65	0.68	5.1
Perchloroethene	VR012	0.18	0.18	0.18	0.0
Carbon Tetrachloride	VR012	0.12	0.12	0.12	0.0
Toluene	VR012	4.30	4.27	4.28	0.35

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
1,1,1-trichloro-ethane	VR009	10.1	9.81	9.96	1.4
Trichloroethene	VR009	0.13	<0.06	---	---
Chloroform	VR009	<0.08	<0.08	---	---
Vinyl chloride	VRISS014	<0.1	<0.1	---	---
m&p-xylene	No Repeat				
o-xylene	No Repeat				

A set of 2 samples, laboratory numbers 90211-(25 & 26) was analyzed for 1150.1 toxic components, permanent gases, methane, and total gaseous non-methane organics (TGNM). Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 4 duplicate measurements from the sample set of 2 Tedlar bag samples is 4.4%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01
AtmAA Project No.: 8000
Site: Bradley/234

Tedlar Bag Samples

Date Received: January 21, 1991
Date Analyzed: January 22, 23 & 24, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Methane	No Repeat				
TGNMO	No Repeat				
		(Concentration in ppb, v/v)			
Acetonitrile	No Repeat				
Benzene	No Repeat				
Benzyl chloride	No Repeat				
Chlorobenzene	No Repeat				
Dichlorobenzenes*	No Repeat				
1,1-dichloroethane	VR009	<0.4	<0.4	---	---
1,2-dichloroethane	VR009	<0.2	<0.2	---	---
1,1-dichloro-ethylene	VRISS0140	<0.1	<0.1	---	---
Dichloromethane	VR009	2.20	2.20	2.20	0.0
Perchloroethene	VR009	0.61	0.48	0.54	12
Carbon Tetrachloride	VR009	0.13	0.12	0.12	4.0
Toluene	No Repeat				
1,1,1-trichloro-ethane	VR009	10.1	9.81	9.96	1.4

CHAIN OF CU[illegible]Y RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA INC.	No.

Site / Facility# BRADLEY/234

Site Name 9188 GLENOAKS BLVD SunValley Ca. 91352

Sampler: (Signature) Ernest Drag

#	Bag Identification Number	Date	Time	Type Of Sample	TGNMO	PERMANENT GASES not required	1150.1 TOOL AIR COMPONENTS							Field Comments	Lab* Comments
59	VR013	1/22/91	14:00	AMBIENT AIR	✓	✓	✓								D.W. <24hr
60	VR014	1/22/91	1400	" "	✓	✓	✓								D.W. <24hr
01	VR006	1/22/91	1400	" "	✓	✓	✓								U.W 24 hr
02	VR012	1/22/91	1400	" "	✓	✓	✓								D.W. 24hr
03	VR011	1/22/91	1400	" "	✓	✓	✓								U.W. <24hr

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Drag	1/22/91	4:45	Karen Porter	1/22/91	4:45
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA. INC.	No.

Site / Facility# 234

Site Name BRADLEY
9188 GLENOAKS BLVD Sun Valley 91352

Sampler: (Signature)

Bag Identification Number	Date	Time	Type Of Sample	Analyses: TGNMO	Analyses: PERMANENT GASES	Analyses: 1150J TOXIC AIR COMPONENTS	Analyses: H_2S			Field Testing			Field Comments	Lab* Comments
VRISS3	1/9/91	3:30	PROBE	✓	✓	✓								E-8D
VRISS4	1/9/91	3:50	PROBE	✓	✓	✓								W-1
~~VRISS5~~	~~1/9/91~~	~~4:10~~	~~ICS~~	~~✓~~	~~✓~~	~~✓~~	~~✓~~							

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	1/9/91	5:30 pm	[signature]	1/9/91	5:30 pm
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA INC.	No.

Site / Facility#: BRADLEY / 234

Site Name: 9188 GLENOARS BLVD, SUNVALLEY CA 91352

Sampler: (Signature) Rod Collins

Bag Identification Number	Date	Time	Type Of Sample	H_2S	PERMANENT GASES	1150.1 TOXIC AIR COMPONENTS	TGNMO							Field Comments	Lab* Comments
VRISS 5 ~~VR~~	1/10/91	10:30	INTERNAL C.S.	✓	✓	✓	✓								I.C.S.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Rod Collins	1/10/91	11:45	Karen Porter	1/10/91	11:45
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CUS[illegible] RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	AtmAA Inc	No.

Site / Facility# Bradley /234

Site Name 9188 Glenoaks Blvd
Sun Valley CA, 91352

Sampler: (Signature) Rodney L. Collu

Bag Identification Number	Date	Time	Type Of Sample	T6NMO	Permanent gas	1150-1 Toxic Air Components								Field Comments	Lab* Comments
				Analyses							Field Testing				
VR009	1/21/91	1600	ISS	X	X	X								Grid #4	
VRISS014	1/21/91	1600	ISS	X	X	X								Grid #8	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Rodney L Collu	1/21/91	1718	Karen Porter	1/22/91	5:20
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS AND QA/QC SUMMARY FOR THE MONTH OF FEBRUARY

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants Analysis
in Ambient Air & Integrated Surface Samples

Report Date : February 25, 1991
P.O. No.: CSA# 81481460-01
Site : Bradley Landfill/234
Date Received : February 21, 1991
Date Analyzed : February 21, 22, & 23, 1991

AtmAA Lab No.:	90521-28	90521-29	90521-30
Sample I.D. No.:	VR029	VR023	VR024
	DW, <24	DW, 24	UW, 24
Component	(Concentration in ppm, v/v)		
Methane	3.37	2.26	3.27
TGNMO	2.46	2.98	4.23
	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	1.44	2.00	1.90
Benzyl chloride	<0.8	<0.8	<0.8
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	<0.1
Dichloromethane	0.55	0.72	0.61
Perchloroethene	0.25	0.39	0.36
Carbon Tetrachloride	0.11	0.11	0.10
Toluene	4.93	5.38	4.67
1,1,1-trichloroethane	1.10	3.40	7.41
Trichloroethene	<0.06	<0.06	<0.06
Chloroform	<0.08	<0.08	<0.08
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	3.14	2.79	2.34
o-xylenes	1.78	1.68	1.44

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organics reported as ppm methane.

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants Analysis
in Ambient Air & Integrated Surface Samples

Report Date :	February 25, 1991
P.O. No.:	CSA# 81481460-01
Site :	Bradley Landfill/234
Date Received :	February 21, 1991
Date Analyzed :	February 21, 22, & 23, 1991

AtmAA Lab No.:	90521-31	90521-32	90521-33
Sample I.D. No.:	VR030	VR031	VR015
	DW, <24	UW, <24	ISS Grid 5
Component	(Concentration in ppm, v/v)		
Methane	3.36	3.14	2.23
TGNMO	2.55	2.18	3.20
	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	1.42	1.11	2.18
Benzyl chloride	<0.8	<0.8	<0.8
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	<0.1
Dichloromethane	0.54	0.38	0.38
Perchloroethene	0.22	0.14	0.13
Carbon Tetrachloride	0.10	0.10	0.10
Toluene	3.66	3.64	5.00
1,1,1-trichloroethane	1.07	1.09	4.22
Trichloroethene	<0.06	<0.06	<0.06
Chloroform	<0.08	<0.08	<0.08
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	1.99	2.08	2.36
o-xylenes	1.28	1.31	1.91

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organics reported as ppm methane.

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants Analysis
in Ambient Air & Integrated Surface Samples

Report Date :	February 25, 1991
P.O. No.:	CSA# 81481460-01
Site :	Bradley Landfill/234
Date Received :	February 21, 1991
Date Analyzed :	February 21, 22, & 23, 1991

AtmAA Lab No.:	90521-34
Sample I.D. No.:	VR022
	ISS Grid 2

Component	(Concentration in ppm, v/v)
Methane	1.81
TGNMO	1.51
	(Concentration in ppb, v/v)
Acetonitrile	<0.8
Benzene	1.08
Benzyl chloride	<0.8
Chlorobenzene	<0.1
Dichlorobenzene*	<1.1
1,1-dichloroethane	<0.4
1,2-dichloroethane	<0.2
1,1-dichloroethylene	<0.1
Dichloromethane	1.00
Perchloroethene	0.20
Carbon Tetrachloride	0.10
Toluene	2.60
1,1,1-trichloroethane	1.58
Trichloroethene	<0.06
Chloroform	<0.08
Vinyl chloride	<0.1
m+p-xylenes	1.12
o-xylenes	1.02

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organics reported as ppm methane.

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Tedlar Bag Samples

Report Date : March 6, 1991
P.O. No.: CSA # 81481460-01
Site : Bradley Landfill
Date Received : February 25, 1991
Date Analyzed : February 26 & 27, 1991

AtmAA Lab No.:	90561-1	90561-2	90561-3
Sample I.D. No.:	VRISS012	VRISS8	VRISS17
	ICS	Probe E8D	Probe W9
Component	(Concentration in %, v/v)		
Nitrogen	17.3	79.4	79.0
Oxygen	1.25	22.2	22.2
Methane	41.4	<0.1	<0.1
Carbon Dioxide	39.4	<0.1	<0.1
	(Concentration in ppm, v/v)		
TGNMO	10100	2.64	3.82
	(Concentration in ppb, v/v)		
Acetonitrile	35.5	<0.8	<0.8
Benzene	1160	11.3	3.03
Benzyl chloride	<100	<0.8	<0.8
Chlorobenzene	<100	0.13	<0.1
Dichlorobenzenes*	425	<1.1	<1.1
1,1-dichloroethane	5490	0.40	0.54
1,2-dichloroethane	223	<0.2	<0.2
1,1-dichloroethylene	787	0.30	0.11
Dichloromethane	16200	1.26	1.04
Perchloroethene	20100	1.00	0.71
Carbon Tetrachloride	<1	0.10	0.10
Toluene	73700	19.7	7.90
1,1,1-trichloroethane	632	2.86	1.14
Trichloroethene	5030	0.20	0.16
Chloroform	4.16	<0.08	<0.08
Vinyl chloride	2300	<1	0.13
m+p-xylenes	32900	15.2	8.16
o-xylenes	21600	8.51	4.78

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organics reported as ppm methane.

Michael L. Porter
Laboratory Director

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LABORATORY ANALYSIS REPORT

Hydrogen Sulfide Analysis
in Tedlar Bag Sample

Report Date :	March 6, 1991
CSA No.:	81481460-01
Site :	Bradley Landfill
Date Received :	February 25, 1991
Date Analyzed :	February 26 & 27, 1991

Hydrogen sulfide was analyzed by gas chromatography with a Hall electroyltic conductivity detector operated in the oxidative sulfur mode.

AtmAA Lab No.:	90561-1
Sample I.D. No.:	VRISS012

Component	(Concentration in ppm, v/v)
Hydrogen sulfide	24.4

Michael L. Porter
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. No.: CSA# 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill/234

Ambient Air & Integrated Surface Samples

Date Received: February 21, 1991
Date Analyzed: February 21, 22, & 23, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Methane	VR024	3.29	3.25	3.27	0.61
TGNMO	VR024	3.84	4.62	4.23	9.2
		(Concentration in ppb, v/v)			
Acetonitrile	VR024	<0.8	<0.8	---	---
Benzene	VR015	2.08	2.28	2.18	4.6
	VR022	1.14	1.01	1.08	6.0
Benzyl chloride	VR022	<0.1	<0.1	---	---
Chlorobenzene	VR015	<0.1	<0.1	---	---
	VR022	<0.1	<0.1	---	---
Dichlorobenzenes*	VR022	<1.1	<1.1	---	---
1,1-dichloroethane	VR024	<0.4	<0.4	---	---
1,2-dichloroethane	VR024	<0.2	<0.2	---	---
1,1-dichloro-ethylene	VR023	<0.1	<0.1	---	---
Dichloromethane	VR030	0.55	0.53	0.54	1.8
Perchloroethene	VR015	0.14	0.12	0.13	7.7
Carbon Tetrachloride	VR015	0.10	0.10	0.10	0.0

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
Toluene	VR015	4.97	5.02	5.00	0.50
	VR022	2.69	2.51	2.60	3.5
1,1,1-trichloro-ethane	VR015	4.22	4.22	4.22	0.0
Trichloroethene	VR015	<0.06	<0.06	---	---
Chloroform	VR015	<0.08	<0.08	---	---
Vinyl chloride	VR023	<0.1	<0.1	---	---
m&p-xylene	VR015	2.38	2.33	2.36	1.1
	VR022	1.15	1.10	1.12	2.2
o-xylene	VR015	1.92	1.89	1.91	0.79
	VR022	1.06	0.98	1.02	3.9

A set of 7 Ambient Air and Integrated Surface samples laboratory numbers 90521-(28-34) was analyzed for 1150.1 contaminants, methane and total gaseous non-methane organics (TGNMO). Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 14 duplicate measurements from the sample set of 7 Ambient Air and Integrated Surface samples is 3.0%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. No.: CSA # 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill

Tedlar Bag Samples

Date Received: February 25, 1991
Date Analyzed: February 26 & 27, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in %, v/v)			
Nitrogen	VRISS17	79.3	78.8	79.0	0.32
Oxygen	VRISS17	22.2	22.1	22.2	0.22
Methane	VRISS012	41.4	41.4	41.4	0.0
Carbon Dioxide	VRISS012	39.4	39.3	39.4	0.13
		(Concentration in ppm, v/v)			
TGNMO	VRISS012	10400	9890	10100	2.5
		(Concentration in ppb, v/v)			
Acetonitrile	VRISS17	<0.8	<0.8	---	---
Benzene	VRISS012	1170	1160	1160	0.43
	VRISS17	3.11	2.95	3.03	2.6
Benzyl chloride	No Repeat				
Chlorobenzene	VRISS012	<100	<100	---	---
	VRISS17	<0.1	<0.1	---	---
Dichloro-benzenes*	No Repeat				
1,1-dichloro-ethane	VRISS8	0.40	<0.4	---	---
1,2-dichloro-ethane	VRISS8	<0.2	<0.2	---	---

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
1,1-dichloro-	VRISS012	767	807	787	2.5
ethylene	VRISS8	0.30	0.31	0.30	1.6
Dichloromethane	VRISS012	16300	16100	16200	0.62
	VRISS8	1.23	1.28	1.26	2.0
Perchloroethene	VRISS012	19300	21000	20100	4.2
	VRISS8	1.03	0.97	1.00	3.0
Carbon Tetrachloride	VRISS8	0.10	0.11	0.10	4.8
Toluene	VRISS012	78800	68600	73700	6.9
	VRISS17	8.41	7.40	7.90	6.4
1,1,1-trichloro-	VRISS012	646	619	632	2.1
ethane	VRISS8	2.84	2.87	2.86	0.52
Trichloroethene	VRISS8	0.19	0.21	0.20	5.0
Chloroform	VRISS8	<0.08	<0.08	---	---
Vinyl chloride	VRISS012	2180	2410	2300	5.0
	VRISS8	<1	<1	---	---
m&p-xylene	VRISS012	34500	31300	32900	4.9
	VRISS17	8.45	7.86	8.16	3.6
o-xylene	VRISS012	21300	21900	21600	1.4
	VRISS17	5.01	4.54	4.78	4.9

A set of 3 Tedlar bag samples, laboratory numbers 90561-(1-3) was analyzed for permanent gases, TGNMO, and Rule 1150.1 containiminants. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 24 duplicate measurements from the sample set of 3 Tedlar bag samples is 2.7%.

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA INC.	No.

Site / Facility# BRADLEY / 234

Site Name BRADLEY LANDFILL
9188 GLENDAKS BLVD, SUNVALLEY CA 91352

Sampler: (Signature) Ernest Dragon

ATMAA #	Bag Identification Number	Date	Time	Type Of Sample	PERMANENT GASES	TGNMO	1150.1 TOXIC CORE COMPOUNDS	HYDROGEN SULFIDE						Field Comments	Lab* Comments
0561-1	VRFSS012	2/25/91	11:20	~~Probe~~ 60 ICS	✓	✓	✓	✓							ICS
-2	VRISS 8	2/25	11:00	PROBE E8D	✓	✓	✓								PROBE E8D
-3	VRISS 17	2/25	10:30	PROBE W9	✓	✓	✓								PROBE W9

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Dragon	2/25/91	2:45	Karen Porter	2/25/91	2:45
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR

WMNA
Environmental Mgmt. Dept.

ANALYTICAL LABORATORY

ATMAA INC.

No.

Site / Facility# BRADLEY LANDFILL / 234

Site Name VALLEY RECLAMATION
9188 GLENOAKS BLVD Sun Valley Ca 91352

Sampler: (Signature) [signature]

ATMAA #	Bag Identification Number	Date	Time	Type Of Sample	PERMANENT GASES	TGNMO	1150.1 TOXICS							Field Comments	Lab* Comments
10621-28	VR029			AMBIENT AIR	✓	✓	✓							DW<24hr	Perm Gases
-29	VR023			↓	✓	✓	✓							D.W. 24hr	not required
-30	VR024				✓	✓	✓							U.W. 24hr	
-31	VR030				✓	✓	✓							D.W. <24hr	
-32	VR031			↓	✓	✓	✓							U.W. <24hr	
-33	VR015			ISS	✓	✓	✓							GRID# 5	
-34	VR022			↓	✓	✓	✓							GRID# 2	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	2/21/91	4:30	Karen Porter	2/21/91	4:30
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. No.: CSA # 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill

Tedlar Bag Sample

Date Received: February 25, 1991
Date Analyzed: February 27, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Hydrogen sulfide	VRISS012	24.4	25.0	24.7	1.2

One Tedlar bag sample, laboratory number 90561-1 was analyzed for hydrogen sulfide. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 1 duplicate measurement from one Tedlar bag sample is 1.2%.

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1.0 INTRODUCTION

This report presents the results of landfill air emissions monitoring performed at Bradley Landfill during the months of March, April and May, 1991 by Waste Management of North America (WMNA) personnel. Monitoring was performed in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1150.1 Monitoring plan developed by Valley Reclamation Company (VRC), a subsidiary of WMNA.

Rule 1150.1 requires that monthly monitoring and quarterly reporting of emissions of specified toxic compounds in the landfill environment be performed. Specific types of monitoring include:

- Instantaneous landfill surface monitoring;
- Ambient air sampling upwind and downwind of the site;
- Integrated surface sampling;
- Internal Landfill Gas Sampling;
- Perimeter probe sampling and weekly readings.

Landfill site

The Bradley Landfill is located in the Sun Valley District of Los Angeles California, in the northwest corner of the Los Angeles metropolitan area. The landfill is owned and operated by VRC. The site was formerly a sand and gravel pit operated by Conrock Company. The landfill is currently a Class III waste disposal facility occupying approximately 209 acres. Current refuse filling activities are taking place at Bradley West. An active landfill gas (LFG) migration/emissions control system has been operational at the site since 1982. The LFG Collection System produces in excess of 2 million cubic feet per day. During normal operating periods of the day, LFG is collected, processed and piped to Pacific Lighting Energy Systems (PLES). During high energy demand the Los Angeles Department of Water and Power (LADWP) Valley Steam Generating Station accepts the gas. When the LFG is not in demand by PLES and or LADWP, it is routed to an on-site flare station where it is incinerated in accordance with SCAQMD rules, and permit conditions.

2.0 SAMPLING PROCEDURES

This section outlines the procedures used in performing each activity. Sampling was conducted on a monthly basis during March, April and May, 1991. All field and analytical procedures were performed in accordance with the guidelines for implementing Rule 1150.1 published by the SCAQMD. All field equipment utilized at the site complies with SCAQMD standards.

2.1 INSTANTANEOUS LANDFILL SURFACE MONITORING

Each month the entire landfill disposal area is monitored for Total Organic Compounds (TOC) measured as methane, using a Flame Ionizing Detector, OVA Model 128. This monitoring consists of walking the landfill over a pre-established 100 ft. by 100 ft. grid while maintaining a 3 inch monitoring distance above the surface. Any detections of TOC in excess of 50 ppm are marked on the grid site map (Appendix A) giving location and concentration. Any TOC detections greater than or equal to 500 ppm or greater are reported. Prior to each surface area sweep, the equipment is calibrated using a three point method and the weather is monitored to ensure favorable conditions. Wind speed was monitored and recorded during the sampling event from the onsite meteorological station.

Instantaneous surface monitoring reports located in Appendix A include weather conditions, instrument operation, instrument calibration and field audits on instrument accuracy.

Portions of the landfill were prevented from monitoring due to activities including dirt stock piling, heavy truck traffic, landfill covering on active face, and steep landfill slopes. The 100 square foot grid pattern monthly site maps for the instant surface sweep are shown on Appendix A.

2.2 AMBIENT AIR SAMPLING

Ambient air monitoring stations were positioned up and downwind of the site. On each test date, two 24-hour samples and three less-than-24 hour samples (including one duplicate) were obtained from upwind and downwind locations. Wind speed and direction were continuously recorded using a onsite meteorological station, and is summarized in Appendix B. These sampler locations are shown in Appendix C. Sample locations were determined based on information generated during meteorological monitoring performed as part of the air Solid Waste Assessment Test in May 1988 and information gathered from the onsite meteorological station. Twenty-four hour meteorological surveys were conducted prior to each ambient air sampling event. Samples were not obtained unless weather conditions and wind conditions were within the Rule 1150.1 specifications.

The 24-hour samplers were programmed to sample from 10:00 a.m. until 10:00 a.m. the following day. The less-than-24-hour samplers were programmed to sample during the peak drainage hours as shown by data collected from the meteorological

station. Flow rates were adjusted to provide an approximate 10-liter sample for the programmed sample duration. Field sheets detailing the calibration and setup of each of the samplers, barometer and checklist, are presented in Appendix D.

Following collection, the air samples were transported to the atmospheric Assessment Associates Inc. (AtmAA Inc.) laboratory, and analyzed within 72 hours for SCAQMD Rule 1150.1 toxic components, methane, and total gaseous non-methane organics (TGNMO). Complete laboratory results for the second quarter sampling event are presented in Appendix E.

2.3 INTEGRATED SURFACE SAMPLING

Integrated Surface Samples (ISS) were obtained from accessible areas overlying deposited refuse materials. The majority of the ISS grids were 100 ft. by 500 ft. rectangles. However, several altered rectangular grids were utilized due to access limitations such as changes to on-site traffic flow, location of working face, drilling of new gas recovery wells and stock piling of soil. The altered grid shapes were used to adequately cover the landfill surface while maintaining the required 50,000 square foot areal coverage. All ISS samples were collected by walking an equivalent 50,000 square foot grid over a 25 minute period. The locations of all ISS grids are shown in Appendix C.

Wind speed was monitored and recorded during the sampling event from the onsite meteorological station. Ten minute averages that were obtained and diagramed in graphs representing the average wind speed are depicted in Appendix B. Sampling was performed using a back pack mounted, hand held sampling apparatus. A 10 litre Tedlar bag enclosed in a light proof container was attached to the sampling apparatus. The gas was directed to the bag via Teflon tubing. Field sheets detailing the calibration and setup of each of the samplers, barometer and checklist, are presented in Appendix D.

Following collection, the air samples were transported to AtmAA Inc. Laboratory for analysis. The samples were analyzed within 72 hours for SCAQMD Rule 1150.1 toxic components, methane, and TGNMO.

2.4 INTERNAL LANDFILL GAS SAMPLING

Each month, one sample was collected from the LFG collection system header pipe. The sample was obtained over a 10-minute period and was collected in a 10-liter Tedlar bag, enclosed in a light-proof container. The gas was directed to the Tedlar bag via Teflon tubing. All sample hoses and fittings were made of stainless steel or Teflon materials. Field data sheets are located in Appendix D.

Following collection, the air samples were transported to the AtmAA Inc.laboratory, and analyzed within 72 hours for SCAQMD Rule 1150.1 toxic components, permanent gases, Hydrogen Sulfide, and TGNMO.

2.5 PERIMETER PROBE SAMPLING

Each week the perimeter probes were monitored for pressure and methane content using a PDM pressure meter and a Gastech NP204 combustible gas indicator. Weekly probe results are listed in Appendix F.

Monthly gas samples were collected from two perimeter probes measuring the highest gas content from the entire perimeter probe set. Prior to sampling, each probe was evacuated until the TOC remained constant for 30 seconds. Samples were then collected in a 10-liter Tedlar bag enclosed in a light-proof container. The gas was directed to the Tedlar bag via Teflon tubing. All sample hoses and fittings were made of stainless steel or Teflon materials. The sample was obtained over a ten minute period.

Following collection, two monthly probe samples were transported to the AtmAA Inc. laboratory, and analyzed within 72 hours for SCAQMD Rule 1150.1 toxic components, methane, and TGNMO.

3.0 RESULTS AND DISCUSSION

3.1 INSTANTANEOUS SURFACE MONITORING

Landfill surface monitoring was performed at the Bradley East, West and West Extension locations during the months of March, April and May. Grid maps showing the landfill areas surveyed and locations of notable emissions are included in Appendix A. The results and discussion of the survey of the findings are provided below.

MARCH

TOC as methane was detected at concentrations above 1000ppm on the Bradley East (south section) in a localized area where four sections of PVC piping was used for marking an underground gas collection system. Located on the Bradley East (north section), TOC as methane greater than 1000ppm was detected at a hallow gate post. There were no other detections of TOC as methane above 500ppm noted.

APRIL

There were two detections in excess of 1000ppm TOC as methane observed at the Bradley west extension. A four foot area around gas well #76 had subsized several feet leaving small fissures in the depression. TOC as methane was detected in this area in excess of 1000ppm. TOC as methane was detected in excess of 1000ppm emanating from the dry leachate sump A. There were no other detections of TOC as methane above 500ppm noted.

MAY

There were three detections in excess of 1000ppm TOC as methane observed at Bradley West. These areas were located along the northern edge of Bradley West (grid #N8, Q6, R5) where methane was detected emanating from fissures in the ground. There were no other detections of TOC as methane above 500ppm noted.

Remedial Action reports to the Instantaneous Landfill Surface Monitoring are included in Appendix A.

3.2 INTEGRATED SURFACE SAMPLING

The number of ISS collected during the three month period are as follows:

March	0 ISS grids
April	18 ISS grids
May	16 ISS grids

Due to consecutive rainstorms throughout the month of March, ambient air and intergrated surface sampling was not concucted.

Each ISS was tested in the field for TOC as methane using a Century OVA Model 128. Throughout the quarter, there were no excess of the 50 ppm as TOC levels in

any of the 34 grids sampled. During each month of the quarter, two samples were selected for laboratory testing. Table 1 presents a summary of the analytical results obtained for this quarter. Complete laboratory reports are included in Appendix E.

The analytical results for this quarter are all within Rule 1150.1 guidelines; no exceedances were detected and all levels of measured compounds were within normal background for this area. The results shown in Table 1 are of similar magnitude.

It should be noted that the ISS were not necessarily collected from the same area of the landfill (grid) as the previous month (i.e., ISS locations in Table 1 vary from month to month). The locations of each ISS are shown on Appendix C.

3.3 AMBIENT AIR SAMPLING

Sample results for 24 and less-than 24-hour samples that were collected in April and May, 1991 are shown in Table 4,5,6 respectively. A duplicate (collocated) sample was obtained at the downwind, less-than-24-hour sample location (the point of maximum expected contaminant concentrations). Table 2 presents the 24-hour upwind and downwind analytical results for each of the days tested. Table 3 presents the less-than-24-hour upwind and downwind analytical results, and Table 4 presents the less-than-24-hour downwind collocated analytical results.

The upwind to downwind 24-hour and less-than 24-hour samples indicated no significant differences between the two results.

3.4 INTERNAL LANDFILL GAS SAMPLING

Table 5 lists the results for the second quarter. The complete laboratory results are located in Appendix E.

3.5 PERIMETER PROBE SAMPLING

Two perimeter probe samples were analyzed each month this quarter for toxic components, methane, and TGNMO at AtmAA Inc. laboratory. The perimeter probes that were sampled each month are listed below.

MONTH	PROBE #
March	W-1, W-9
April	E-8d, W-1m
May	W-2b, E-8d

Please refer to the site map in Appendix F for perimeter probe locations.

During the past quarter, weekly probe readings were taken for pressure and percent methane. The results of the monitoring are listed in Appendix F.

TABLE 1. INTERGRATED SURFACE SAMPLES - ANALYTICAL RESULTS

Concentrations are reported as ppb. unless noted.
Referenced grid locations are shown in Appendix A.

			APRIL		MAY	
	Detection	Sample bag	Grid #7	Grid #8	Grid #3	Grid #4
COMPOUNDS	Limits	I.D. No.	VR035	VR038	VR066	VR068
	(ppb)		(ppb)		(ppb)	
Acetonitrile	0.8		ND	ND	ND	ND
Benzene	0.1		1.18	1.08	2.09	2.47
Benzyl Chloride	0.8		ND	ND	ND	ND
Chlorobenzene	0.1		ND	ND	ND	ND
Dichlorobenzene	1.1		ND	ND	ND	ND
1,1-dichloroethane	0.4		ND	ND	ND	ND
1,2-dichloroethane	0.2		ND	ND	ND	ND
1,1-dichloroethylene	0.1		ND	ND	ND	ND
Dichloromethane	0.2		2.22	2.00	1.22	1.93
Perchloroethene	0.1		0.17	0.20	0.36	0.38
Carbon Tetrachloride	0.06		0.10	0.11	0.12	0.11
Toluene	0.1		2.61	2.62	5.62	6.64
1,1,1-trichloroethane	0.06		4.94	4.23	3.70	4.28
Trichloroethene	0.06		ND	ND	ND	0.093
Chloroform	0.08		ND	ND	ND	ND
Vinyl Chloride	0.1		ND	ND	ND	ND
m+p-xylenes	0.4		1.25	1.20	2.32	2.70
o-xylenes	0.2		0.94	0.88	0.87	0.97
Total Methane (ppmv)	1.0 ppm		1.81ppm	1.78ppm	2.03ppm	2.20ppm
Total Non Methane Organics (ppmv)	1.0 ppm		1.10ppm	1.47ppm	2.57ppm	2.14ppm

Grid locations vary from month to month, regardless of the grid number.
ND = not detected

No sampling was conducted during the month of March.

TABLE 2. 24 HOUR AMBIENT AIR SAMPLES - ANAYLTICAL RESULTS

Concentrations are reported as ppbv unless otherwise noted

Compounds	Detection limits	APRIL Upwind VR047	APRIL Downwind VR046	MAY Upwind VR065	MAY Downwind VR064
			(ppb)		(ppb)
Acetonitrile	0.8	ND	ND	ND	ND
Benzene	0.1	1.09	1.17	3.67	3.54
Benzyl Chloride	0.8	ND	ND	ND	ND
Chlorobenzene	0.1	ND	ND	ND	ND
Dichlorobenzene	1.1	ND	ND	ND	ND
1,1-dichloroethane	0.4	ND	ND	ND	ND
1,2-dichloroethane	0.2	ND	ND	ND	ND
1,1-dichloroethene	0.1	ND	ND	ND	ND
Dichloromethane	0.2	1.15	0.40	NA	1.16
Perchloroethene	0.1	0.32	0.22	0.72	0.54
Carbon Tetrachloride	0.06	0.10	0.10	0.12	0.11
Toluene	0.1	2.61	2.66	8.35	8.76
1,1,1-trichloroethane	0.06	2.38	2.95	6.78	3.74
Trichloroethane	0.06	0.06	ND	ND	0.096
Chloroform	0.08	ND	ND	ND	0.12
Vinyl Chloride	0.1	ND	ND	ND	ND
m+p-xylenes	0.4	1.76	1.70	3.97	3.76
o-xylenes	0.2	0.99	0.76	1.52	1.37
Total methane in ppm	1.0ppm	1.76 ppm	3.29 ppm	3.44 ppm	2.06ppm
TGNMO in ppm	1.0ppm	ND	1.06 ppm	1.13 ppm	ND

ND= not detected

No sampling was conducted during the month of March.

TABLE 3. LESS THAN 24 HOUR AMBIENT AIR SAMPLES – ANAYLTICAL RESULTS

Concentrations are reported as ppbv unless otherwise noted

Compounds	Detection limits	APRIL Upwind VR048	APRIL Downwind VR050	MAY Upwind VR072	MAY Downwind VR063
		(ppb)		(ppb)	
Acetonitrile	0.8	ND	ND	ND	ND
Benzene	0.1	1.15	1.12	3.14	2.43
Benzyl Chloride	0.8	ND	ND	ND	ND
Chlorobenzene	0.1	ND	ND	ND	ND
Dichlorobenzene	1.1	ND	ND	ND	ND
1,1-dichloroethane	0.4	ND	ND	ND	ND
1,2-dichloroethane	0.2	ND	ND	ND	ND
1,1-dichloroethene	0.1	ND	ND	ND	ND
Dichloromethane	0.2	0.76	0.36	1.12	0.69
Perchloroethene	0.1	0.42	0.22	0.41	0.95
Carbon Tetrachloride	0.06	0.11	0.10	0.12	0.12
Toluene	0.1	2.46	2.52	4.45	4.55
1,1,1-trichloroethane	0.06	4.46	1.78	2.03	2.50
Trichloroethane	0.06	0.14	ND	ND	ND
Chloroform	0.08	ND	ND	0.082	0.12
Vinyl Chloride	0.1	ND	ND	ND	ND
m+p-xylenes	0.4	2.04	1.55	1.43	2.42
o-xylenes	0.2	1.10	0.95	0.54	0.87
Total methane in ppm	1.0ppm	1.90 ppm	3.91	2.18 ppm	4.62 ppm
TGNMO in ppm	1.0ppm	ND	1.26 ppm	2.08 ppm	1.00 ppm

ND = not detected

No sampling was conducted during the month of March.

TABLE 4. LESS THAN 24 HOUR CO-LOCATED AMBIENT AIR SAMPLES - ANAYLTICAL RESULTS

Concentrations are reported as ppbv unless otherwise noted

Compounds	Detection limits	APRIL Downwind VR050	APRIL Co-located VR049	MAY Downwind VR063	MAY Co-located VR060
		ppb		ppb	
Acetonitrile	0.8	ND	ND	ND	ND
Benzene	0.1	1.12	1.17	2.43	3.53
Benzyl Chloride	0.8	ND	ND	ND	ND
Chlorobenzene	0.1	ND	ND	ND	ND
Dichlorobenzene	1.1	ND	ND	ND	ND
1,1-dichloroethane	0.4	ND	ND	ND	ND
1,2-dichloroethane	0.2	ND	ND	ND	ND
1,1-dichloroethene	0.1	ND	ND	ND	ND
Dichloromethane	0.2	0.36	0.40	0.69	0.72
Perchloroethene	0.1	0.22	0.22	0.95	0.86
Carbon Tetrachloride	0.06	0.10	0.10	0.12	0.12
Toluene	0.1	2.52	2.43	4.55	8.94
1,1,1-trichloroethane	0.06	1.78	1.77	2.50	2.36
Trichloroethane	0.06	ND	ND	ND	ND
Chloroform	0.08	ND	ND	0.12	ND
Vinyl Chloride	0.1	ND	ND	ND	ND
m+p-xylenes	0.4	1.55	1.81	2.42	4.94
o-xylenes	0.2	0.95	0.99	0.87	1.83
Total methane in ppm	1.0ppm	3.91	4.03 ppm	4.62 ppm	5.05 ppm
TGNMO in ppm	1.0ppm	1.26 ppm	ND	1.00 ppm	ND

NA = not analyzed

No sampling was conducted during the month of March.

TABLE 5. LANDFILL GAS SAMPLES - ANALYTICAL RESULTS

	Detection Limits	Bag ID #	March VR018	April VRISS09	May VR062
COMPONENTS measured in concentration in ppm V/V					
Total Gaseous Non-methane Organics	1ppm		5170	12100	11200
Hydrogen Sulfide	0.5ppm		14.6	35.0	50.8
COMPONENTS measured in percentage % V/V					
Methane	0.2%		22.9	39.3	40.4
Carbon Dioxide	0.2%		23.9	40.9	36.7
Oxygen	0.2%		9.84	0.97	1.39
Nitrogen	0.2%		44.4	19.1	20.1
COMPOUNDS measured in concentration in ppb, V/V					
Acetonitrile	5.0ppb		39.0	60.2	1.78
Benzene	50		1640	1820	2540
Benzyl Chloride	100		ND	ND	ND
Chlorobenzene	50		ND	330	383
Dichlorobenzene	100		179	628	450
1,1-dichloroethane	100		4660	1320	2470
1,2-dichloroethane	20		ND	268	147
1,1-dichloroethylene	30		539	1160	607
Dichloromethane	15		13300	22600	7035
Perchloroethene	2		11400	20600	16900
Carbon Tetrachloride	1		4.08	ND	ND
Toluene	75		57400	44000	88600
1,1,1-trichloroethane	5		278	356	118
Trichloroethene	4		4400	6640	5440
Chloroform	2		5.11	5.23	1.07
Vinyl Chloride	20		21400	2720	2520
m+p-xylenes	100		16000	24100	34400
o-xylenes	60		11600	9790	11300

3.6 QUALITY ASSURANCE/QUALITY CONTROL PROVISIONS

Quality assurance/quality control (QA/QC) provisions were strictly maintained during sample collection and analysis. The provisions for field quality assurance and sampling methodology included:

- Adherence to sample handling and chain-of-custody provisions, as out-lined in the Guidelines for Implementing Rule 1150.1.
- Use of field data sheets to record sampling date and location, initials of field personnel, sample flow rates, regular equipment checks and calibration, weather conditions, etc.
- Collection of Ambient Air Co-located samples.
- Regular service checks and calibration of all field equipment.
- Prior to each use, the Tedlar bags were vacuum tested for leakage, then purged three times with purified Nitrogen.

Co-located Sample

Co-located samples were obtained on all test dates at the downwind less-than-24-hour sampler location. No significant changes between the two samples were noticed. Analytical results are summarized in Table 4 and are included in Appendix E.

APPENDIX A

INSTANTANEOUS SURFACE SWEEP REPORT AND SITE MAP

INSTANTANEOUS SURFACE MONITORING, REPORTS AND RESPONSES FOR THE MONTH OF MARCH

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: APRIL 3, 1991

TO: JOHN MAYS

FROM: RODNEY COLLINS RC

SUBJECT: GAS EMISSION SURVEY CARRIED OUT ON BRADLEY WEST, BRADLEY WEST EXTENSION AND BRADLEY EAST LANDFILLS ON MARCH 29-30, 1991

A sweep was conducted using a Century Organic Vapor Analyzer Model OVA 128, to locate potential surface landfill gas emissions. Monthly emission surveys are carried out at Bradley landfill making note of detections exceeding 500 ppm TOC as methane.

Weather conditions were within sampling limits; noting that no rainfall was observed three days prior to the survey. Details on the weather conditions, instrument operation, performance checklist, laboratory calibration and field audits are attached.

The results of the survey and a discussion of the findings are provided below.

BRADLEY EAST (SOUTH SECTION)

Time of Sweep: 13:30 - 15:00 March 29, 1991

Total organic carbon as methane was detected at concentrations of greater than 1000 ppm at grid W36 and X27 of the topographical map. The exceedences were a result of four PVC pipes at W36 and one PVC pipe at X27, which were all used as depth markers by Gas Recovery.

No other detections of organic vapor was observed.

BRADLEY EAST (NORTH SECTION)

Time of Sweep: 15:00 - 16:30 March 29, 1991

Total organic carbon as methane was detected at a concentration of greater that 1000 ppm near grid Z7 of the topographical map. The exceedence was a result of a hollow gate post on the northeast section of the landfill.

No other detections of organic vapor was observed.

BRADLEY WEST

Time of Sweep: 07:10 - 08:40 March 30, 1991

There were no detections of total organic carbon as methane observed at Bradley West during the time of the sweep.

BRADLEY WEST EXTENSION

Time of Sweep: 06:00 - 07:10 March 30, 1991

There were no detections of total organic carbon as methane observed at Bradley West Extension during the time of the sweep.

RC:rb

cc: Eric Davies
Bob Austin
Susan Kilgore

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: Bradley Landfill

PURPOSE: [illegible] sweep

OPERATOR: [illegible]

DATE: 3/30/91 **Start** [illegible] **Finish** 0830

Model # [illegible]
Serial # [illegible]

INSTRUMENT INTEGRITY CHECKLIST	
Battery Test	Pass/Fail
Reading Following Ignition	4 ppm
Leak Test	Pass/Fail
Clean System Check (Check Valve Chatter)	Pass/Fail
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail

INSTRUMENT CALIBRATION

Perform Three Point Internal Calibration Before Use.

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
10	8	80	0
95	90	95	0
900	880	98	0

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1. 0830	10	11	91
	95	95	100
2.	900	888	98

Instrument calibrated to CH_4 gas

COMMENTS: Wind speed: <1 mph @ 6:00 am, 2 mph @ 6:30 am, 1.5 mph @ 7:00 am

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE:

PURPOSE:

OPERATOR:

DATE: 3/29/91 **Start** 1300 **Finish** 1620

Model # Century OVA 120
Serial # 41034

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery Test	Pass/Fail	Perform Three Point Internal Calibration Before Use.
Reading Following Ignition	6 ppm	
Leak Test	Pass/Fail	
Clean System Check (Check Valve Chatter)	Pass/Fail	
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail	

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
10	4	40	Ø
95	90	95	Ø
900	980	92	Ø

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1. 1620	10	10	100
	95	94	99
2.	900	900	100

Instrument calibrated to CH4 gas

COMMENTS: Wind speed: 4.0 mph @ 1:30 pm, 4.5 mph @ 2:30 pm
8.0 mph @ 3:30 pm, 8.5 @ 4:30 pm

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: APRIL 5, 1991

TO: JOHN MAYS

FROM: SUSAN KILGORE SK.

SUBJECT: RESPONSE TO POINT SOURCE EMISSIONS MARCH 29-30, 1991

In response to the Gas Emission Survey performed on March 29 and 30, 1991, the following responses were taken:

Bradley East (South Section)

Exceeded Limits: There were 5 detections of greater than 1000 ppm at PVC pipes used as depth markers. Gas Recovery personnel was notified immediately.

Response: The four PVC pipes located at topographic grid W36 were removed. On March 29, 1991 a follow-up OVA sweep was performed on the immediate area. No VOC's were noted. One PVC pipe located at W27 was capped by Gas Recovery personnel. On April 3, 1991 a follow-up OVA Sweep was performed and no VOC detections were noted.

Bradley East (North Section)

Exceeded Limits: There was a detection of greater than 1000 ppm at grid Z7 on the topographic map. The exceedence was a result of a hollow gate post. Operations was notified immediately.

Response: Mortar was poured down gate post. A follow-up sweep using the OVA was performed on April 5, 1991 and no VOC detections were noted.

Bradley West

Exceeded Limits: No exceeded limits were noted.

Response: No response necessary.

Bradley West Extension

Exceeded limits: No exceeded limits were noted.

Response: No response necessary.

cc: Rod Collins
Ernie Dragan
Bob Austin
Eric Davies

F/VR/Rule 1150.1 Feb. 1991

INSTANTANEOUS SURFACE MONITORING, REPORTS AND RESPONSES FOR THE MONTH OF APRIL

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: APRIL 30, 1991

TO: JOHN MAYS

FROM: ERNIE DRAGAN

SUBJECT: **GAS EMISSION SURVEY CARRIED OUT ON BRADLEY WEST, BRADLEY WEST EXTENSION AND BRADLEY EAST LANDFILLS ON APRIL 25 - 26, 199**

A sweep was conducted using a Century Organic Vapor Analyzer Model OVA 128 to locate potential surface landfill gas emissions. Monthly emission surveys are carried out at Bradley landfill making note of detections exceeding 500 ppm TOC as methane.

Weather conditions were within sampling limits; noting that no rainfall was observed 24 hours prior to the survey. Wind speed was measured using a hand held anomometer and recorded every hour. Details on the weather conditions, instrument operation, performance checklist, laboratory calibration and field audits are attached.

The results of the survey and a discussion of the findings are provided below.

BRADLEY EAST (SOUTH SECTION)

Time of Sweep: 0900 - 1030 April 25, 1991

There were no detections in excess of 500 ppm TOC as methane observed at Bradley East (South section).

No other detections of organic vapor was observed.

BRADLEY EAST (NORTH SECTION)

Time of Sweep: 1030 - 1130 April 25, 1991,

There were no detections in excess of 500 ppm TOC as methane observed at Bradley East (North section) during the time of the sweep.

BRADLEY WEST EXTENSION

Time of Sweep: 11:30 - 13:00 April 25, 1991

There were two detections in excess of 1000 ppm TOC as methane observed at Bradley West extension (locations grid#s S30, and T19).
A four foot area around Gas well #76 located at grid S30 had subsized several feet, possibly due to the rainstorms in March, leaving small fissures in the depression. TOC as methane was detected in this area in excess of 1000ppm.

TOC as methane was detected in excess of 1000ppm emanating from the dry leachate sump A located at grid T19.

BRADLEY WEST

Time of Sweep: 09:00 - 12:00 April 26, 1991

There were no detections of methane as TOC in excess of 500 ppm at Bradley West.

A portion of Bradley West was not monitored due to active trash disposal and dirt stock piling.

c.c. Eric Davies
Bob Austin
Susan Kilgore

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: 234

PURPOSE: OVA

OPERATOR: DR/BAM

DATE: 4/25 **Start** 8:30 **Finish** 9:00

Model # CENTURY
Serial # 4 05 01

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery Test	(Pass)/Fail	Perform Three Point Internal Calibration Before Use.
Reading Following Ignition	3 ppm	**CALIBRATION CHECK**
Leak Test	(Pass)/Fail	
Clean System Check (Check Valve Chatter)	(Pass)/Fail	
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	(Pass)/Fail	

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
10	10	100%	3
95	95	↓	
900	900		

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1. 1:30	10	7	70
	95	82	86
2.	900	830	92

Instrument calibrated to CH_4 gas

COMMENTS:

WIND SPEED	TIME	BAROMETER 9:00 - 29.96
4	9:00 AM	10:00 PM 29.98
5	10 AM	
13	11 pm	
8.0	12 pm	
6.8	1 pm	

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: 234

PURPOSE: DVH SWEEP

OPERATOR: DRAGAN

DATE: 4/26/91 **Start** 8:30 **Finish** 8:45

Model # CENTURY
Serial # 40[illegible]

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery Test	Pass/Fail	Perform Three Point Internal Calibration Before Use.
Reading Following Ignition	2 ppm	
Leak Test	Pass/Fail	
Clean System Check (Check Valve Chatter)	Pass/Fail	
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail	

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
10	10	100	2
95	95	↓	↓
900	900		

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1. 12:30	10	9	90
	95	90	95
2.	900	860	95

Instrument calibrated to CH gas

COMMENTS: WIND SPEED TIME BAROMETER 9:00 29.99
9:00 AM " 29.98
10:00 AM
11:00 AM
12:00 PM

A Waste Management Compa-.

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: MAY 8, 1991

TO: JOHN MAYS

FROM: SUSAN KILGORE

SUBJECT: **RESPONSE TO POINT SOURCE EMISSIONS APRIL 25 - 26, 1991**

In response to the Gas Emission Survey performed by Environmental Technician Ernie Dragan on April 25 and 26, 1991, the following responses were taken:

BRADLEY EAST (SOUTH SECTION)

Exceeded Limits: No exceeded limits.

Response: No response necessary.

BRADLEY EAST (NORTH SECTION)

Exceeded Limits: No exceeded limits.

Response: No response necessary.

BRADLEY WEST EXTENSION

Exceeded Limits: There were two detections of 1000 ppm at Bradley West Extension. The first detection was due to fissures around a gas well located at map grid S30. The second detection was located at a dry leachate sump at map grid T19.

Response: Operations was informed of these detections on the same day as the sweep. Two feet of dirt was placed around the gas well so all fissures were covered. A

follow up sweep revealed no methane. The dry leachate sump was partially covered with taped to prevent landfill gas from entering or exiting. A space was left for venting the sump. A follow up sweep revealed no methane.

BRADLEY WEST:

Exceeded Limits: No exceeded limits.

Response: No response necessary.

cc: Eric Davies
Bob Austin
Ernie Dragan
F/VR Rule 1150.1/Report 04/91

INSTANTANEOUS SURFACE MONITORING, REPORTS AND RESPONSES FOR THE MONTH OF MAY

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: JUNE 3, 1991

TO: JOHN MAYS

FROM: ERNEST DRAGAN ED

SUBJECT: **GAS EMISSION SURVEY CARRIED OUT ON BRADLEY WEST, BRADLEY WEST EXTENSION AND BRADLEY EAST LANDFILLS ON MAY 28 AND 31, 1991**

A sweep was conducted using a Century Organic Vapor Analyzer Model OVA 128 to locate potential surface landfill gas emissions. Monitoring was conducted according to the "Guidelines for Implementation of rule 1150.1" by marking on the grided map any detections exceeding 50 ppm TOC as methane.

Weather conditions were within sampling limits; noting that no rainfall was observed 24 hours prior to the survey. Wind speed was measured using a hand held anomometer and recorded every hour. Details on the weather conditions, instrument operation, performance checklist, laboratory calibration and field audits are attached.

The results of the survey and a discussion of the findings are provided below.

BRADLEY EAST (SOUTH SECTION)

Time of Sweep: 9:30 - 11:00 May 28, 1991

There were no detections in excess of 50 ppm TOC as methane observed at Bradley East (South section).

No other detections of organic vapor was observed.

BRADLEY WEST EXTENSION

Time of Sweep: 11:00 - 12:30 May 28, 1991

There were no detections in excess of 50 ppm TOC as methane observed at Bradley West Extension.

No other detections of organic vapor was observed.

BRADLEY EAST (NORTH SECTION)

Time of Sweep: 12:00 - 13:00 May 30, 1991

There were no detections in excess of 50 ppm TOC as methane observed at Bradley East (North section) during the time of the sweep.

BRADLEY WEST

Time of Sweep: 13:00 - 15:00 May 30, 1991

There were three areas that methane as TOC exceeded 50 ppm at Bradley West.

These areas were located along the northern edge of Bradley West where methane was found eminating from fissures in the ground (Grid # N8, Q6, R5). Please refer to the topo map attached for further details.

A portion of Bradley West was not monitored due to active trash disposal and dirt stock piling.

c.c. Eric Davies
Bob Austin
Susan Kilgore

A Waste Management Company

SOUTHERN CALIFORNIA EMD
INTERCOMPANY MEMORANDUM

DATE: JUNE 6, 1991

TO: JOHN MAYS

FROM: SUSAN KILGORE

SUBJECT: **RESPONSE TO POINT SOURCE EMISSIONS MAY 28 - 31, 1991**

In response to the Gas Emission Survey performed by Environmental Technician Ernie Dragan on May 28 and 31, 1991, the following responses were taken:

BRADLEY EAST (SOUTH SECTION)

Exceeded Limits: No exceeded limits.

Response: No response necessary.

BRADLEY EAST (NORTH SECTION)

Exceeded Limits: No exceeded limits.

Response: No response necessary.

BRADLEY WEST EXTENSION

Exceeded Limits: No exceeded limits.

Response: No response necessary.

BRADLEY WEST

Exceeded Limits: There were two points in Bradley West that exceeded 500 ppm as methane. Detections of 600 ppm and 1000 ppm were found at Grids N8 and Q6 respectively. There was an also a detection of 300 ppm at Grid R5. These points were along the northern edge of Bradley West where methane was found emanating from fissures in the ground.

Response: Operations piled dirt over each of the three points of emmissions immediately after their detection. No methane was detected in a follow-up OVA sweep.

cc: Eric Davies
Bob Austin
Ernie Dragan
F/VR Rule 1150.1/Report 05/91

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRABAN/WILSON

sample location EAST (SOUTH) + WEST EXTENSION

bag number

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/28 TIME: 9.30 PROGRAM STOP: DATE 5/28 TIME: 12:30

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start:	Stop:
FLOW RATE SETTING Start:	Stop:

BAROMETER Start: 29.94 Stop: 29.92

WIND SPEED AVE. <15mph

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW	TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS: NO CH_4 DETECTED ABOVE 50ppm DURING SWEEP

TIME	WIND SPEED
9:30	5.4
10:30	5.3
11:30	6.6
12:30	7.8

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGIAN

sample location WEST + EAST NORTH

bag number

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/30/91 TIME: 12:00 PROGRAM STOP: DATE 5/30 TIME: 3:00

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start:	Stop:
FLOW RATE SETTING Start:	Stop:

BAROMETER Start: 29.82 Stop: 29.82

WIND SPEED AVE. <15mph

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW	TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS: DETECTED CH_4 IN CONCENTRATIONS FROM 30 -> 1000 ALONG THE WEST SIDE WHERE FISSURES WERE FOUND

		WIND SPEED
TIME	1200	10.5
	1300	10.1
	1400	10.6
	1500	11.1

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: 234 BRADLEY

PURPOSE: OVA SWEEP

OPERATOR: DRNGAN

DATE: 5/30/91 **Start** 9:00 **Finish** 9:15

Model # CENTURY OVA 128
Serial # 40501

INSTRUMENT INTEGRITY CHECKLIST		INSTRUMENT CALIBRATION
Battery Test	(Pass)/Fail	Perform Three Point Internal Calibration Before Use.
Reading Following Ignition	4 ppm	**CALIBRATION CHECK**
Leak Test	Pass/(Fail)	
Clean System Check (Check Valve Chatter)	Pass/(Fail)	
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	(Pass)/Fail	

CALIBRATION CHECK

Calibration Gas (ppm)	~~Actual (ppm)~~	~~% Accuracy~~	Ambient (ppm)
900	900		4 ppm
95	93		
10	10		

AUDIT

Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
	900	960	
1.330	95	100	95
	10	9.9	99

Instrument calibrated to_____gas

COMMENTS: CALIBRATED ON 5/30/91 AT 900 AM & AUDIT IT AT 3:30 pm.

WMNA - EMD
ORGANIC VAPOR ANALYZER CALIBRATION LOG

SITE: 234

PURPOSE: OVA SWEEP

OPERATOR: DRAGAN

DATE: 5/28 **Start** 9:00 **Finish** 9:15

Model # Century OVA 128
Serial # 40501

INSTRUMENT INTEGRITY CHECKLIST	
Battery Test	Pass/Fail
Reading Following Ignition	3.5 ppm
Leak Test	Pass/Fail
Clean System Check (Check Valve Chatter)	Pass/Fail
H_2 Supply Pressure Gauge (Acceptable Range 9.5-12)	Pass/Fail

INSTRUMENT CALIBRATION

Perform Three Point Internal Calibration Before Use.

CALIBRATION CHECK

Calibration Gas (ppm)	Actual (ppm)	% Accuracy	Ambient (ppm)
10	10	100	3.5
95	95	↓	↓
900	900		

AUDIT

	Time	Calibration Gas (ppm)	Actual (ppm)	% Accuracy
1.	12:10	9.3ppm	10 ppm	
2.	12:15	92ppm	95ppm	

Instrument calibrated to CH_4 gas

COMMENTS:

APPENDIX B

WIND SPEED AND DIRECTION INFORMATION

PARTIALLY SCANNED
OVERSIZE ITEM(S)

See document # 2199225
for partially scanned image(s).

14 OF 19, 15 OF 19, 16 OF 19

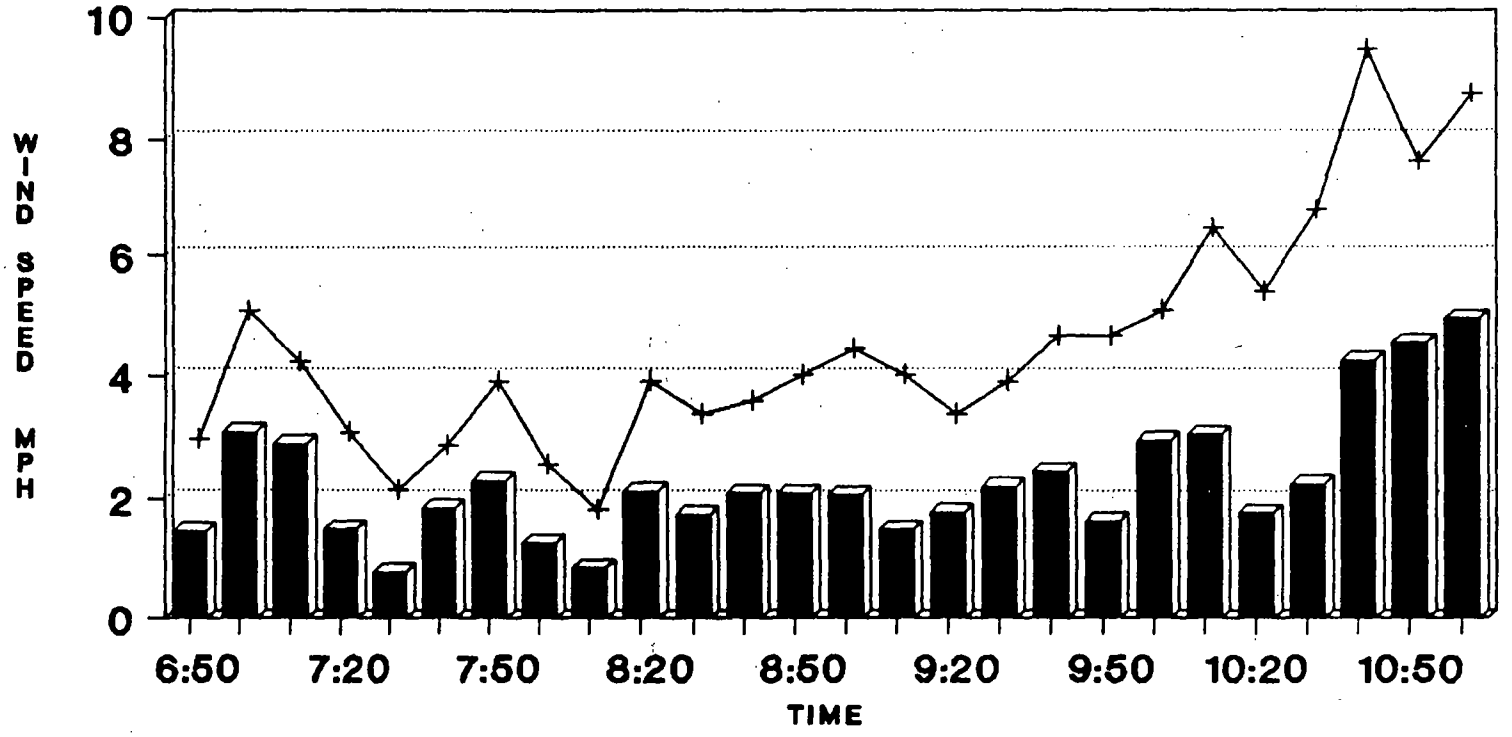
For complete hardcopy version of the oversize document
contact the Region IX Superfund Records Center at
(415) 536-2000

APPENDIX B

WIND SPEED AND DIRECTION INFORMATION

CONSECUTIVE RAIN STORMS THROUGHOUT THE MONTH OF MARCH, 1991 PREVENTED THE COLLECTION OF FIELD ISS AND AMBIENT AIR SAMPLE DATA PER SCAQMD RULE 1150.1 GUIDELINE MANUAL.

AMBIENT AIR SAMPLING METEOROLOGICAL DATA
April 9, 1991



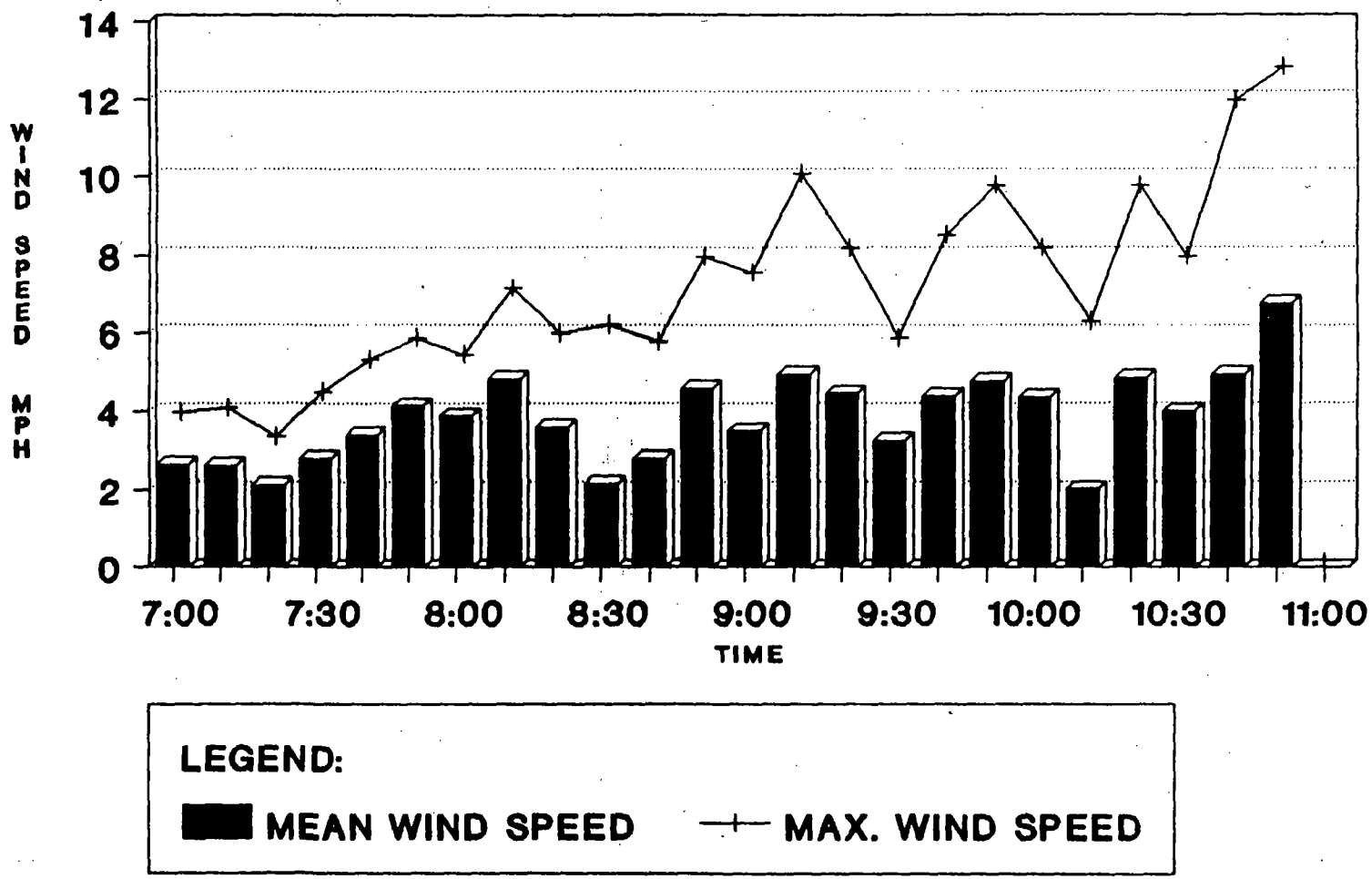
LEGEND:

MEAN WIND SPEED — MAX. WIND SPEED

AIR MONITORING WIND DATA

DATE	TIME	Mean wind speed	Max. wind speed
4 9	650	1.468	2.839
4 9	700	3.1	4.942
4 9	710	2.909	4.1
4 9	720	1.506	2.944
4 9	730	.753	1.998
4 9	740	1.854	2.734
4 9	750	2.29	3.785
4 9	800	1.263	2.418
4 9	810	.826	1.682
4 9	820	2.126	3.785
4 9	830	1.747	3.259
4 9	840	2.088	3.47
4 9	850	2.099	3.89
4 9	900	2.071	4.311
4 9	910	1.499	3.89
4 9	920	1.784	3.259
4 9	930	2.214	3.785
4 9	940	2.45	4.521
4 9	950	1.641	4.521
4 9	1000	2.971	4.942
4 9	1010	3.07	6.308
4 9	1020	1.771	5.257
4 9	1030	2.254	6.624
4 9	1040	4.255	9.36
4 9	1050	4.547	7.46
4 9	1100	4.942	8.62

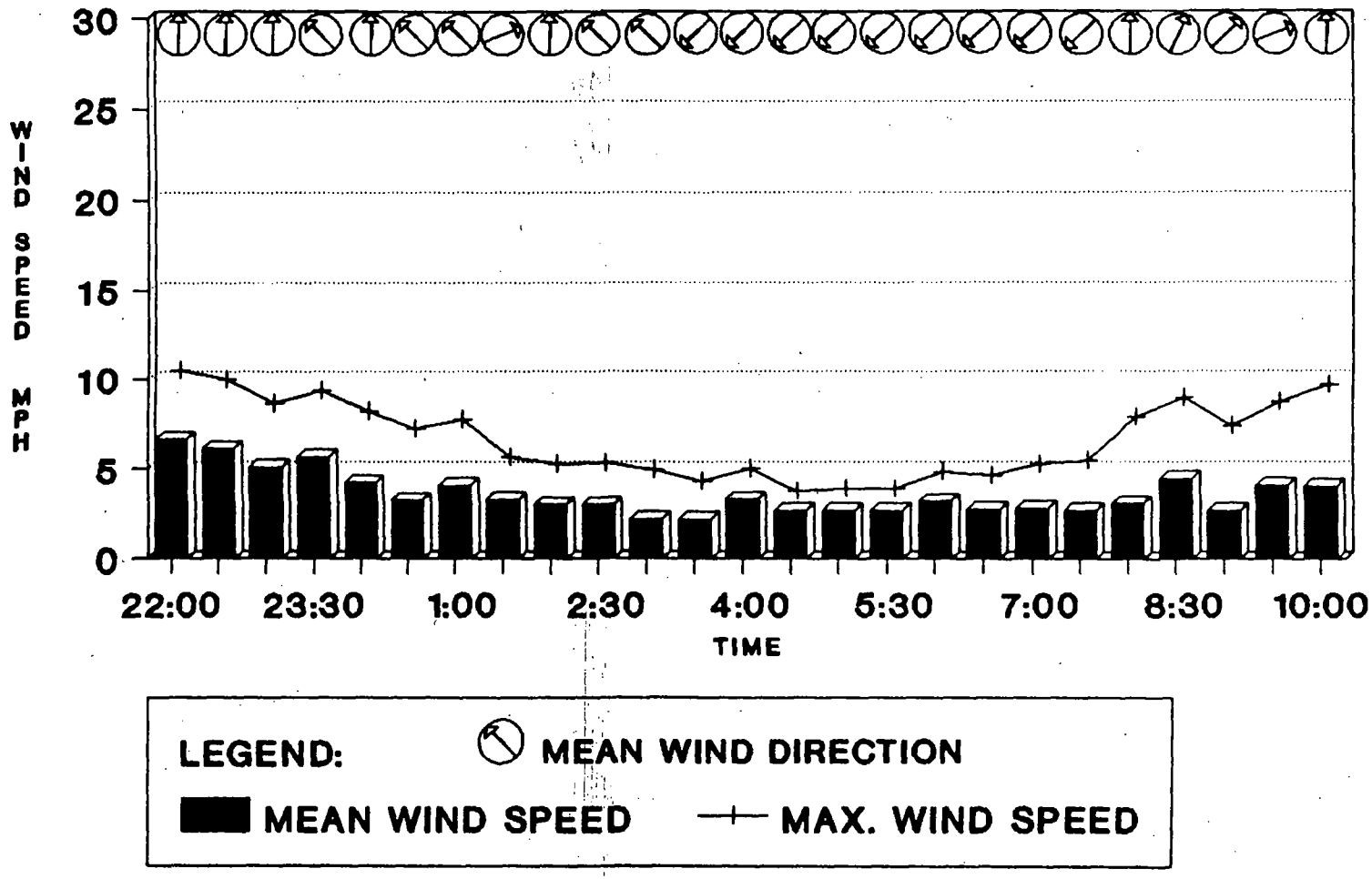
AMBIENT AIR SAMPLING METEOROLOGICAL DATA
April 12, 1991



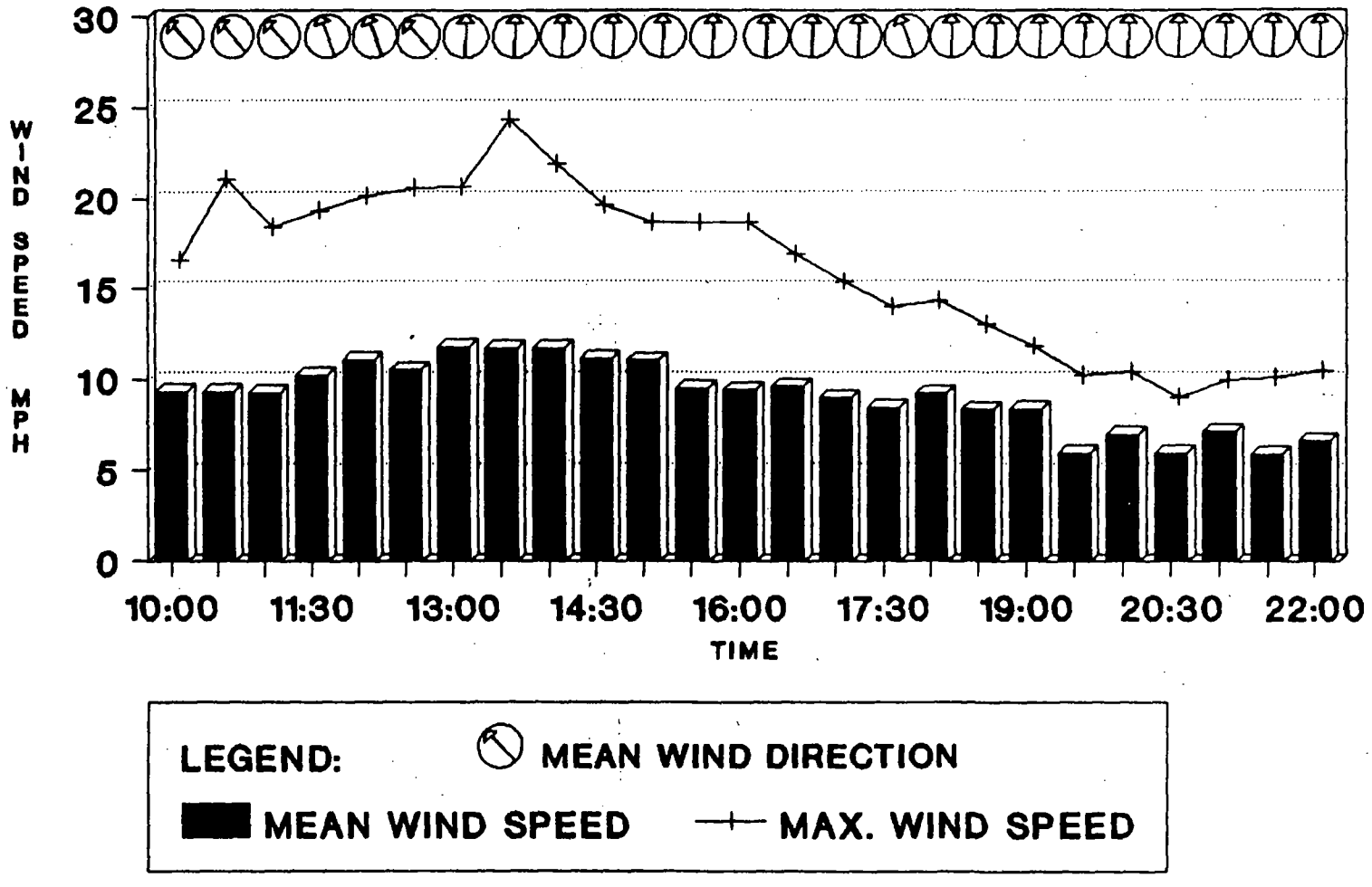
AMBIENT AIR MONITORING DATA

DATE	TIME	MEAN WIND SPEED	MAX. WIND SPEED
4 12	650	2.566	4.1
4 12	700	2.638	3.785
4 12	710	2.612	3.89
4 12	720	2.105	3.154
4 12	730	2.791	4.311
4 12	740	3.386	5.152
4 12	750	4.146	5.678
4 12	800	3.879	5.257
4 12	810	4.836	6.939
4 12	820	3.586	5.783
4 12	830	2.139	5.993
4 12	840	2.801	5.572
4 12	850	4.59	7.78
4 12	900	3.492	7.36
4 12	910	4.958	9.88
4 12	920	4.467	7.99
4 12	930	3.244	5.678
4 12	940	4.384	8.31
4 12	950	4.772	9.57
4 12	1000	4.365	7.99
4 12	1010	2.012	6.098
4 12	1020	4.864	9.57
4 12	1030	3.998	7.78
4 12	1040	4.965	11.78
4 12	1050	6.727	12.62
4 12	1100	4.09	7.99

AMBIENT AIR SAMPLING METEOROLOGICAL DATA
April 16, 17, 1991



AMBIENT AIR SAMPLING METEOROLOGICAL DATA
April 16, 17, 1991

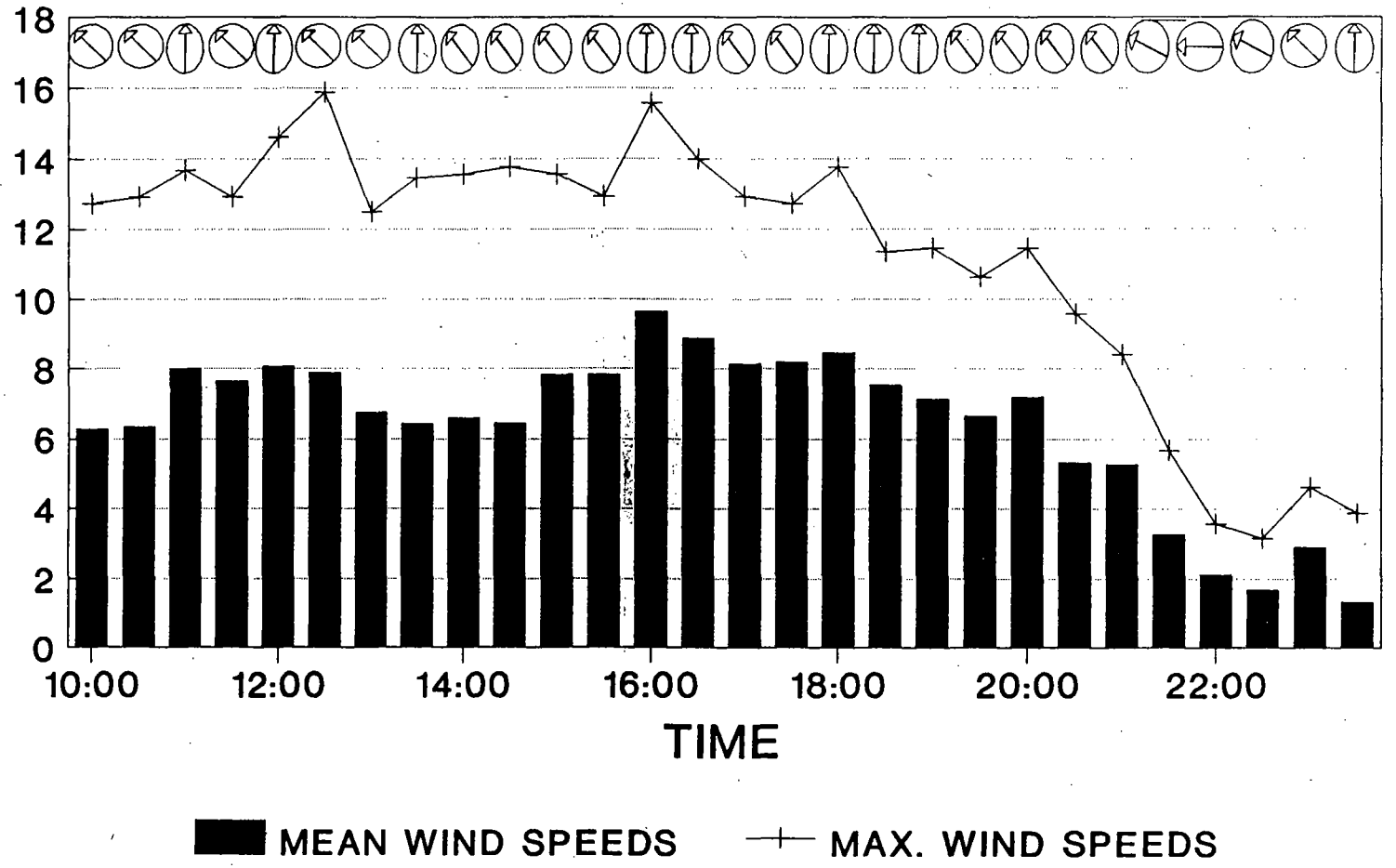


AMBIENT AIR MONITORING DATA

DATE	TIME	MEAN WIND SPEED	AVE. WIND DIR.	MAX. WIND SPEED
4 16	1000	9.35	133	16.19
4 16	1030	9.36	145.6	20.71
4 16	1100	9.31	142.5	18.08
4 16	1130	10.26	152.6	18.93
4 16	1200	11.08	159.7	19.77
4 16	1230	10.52	143.6	20.19
4 16	1300	11.75	181.8	20.29
4 16	1330	11.72	179.1	23.97
4 16	1400	11.71	186	21.55
4 16	1430	11.15	179.7	19.24
4 16	1500	11.04	175	18.29
4 16	1530	9.56	173.1	18.29
4 16	1600	9.45	173.8	18.29
4 16	1630	9.64	183.5	16.51
4 16	1700	9	170.9	14.93
4 16	1730	8.47	167.4	13.56
4 16	1800	9.25	169.4	13.88
4 16	1830	8.37	172.9	12.62
4 16	1900	8.41	187	11.36
4 16	1930	5.976	172	9.78
4 16	2000	7	174.9	9.99
4 16	2030	5.976	179.1	8.62
4 16	2100	7.16	180.3	9.57
4 16	2130	5.912	179.1	9.67
4 16	2200	6.649	170.1	10.09
4 16	2230	6.15	176.9	9.57
4 16	2300	5.083	180.4	8.2
4 16	2330	5.659	163.4	8.94
4 17	0	4.253	175.9	7.78
4 17	30	3.238	150.1	6.834
4 17	100	4.086	164.8	7.36
4 17	130	3.255	194.2	5.257
4 17	200	2.986	187.4	4.836
4 17	230	2.969	165.8	4.942
4 17	300	2.104	165.8	4.521
4 17	330	2.102	14.49	3.89
4 17	400	3.291	17.33	4.626
4 17	430	2.616	21.55	3.364
4 17	500	2.616	15.96	3.47
4 17	530	2.623	18.1	3.47
4 17	600	3.168	12.63	4.416
4 17	630	2.678	21.93	4.206
4 17	700	2.74	19.46	4.836
4 17	730	2.63	37.31	5.047
4 17	800	3.037	180.9	7.46
4 17	830	4.466	197.7	8.52
4 17	900	2.638	214.1	6.939
4 17	930	4.08	245.6	8.31
4 17	1000	4.01	189.3	9.25

MONITORING WIND CONDITIONS

May 22, 1991



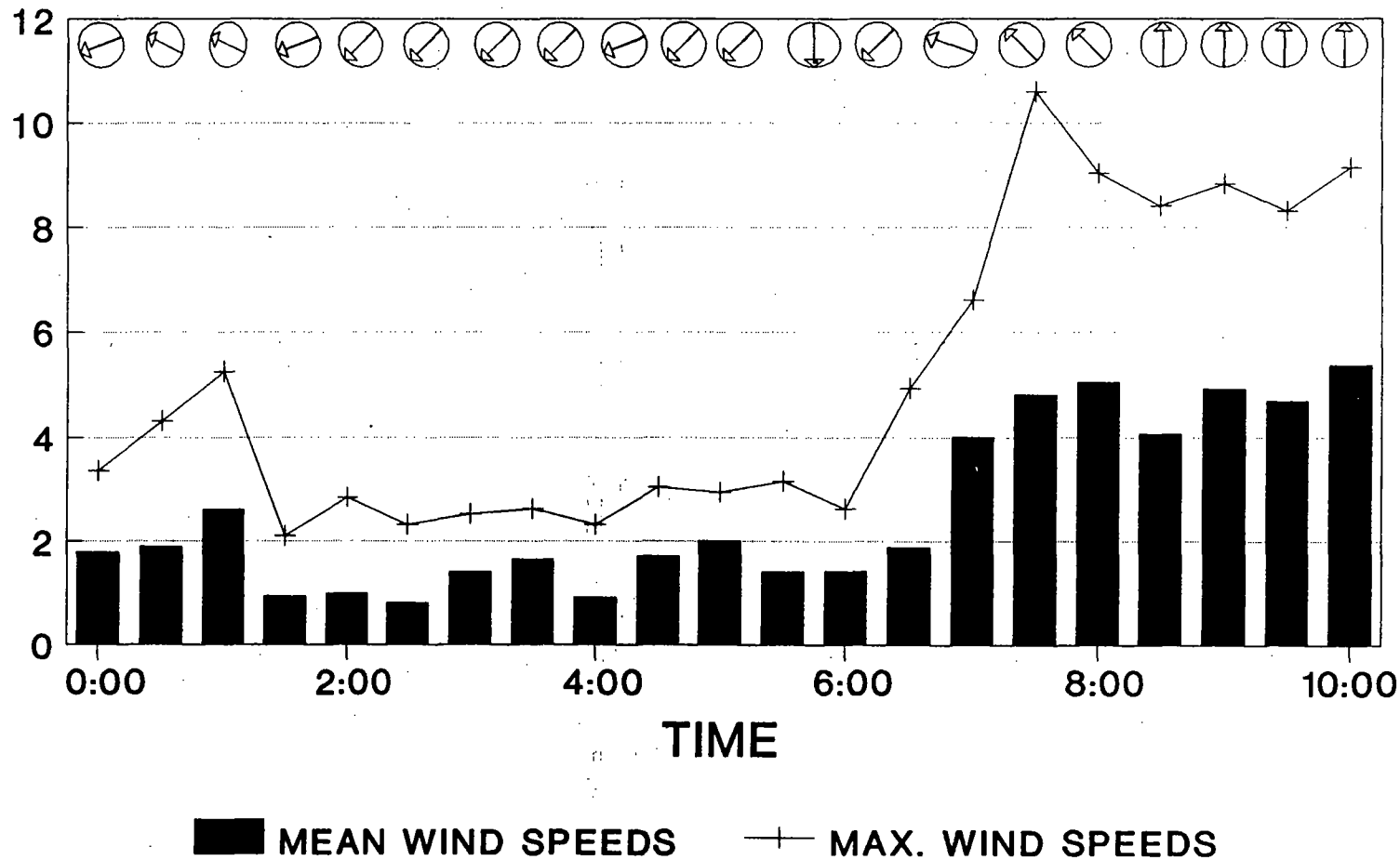
wind speed mph

AMBIENT AIR METEOROLOGICAL DATA

DATE		TIME	AVE. WIND SPEED	AVE. WIND DIR.	MAX WIND SPEED
5	22	1000	6.284	161.3	12.74
5	22	1030	6.357	162.2	12.93
5	22	1100	8	169.3	13.67
5	22	1130	7.65	154.9	12.93
5	22	1200	8.08	171.1	14.61
5	22	1230	7.88	165.7	15.88
5	22	1300	6.758	160.2	12.51
5	22	1330	6.438	169.2	13.46
5	22	1400	6.607	154.9	13.56
5	22	1430	6.463	153.6	13.77
5	22	1500	7.83	149.9	13.56
5	22	1530	7.83	155.8	12.93
5	22	1600	9.64	175	15.56
5	22	1630	8.88	171.9	13.98
5	22	1700	8.14	165.4	12.93
5	22	1730	8.19	163.8	12.72
5	22	1800	8.47	169.4	13.77
5	22	1830	7.55	172.8	11.36
5	22	1900	7.16	169.2	11.46
5	22	1930	6.659	164.8	10.62
5	22	2000	7.21	150.6	11.46
5	22	2030	5.331	154.9	9.57
5	22	2100	5.288	155.5	8.41
5	22	2130	3.267	144.7	5.678
5	22	2200	2.123	96.6	3.575
5	22	2230	1.686	132.9	3.154
5	22	2300	2.912	148.8	4.626
5	22	2330	1.334	177.9	3.89

MONITORING WIND CONDITIONS

May 23, 1991



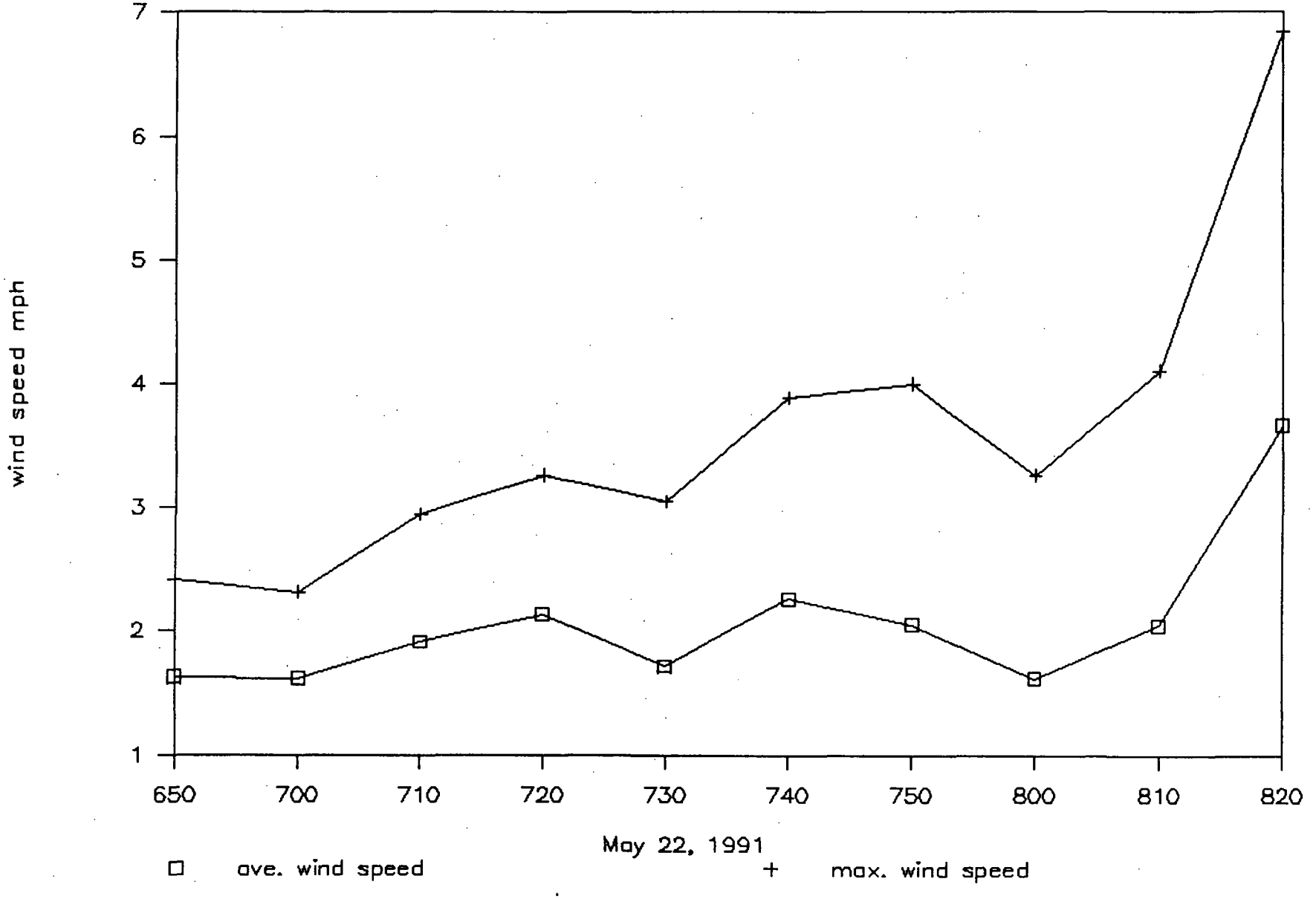
(speed in mph)

AMBIENT AIR METEOROLOGICAL DATA

DATE		TIME	AVE. WIND SPEED	AVE. WIND DIR.	MAX WIND SPEED
5	23	0	1.798	41.36	3.364
5	23	30	1.895	130	4.311
5	23	100	2.613	141.5	5.257
5	23	130	0.948	64.21	2.103
5	23	200	1.005	27.03	2.839
5	23	230	0.814	32.72	2.313
5	23	300	1.417	23.26	2.523
5	23	330	1.66	15.59	2.628
5	23	400	0.917	55.26	2.313
5	23	430	1.713	26.41	3.049
5	23	500	2.016	25.93	2.944
5	23	530	1.425	9.39	3.154
5	23	600	1.428	21.58	2.628
5	23	630	1.883	105.8	4.942
5	23	700	4.007	141.7	6.624
5	23	730	4.821	159	10.62
5	23	800	5.061	174.7	9.04
5	23	830	4.073	176.1	8.41
5	23	900	4.938	186.1	8.83
5	23	930	4.698	182.4	8.31
5	23	1000	5.378	172.3	9.15

AMBIENT AIR METEOROLOGICAL DATA

INTEGRATED SURFACE SAMPLING

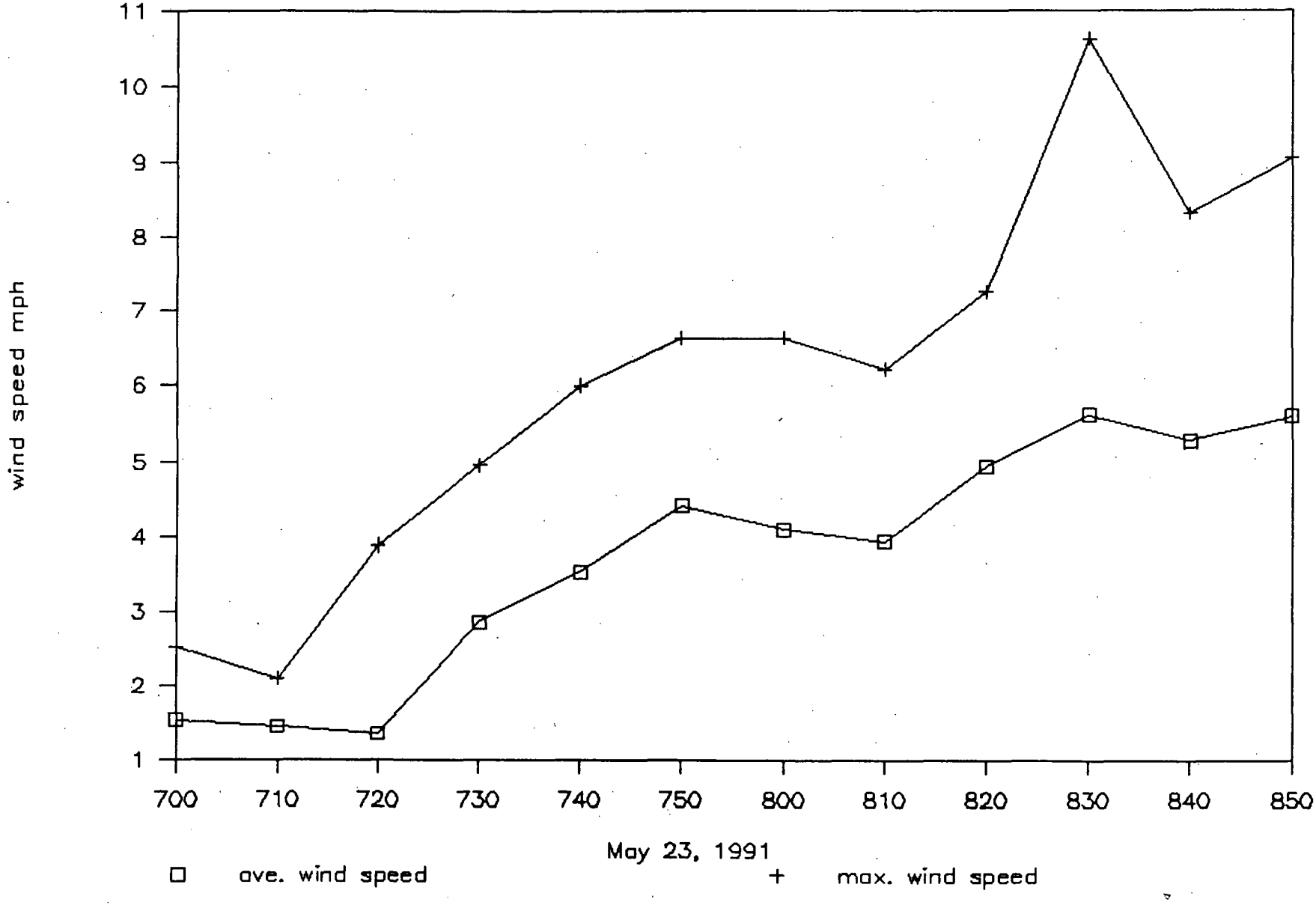


AMBIENT AIR METEOROLOGICAL DATA
INTEGRATED SURFACE SAMPLING

	DATE	TIME	AVE. WIND SPEED	MAX WIND SPEED
5	22	650	1.628	2.418
5	22	700	1.613	2.313
5	22	710	1.909	2.944
5	22	720	2.132	3.259
5	22	730	1.714	3.049
5	22	740	2.263	3.89
5	22	750	2.053	3.995
5	22	800	1.615	3.259
5	22	810	2.046	4.1
5	22	820	3.662	6.834

AMBIENT AIR METEOROLOGICAL DATA

INTEGRATED SURFACE SAMPLING

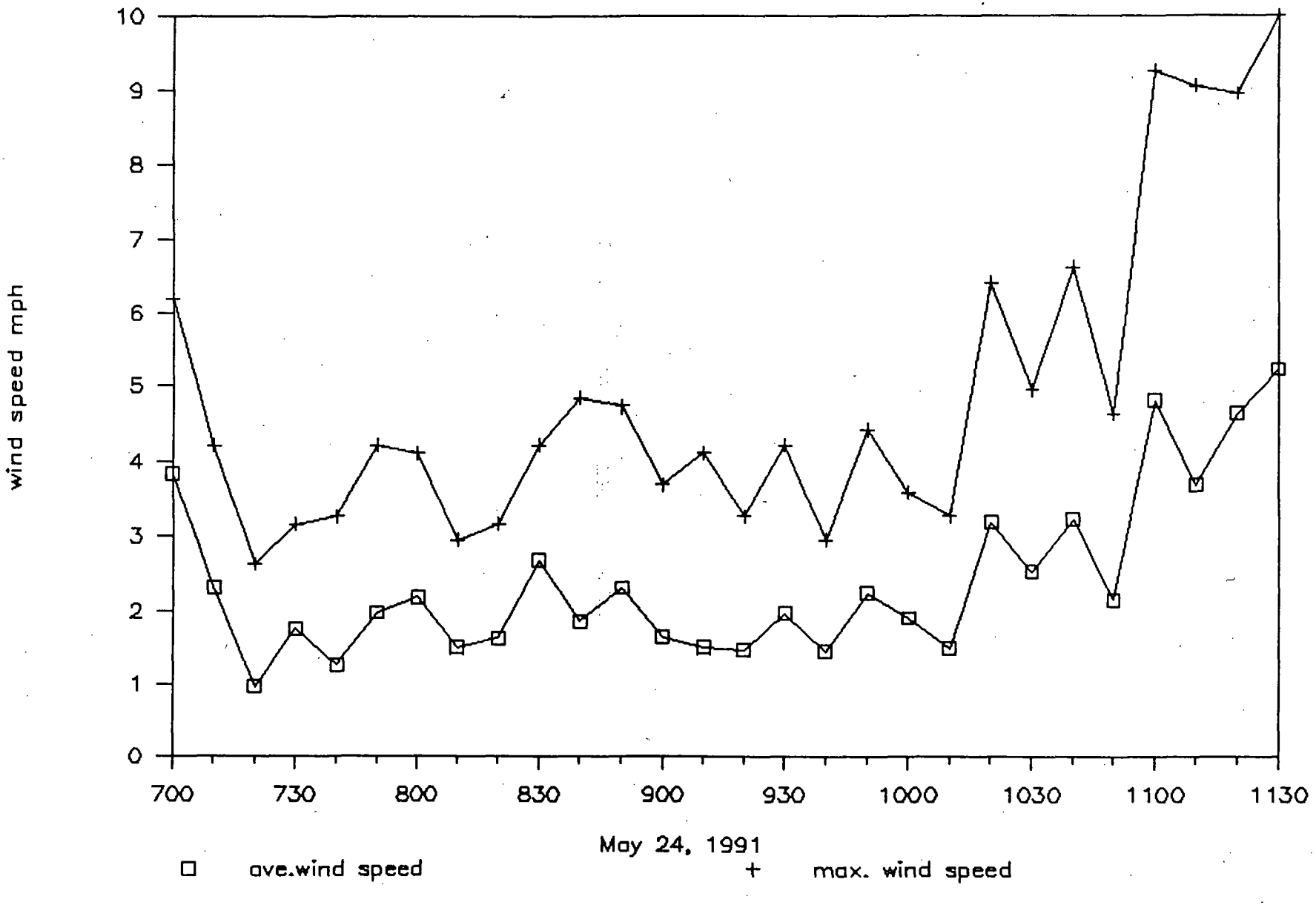


METEOROLOGICAL DATA
INTEGRATED SURFACE SAMPLING

	DATE	TIME	AVE. WIND SPEED	MAX WIND SPEED
5	23	700	1.528	2.523
5	23	710	1.443	2.103
5	23	720	1.346	3.89
5	23	730	2.861	4.942
5	23	740	3.526	5.993
5	23	750	4.407	6.624
5	23	800	4.087	6.624
5	23	810	3.922	6.203
5	23	820	4.929	7.25
5	23	830	5.612	10.62
5	23	840	5.271	8.31
5	23	850	5.591	9.04

AMBIENT AIR METEOROLOGICAL DATA

INTEGRATED SURFACE SAMPLING



AMBIENT AIR METEOROLOGICAL DATA
INTEGRATED SURFACE SAMPLING

	DATE	TIME	AVE. WIND SPEED	MAX. WIND SPEED
5	24	700	3.827	6.203
5	24	710	2.321	4.206
5	24	720	0.966	2.628
5	24	730	1.761	3.154
5	24	740	1.257	3.259
5	24	750	1.975	4.206
5	24	800	2.18	4.1
5	24	810	1.503	2.944
5	24	820	1.627	3.154
5	24	830	2.672	4.206
5	24	840	1.855	4.836
5	24	850	2.301	4.731
5	24	900	1.639	3.68
5	24	910	1.502	4.1
5	24	920	1.468	3.259
5	24	930	1.967	4.206
5	24	940	1.451	2.944
5	24	950	2.229	4.416
5	24	1000	1.897	3.575
5	24	1010	1.484	3.259
5	24	1020	3.176	6.414
5	24	1030	2.524	4.942
5	24	1040	3.215	6.624
5	24	1050	2.147	4.626
5	24	1100	4.805	9.25
5	24	1110	3.67	9.04
5	24	1120	4.628	8.94
5	24	1130	5.218	9.99

APPENDIX C

ISS AND AMBIENT AIR SITE PLAN MAP

APPENDIX C

ISS AND AMBIENT AIR SITE PLAN MAP

CONSECUTIVE RAIN STORMS THROUGHOUT THE MONTH OF MARCH, 1991 PREVENTED THE COLLECTION OF FIELD ISS AND AMBIENT AIR SAMPLE DATA PER SCAQMD RULE 1150.1 GUIDELINE MANUAL.

INTEGRATED SURFACE SAMPLE SUMMARY

Sample Location	Sample Identification
April	April
I.S.S. GRID No. 7	Sample I.D. No. VR035
I.S.S. GRID No. 8	Sample I.D. No. VR038
May	May
I.S.S. GRID No. 3	Sample I.D. No. VR066
I.S.S. GRID No. 4	Sample I.D. No. VR068

ISS AND AMBIENT AIR SITE PLAN FOR THE MONTH OF APRIL

PARTIALLY SCANNED
OVERSIZE ITEM(S)

See document # 2199225
for partially scanned image(s).

17 OF 19

For complete hardcopy version of the oversize document
contact the Region IX Superfund Records Center at
(415) 536-2000

ISS AND AMBIENT AIR SITE PLAN FOR THE MONTH OF MAY

PARTIALLY SCANNED OVERSIZE ITEM(S)

See document # 2199225
for partially scanned image(s).

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contact the Region IX Superfund Records Center at
(415) 536-2000

APPENDIX D

FIELD RECORD LOGS

FIELD AND CALIBRATION DATA LOGS FOR

MONTH OF MARCH

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN / COLLINS

sample location ICS/LFG

bag number YZ038

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES / HEAD SPACE / OVA SWEEP

PROGRAM START: DATE 3/21 TIME: 3:00 PROGRAM STOP: DATE 3/21 TIME: 3:10

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 25	Stop: 25
FLOW RATE SETTING Start: 1L/min	Stop: 1L/min

BAROMETER Start: 29.90 Stop: 29.90

WIND SPEED AVE. —

CONC. METHANE IN TEDLAR BAG ~42

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: SAMPLE TAKEN FROM THE INLET TO COMPRESSOR AT THE PRESSURE METER

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel COLLINS / DRAGAN

site location BRADLEY - 234

sample location W-1

bag number VR016

sampler number 9012

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES / HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 3/25 TIME: 10:30 PROGRAM STOP: DATE 3/25 TIME: 10/48

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: 1 STDL/MIN Stop:

BAROMETER Start: 29.87 Stop: 29.87

WIND SPEED AVE. N/A

CONC. METHANE IN TEDLAR BAG ~ 96%

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS: COLD FRONT SYSTEM IN AREA RAINED 2 10 HOURS AGO.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
W-1			46%		+0.08				

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGANS/COLLINS

site location BRADLEY/234

sample location PROBE VV-9

bag number VR ISS 7

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 3/25 TIME: 11:00 PROGRAM STOP: DATE 3/25 TIME: 11:10

PROGRAM TIMER SETTING: N/A ACTUAL TIME: —

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: 1 STD L/MIN Stop: 1 STD L/MIN

BAROMETER Start: 29.87 Stop: 29.87

WIND SPEED AVE. N/A

CONC. METHANE IN TEDLAR BAG ~32%

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
VV-9	—		31%						

FIELD AND CALIBRATION DATA LOGS FOR

MONTH OF APRIL

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

site location 134

sample location GRID #7

bag number VR035

sampler number 9 OR

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 9/9 TIME: 9:05 PROGRAM STOP: DATE 9/9 TIME: 9:30

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: 0.36L/min Stop: 0.36L/min

BAROMETER Start: 30.0 Stop: 30.0

WIND SPEED AVE. < 5mph

CONC. METHANE IN TEDLAR BAG <50ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID #7	0		0					VR035	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

site location 234

sample location GRID #6

bag number VR017

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / (SS) / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/9 TIME: 8:15 PROGRAM STOP: DATE 4/9 TIME: 8:40

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: 0.36L/mn Stop: 0.36L/mn

BAROMETER Start: 30.01 Stop: 30.01

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG <50 ppm

BATTERY CHECK: (OK) LOW

TEDLAR BAG VALVE: (OPEN) CLOSED

LEAK CHECK: (PASS) FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GR1#6	Ø		Ø					VR017	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

site location 234

sample location GR 1 D #5

bag number VR039

sampler number 7012

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/9 TIME: 8:10 PROGRAM STOP: DATE 4/9 TIME: 8:35

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: 0.36L/min Stop: 0.36L/min

BAROMETER Start: 30.01 Stop: 30.01

WIND SPEED AVE. <5 mph

CONC. METHANE IN TEDLAR BAG <50ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GR1D5 ~~VR036~~	Ø		Ø					VR039	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel COLLINS

sample location GRID 4

bag number VR034

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/9 TIME: 7:35 PROGRAM STOP: DATE 4/9 TIME: 8:00

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: .36L/m Stop: .36L/m

BAROMETER Start: 30.01 Stop: 30.01

WIND SPEED AVE. <5 mph

CONC. METHANE IN TEDLAR BAG 50PPM

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID 4	Ø		9					VR034	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

sample location GRID #3

bag number VR036

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/9 TIME: 7:35 PROGRAM STOP: DATE 4/9 TIME: 8:00

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: .36L/m Stop: .36L/m

BAROMETER Start: 30.01 Stop: 30.01

WIND SPEED AVE. <5mph

CONC. METHANE IN TEDLAR BAG 0 ppm

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID#3	0	0	0	–	–			VR036	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel [illegible]

site location 234

sample location [illegible] #2

bag number [illegible]

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE [illegible] TIME: [illegible] PROGRAM STOP: DATE [illegible] TIME: 7 [illegible]

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 17 Stop: 19

FLOW RATE SETTING Start: [illegible] Stop: [illegible]

BAROMETER Start: [illegible] Stop: [illegible]

WIND SPEED AVE. < 5 mph

CONC. METHANE IN TEDLAR BAG <50ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
[illegible] #2	[illegible]		[illegible]					[illegible]	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R Collins

site location 734

sample location Grid #1

bag number VR045

sampler number 904

SAMPLE TYPE: AMBIENT AIR / SS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/9 TIME: 7:00 PROGRAM STOP: DATE 4/9 TIME: 7:00

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: .36L/min Stop: .36L/min

BAROMETER Start: 30.01 Stop: 30.01

WIND SPEED AVE. < 5 mph

CONC. METHANE IN TEDLAR BAG <50ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 1	0		4					VR045	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

sample location ~~UPWIND~~ Downwind 24 hours

bag number VR046

site location 234

sampler number 3004

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/16 TIME: 10 AM PROGRAM STOP: DATE 4/17 TIME: 10 AM

PROGRAM TIMER SETTING: 9:11 AM ACTUAL TIME: 9:11 AM

ROTOMETER SETTING Start: 30 Stop: 30

FLOW RATE SETTING Start: 6.9 cc/min Stop: 6.9 cc/min

BAROMETER Start: 29.90 Stop: 30.00

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

site location 234

sample location UPWIND 24 hr

bag number UR047

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/16 TIME 10 AM PROGRAM STOP: DATE 4/17 TIME: 10 AM

PROGRAM TIMER SETTING: 9:40 ACTUAL TIME: 9:40

ROTOMETER SETTING Start: 30 Stop: 30

FLOW RATE SETTING Start: 6.9 cc/min Stop: 6.9 cc/min

BAROMETER Start: 29.90 Stop: 30.00

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW | TEDLAR BAG VALVE OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

A Waste Management Compar,

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

sample location Down wind <24 hr

bag number YR050

site location 234

sampler number 9002

SAMPLE TYPE: (AMBIENT AIR) / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/17 TIME: 12:00 AM PROGRAM STOP: DATE 4/17 TIME: 6:00 AM

PROGRAM TIMER SETTING: 9:19 AM ACTUAL TIME: 9:19 AM

ROTOMETER SETTING Start: 100 Stop: 100

FLOW RATE SETTING Start: 28 cc/min Stop: 28 cc/min

BAROMETER Start: 29.90 Stop: 30.00

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: (OK) LOW | TEDLAR BAG VALVE: (OPEN) CLOSED

LEAK CHECK: (PASS) FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel R. Collins

site location Bradley

sample location PW<24

bag number YEC49

sampler number 9001

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/17/91 TIME: 0000 PROGRAM STOP: DATE 4/17/91 TIME: 0600

PROGRAM TIMER SETTING: 9:15 ACTUAL TIME: 9:15

ROTOMETER SETTING Start: 100 Stop: 100

FLOW RATE SETTING Start: 28 cc/MN Stop: 28 cc/MN

BAROMETER Start: 29.90 Stop: 30.00

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

site location 234

sample location [illegible]

bag number VROYB

sampler number 9003

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/17 TIME: 12:00 A.M. PROGRAM STOP: DATE 4/17 TIME: 6:00 AM

PROGRAM TIMER SETTING: 9:52 ACTUAL TIME: 9:52

ROTOMETER SETTING Start: 100 Stop: 100

FLOW RATE SETTING Start: 28 cc/min Stop: 28 cc/min

BAROMETER Start: 29.90 Stop: 30.00

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

site location 234

sample location GRID #8

bag number VR038

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/9 TIME: 9:00 PROGRAM STOP: DATE 4/9 TIME: 9:25

PROGRAM TIMER SETTING: — ACTUAL TIME: —

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: 0.366/min Stop: 0.366/min

BAROMETER Start: 30.0 Stop:

WIND SPEED AVE. 2.5 mph

CONC. METHANE IN TEDLAR BAG 50 ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID #8	Ø		Ø					VR038	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

sample location GRID # 9

bag number VR040

site location 234

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/9 TIME: 9:35 PROGRAM STOP: DATE 4/9 TIME: 10:00 am

PROGRAM TIMER SETTING: — ACTUAL TIME:

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: .36 L/min Stop: .36 L/min

BAROMETER Start: 30.00 Stop: 30.00

WIND SPEED AVE. < 5 mph

CONC. METHANE IN TEDLAR BAG < 50 ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
#9			Ø					VR040	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGANO

site location 234

sample location GRID #10

bag number VR041

sampler number 5012

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 7/9 TIME: 9:40 PROGRAM STOP: DATE 7/9 TIME: 10:05

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: .36L/mn Stop: .36L/mn

BAROMETER Start: 30.0 Stop: 30.0

WIND SPEED AVE. <5 mph

CONC. METHANE IN TEDLAR BAG <50 ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
#10			9					VR041	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel COLLINS

site location 234

sample location GRID #11

bag number VR043

sampler number 902

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/9 TIME: 10:10 PROGRAM STOP: DATE 4/9 TIME: 10:35

PROGRAM TIMER SETTING: — ACTUAL TIME: ✓

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: .36L/MIN Stop: .36L/MIN

BAROMETER Start: 30.0 Stop: 30.0

WIND SPEED AVE. <5 mph

CONC. METHANE IN TEDLAR BAG <50 ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
#11			0					VR043	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DIAGAN

site location 234

sample location GRD #12

bag number VR044

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/9 TIME: 10:20 PROGRAM STOP: DATE 4/9 TIME: 10:45

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: .366/mn Stop: .366/mn

BAROMETER Start: 30.0 Stop: 30.0

WIND SPEED AVE. < 5 mph

CONC. METHANE IN TEDLAR BAG <50 ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
#12			Ø					VR044	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

site location 234

sample location GRID #13

bag number VR051

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/12 TIME: 700AM PROGRAM STOP: DATE 4/12 TIME: 725AM

PROGRAM TIMER SETTING: – ACTUAL TIME: –

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: .36L/MIN Stop: .36L/MIN

BAROMETER Start: 29.97 Stop: 29.97

WIND SPEED AVE. < 5 MPH

CONC. METHANE IN TEDLAR BAG <50ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
#13			Ø					VR051	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins

site location 234

sample location GRID # 14

bag number VR052

sampler number 9012

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/12 TIME: 7:00AM PROGRAM STOP: DATE 4/12 TIME: 7:30AM

PROGRAM TIMER SETTING: — ACTUAL TIME:

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: .36L/min Stop: .36L/min

BAROMETER Start: 29.97 Stop: 29.97

WIND SPEED AVE. <5mph

CONC. METHANE IN TEDLAR BAG <50ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
#14			Ø					VR052	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

site location 234

sample location GRID #15

bag number VR053

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/12 TIME: 7:15 PROGRAM STOP: DATE 4/12 TIME: 8:00

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: 0.36L/MIN Stop: .36L/MIN

BAROMETER Start: 29.97 Stop: 29.97

WIND SPEED AVE. <5 mph

CONC. METHANE IN TEDLAR BAG <50ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
#15			✓					VR053	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel COLLINS

sample location GRD #16

bag number VR055

site location 234

sampler number 9012

SAMPLE TYPE: AMBIENT AIR / (ISS) / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/12 TIME 7:40 PROGRAM STOP: DATE 4/12 TIME: 8:05

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 19	Stop: 19
FLOW RATE SETTING Start: .36 L/min	Stop: .36 L/min

BAROMETER Start: 29.97 Stop: 29.97

WIND SPEED AVE. < 5 mph

CONC. METHANE IN TEDLAR BAG < 50 ppm

BATTERY CHECK: (OK) LOW	TEDLAR BAG VALVE: (OPEN) CLOSED

LEAK CHECK: (PASS) FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
#16			Ø					VR055	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAM

site location 234

sample location GRID #17

bag number VR056

sampler number 9011

SAMPLE TYPE: AMBIENT AIR / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/12 TIME: 8 20 PROGRAM STOP: DATE 4/12 TIME: 8:45

PROGRAM TIMER SETTING: – ACTUAL TIME: –

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: .36L/min Stop: .36L/min

BAROMETER Start: 29.97 Stop: 29.97

WIND SPEED AVE. < 5 mph

CONC. METHANE IN TEDLAR BAG < 50 ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
#17			Ø					VR056	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel COLLINS

site location 234

sample location GRID #18

bag number VR057

sampler number 9012

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/12 TIME: 820 PROGRAM STOP: DATE 4/12 TIME: 8:45

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: .36L/min Stop: .36L/min

BAROMETER Start: 29.97 Stop: 29.97

WIND SPEED AVE. <5mph

CONC. METHANE IN TEDLAR BAG <5.0ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS / FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
#18			∅					VR057	

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins/Dragan

site location Bradley

sample location Probe W1M

bag number VR[redacted]037

sampler number 9012

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES / HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 8/1/91 TIME: 1525 PROGRAM STOP: DATE 8/1/91 TIME: 1535

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: 1L/min Stop: 1L/min

BAROMETER Start: 30.08 Stop: 30.08

WIND SPEED AVE. < 5mph

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Probe W1M	—	—	41	—	+0.05	1526	1527	~~9012~~ VR037	1525

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Collins/Dragan

site location Bradley

sample location Probe E8D

bag number VRFSS010

sampler number 9012

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES / HEAD SPACE / OVA SWEEP

PROGRAM START: DATE 4/1/91 TIME: 1420 PROGRAM STOP: DATE 4/1/91 TIME: 1430

PROGRAM TIMER SETTING: N/A ACTUAL TIME: N/A

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: 1 L/min Stop: 1 L/min

BAROMETER Start: Stop:

WIND SPEED AVE. <5 mph

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
E8D	—	—	26	—	-0.09	1420	1430	VRFSS010	1420

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGON

sample location LFG

bag number YRJ5509

site location BRADLEY

sampler number 9013

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 4/1/91 TIME: 3:20 PROGRAM STOP: DATE 4/1 TIME: 3:30

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: 1L/MIN Stop: 1L/MIN

BAROMETER Start: 30.11 Stop: 30.11

WIND SPEED AVE. —

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME

FIELD AND CALIBRATION DATA LOGS FOR

MONTH OF MAY

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Wilson/Dragan

site location 234

sample location Downwind 24hrs

bag number VR064

sampler number 9003

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/22 TIME: 10:00 PROGRAM STOP: DATE 5/23 TIME: 10:00

PROGRAM TIMER SETTING: 9:47 ACTUAL TIME: 9:48

ROTOMETER SETTING Start: 30 Stop:

FLOW RATE SETTING Start: 6.9 cc/min Stop:

BAROMETER Start: 29.97 Stop: 30

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG Ø

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
D.W. 24hrs	Ø								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Wilson/Dragan

site location 234

sample location 24 hrs upwind

bag number VR065

sampler number 9002

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/22 TIME: 10:05 PROGRAM STOP: DATE 5/23 TIME: 10:05

PROGRAM TIMER SETTING: 10:00 ACTUAL TIME: 9:59

ROTOMETER SETTING Start: 30 Stop: 32

FLOW RATE SETTING Start: 69cc Stop:

BAROMETER Start: 29.97 Stop: 30

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG 10ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
234uw	1ppm								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Wilson/Dragen

site location 234

sample location ~~Upwind~~ Downwind <24 hrs

bag number VR0063

sampler number 9001

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/23 TIME: 12:00 a.m. PROGRAM STOP: DATE 5/23 TIME: 6:00 a.m

PROGRAM TIMER SETTING: 5/22 10:11 a.m ACTUAL TIME: 5/22 10:11 a.m.

ROTOMETER SETTING Start: 100 Stop: 103

FLOW RATE SETTING Start: 28 cc/min Stop:

BAROMETER Start: 29.97 Stop: 30

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG 2.2 ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
<24 DW	2.2 ppm								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Wilson / Dragan

sample location <24 down wind colocated

bag number VR060

site location 234

sampler number 9004

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/23 TIME: 12:10 PROGRAM STOP: DATE 5/23 TIME: 6:00 a.m.

PROGRAM TIMER SETTING: 10:18 ACTUAL TIME: 10:18

ROTOMETER SETTING Start: 100 Stop: 101

FLOW RATE SETTING Start: 28cf Stop:

BAROMETER Start: 2997 Stop: 30

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG 2.5ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
<24 DW	2.5 ppm								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Wilson / Dragan

site location 234

sample location Upwind < 24 hrs

bag number VR072

sampler number 9005

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/23 TIME: 12:00 PROGRAM STOP: DATE 5/23 TIME: 6:00

PROGRAM TIMER SETTING: 11:03 ACTUAL TIME: 11:03

ROTOMETER SETTING Start: 100 Stop: 96

FLOW RATE SETTING Start: 28cc/min Stop: 28cc/min

BAROMETER Start: 29.97 Stop 30.00

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG Ø

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
<24 up	Ø								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Cozetthulson

sample location Grid # 1

bag number VR044

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/22/11 TIME: 700 PROGRAM STOP: DATE 5/22/11 TIME: 7:25

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20. Stop: 19

FLOW RATE SETTING Start: .36L/min Stop: .36L/min

BAROMETER Start: 29.97 Stop: 29.97

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG <1ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS: Grid transversed by 3 pipelines

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid1	<1ppm								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

site location 734

sample location GR10"2

bag number VR040

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/22 TIME: 7:05 PROGRAM STOP: DATE 5/26 TIME: 0730

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20 Stop: 20

FLOW RATE SETTING Start: Stop:

BAROMETER Start: 29.97 Stop: 29.97

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG <1ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS: PATH ENCOMPASSED 3 well collection lines

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRD 2	<1ppm								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAH

site location 23M

sample location GRID #3

bag number VR066

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/22 TIME: 7:45 PROGRAM STOP: DATE 5/22 TIME: 8:10

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20 Stop: 20

FLOW RATE SETTING Start: .36 L/min Stop: .36 L/min

BAROMETER Start: 29.97 Stop: 29.97

WIND SPEED AVE. <5 mph

CONC. METHANE IN TEDLAR BAG <1 ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GRID 3	<1 ppm								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel WILSON

site location 23h

sample location GR10#4

bag number VR06B

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/22 TIME: 7:45 PROGRAM STOP: DATE 5/22 TIME: 8:10

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20 Stop: 20

FLOW RATE SETTING Start: .36L/min Stop: .36L/min

BAROMETER Start: 29.97 Stop: 29.97

WIND SPEED AVE. <5mph

CONC. METHANE IN TEDLAR BAG <1ppm

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
GR10 4	<1ppm								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

sample location GRID 5

bag number VR069

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/23 TIME: 7:15 PROGRAM STOP: DATE 5/23 TIME: 7:40

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start:	Stop:
FLOW RATE SETTING Start:	Stop:

BAROMETER Start: 30.00 Stop:

WIND SPEED AVE. < 5mph

CONC. METHANE IN TEDLAR BAG Ø

BATTERY CHECK:	OK	LOW	TEDLAR BAG VALVE: OPEN	CLOSED

LEAK CHECK:	PASS	FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 5	Ø								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Wilson

site location 234

sample location Grid #6

bag number VR043

sampler number

SAMPLE TYPE: AMBIENT AIR / SS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/23 TIME 7:31 PROGRAM STOP: DATE 5/23 TIME 7:56

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20	Stop: 20
FLOW RATE SETTING Start: 7	Stop:

BAROMETER Start: 30 Stop:

WIND SPEED AVE. <5

CONC. METHANE IN TEDLAR BAG Ø

BATTERY CHECK: OK LOW	TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS: ~~The grid was~~ A gas well was encompassed by grid 6. Also the grid ran parallel for about fifty feet with a gas ~~line~~ pipe.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid	Ø								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRUGAN

sample location GRID #7

bag number VR058

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / SS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/23 TIME: 8:08 PROGRAM STOP: DATE 5/23 TIME: 8:33

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start:	19	Stop:	19
FLOW RATE SETTING Start:		Stop:	

BAROMETER Start: 30.00 Stop:

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG Ø

BATTERY CHECK:	OK	LOW	TEDLAR BAG VALVE	OPEN	CLOSED

LEAK CHECK:	PASS	FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 7	Ø								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel WILSON

site location 234

sample location GR08

bag number VR070

sampler number

SAMPLE TYPE: AMBIENT AIR / SS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/23 TIME 8:10 PROGRAM STOP: DATE 5/23 TIME: 8:35

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20	Stop: 20
FLOW RATE SETTING Start:	Stop:

BAROMETER Start: 30.00 Stop:

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG Ø

BATTERY CHECK: OK LOW	TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 8	Ø								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Drugan

site location 234

sample location Grid #9

bag number ~~UF057~~ UR057.S

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/24 TIME: 7:25 PROGRAM STOP: DATE 5/24 TIME: 7:50

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20 Stop: 20

FLOW RATE SETTING Start: .36L/min Stop: .36L/min

BAROMETER Start 30.21 Stop: 30.21

WIND SPEED AVE. <5

CONC. METHANE IN TEDLAR BAG Ø

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 9	Ø								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Wilson

sample location Grid #10

bag number uR052

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/24 TIME: 7.27 PROGRAM STOP: DATE 5/24 TIME: 7:52

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20 Stop: 20

FLOW RATE SETTING Start: .36 L/min Stop: .36 L/min

BAROMETER Start 30.01 Stop: 30.01

WIND SPEED AVE. <5

CONC. METHANE IN TEDLAR BAG <1

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 10	<1								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel WILSON

site location 234

sample location GRID #11

bag number VR053

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/21 TIME: 8:35 PROGRAM STOP: DATE 5/24 TIME: 9:00

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20 Stop:

FLOW RATE SETTING Start: 3.66/m Stop:

BAROMETER Start 30.01 Stop 30.01

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG <1

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS: Probewell heads were encompassed by Grid 11.

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 11	0								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAM

site location 134

sample location GRID # 12

bag number VR059

sampler number

SAMPLE TYPE: AMBIENT AIR / (SS) / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/24 TIME: 8:35 PROGRAM STOP: DATE 5/24 TIME: 9:00

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 19 Stop: 19

FLOW RATE SETTING Start: .36 L/min Stop: .36 L/min

BAROMETER Start: 30.01 Stop: 30.01

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG <1

BATTERY CHECK: (OK) LOW

TEDLAR BAG VALVE: (OPEN) CLOSED

LEAK CHECK: (PASS) FAIL

OBSERVATIONS: Detected strong odor emanating from gas well in GRID PATH #12

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 12	Ø								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Dragan

site location

sample location Grid 13

bag number ~~VR057~~ ~~VR0~~ VR057

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/21 TIME: 9:30 PROGRAM STOP: DATE 5/21 TIME: 9:55

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 19 Stop: 20

FLOW RATE SETTING Start: .36 L/min Stop: .36 L/min

BAROMETER Start: 30.01 Stop: 30.01

WIND SPEED AVE. <5

CONC. METHANE IN TEDLAR BAG <1

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 13	<1								

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WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Wilson

site location 234

sample location Grid #14

bag number ~~VR055~~ VR071

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/24 TIME: 9:3 PROGRAM STOP: DATE ~~9:5~~ 5/24 TIME: 9:55

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20	Stop: 10
FLOW RATE SETTING Start: .3666	Stop:

BAROMETER Start: 30.0 (Stop:

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG <1

BATTERY CHECK:	OK LOW	TEDLAR BAG VALVE:	OPEN CLOSED

LEAK CHECK:	PASS	FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE (W.C.)	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid14	Ø								

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN

sample location GRID 15

bag number VR041

site location

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/24 TIME: 10:25 PROGRAM STOP: DATE 5/24 TIME: 10:50

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20 Stop: 20

FLOW RATE SETTING Start: .36 L/min Stop: .34 L/m

BAROMETER Start: Stop:

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG: Ø

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 15	Ø								

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WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Wilson

site location 234

sample location Grid 16

bag number VR051

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES/ HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/24 TIME: 10:25 PROGRAM STOP: DATE 5/24 TIME: 10:50

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 20 Stop: 20

FLOW RATE SETTING Start: .3664m Stop: .364m

BAROMETER Start: 30.01 Stop:

WIND SPEED AVE. <5

CONC. METHANE IN TEDLAR BAG Ø

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Grid 16	Ø								

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WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel DRAGAN/WILSON

site location 234

sample location PROBE W-2B

bag number YR045

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES / HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/28 TIME: 3:45 PROGRAM STOP: DATE 5/28 TIME: 3:55

PROGRAM TIMER SETTING: 3:45 ACTUAL TIME:

ROTOMETER SETTING Start: 25 Stop:

FLOW RATE SETTING Start: 1L/min Stop:

BAROMETER Start: 29.94 Stop: 29.94

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG ~0%

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
W-2B			0 %		+0.14				

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WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel WILSON/DRAGAN

site location 234

sample location E PROBE 8D

bag number VR042

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES / HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/28 TIME: 4:20 PROGRAM STOP: DATE 5/28 TIME: 4:30

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 25	Stop: 25
FLOW RATE SETTING Start: 1L/MIN	Stop: 1L/MIN

BAROMETER Start: 29.92 Stop: 29.92

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG

BATTERY CHECK: OK LOW	TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
E8D			27						

A Waste Management Company

WMNA EMD

SCAQMD 1150.1 FIELD DATA SHEET

personnel Wilson Dragan

sample location LFG-Main Header System to Compressor

bag number VR062

site location 234

sampler number

SAMPLE TYPE: AMBIENT AIR / ISS / LFG / PROBES / HEAD SPACE/ OVA SWEEP

PROGRAM START: DATE 5/28 TIME: 4:03 PROGRAM STOP: DATE 5/28 TIME: 4:13

PROGRAM TIMER SETTING: ACTUAL TIME:

ROTOMETER SETTING Start: 25 Stop: 25

FLOW RATE SETTING Start: 1L/min Stop: 1L/min

BAROMETER Start: 29.92 Stop: 29.92

WIND SPEED AVE.

CONC. METHANE IN TEDLAR BAG 46%

BATTERY CHECK: OK LOW

TEDLAR BAG VALVE: OPEN CLOSED

LEAK CHECK: PASS FAIL

OBSERVATIONS:

SAMPLE POINT	CH_4 PPM	% LEL	CH_4 % VOLUME	% O_2	PRESSURE [W.C.]	EVACUATION TIME		BAG I.D. NO.	TESTING TIME
Landfill Gas			46						

APPENDIX E

LABORATORY RESULTS AND CHAIN OF CUSTODY FORMS

CONSECUTIVE RAIN STORMS THROUGHOUT THE MONTH OF MARCH, 1991 PREVENTED THE COLLECTION OF FIELD ISS AND AMBIENT AIR SAMPLE DATA PER SCAQMD RULE 1150.1 GUIDELINE MANUAL.

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS, AND QA/QC SUMMARY FOR THE MONTH OF MARCH

AtmAA Inc.
21354 Nordhoff St., Suite 113, Chatsworth, CA 91311 (818) 718-6070 • FAX (818) 718-9779
environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Tedlar Bag Samples

Report Date : March 26, 1991
CSA No.: 81481460-01
Site : Bradley Landfill/234
Date Received : March 25, 1991
Date Analyzed : March 25 & 26, 1991

AtmAA Lab No.:	90841-17	90841-18
Sample I.D. No.:	VR016	VRISS7
	Probe # W-1	Probe # W-9
Component	(Concentration in %, v/v)	
Nitrogen	22.2	38.1
Oxygen	0.60	1.47
Methane	45.3	29.6
Carbon Dioxide	30.4	30.2
	(Concentration in ppm, v/v)	
TGNMO	2100	1310
	(Concentration in ppb, v/v)	
Acetonitrile	<10	<10
Benzene	135	16.6
Benzyl chloride	<10	<10
Chlorobenzene	25.3	5.93
Dichlorobenzenes*	774	99.8
1,1-dichloroethane	92.2	2820
1,2-dichloroethane	<20	<20
1,1-dichloroethylene	31.5	139
Dichloromethane	<60	<60
Perchloroethene	75.0	1430
Carbon Tetrachloride	<0.5	0.90
Toluene	190	8.0
1,1,1-trichloroethane	1.55	89.8
Trichloroethene	50.1	391
Chloroform	1.40	1.57
Vinyl chloride	2920	5160
m+p-xylenes	310	34.4
o-xylenes	83.1	17.0

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organics reported as ppm methane.

Michael L. Porter
Laboratory Director

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laboratory services

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Tedlar Bag Sample

Report Date : March 26, 1991
CSA No.: 81481460-01
Site : Bradley Landfill/234
Date Received : March 21, 1991
Date Analyzed : March 21 & 22, 1991

AtmAA Lab No.: 90801-63
Sample I.D. No.: VR018
LFG

Component	
	(Concentration in %, v/v)
Nitrogen	44.4
Oxygen	9.84
Methane	22.9
Carbon Dioxide	23.9
	(Concentration in ppm, v/v)
TGNMO	5170
	(Concentration in ppb, v/v)
Acetonitrile	39.0
Benzene	1640
Benzyl chloride	<100
Chlorobenzene	<100
Dichlorobenzenes*	179
1,1-dichloroethane	4660
1,2-dichloroethane	<20
1,1-dichloroethylene	539
Dichloromethane	13300
Perchloroethene	11400
Carbon Tetrachloride	4.08
Toluene	57400
1,1,1-trichloroethane	278
Trichloroethene	4400
Chloroform	5.11
Vinyl chloride	21400
m+p-xylenes	16000
o-xylenes	11600

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organics reported as ppm methane.

Michael L. Porter
Laboratory Director

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environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

Hydrogen Sulfide Analysis
in Tedlar Bag Sample

Report Date :	March 26, 1991
CSA No.:	81481460-01
Site :	Bradley Landfill/234
Date Received :	March 21, 1991
Date Analyzed :	March 21, 1991

Hydrogen sulfide was analyzed by gas chromatography with a Hall electroyltic conductivity detector operated in the oxidative sulfur mode.

AtmAA Lab No.:	90801-63
Sample I.D. No.:	VR018
	LFG

Component	(Concentration in ppm, v/v)
Hydrogen sulfide	14.6

Michael L. Porter
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill/234

Tedlar Bag Sample

Date Received: March 21, 1991
Date Analyzed: March 21 & 22, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in %, v/v)			
Nitrogen	VR018	44.9	44.0	44.4	1.0
Oxygen	VR018	9.95	9.73	9.84	1.1
Methane	VR018	22.8	23.0	22.9	0.44
Carbon Dioxide	VR018	23.8	24.0	23.9	0.42
		(Concentration in ppm, v/v)			
TGNMO	VR018	4980	5360	5170	3.7
		(Concentration in ppb, v/v)			
Acetonitrile	VR018	40.2	37.8	39.0	3.1
Benzene	VR018	1710	1580	1640	4.0
Benzyl chloride	No Repeat				
Chlorobenzene	No Repeat				
Dichlorobenzenes*	No Repeat				
1,1-dichloroethane	No Repeat				
1,2-dichloroethane	No Repeat				
1,1-dichloro-ethylene	VR018	571	507	539	5.9
Dichloromethane	No Repeat				

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
Perchloroethene	VR018	11600	11200	11400	1.8
Carbon Tetrachloride	No Repeat				
Toluene	VR018	57100	57800	57400	0.61
1,1,1-trichloro-ethane	No Repeat				
Trichloroethene	No Repeat				
Chloroform	No Repeat				
Vinyl chloride	VR018	21200	21700	21400	1.2
m&p-xylene	VR018	16500	15600	16000	2.8
o-xylene	VR018	11700	11600	11600	0.43

One Tedlar bag sample, laboratory number 90801-63 was analyzed for 1150.1 contaminants. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 13 duplicate measurements from one Tedlar bag sample is 2.0%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill/234

Tedlar Bag Sample

Date Received: March 21, 1991
Date Analyzed: March 21, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Hydrogen sulfide	VR018	14.8	14.4	14.6	1.4

One Tedlar bag sample, laboratory number 90801-63 was analyzed for hydrogen sulfide. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 1 duplicate measurement from one Tedlar bag sample is 1.4%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill/234

Tedlar Bag Samples

Date Received: March 25, 1991
Date Analyzed: March 25 & 26, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in %, v/v)			
Nitrogen	VRISS7	38.0	38.2	38.1	0.26
Oxygen	VRISS7	1.46	1.48	1.47	0.68
Methane	VRISS7	29.6	29.7	29.6	0.17
Carbon Dioxide	VRISS7	30.1	30.3	30.2	0.33
		(Concentration in ppm, v/v)			
TGNMO	VR016	2200	1990	2100	5.0
		(Concentration in ppb, v/v)			
Acetonitrile	No Repeat				
Benzene	VR016	135	135	135	0.0
Benzyl chloride	VR016	<10	<10	---	---
Chlorobenzene	No Repeat				
Dichlorobenzenes*	VR016	798	750	774	3.1
1,1-dichloroethane	No Repeat				
1,2-dichloroethane	No Repeat				
1,1-dichloro-ethylene	VR016	28.6	34.4	31.5	9.2
Dichloromethane	No Repeat				

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
Perchloroethene	VR016	76.0	74.0	75.0	1.3
Carbon Tetrachloride	No Repeat				
Toluene	VR016	198	182	190	4.2
1,1,1-trichloro-ethane	VRISS7	89.8	89.8	89.8	0.0
Trichloroethene	VRISS7	395	387	391	1.0
Chloroform	No Repeat				
Vinyl chloride	VR016	2860	2980	2920	2.0
m&p-xylene	VR016	313	306	310	1.1
o-xylene	VR016	82.2	84.0	8.31	1.1

A set of 2 Tedlar bag samples, laboratory numbers 90841-(17 & 18) was analyzed for 1150.1 contaminants. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 15 duplicate measurements from the sample set of 2 Tedlar bag samples is 2.0%.

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA INC.	No.

Site / Facility# BRADLEY / 234

Site Name VALLEY RECLAMATION
9188 GLENOAKS BLVD SUNVALLEY CA 91352

Sampler: (Signature) [signature]

Bag Identification Number	Date	Time	Type Of Sample	Analyses: PERMANENT GASES	Analyses: TRIMO	Analyses: 1150 TOXICS				Field Testing			Field Comments	Lab* Comment
VR016	3/25	10:40	PROBE	✓	✓	✓								PROBE W-1
VR1587	3/25	11:00	PROBE	✓	✓	✓								PROBE W-9

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	3/25		[signature] Miller	3/25	17
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

SAMPLERS COPY

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA INC.	No.

Site / Facility# BRADLEY LANDFILL / 234

Site Name VALLEY RECLAMATION
9188 GLENOAKS SUN VALLEY Ca 91352

Sampler: (Signature) E. Drag

Bag Identification Number	Date	Time	Type Of Sample	Analyses: PERMANENT GASES	TGNMO	1150.1 TOXIC AIR COMPONENTS	HYDROGEN SULFIDE			Field Testing			Field Comments	Lab* Comments
~~VR016~~	~~3/21~~		~~PROBE~~	~~X~~	~~X~~	~~X~~								
VR1557 ~~VR018~~	~~3/21~~		~~PROBE~~	~~X~~	~~X~~	~~X~~								
VR018 ~~VR056~~	3/21		LFG	X	X	X	X						VR018	LFG 3

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Drag	3/21/91	4:20	Karen Porter	3/21/91	4:20
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

COPY

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS, AND QA/QC SUMMARY FOR THE MONTH OF APRIL

A AA Inc.
21354 Nordhoff St., Suite 113, Chatsworth, CA 91311 (818) 718-6070 • FAX (818) 718-9779
environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air Samples

Report Date : April 23, 1991
CSA No.: 81481460-01
Site : Bradley Landfill
Date Received : April 17, 1991
Date Analyzed : April 17, 18, & 19, 1991

AtmAA Lab No.:	91071-27	91071-28	91071-29
Sample I.D. No.:	VR048, Ambient Air U.W. <24 hr	VR047, Ambient Air U.W. 24 hr.	VR049, Ambient Air D.W. <24 hr
Component			
	(Concentration in ppm, v/v)		
Methane	1.90	1.76	4.03
TGNMO	<1	<1	<1
	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	1.15	1.09	1.17
Benzyl chloride	<0.8	<0.8	<0.8
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzenes*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	<0.1
Dichloromethane	0.76	1.15	0.40
Perchloroethene	0.42	0.32	0.22
Carbon Tetrachloride	0.11	0.10	0.10
Toluene	2.46	2.61	2.43
1,1,1-trichloroethane	4.46	2.38	1.77
Trichloroethene	0.14	0.06	<0.06
Chloroform	<0.08	<0.08	<0.08
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	2.04	1.76	1.81
o-xylenes	1.10	0.99	0.99

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organics reported as ppm methane.

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Ambient Air Samples

Report Date : April 23, 1991
CSA No.: 81481460-01
Site : Bradley Landfill
Date Received : April 17, 1991
Date Analyzed : April 17, 18, & 19, 1991

AtmAA Lab No.:	91071-30	91071-31
Sample I.D. No.:	VR050, Ambient Air D.W.< 24hr	VR046, Ambient Air D.W. 24hr.
Component	(Concentration in ppm, v/v)	
Methane	3.91	3.29
TGNMO	1.26	1.06
	(Concentration in ppb, v/v)	
Acetonitrile	<0.8	<0.8
Benzene	1.12	1.17
Benzyl chloride	<0.8	<0.8
Chlorobenzene	<0.1	<0.1
Dichlorobenzene*	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1
Dichloromethane	0.36	0.40
Perchloroethene	0.22	0.22
Carbon Tetrachloride	0.10	0.10
Toluene	2.52	2.66
1,1,1-trichloroethane	1.78	2.95
Trichloroethene	<0.06	<0.06
Chloroform	<0.08	<0.08
Vinyl chloride	<0.1	<0.1
m+p-xylenes	1.55	1.70
o-xylenes	0.95	0.76

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organics reported as ppm methane.

Michael L. Porter
Laboratory Director

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Tedlar Bag Samples

Report Date : April 15, 1991
CSA No.: 81481460-01
Site : Bradley Landfill
Date Received : April 10, 1991
Date Analyzed : April 10 & 11, 1991

AtmAA Lab No.:	91001-13	91001-14
Sample I.D. No.:	VR035	VR038
	ISS	ISS
	Grid #7	Grid #8
Component	(Concentration in ppm, v/v)	
Methane	1.81	1.78
TGNMO	1.10	1.47
	(Concentration in ppb, v/v)	
Acetonitrile	<0.8	<0.8
Benzene	1.18	1.08
Benzyl chloride	<0.8	<0.8
Chlorobenzene	<0.1	<0.1
Dichlorobenzenes*	<1.1	<1.1
1,1-dichloroethane	<0.47	<0.47
1,2-dichloroethane	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1
Dichloromethane	2.22	2.00
Perchloroethene	0.17	0.20
Carbon Tetrachloride	0.10	0.11
Toluene	2.61	2.62
1,1,1-trichloroethane	4.94	4.23
Trichloroethene	<0.06	<0.06
Chloroform	<0.08	<0.08
Vinyl chloride	<0.1	<0.1
m+p-xylenes	1.25	1.20
o-xylenes	0.94	0.88

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organics reported as ppm methane.

Michael L. Porter
Laboratory Director

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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Tedlar Bag Samples

Report Date : April 4, 1991
P.O. No.: 81481460-01
Site : Bradley Landfill
Date Received : April 1, 1991
Date Analyzed : April 2 & 3, 1991

AtmAA Lab No.:	90911-1	90911-2	90911-3
Sample I.D. No.:	VRISS10	VRISS09	VR037
	Probe E-8d	LFG	Probe W-1m
Component	(Concentration in %, v/v)		
Nitrogen	47.2	19.1	24.5
Oxygen	1.19	0.97	2.01
Methane	28.6	39.3	45.8
Carbon Dioxide	24.2	40.9	28.3
	(Concentration in ppm, v/v)		
TGNMO	494	12100	798
	(Concentration in ppb, v/v)		
Acetonitrile	<10	60.2	<10
Benzene	54.1	1820	32.6
Benzyl chloride	<100	<100	<100
Chlorobenzene	5.83	330	15.4
Dichlorobenzenes*	18.3	628	22.3
1,1-dichloroethane	159	1320	49.7
1,2-dichloroethane	<20	268	<20
1,1-dichloroethylene	203	1160	83.4
Dichloromethane	<60	22600	<60
Perchloroethene	395	20600	42.4
Carbon Tetrachloride	<5	<5	<5
Toluene	36.2	44000	13.2
1,1,1-trichloroethane	<10	356	<10
Trichloroethene	190	6640	31.5
Chloroform	<2	5.23	2.91
Vinyl chloride	973	2720	2660
m+p-xylenes	92.4	24100	21.9
o-xylenes	47.6	9790	11.9

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organics reported as ppm methane.

Michael L. Porter
Laboratory Director

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LABORATORY ANALYSIS REPORT

Hydrogen Sulfide Analysis
in Tedlar Bag Sample

Report Date :	April 5, 1991
CSA No.:	81481460-01
Site :	Bradley Landfill
Date Received :	April 1, 1991
Date Analyzed :	April 4, 1991

Hydrogen sulfide was analyzed by gas chromatography with a Hall electroyltic conductivity detector operated in the oxidative sulfur mode.

AtmAA Lab No.:	90911-2
Sample I.D. No.:	VRISS09
	LFG

Component	(Concentration in ppm, v/v)
Hydrogen sulfide	35.0

Michael L. Porter
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. No.: 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill

Tedlar Bag Samples

Date Received: April 10, 1991
Date Analyzed: April 10 & 11, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Methane	VR038	1.78	1.78	1.78	0.0
TGNMO	VR038	1.00	1.94	1.47	31
		(Concentration in ppb, v/v)			
Acetonitrile	VR038	<0.8	<0.8	---	---
Benzene	VR038	1.06	1.09	1.08	1.4
Benzyl chloride	VR038	<0.8	<0.8	---	---
Chlorobenzene	VR038	<0.1	<0.1	---	---
Dichlorobenzenes*	VR038	<1.1	<1.1	---	---
1,1-dichloroethane	VR035	<0.47	<0.47	---	---
1,2-dichloroethane	VR035	<0.2	<0.2	---	---
1,1-dichloro-ethylene	VR035	<0.1	<0.1	---	---
Dichloromethane	VR035	2.29	2.16	2.22	2.9
Perchloroethene	VR035	0.18	0.16	0.17	5.9
Carbon Tetrachloride	VR035	0.11	0.10	0.10	4.8
Toluene	VR038	2.54	2.71	2.62	3.2

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
1,1,1-trichloro-ethane	VR035	4.97	4.92	4.94	0.50
Trichloroethene	VR035	<0.06	<0.06	---	---
Chloroform	VR035	<0.08	<0.08	---	---
Vinyl chloride	VR035	<0.1	<0.1	---	---
m&p-xylene	VR038	1.20	1.20	1.20	0.0
o-xylene	VR038	0.90	0.87	0.88	1.7

A set of 2 Tedlar bag samples, laboratory numbers 91001-(13 & 14) was analyzed for 1150.1 comtaminants, permanent gases, and total gaseous non-methane organics (TGNMO). Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 10 duplicate measurements from the sample set of 2 Tedlar bag samples is 5.1%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill

Ambient Air Samples

Date Received: April 17, 1991
Date Analyzed: April 17, 18, & 19, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Methane	VR048	1.91	1.90	1.90	0.26
TGNMO	VR048	<1	<1	---	---
		(Concentration in ppb, v/v)			
Acetonitrile	VR047	<0.8	<0.8	---	---
Benzene	VR046	1.19	1.15	1.17	1.7
Benzyl chloride	VR047	<0.8	<0.8	---	---
Chlorobenzene	VR046	<0.1	<0.1	---	---
Dichlorobenzenes*	VR047	<1.1	<1.1	---	---
1,1-dichloroethane	VR050	<0.4	<0.4	---	---
1,2-dichloroethane	VR050	<0.2	<0.2	---	---
1,1-dichloro-ethylene	VR050	<0.1	<0.1	---	---
Dichloromethane	VR047	1.10	1.20	1.15	4.3
Perchloroethene	VR050	0.24	0.21	0.22	6.7
	VR046	0.22	0.22	0.22	0.0
Carbon Tetrachloride	VR050	0.10	0.09	0.10	5.3
	VR046	0.09	0.11	0.10	14

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
Toluene	VR046	2.70	2.63	2.66	1.3
1,1,1-trichloro-	VR050	1.78	1.79	1.78	0.28
ethane	VR046	2.94	2.96	2.95	0.34
Trichloroethene	VR050	<0.06	<0.06	---	---
	VR046	<0.06	<0.06	---	---
Chloroform	VR050	<0.08	<0.08	---	---
	VR046	<0.08	<0.08	---	---
Vinyl chloride	VR050	<0.1	<0.1	---	---
m&p-xylene	VR046	1.71	1.69	1.70	0.59
o-xylene	VR046	0.77	0.76	0.76	0.65

A set of 5 samples, laboratory numbers 91071-(27-31) was analyzed for 1150.1 contaminants, permanent gases, and total gaseous non-methane organcis (TGNMO). Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 12 duplicate measurements from the sample set of 5 Tedlar bag samples is 3.0%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill

Tedlar Bag Samples

Date Received: April 1, 1991
Date Analyzed: April 2 & 3, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in %, v/v)			
Nitrogen	VRISS10	46.9	47.6	47.2	0.74
Oxygen	VRISS10	1.23	1.15	1.19	3.4
Methane	VRISS10	28.6	28.6	28.6	0.0
Carbon Dioxide	VRISS10	24.3	24.1	24.2	0.41
		(Concentration in ppm, v/v)			
TGNMO	VR037	783	813	798	1.9
		(Concentration in ppb, v/v)			
Acetonitrile	VRISS09	58.6	61.8	60.2	2.6
Benzene	VRISS09	1820	1830	1820	0.27
Benzyl chloride	VRISS09	<100	<100	---	---
Chlorobenzene	VRISS09	340	321	330	2.9
Dichlorobenzenes*	VRISS09	678	579	628	7.9
1,1-dichloro-ethane	VRISS09	1350	1280	1320	2.7
	VR037	50.0	49.4	49.7	0.60
1,2-dichloro-ethane	VR037	<20	<20	---	---
1,1-dichloro-etylene	VRISS09	1150	1180	1160	1.3

APPENDIX E

LABORATORY RESULTS AND QA/QC SUMMARY

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
Dichloromethane	VRISS09	22600	22700	22600	0.22
	VR037	<60	<60	---	---
Perchloroethene	VRISS10	404	386	395	2.3
	VRISS09	21600	19600	20600	4.8
	VR037	42.5	42.3	42.4	0.23
Carbon Tetrachloride	VR037	<5	<5	---	---
Toluene	VRISS09	44300	43600	44000	0.80
1,1,1-trichloro-ethane	VRISS09	360	351	356	1.3
Trichloroethene	VRISS09	6630	6660	6640	0.22
	VR037	31.2	31.8	31.5	0.95
Chloroform	VR037	2.76	3.06	2.91	5.2
Vinyl chloride	VRISS09	2680	2760		
m&p-xylene	VRISS0	23100	25100	24100	4.1
o-xylene	VRISS09	10300	9280	9790	5.2

A set of 3 samples, laboratory numbers 90911-(1-3) was analyzed for 1150.1 contaminants, permanent gases, & TGNMO Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 24 duplicate measurements from the sample set of 3 Tedlar bag samples is 2.1%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill

Tedlar Bag Sample

Date Received: April 1, 1991
Date Analyzed: April 4, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Hydrogen sulfide	VRISS09	34.9	35.1	35.0	0.28

One Tedlar bag sample, laboratory number 90911-2 was analyzed for hydrogen sulfide. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 1 duplicate measurement from one Tedlar bag sample is 0.28%.

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA **Environmental Mgmt. Dept.**	ATMAA INC.	**No.**

Site / Facility#: Bradley /234

Site Name: Valley Reclamation Co.

Sampler: (Signature): Rodney L Colbert

Bag Identification Number	Date	Time	Type Of Sample	Permanent Gases	1150.1 Toxic Air Components	T6NMO		ATMAA Lab#					Field Comments	Lab* Comments
VR048	4/17/91	1:00pm	Ambient Air	X	X	X		91071-		27			UPWIND <24hr	
VR047	4/17/91		"	X	X	X				-28			UPWIND 24hr.	
VR049	4/17/91		"	X	X	X				-29			D.W. <24 Dup.	
VR050	4/17/91		"	X	X	X				-30			D.W. <24hr	
VR046	4/17/91		"	X	X	X				-31			D.W. 24hr.	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Rodney L. Colbert	4/17/91	12:30pm	Ernest Dragon	4/17/91	1:00pm
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Dragon	4/17/91	1:30	Karen Patel	4/17/91	1:38
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA **Environmental Mgmt. Dept.**	ATMAA INC	**No.**

Site/Facility # 234

Site Name BRADLEY 9100 GLENOAKS SUNVALLEY 91352

Sampler: (Signature) [signature]

ATMAA#	Bag Identification Number	Date	Time	Type Of Sample	PERMANENT GASES	TGNMO	1150.1 TOXIC COMPONENTS								Field Comments	Lab* Comments
91001-13	VR035	4/9	9:00	AMBIENT AIR (ISS)	✓	✓	✓								GRID# 7	
-14	VR038	4/9	9:00	AMBIENT AIR (ISS)	✓	✓	✓								GRID# 8	

Relinquished by: (*Signature*)	Date	Time	Received by: (*Signature*)	Date	Time
[signature]	4/10/91	10:30	Karen Porter	4/10/91	10:30
Relinquished by: (*Signature*)	Date	Time	Received by: (*Signature*)	Date	Time
Relinquished by: (*Signature*)	Date	Time	Received for Laboratory: (*Signature*)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA INC.	No.

Site / Facility# BRADLEY LANDFILL

Site Name VALLEY RECLAMATION
9188 GLENOAKS BLVD, SUNVALLEY CA. 91352

Sampler: (Signature) [signature]

#	Bag Identification Number	Date	Time	Type Of Sample	PERMANENT GASES	TGNMO	1150.1 TOXICS	H_2S						Field Comments	Lab* Comments
-1	VRESS10	4/1/91	2:20	PROBE E-8d	✓	✓	✓							PROBE E-8d 26% CH_4	
-2	VRISSD9	4/1/91	3:20	LFG	✓	✓	✓	✓						LFG ~ 42% CH_4	
-3	VR037	4/1/91	3:20	PROBE W-1M	✓	✓	✓							PROBE W-1M 41% CH_4	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	4/1/91	5:00	Karen Porter	4/1/91	5:10
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

LABORATORY RESULTS, CHAIN OF CUSTODY FORMS AND QA/QC SUMMARY FOR THE MONTH OF MAY

AtmAA Inc.
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LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants Analysis
in Ambient Air & Integrated Surface Samples

Report Date : May 29, 1991
P.O. No.: 81481460-01
Site : Bradley Landfill
Date Received : May 23, 1991
Date Analyzed : May 24, & 25, 1991

AtmAA Lab No.:	91431-3	91431-4	91431-5
Sample I.D. No.:	VR064	VR060	VR063
	A.A., D.W.	A.A., D.W.	A.A., D.W.
	24hr.	<24hr. DUP.	<24hr.
Component	(Concentration in ppm, v/v)		
Methane	2.06	5.05	4.62
TGNMO	<1	<1	1.00
	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	3.54	3.53	2.43
Benzyl chloride	<1.1	<1.1	<1.1
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzenes*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	<0.1
Dichloromethane	1.16	0.72	0.69
Perchloroethene	0.54	0.86	0.95
Carbon Tetrachloride	0.11	0.12	0.12
Toluene	8.76	8.94	4.55
1,1,1-trichloroethane	3.74	2.36	2.50
Trichloroethene	0.096	<0.06	<0.06
Chloroform	0.12	<0.08	0.12
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	3.76	4.64	2.42
o-xylene	1.37	1.83	0.87

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organcis reported as ppm methane.

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants Analysis
in Ambient Air & Integrated Surface Samples

Report Date : May 29, 1991
P.O. No.: 81481460-01
Site : Bradley Landfill
Date Received : May 23, 1991
Date Analyzed : May 24, & 25, 1991

AtmAA Lab No.:	91431-6	91431-7	91431-8
Sample I.D. No.:	VR065	VR072	VR068
	A.A., U.W.	A.A., U.W.	I.S.S.
	24hr.	<24hr.	Grid #4
Component	(Concentration in ppm, v/v)		
Methane	3.44	2.18	2.20
TGNMO	1.13	2.08	2.14
	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	<0.8
Benzene	3.67	3.14	2.47
Benzyl chloride	<1.1	<1.1	<1.1
Chlorobenzene	<0.1	<0.1	<0.1
Dichlorobenzenes*	<1.1	<1.1	<1.1
1,1-dichloroethane	<0.4	<0.4	<0.4
1,2-dichloroethane	<0.2	<0.2	<0.2
1,1-dichloroethylene	<0.1	<0.1	<0.1
Dichloromethane	NA	1.12	1.93
Perchloroethene	0.72	0.41	0.38
Carbon Tetrachloride	0.12	0.12	0.11
Toluene	8.35	4.45	6.64
1,1,1-trichloroethane	6.78	2.03	4.28
Trichloroethene	<0.06	<0.06	0.093
Chloroform	<0.08	0.082	<0.08
Vinyl chloride	<0.1	<0.1	<0.1
m+p-xylenes	3.97	1.43	2.70
o-xylene	1.52	0.54	0.97

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organics reported as ppm methane.

NA - Not Analyzed

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants Analysis
in Ambient Air & Integrated Surface Samples

Report Date :	May 29, 1991
P.O. No.:	81481460-01
Site :	Bradley Landfill
Date Received :	May 23, 1991
Date Analyzed :	May 24, & 25, 1991

AtmAA Lab No.:	91431-9
Sample I.D. No.:	VR066 I.S.S. Grid #3

Component	(Concentration in ppm, v/v)
Methane	2.03
TGNMO	2.57
	(Concentration in ppb, v/v)
Acetonitrile	<0.8
Benzene	2.09
Benzyl chloride	<1.1
Chlorobenzene	<0.1
Dichlorobenzenes*	<1.1
1,1-dichloroethane	<0.4
1,2-dichloroethane	<0.2
1,1-dichloroethylene	<0.1
Dichloromethane	1.22
Perchloroethene	0.36
Carbon Tetrachloride	0.12
Toluene	5.62
1,1,1-trichloroethane	3.70
Trichloroethene	<0.06
Chloroform	<0.08
Vinyl chloride	<0.1
m+p-xylenes	2.32
o-xylene	0.87

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organics reported as ppm methane.

Michael L. Porter
Laboratory Director

AtmAA Inc.
21354 Nordhoff St., Suite 113, Chatsworth, CA 91311 (818) 718-6070 • FAX (818) 718-9779
environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

SCAQMD Rule 1150.1 Contaminants
Analysis in Probe & Landfill Gas Samples

Report Date : May 31, 1991
P.O. No.: 81481460-01
Site : Bradley Landfill
Date Received : May 28, 1991
Date Analyzed : May 28, 29, & 30, 1991

AtmAA Lab No.:	91481-16	91481-17	91481-18
Sample I.D. No.:	VR045 Probe W2B	VR042 Probe E8Deep	VR062 Landfill Gas
Component	(Concentration in %, v/v)		
Nitrogen	68.4	57.0	20.1
Oxygen	1.64	3.84	1.39
Methane	11.0	22.6	40.4
Carbon Dioxide	18.2	17.1	36.7
	(Concentration in ppm,v/v)		
TGNMO	468	324	11200
	(Concentration in ppb, v/v)		
Acetonitrile	<0.8	<0.8	1.78
Benzene	395	77.2	2540
Benzyl chloride	<20	<20	<20
Chlorobenzene	9.99	18.6	383
Dichlorobenzenes*	20.3	1.29	450
1,1-dichloroethane	1660	135	2470
1,2-dichloroethane	53.1	52.2	147
1,1-dichloroethylene	468	153	607
Dichloromethane	<60	<60	7035
Perchloroethene	4710	313	16900
Carbon Tetrachloride	<0.5	<0.5	<0.5
Toluene	58.4	27.0	88600
1,1,1-trichloroethane	796	2.85	118
Trichloroethene	1750	171	5440
Chloroform	2.00	1.11	1.07
Vinyl chloride	2850	1000	2520
m+p-xylenes	49.6	16.5	34400
o-xylenes	67.7	<20	11300

* total amount containing meta, para & ortho isomers

TGNMO is total gaseous non-methane organcis reported as ppm methane.

Michael L. Porter
Laboratory Director

AtmAA inc
21354 Nordhoff St., Suite 113, Chatsworth, CA 91311 (818) 718-6070 • FAX (818) 718-9779
environmental consultants
laboratory services

LABORATORY ANALYSIS REPORT

Hydrogen Sulfide Analysis
in Probe & Landfill Gas Samples

Report Date :	June 3, 1991
CSA No.:	81481460-01
Site :	Bradley Landfill
Date Received :	May 28, 1991
Date Analyzed :	May 29, 1991

ANALYSIS DESCRIPTION

Hydrogen sulfide was analyzed by gas chromatography with a Hall electroyltic conductivity detector operated in the oxidative sulfur mode.

AtmAA Lab No.:	91481-16
Sample I.D. No.:	VR062
	LFG

Component	(Concentration in ppm, v/v)
Hydrogen sulfide	50.8

Michael L. Porter
Laboratory Director

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. No.: 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill

Ambient Air & Integrated Surface Samples

Date Received: May 23, 1991
Date Analyzed: May 24, & 25, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Methane	VR060	5.02	5.08	5.05	0.59
	VR066	2.03	2.03	2.03	0.0
TGNMO	VR060	<1	1.27	---	---
	VR066	2.34	2.79	2.57	8.9
		(Concentration in ppb, v/v)			
Acetonitrile	VR072	<0.8	<0.8	---	---
	VR066	<0.8	<0.8	---	---
Benzene	VR066	2.14	2.04	2.09	2.4
Benzyl chloride	VR066	<1.1	<1.1	---	---
Chlorobenzene	VR066	<0.1	<0.1	---	---
Dichlorobenzenes*	VR065	<1.1	<1.1	---	---
	VR066	<1.1	<1.1	---	---
1,1-dichloroethane	VR060	<0.4	<0.4	---	---
1,2-dichloroethane	VR060	<0.2	<0.2	---	---
1,1-dichloro-ethylene	VR064	<0.1	<0.1	---	---
	VR066	<0.1	<0.1	---	---
Dichloromethane	VR064	1.16	1.16	1.16	0.0
	VR066	1.22	1.22	1.22	0.0

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
Perchloroethene	VR064	0.57	0.51	0.54	5.6
	VR066	0.36	0.37	0.36	1.4
Carbon Tetrachloride	VR064	0.10	0.11	0.11	9.1
	VR066	0.11	0.12	0.12	4.3
Toluene	VR066	5.70	5.53	5.62	1.5
1,1,1-trichloro-ethane	VR064	3.76	3.73	3.74	0.40
	VR066	3.72	3.69	3.70	0.40
Trichloroethene	VR064	0.096	<0.06	---	---
	VR066	<0.06	<0.06	---	---
Chloroform	VR064	0.12	<0.08	---	---
	VR066	<0.08	<0.08	---	---
Vinyl Chloride	VR064	<0.1	<0.1	---	---
	VR066	<0.1	<0.1	---	---
m&p-xylene	VR066	2.40	2.24	2.32	3.5
o-xylene	VR065	1.44	1.59	1.52	5.0
	VR066	0.87	0.87	0.87	0.0

A set of 7 ambient air and integrated surface samples, laboratory numbers 91431-(3-9) was analyzed for SCAQMD Rule 1150.1 Contaminants, methane, and total gaseous non-methane organics (TGNMO). Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 16 duplicate measurements from the sample set of 7 ambient air and integrated surface samples is 2.7%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

CSA No.: 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill

Probe & Landfill Gas Samples

Date Received: May 28, 1991
Date Analyzed: May 29, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppm, v/v)			
Hydrogen sulfide	VR062	50.5	51.2	50.8	0.69

A set of three probe and landfill gas samples, laboratory numbers 91481-(16-18) was analyzed for hydrogen sulfide. Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 1 duplicate measurement from three probe and landfill gas samples is 0.69%.

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)

P.O. No.: 81481460-01
AtmAA Project No.: 8000
Site: Bradley Landfill

Probe & Landfill Gas Samples

Date Received: May 28, 1991
Date Analyzed: May 28, 29, & 30, 1991

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in %, v/v)			
Nitrogen	VR045	68.1	68.7	68.4	0.44
Oxygen	VR045	1.64	1.64	1.64	0.0
Methane	VR062	40.5	40.4	40.4	0.12
Carbon Dioxide	VR062	37.7	35.7	36.7	2.7
		(Concentration in ppm, v/v)			
TGNMO	VR045	470	467	468	0.32
		(Concentration in ppb, v/v)			
Acetonitrile	VR062	1.78	1.78	1.78	0.0
Benzene	VR062	2540	2540	2540	0.0
Benzyl Chloride	VR062	<20	<20	---	---
Chlorobenzene	VR062	383	383	383	0.0
Dichlorobenzenes*	VR062	433	466	450	3.7
1,1-dichloroethane	No Repeat				
1,2-dichloroethane	VR042	54.3	50.2	52.2	3.9
1,1-dichloro-ethylene	VR042	146	160	153	4.6

QUALITY ASSURANCE SUMMARY
(Duplicates Analyses)
(continued)

Component	Sample ID	Duplicates Analyses Run #1	Run #2	Mean Conc.	% Diff. from Mean
		(Concentration in ppb, v/v)			
Dichloromethane	VR042	<60	<60	---	---
	VR062	7180	6890	7035	2.1
Perchloroethene	VR045	4860	4560	4710	3.2
Carbon Tetrachloride	VR042	<0.5	<0.5	---	---
Toluene	VR062	88700	88400	88600	0.17
1,1,1-trichloro-ethane	VR062	121	114	118	3.0
Trichloroethene	VR062	5470	5400	5440	0.64
Chloroform	VR042	1.00	1.22	1.11	9.9
Vinyl Chloride	VR042	1000	1010	1000	0.50
m&p-xylene	VR062	34200	34700	34400	0.72
o-xylene	VR062	11100	11500	11300	1.8

A set of 3 probe and landfill gas samples, laboratory numbers 91481-(16-18) was analyzed for SCAQMD Rule 1150.1 contaminants, permanent gases, and total gaseous non-methane organcis (TGNMO). Agreement between duplicate analyses is a measure of precision and is shown above in the column "% Difference from Mean". Duplicate analyses are an important part of AtmAA's quality assurance program. The average % Difference from Mean for 20 duplicate measurements from the sample set of 3 probe and landfilll gas samples is 1.9%.

CHAIN OF CUSTODY RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	No.
WMNA Environmental Mgmt. Dept.	ATMAA INC	

Site / Facility# VALLEY RECLAMATION / 234

Site Name 9188 GLENOAKS BLVD
SUN Valley Ca. 91352

Sampler: (Signature) Ernest Drago

Bag Identification Number	Date	Time	Type Of Sample	PERMANENT GASES	11501 TOXIC AIR CONTAMINANTS	T.G.N.M.O.		ATMAA Lab#					Field Comments	Lab* Comments
VR064	5/23	1000	A.A. DOWNWIND 24hrs	X	X	X		91431-3						D.W. 24hrs
VR060	5/23	0600	A.A. D.W. <24HR DUP.	X	X	X			-4					D.W. <24hr DUP
VR063	5/23	0600	A.A. D.W. <24HR	X	X	X			-5					D.W. <24HR
VR065	5/23	1000	A.A. U.W. 24hr	X	X	X			-6					U.W. 24HR
VR072	5/23	0600	A.A. U.W. <24HR	X	X	X			-7					U.W. <24HR
VR068	5/22	0900	I.S.S. GRID #4	X	X	X			-8					ISS GRID #4
VR066	5/22	0900	ISS. GRID #3	X	X	X			-9					ISS GRID #3

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Drago	5/23/91	12:00	Karen Porter	5/23/91	12:00
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

CHAIN OF CU[illegible]Y RECORD

SAMPLE COLLECTOR	ANALYTICAL LABORATORY	
WMNA Environmental Mgmt. Dept.	ATMAA INC.	No.

Site / Facility# 234 / 9188 Glenoaks Blvd Sun-Valley

Site Name Bradley Landfill

Sampler: (Signature) Ernest Dragan

Bag Identification Number	Date	Time	Type Of Sample	Permanent Gases	USA Toxic Air Contaminants	TGNMO	H_2S		AtmAA Lab #				Field Comments	Lab* Comments
VR045	5/28	3:45	Probe West 2B	X	X	X			91481-		16		CH_4=10%	Probe W2B
VR042	5/28	4:20	East 8 Deep	X	X	X				-	17		CH_4=28%	Probe EBDeep
VR062	5/28	4:00	Land fill Gas	X	X	X	X			-	18		CH_4=46%	Landfill Gas

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Ernest Dragan	5/28/91	5:14	Brian [illegible]	5-28-91	5:15
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received for Laboratory: (Signature)	Date	Time

* Condition of Sample: Empty = E; Empty - 1/4 = 1; 1/4-1/2 = 2; 1/2-3/4 = 3; 3/4-Full = 4; Over Full = 0

APPENDIX F

PERIMETER PROBE SITE MAP AND WEEKLY GAS PROBE READINGS

PARTIALLY SCANNED
OVERSIZE ITEM(S)

See document # 2199225
for partially scanned image(s).

19 OF 19

For complete hardcopy version of the oversize document
contact the Region IX Superfund Records Center at
(415) 536-2000

WEEKLY PERIMETER PROBE READINGS FOR

MONTH OF MARCH

Valley Reclamation
9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probe: Readings

EQUIPMENT USED

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 30.04

BY: DRAGAN DATE: 3/5/91 START TIME: 12:00pm FINISH TIME: 9:45pm

BRADLEY EAST (AFTER) BAROMETER 29.99

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	0	-0.11								
E-2S	7	+0.12								
E-2M	0	+0.16								
E-2D	N/A	N/A								
E-3	0	+0.11								
E-4	0	+0.07								
E 5S	0	+0.04								
E-5M	0	+0.06								
E-5D	0	+0.13								
E-6	N/A	→ FLOODED								
E-7	0	+0.19 +0.07								
E-8S	0									
E-8M	0	+0.34								
E-8D	25	+0.40	No Data							
E-9	0	+0.09								
E-10	0	+0.13								
E-11S	0	+0.07								
E-11M	0	+0.03								
E-11D	0	+0.16								
E-12	0	+0.12								
E-13	0	+0.04								
E-14S	0	+0.03								
E-14M	0	+0.04								
E-14D	0	+0.06								

CALIBRATION:

	50%	2.5%	ACCURACY
Calib.	✓	✓	NA
AUDIT	48	2.5	= 96%

cc: G. Loughnane
J. Mays
B. Austin/approval RVA
D. Edwards
B. Biskeborn
S. Kilgore

113

Valley Reclamation
9227 Tujunga Ave.
Valley Ca 91352
)767-6180

BRADLEY LANDFILL
Gas Probes Readings

EQUIPMENT USED

MAKE- GAS TECH MAKE- NEOTONICS

MODEL-NP-204 MODEL-PDM 205

cc: G. Loughnane
J. Mays
APPR RVA B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

(BEFORE)BAROMETER 30.04

BY: DRAGAN DATE: 3/5/91 START TIME: 9:45 FINISH TIME: 4:45

BRADLEY WEST (AFTER)BAROMETER 29.99

ROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
V-1	55	+0.22	40	80	-34	+.22	4.3	10.2/.31	51.4	4.9
			41	80	-36	+.2	3.7	21.4/.49	45.5	5.4
V-2	33	+0.05	42	98	-36	+.14	16.2	25.6/.54	42.4	19.3
-3	20	+0.05	43	70	-25	+.23	3.7	12.1/.29	36.7	
			44	80	-25	+.23	3.7	8.6/.4	46.6	4.9
-4	3	-0.02								
	0	+0.03								
-6	13	+0.06	47	92	-25	+.12	18.4	11.3/.45	44.4	23.3
-7	14	+0.24	48	90	-25	+.14	11.5	6.9/.32	41.1	12.4
			49	96	-25	+.25	6.3	9.7/.36	51.7	8.9
-8	10	+0.06	50	86	-25	+.22	6.3	13.3/.36	50.1	10.4
-9	36	+0.05	51	92	-32	+.15	7.7	9.7/.28	49.4	9.1
-10	5.0	+0.15	51	"	"	"	"	"	"	"
-11	0	+0.02								
	0	+0.01								
	0	+0.01								
-14	0	+0.02								

9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

Gas Probe: Readings

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 30.10

BY: R. Collins DATE: 3/11/91 START TIME: 0920 FINISH TIME: 1123

BRADLEY EAST (AFTER) BAROMETER 30-08

PROBE	CH4%	PRESS	WELL	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	Ø	-0.75								
E-2S	BROKEN									
E-2M	Ø	+0.08								
E-2D	Ø	-0.30								
E-3	Ø	-0.03								
E-4	Ø	-0.50								
E-5S	Ø	+0.01								
E-5M	Ø	-0.01								
E-5D	Ø	-0.16								
E-6	Ø	-0.20								
E-7	Ø	+0.20								
E-8S	Ø	-0.19								
E-8M	Ø	-0.34								
E-8D	28	-0.95								
E-9	Ø	0.00								
E-10	Ø	-0.11								
E-11S	Ø	-0.12								
E-11M	Ø	-0.19								
E-11D	Ø	-1.28								
E-12	Ø	-0.19								
E-13	Ø	0.00								
E-14S	Ø	-0.01								
E-14M	Ø	-0.07								
E-14D	Ø	-0.71								

CALIBRATION:

cc: G. Loughnane
J. Mays
B. Austin/approval_____
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

Valley Reclamation
9227 Tujunga Ave.
Sun Valley Ca 91352
(818)767-6180

BRADLEY LANDFILL
Gas Probes Readings

EQUIPMENT USED

MAKE- GAS TECH MAKE- NEOTONICS

MODEL-NP-204 MODEL-PDM 205

cc: G. Loughnane
J. Mays
APPR_____ B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

(BEFORE)BAROMETER 30.10

BY: R. Collins DATE: 3/11/91 START TIME: 11:23 FINISH TIME: 1350

BRADLEY WEST (AFTER)BAROMETER 30.08

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
W-1	35	-0.15								
W-2	35	-0.05								
W-3	40	-0.05								
4	Ø	-0.06								
5	Ø	-0.02								
N-6	30	-0.04								
N-7	Ø	+0.06								
N-8	35	+0.02								
N-9	44	-0.01								
V-10	Ø	-0.20								
V-11	Ø	0.00								
V-12	Ø	+0.02								
V-13	Ø	+0.05								
V-14	Ø	+0.06								

ALIBRATION:

San Fernando CA 91334
(818)767-6180

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 29.92

BY: DRAGAN DATE: 3/18/91 START TIME: 10:00 FINISH TIME: 11:30 PM

BRADLEY EAST (AFTER) BAROMETER 29.90

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	0	-0.03								
E-2S	0	N/A								
E-2M	0	N/A								
E-2D	N/A	BROKEN CAP								
E-3	0	+0.11								
E-4	2	+0.12								
E-5S	0	+0.08								
E-5M	0	+0.21								
E-5D	0	+0.05								
E-6	0	-0.32								
E-7	0	-0.31								
E-8S	0	0.0								
E-8M	0	+0.03								
E-8D	23	+0.31 ~~+0.31~~								
E-9	0	+0.07								
E-10	0	+0.07								
E-11S	3	+0.07								
E-11M	0	+0.31								
E-11D	0	+0.08								
E-12	0	+0.03								
E-13	0	+0.01								
E-14S	0	+0.01								
E-14M	0	+0.01								
E-14D	0	+0.21								

CALIBRATION:

cc: G. Loughnane
J. Mays
B. Austin/approval_____
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

(818)767-6180

EQUIPMENT USED

MAKE- GAS TECH MAKE- NEOTONICS

MODEL-NP-204 MODEL-PDM 205

D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

(BEFORE)BAROMETER 29.93

BY: DRAGAN DATE: 3/18/91 START TIME: 9:00 AM FINISH TIME: 9:50 AM

BRADLEY WEST

(AFTER)BAROMETER 29.92

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
W-1	55	+0.35								
W-2	37	+0.07								
W-3	11	+0.13								
W-4	5	+0.04								
W-5	0	+0.02								
5	20	+0.03								
V-7	13	+0.26								
V-8	17	+0.09								
V-9	39	+0.17								
V-10	4	+0.39								
-11	0	+0.07								
-12	0	+0.09								
-13	0	+0.08								
4	0	+0.02								

RATION:

(818)767-6180

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 29.79

BY: R. Collins DATE: 3/26/91 START TIME: 9:00 FINISH TIME: 1:10 pm

BRADLEY EAST (AFTER) BAROMETER 29.87

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	Ø	-0.51								
E-2S	Broken									
E-2M	Ø	-0.21								
E-2D	Ø	-0.32								
E-3	Ø	-0.33								
E-4	Ø	-0.14								
E-5S	Ø	+0.02								
E-5M	Ø	-0.04								
E-5D	Ø	-0.88								
E-6	Ø	-0.03								
E-7	Ø	-0.75								
E-8S	Ø	-0.32								
E-8M	Ø	-0.38								
E-8D	35	-0.61								
E-9	Ø	-0.02								
E-10	Ø	-0.13								
E-11S	Ø	-0.14								
E-11M	Ø	-0.18								
E-11D	Ø	-0.78								
E-12	Ø	-0.24								
E-13	Ø	0.00								
E-14S	Ø	-0.02								
E-14M	Ø	-0.10								
E-14D	Ø	+0.01								

CALIBRATION:

cc: G. Loughnane
J. Mays
B. Austin/approval_____
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

(818)767-6180

EQUIPMENT USED

MAKE- GAS TECH MAKE- NEOTONICS

MODEL-NP-204 MODEL-PDM 205

D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

(BEFORE)BAROMETER 29.87

BY: R. Collins DATE: 3/26/91 START TIME: 1:10 pm FINISH TIME: 2:50 pm

BRADLEY WEST

(AFTER)BAROMETER 29.86

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
W-1	45	-0.14								
W-2	Ø	-0.13								
W-3	Ø	-0.23								
W-4	Ø	-0.10								
W-5	Ø	-0.06								
W-6	Ø	-0.8								
W-7	Ø	-0.32								
W-8	Ø	-0.08								
W-9	Ø	-0.04								
W-10	Ø	-0.08								
W-11	Ø	+0.03								
W-12	Ø	-0.01								
W-13	Ø	+0.01								
W-14	Ø	+0.05								

CALIBRATION:

	CH4	Press
S	Ø	-0.14
Probe 1		-0.03

	CH4	Press
Probe 2	14	[illegible]

	CH4	Press
S	Ø	-0.18
Probe 2	[illegible]	[illegible]

WEEKLY PERIMETER PROBE READINGS FOR

MONTH OF APRIL

um Valley Ca 91352
818)7(7-6180

EQUIPMENT USED

MAKE- GAS TECH MAKE- NEOTONICS

MODEL-NP-204 MODEL-PDM 205

J. Mays
APPR B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

(BEFORE)BAROMETER 30.01

Y: Collins/Drayson DATE: 4/1/91 START TIME: 10:00 am FINISH TIME: 11:55 am

BRADLEY WEST (AFTER)BAROMETER 30.10

ROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
1-1	35	-0.06								
1-2	Ø	-0.06								
1-3	Ø	-0.07								
1-4	Ø	-0.04								
	Ø	-0.03								
1-6	2	-0.03								
1-7	Ø	-0.08								
1-8	Ø	-0.04								
1-9	24	-0.01								
1-10	Ø	-0.03								
1-11	Ø	+0.03								
1-12										
13	Ø	+0.03								
14										

ALIBRATION:

9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

Gas Probe: Readings

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 30.08

BY: Collins/Dragan DATE: 4/1/91 START TIME: 2:08 pm FINISH TIME:

BRADLEY EAST (AFTER) BAROMETER 30.08

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
* E-1	Ø	-0.04								
* E-2S	Ø	-0.01								
* E-2M	Ø	-0.09								
* E-2D	Broken									
E-3	Ø	-0.08								
E-4	Ø	-0.09								
E-5S	Ø	+0.02								
E-5M	Ø	-0.06								
E-5D	Ø	-0.02								
E-6	Ø	-0.04								
E-7	Ø	-0.08								
* E-8S	Ø	-0.14								
* E-8M	Ø	-0.09								
* E-8D	27	-0.09								
* E-9	Ø	+1.19								
E-10	Ø	-0.03								
E-11S	Ø	+0.01								
E-11M	Ø	+0.17								
E-11D	Ø	-0.25								
E-12	Ø	+0.01								
E-13	Ø	-0.01								
E-14S	Ø	+0.02								
E-14M	Ø	+0.03								
E-14D	Ø	-0.09								

CALIBRATION:

* Probe was covered in mud.

cc: G. Loughnane
J. Mays
B. Austin/approval
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

Valley Reclamation
9227 Tujunga Ave.
Sun Valley, Ca 91352
(818) 767-6180

BRADLEY LANDFILL
Gas Probe Readings

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 30.11
BAROMETER (after): 30.10

BY: Collins/Dragan DATE: 4/1/91 START TIME: 10:00am FINISH TIME: 1155 am

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ (cfm)
W-1S	Ø	-0.05								
W-1M	43	+0.02								
W-1D	3.5	-0.08								
W-2A	0.8	-0.14								
W-2B										
W-3S	0	-0.00								
W-3M	2	-0.12								
W-3D	0	-0.10								
W-4										
W-5S										
W-5M										
W-5D										
W-6										
W-7S										
W-7M										
W-7D										
W-8										
W-9	17	+0.02								
W-10S	0	-0.02								
W-10M	0	+0.01								
W-10D	0.8	-0.03								
W-11	Ø	+0.03								
W-12S	Ø	+0.03								
W-12M	Ø	+0.06								
W-12D	Ø	+0.05								
W-13	Ø	+0.04								
W-14S	Ø									
W-14M	Ø									
W-14D	Ø									

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Gas Probes Readings

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 30.04

BY: DRAGAN DATE: 4/9/91 START TIME: 12:30 FINISH TIME: 2:30

BRADLEY EAST (AFTER) BAROMETER 30.04

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	Ø	+0.02								
E-2S	Ø	+0.13								
E-2M	Ø	+0.32								
E-2D	UNDER REPAIR									
E-3	Ø	+0.08								
E-4	Ø	+0.07								
E-5S	Ø	+0.05								
E-5M	Ø	+0.06								
E-5D	Ø	+0.18								
E-6	Ø	+0.02								
E-7	Ø	+0.15								
E-8S	Ø	+0.09								
E-8M	Ø	+0.16								
E-8D	24	+0.57								
E-9	Ø	+0.18								
E-10	Ø	+0.07								
E-11S	Ø	+0.05								
E-11M	Ø	+0.11								
E-11D	Ø	+0.17								
E-12	Ø	+0.18								
E-13	Ø	+0.03								
E-14S	Ø	+0.09								
E-14M	Ø	+0.17								
E-14D	Ø	+0.28								

CALIBRATION:

cc: G. Loughnane
J. Mays
B. Austin/approval_____
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

Valley Reclamation
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Sun Valley, Ca 91352
(818) 767-6180

BRADLEY LANDFILL
Gas Probe Readings
Revision 1

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 30.04
BAROMETER (after): 30.01

BY: DRAGAN DATE: 4/9/91 START TIME: 2:30 FINISH TIME: 3:30

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PW ("wc)	FLOW (cfm)	O2%	N2%	CH4%	WELL ADJ (cfm)
W-1S	Ø	+0.16								
W-1M	34	+0.30								
W-1D	Ø	+0.70								
W-2A	Ø	+0.15								
W-2B	Ø	+0.30								
W-3S	2	+0.18								
W-3M	Ø	+0.38								
W-3D	Ø	+0.73								
W-4	Ø	+0.24								
W-5S	Ø	+0.11								
W-5M	Ø	+0.27								
W-5D	Ø	+0.92								
W-6	Ø	+0.26								
W-7S	2	+0.15								
W-7M	5	+0.41								
W-7D	5	+1.02								
W-8	Ø	+0.11								
W-9	14	+0.25								
W-10S	2	+0.04								
W-10M	Ø	+1.107								
W-10D	4	+0.14								
W-11	Ø	+0.01								
W-12S	Ø	+0.01								
W-12M	Ø	+0.09								
W-12D	2	+1.29								
W-13	Ø	+0.03								
W-14S	Ø	+0.01								
W-14M	Ø	+0.05								
W-14D	Ø	+0.08								

Sun Valley Ca 91352
818)767-6180

EQUIPMENT USED

MAKE- GAS TECH MAKE- NEOTONICS

MODEL-NP-204 MODEL-PDM 205

APPR B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

(BEFORE)BAROMETER 30.04

Y: DRAGAN DATE: 4/9/91 START TIME: 2:30 FINISH TIME: 3:30

BRADLEY WEST (AFTER)BAROMETER 30.01

ROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
V-1	0.4	+0.34								
V-2	Ø	+0.15								
V-3	Ø	+0.24								
V-4	Ø	+0.10								
	Ø	~~[illegible]~~								
-5	Ø	+0.02								
V-6	Ø	+0.07								
V-7	3	+0.70								
V-8	Ø	+0.07								
V-9	23	+0.12								
V-10	Ø	+0.46								
V-11	Ø	+0.01								
V-12	Ø	+0.0								
V-13	*									
4	*									

RATION: * DECOMMISSIONED GAS PROBE

Valley Reclamation
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Sun Valley, Ca 91352
(818) 767-6180

BRADLEY LANDFILL
Gas Probe Readings
Revision 1

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 29.90
BAROMETER (after): 29.88

BY: R. Collins DATE: 4/15/91 START TIME: 1100 FINISH TIME: 1200

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PW (" wc)	FLOW (cfm)	O2%	N2%	CH4%	WELL ADJ (cfm)
W-1S	0	+0.02								
W-1M	43	+0.6								
W-1D	0	+0.08								
W-2A	0	+0.02								
W-2B	1.5	0.00								
W-3S	0	+0.02								
W-3M	0	+0.05								
W-3D	0	+0.16								
W-4	0	+0.05								
W-5S	0	+0.03								
W-5M	0	+0.05								
W-5D	3.5	+0.10								
W-6	0	+0.06								
W-7S	1.5	+0.06								
W-7M	11	+0.15								
W-7D	19	+0.40								
W-8	0	+0.04								
W-9	15	+0.07								
W-10S	0.5	+0.01								
W-10M	0	+0.56								
W-10D	1.5	+0.06								
W-11	0	+0.07								
W-12S	0	+0.03								
W-12M	0	+0.14								
W-12D	0	+0.77								
W-13	0	+0.06								
W-14S	0	+0.03								
W-14M	0	+0.05								
W-14D	0	+0.45								

W-9A 27 +0.07

9227 Tujunga Ave
Sun Valley Ca 91352
(818)767-6180

Gas Probe: Readings

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 29.90

BY: W. Collins DATE: 4/15/91 START TIME: 9:30 FINISH TIME: 11:05

BRADLEY EAST (AFTER) BAROMETER: 29.88

PROBE	CH4%	PRESS	WELL	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	Ø	-0.06								
E-2S	Broken									
E-2M	Ø	-0.05								
E-2D	Ø	-0.10								
E-3	Ø	-0.03								
E-4	Ø	-0.01								
E-5S	Ø	+0.02								
E-5M	Ø	+0.03								
E-5D	Ø	+0.04								
E-6	Ø	0.00								
E-7	Ø	-0.02								
E-8S	Ø	-0.05								
E-8M	Ø	-0.07								
E-8D	26	+0.14								
E-9	Ø	+0.01								
E-10	Ø	0.00								
E-11S	Ø	-0.02								
E-11M	Ø	-0.04								
E-11D	Ø	+0.03								
E-12	Ø	-0.04								
E-13	Ø	+0.01								
E-14S	Ø	-0.02								
E-14M	Ø	-0.07								
E-14D	Ø	+0.06								

CALIBRATION:

cc: G. Loughnane
J. Mays
B. Austin/approval_____
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

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BRADLEY LANDFILL
Gas Probe Readings
Revision 2

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 29.93
BAROMETER (after): 29.92

BY: DRAGAN DATE: 4/23/91 START TIME: 2:10 FINISH TIME: 3:00

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PW ("wc)	FLOW (cfm)	O2%	N2%	CH4%	WELL ADJ (cfm)
W-1S	Ø	+0.03								
W-1M	52	+0.15								
W-1D	Ø	+0.78								
W-2A	Ø	+0.06								
W-2B	7	+0.4								
W-3S	Ø	+0.08								
W-3M	Ø	+0.15								
W-3D	Ø	+0.31								
W-4	Ø	+0.08								
W-5S	Ø	+0.02								
W-5M	Ø	+0.07								
W-5D	6	+0.24								
W-6	Ø	+0.07								
W-7S	Ø	+0.05								
W-7M	12	+0.15								
W-7D	20	+0.42								
W-8	6	+0.05								
W-9A	35	+0.03								
W-9B	18	+0.09								
W-10S	2	+0.02								
W-10M	Ø	+0.56								
W-10D	4	+0.09								
W-11	Ø	+0.02								
W-12S	Ø	+0.04								
W-12M	Ø	+0.10								
W-12D	Ø	+0.72								
W-13	Ø	+0.06								
W-14S	Ø	+0.02								
W-14M	Ø	+0.05								
W-14D	Ø	+0.43								

Comments: Probe W-2A and W-9A are old probes.
Probe W-2B and W-9B are new probes.

9227 Tujunga Ave
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(818)767-6180

Gas Probes Readings

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 29.93

BY: DRAGAN DATE: 4/23/91 START TIME: 12:30 FINISH TIME: 2:00

BRADLEY EAST (AFTER) BAROMETER 29.93

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL ADJ CFM
E-1	Ø	-0.02								
E-2S	BROKEN									
E-2M	Ø	-0.02								
E-2D	Ø	+0.12								
E-3	Ø	+0.02								
E-4	5	+0.03								
E-5S	Ø	+0.03								
E-5M	Ø	+0.09								
E-5D	Ø	+0.02								
E-6	0	+0.01								
E-7	0	-0.01								
E-8S	Ø	+0.04								
E-8M	Ø	+0.03								
E-8D	26	+0.39								
E-9	Ø	±0.0								
E-10	Ø	+0.04								
E-11S	Ø	+0.01								
E-11M	Ø	+0.02								
E-11D	Ø	+0.05								
E-12	Ø	+0.04								
E-13	Ø	+0.01								
E-14S	Ø	+0.02								
E-14M	Ø	+0.01								
E-14D	Ø	+0.22								

CALIBRATION:

cc: G. Loughnane
J. Mays
B. Austin/approval_____
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

Valley Reclamation
9227 Tujunga Ave.
Sun Valley, Ca 91352
(818) 767-6180

BRADLEY LANDFILL
Gas Probe Readings
Revision 2

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
[redacted]

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 29.94
BAROMETER (after): 29.93

BY: BRAGAN DATE: 4/30 START TIME: 11:00am FINISH TIME: 12:00pm

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PW (" wc)	FLOW (cfm)	O2%	N2%	CH4%	WELL ADJ (cfm)
W-1S	Ø	+0.07								
W-1M	30	+0.19								
W-1D	Ø	+0.14								
W-2A	6	+0.05								
W-2B	7	+0.14								
W-3S	Ø	+0.08								
W-3M	Ø	+0.13								
W-3D	Ø	+0.18								
W-4	Ø	+0.09								
W-5S	Ø	+0.04								
W-5M	Ø	+0.11								
W-5D	4	+0.11								
W-6	Ø	+0.12								
W-7S	Ø	+0.07								
W-7M	Ø	+0.11								
W-7D	Ø	+0.15								
W-8	4	+0.05								
W-9A	32	+0.07								
W-9B	17	+0.11								
W-10S	Ø	+0.02								
W-10M	Ø	+0.26								
W-10D	5.[illegible]	+0.03								
W-11	Ø	+0.02								
W-12S	Ø	+0.01								
W-12M	Ø	+0.06								
W-12D	Ø	+0.21								
W-13	Ø	+0.13								
W-14S	Ø	+0.02								
W-14M	Ø	+0.03								
W-14D	Ø	+0.22								

Comments: Probe W-2A and W-9A are old probes.
Probe W-2B and W-9B are new probes.

NOTE: GAS RECOVERY SYSTEM WAS DOWN FROM 7AM - 3PM FOR MAINTENANCE (TIE-IN) ON GAS LINE TO FLARE

Sun Valley Ca 91352
(818)767-6180

MAKE-GAS TECH MAKE- NEOTRONICS

MODEL- NP-204 MODEL- PDM 205

(BEFORE) BAROMETER 29.74

BY: DRAGAN DATE: 4/30 START TIME: 9:00 AM FINISH TIME: 11:00 AM

BRADLEY EAST (AFTER) BAROMETER 29.94

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PH (°wc)	PW (°wc)	FLOW (cfm)	N2/O2%	CH4%	WELL AD CFM
E-1	Ø	+0.06								
E-2S	BROKEN									
E-2M	Ø	+0.08								
E-2D	Ø	+0.07								
E-3	Ø	+0.07								
E-4	6	+0.04								
E-5S	Ø	+0.12								
E-5M	Ø	+0.04								
E-5D	Ø	-0.01								
E-6	Ø	+0.04								
E-7	Ø	+0.05								
E-8S	Ø	+0.04								
E-8M	Ø	+0.04								
E-8D	25	+0.04								
E-9	Ø	+0.01								
E-10	Ø	+0.03								
E-11S	Ø	0.00								
E-11M	Ø	-0.02								
E-11D	Ø	-0.21								
E-12	Ø	-0.04								
E-13	Ø	+0.01								
E-14S	Ø	-0.08								
E-14M	Ø	-0.01								
E-14D	Ø	-0.02								

CALIBRATION:

cc: G. Loughnane
J. Mays
B. Austin/approval
D. Edwards
B. Biskeborn
S. Kilgore
[redacted]

NOTE: GAS RECOVERY SYSTEM WAS DOWN FROM 7 AM-3PM FOR MAINTENANCE (T N) ON GAS LINE TO FLARE

WEEKLY PERIMETER PROBE READINGS FOR

MONTH OF MAY

Valley Reclamation
9227 Tujunga Ave.
Sun Valley, Ca 91352
(818) 767-6180

BRADLEY LANDFILL
Gas Probe Readings
Revision 2

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 29.82
BAROMETER (after): 29.79

BY: Wilson/Dragan DATE: 5/7/91 START TIME: 2:50 FINISH TIME: 3:45

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PW (°wc)	FLOW (cfm)	O2%	N2%	CH4%	WELL ADJ (cfm)
W-1S	Ø	+0.09								
W-1M	20	+0.11								
W-1D	Ø	+0.23								
W-2A	1	+0.8								
W-2B	21	+0.17								
W-3S	14	+0.11								
W-3M	6	+0.18								
W-3D	Ø	+0.36								
W-4	Ø	+0.14								
W-5S	Ø	+0.15								
W-5M	Ø	+0.15								
W-5D	.4	+0.2								
W-6	Ø	+0.13								
W-7S	Ø	+0.00								
W-7M	Ø	+0.13								
W-7D	17	+0.37								
W-8	Ø	+0.05								
W-9A	15	+0.11								
W-9B	24	+0.04								
W-10S	0	+0.03								
W-10M	0	+0.59								
W-10D	5	+0.10								
W-11	Ø	+0.03								
W-12S	Ø	+0.03								
W-12M	Ø	+0.11								
W-12D	Ø	+0.27								
W-13	Ø	+0.07								
W-14S	Ø	+0.04								
W-14M	Ø	0.08								
W-14D	Ø	0.54								

Comments: Probe W-2A and W-9A are old probes.
Probe W-2B and W-9B are new probes.

Valley Reclamation
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BRADLEY LANDFILL
Gas Probe Readings
Revision 2

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
Bradley EMD Techs

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 29.82
BAROMETER (after): 29.82

BY: WILSON/DEAGAN DATE: 5-9-91 START TIME: 2:00 FINISH TIME: 2:50

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PW (" wc)	FLOW (cfm)	O2%	N2%	CH4%	WELL ADJ (cfm)
E-1	Ø	+0.03								
E-2S	BROKEN									
E-2M	Ø	+0.02								
E-2D	Ø	0.19								
E-3	Ø	+0.07								
E-4	14	+0.03								
E-5S	Ø	+0.01								
E-5M	Ø	0.10								
E-5D	Ø	0.00								
E-6	Ø	0.00								
E-7	Ø	0.00								
E-8S	29	+0.03								
E-8M	Ø	+0.05								
E-8D	Ø	+0.36								
E-9	Ø	0.00								
E-10	Ø	-0.02								
E-11S	Ø	-0.06								
E-11M	Ø	+0.05								
E-11D	Ø	0.26								
E-12	Ø	+0.06								
E-13	Ø	-0.00								
E-14S	Ø	-0.05								
E-14M	Ø	-0.03								
E-14D	Ø	+0.08								

Comments:

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BRADLEY LANDFILL
Gas Probe Readings
Revision 2

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
Bradley EMD Techs

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 29.89
BAROMETER (after): 29.88

BY: DRAGAN DATE: 5/17/91 START TIME: 2:00 FINISH TIME: 4:00

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PW ("wc)	FLOW (cfm)	O2%	N2%	CH4%	WELL ADJ (cfm)
E-1	Ø	+0.01								
E-2S	BROKEN	—								
E-2M	Ø	+0.02								
E-2D	Ø	+0.18								
E-3	Ø	+0.07								
E-4	13	+0.07								
E-5S	Ø	+0.05								
E-5M	Ø	+0.16								
E-5D	Ø	+0.03								
E-6	Ø	+0.08								
E-7	Ø	+0.01								
E-8S	Ø	+0.05								
E-8M	Ø	+0.08								
E-8D	29	+0.48								
E-9	Ø	+0.01								
E-10	Ø	+0.06								
E-11S	Ø	+0.06								
E-11M	Ø	+0.11								
E-11D	Ø	+0.46								
E-12	Ø	+0.15								
E-13	Ø	+0.02								
E-14S	Ø	+0.05								
E-14M	Ø	+0.03								
E-14D	Ø	+0.31								

Comments:

Valley Reclamation
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BRADLEY LANDFILL
Gas Probe Readings
Revision 2

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
~~[illegible]~~

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 29.39
BAROMETER (after): 29.89

BY: DRAGAN DATE: 5-17-91 START TIME: 4:00 FINISH TIME: 4:45

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PW (" wc)	FLOW (cfm)	O2%	N2%	CH4%	WELL ADJ (cfm)
W-1S	Ø	+0.01								
W-1M	10	+0.26								
W-1D	Ø	+0.15								
W-2A	Ø	+0.04								
W-2B	19	+0.04								
W-3S	Ø	+0.06								
W-3M	Ø	+0.08								
W-3D	Ø	+0.13								
W-4	Ø	+0.04								
W-5S	Ø	+0.02								
W-5M	Ø	+0.05								
W-5D	Ø	+0.11								
W-6	Ø	+0.06								
W-7S	Ø	+0.05								
W-7M	Ø	+0.05								
W-7D	15	+0.26								
W-8	Ø	+0.01								
W-9A	11	+0.04								
W-9B	18	+0.07								
W-10S	Ø	+0.03								
W-10M	Ø	+0.18								
W-10D	3	+0.09								
W-11	Ø	+0.07								
W-12S	Ø	+0.03								
W-12M	Ø	+0.13								
W-12D	Ø	+0.31								
W-13	Ø	+0.08								
W-14S	Ø	+0.02								
W-14M	Ø	+0.05								
W-14D	Ø	+0.35								

Comments: Probe W-2A and W-9A are old probes.
Probe W-2B and W-9B are new probes.

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BRADLEY LANDFILL
Gas Probe Readings
Revision 2

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J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
Bradley EMD Techs

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 29.98
BAROMETER (after): _____

BY: DRAGAN DATE: 5/24/91 START TIME: 1:15 FINISH TIME: 2:30

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PW (°wc)	FLOW (cfm)	O2%	N2%	CH4%	WELL ADJ (cfm)
E-1	Ø	+0.04								
E-2S	BROKEN									
E-2M	Ø	+0.03								
E-2D	Ø	+0.25								
E-3	Ø	+0.07								
E-4	6	+0.06								
E-5S	Ø	+0.04								
E-5M	Ø	+0.13								
E-5D	Ø	+0.03								
E-6	Ø	+0.11								
E-7	Ø	+0.10								
E-8S	Ø	+0.08								
E-8M	Ø	+0.12								
E-8D	Ø	+0.50								
E-9	Ø	+0.01								
E-10	Ø	+0.08								
E-11S	6	+0.09								
E-11M	Ø	+0.14								
E-11D	Ø	+0.52								
E-12	Ø	+0.15								
E-13	Ø	+0.01								
E-14S	Ø	+0.09								
E-14M	Ø	+0.18								
E-14D	Ø	+0.35								

Comments:

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BRADLEY LANDFILL
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J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 29.98
BAROMETER (after): 29.92

BY: DRAGAN DATE: 5/24/91 START TIME: 2:30 FINISH TIME: 3:15

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PW (°wc)	FLOW (cfm)	O2%	N2%	CH4%	WELL ADJ (cfm)
W-1S	Ø	+0.09								
W-1M	2.4	+0.11								
W-1D	Ø	+0.35								
W-2A	Ø	+0.07								
W-2B	9	+0.17								
W-3S	Ø	+0.11								
W-3M	Ø	+0.23								
W-3D	Ø	+0.41								
W-4	Ø	+0.15								
W-5S	Ø	+0.06								
W-5M	Ø	+0.15								
W-5D	Ø	+0.34								
W-6	Ø	+0.06								
W-7S	Ø	+0.06								
W-7M	Ø	+0.15								
W-7D	Ø	+0.39								
W-8	Ø	+0.04								
W-9A	Ø	+0.02								
W-9B	5	+0.07								
W-10S	Ø	+0.02								
W-10M	Ø	+0.45								
W-10D	Ø	+0.04								
W-11	Ø	+0.03								
W-12S	Ø	+0.01								
W-12M	Ø	+0.06								
W-12D	Ø	+0.58								
W-13	Ø	+0.03								
W-14S	Ø	+0.01								
W-14M	Ø	+0.03								
W-14D	Ø	+0.34								

Comments: Probe W-2A and W-9A are old probes.
Probe W-2B and W-9B are new probes.

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BRADLEY LANDFILL
Gas Probe Readings
Revision 2

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J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 29.94
BAROMETER (after): 29.94

BY: Wilson / Dragan DATE: 5/28/91 START TIME: 2:10 FINISH TIME: 3:00

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PW ("wc)	FLOW (cfm)	O2%	N2%	CH4%	WELL ADJ (cfm)
E-1	Ø	0.03								
E-2S										
E-2M	Ø	0.08								
E-2D	Ø	0.18								
E-3	Ø	+0.05								
E-4	11	+0.21								
E-5S	Ø	+0.01								
E-5M	Ø	+0.11								
E-5D	Ø	+0.03								
E-6	Ø	+0.06								
E-7	Ø	+0.04								
E-8S	Ø	+0.01								
E-8M	Ø	+0.01								
E-8D	28	+0.09								
E-9	Ø	+0.00								
E-10	Ø	+0.05								
E-11S	Ø	+0.06								
E-11M	Ø	+0.08								
E-11D	Ø	+0.31								
E-12	Ø	+.07								
E-13	Ø	+0.01								
E-14S	Ø	+0.04								
E-14M	Ø	+0.03								
E-14D	Ø	+0.16								

Comments:

Valley Reclamation
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BRADLEY LANDFILL
Gas Probe Readings
Revision 2

cc: G. Loughnane
J. Mays
B. Austin
D. Edwards
B. Biskeborn
S. Kilgore
EMD Techs Bradley

EQUIPMENT USED

Gas Tech, NP-204
Neotronics, PDM 205

BAROMETER (before): 29.94
BAROMETER (after): 29.92

BY: WILSON/DRAGAN DATE: 5/28/91 START TIME: 3:00 FINISH TIME: 3:45

PROBE	CH4%	PRESS	WELL#	GAS TEMP	PW ("wc)	FLOW (cfm)	O2%	N2%	CH4%	WELL ADJ (cfm)
W-1S	Ø	+0.05								
W-1M	Ø	+0.05								
W-1D	Ø	+0.23								
W-2A	Ø	+0.05								
W-2B	10[illegible]	+0.14								
W-3S	Ø	+0.08								
W-3M	Ø	+0.16								
W-3D	Ø	+0.26								
W-4	Ø	+0.11								
W-5S	Ø	+0.06								
W-5M	Ø	+0.12								
W-5D	Ø	+0.19								
W-6	Ø	+0.13								
W-7S	Ø	+0.06								
W-7M	Ø	+0.14								
W-7D	Ø	+0.26								
W-8	Ø	+0.05								
W-9A	Ø	+0.03								
W-9B	4	+0.08								
W-10S	Ø	+0.03								
W-10M	Ø	+0.33								
W-10D	Ø	+0.06								
W-11	Ø	+0.03								
W-12S	Ø	+0.02								
W-12M	Ø	+0.07								
W-12D	Ø	+0.04								
W-13	Ø	+0.04								
W-14S	Ø	+0.02								
W-14M	Ø	+0.05								
W-14D	Ø	+0.27								

Comments: Probe W-2A and W-9A are old probes.
Probe W-2B and W-9B are new probes.