TRANSMITTAL

To:	Mr. Robert Griffis Utility Trailer Manufacturing Company 17295 East Railroad Street, P.O. Box 1299 City of Industry, California 91749
From:	Kevin Trout
Date:	March 14, 1996
Subject:	IRAP Implementation Report - SVE System Construction and Startup
Project Number:	28739 06.01

Enclosed is your copy of Harding Lawson Associates' report entitled, IRAP Implementation, Southeast and Southwest Areas/Satellite Paint Booth Area, Soil-Vapor Extraction System, Construction and Startup Report. If you have any questions, give me a call.

Harding Lawson Associates
Engineering and Environmental Services
30 Corporate Park, Suite 400
Irvine, CA 92714 – (714) 260-1800

TRANSMITTAL

To:	Julio Lara California Regional Water Quality Control Board - LA Region 101 Centre Plaza Drive Monterey Park, California 91754-2156
From:	Kevin Trout
Date:	March 14, 1996
Subject:	IRAP Implementation Report - Soil Vapor Extraction Construction and Startup
Project Number:	28739 06.01

Enclosed are five copies of Harding Lawson Associates' report entitled *IRAP Implementation Southeast and Southwest Areas/Satellite Paint Booth Area, Soil-Vapor Extraction System, Construction and Startup Report.* A copy is included for Mr. Arthur Heath as well as Mr. Eric Nupen. If you have any questions, please call.

Harding Lawson Associates
Engineering and Environmental Services
30 Corporate Park, Suite 400
Irvine, CA 92714 – (714) 260-1800

Harding Lawson Associates

March 14, 1996

28739 06.01

Mr. Julio Lara
California Regional Water Quality Control Board
Los Angeles Region
101 Centre Plaza Drive
Monterey Park, California 91754-2156

IRAP Implementation
Southeast and Southwest Areas/Satellite Paint Booth Area
Soil-Vapor Extraction System
Construction and Startup Report
Utility Trailer Manufacturing Company
17300 East Chestnut Street
City of Industry, California

Dear Mr. Lara:

INTRODUCTION

Harding Lawson Associates (HLA), on behalf of Utility Trailer Manufacturing Company (UTM), is submitting this report to the Regional Water Quality Control Board - Los Angeles Region (RWQCB) as discussed in HLA's December 8, 1995 letter entitled "IRAP Implementation Meeting Summary" and in a November 21, 1995 meeting among the RWQCB, UTM, and HLA. This report summarizes the construction and startup activities of remediation systems in the Southeast, Southwest, and satellite paint booth areas of the UTM site, and is presented in summary outline form for clarity and brevity.

This outline report covers work completed in the Southeast, Southwest, and satellite paint booth areas over the period of September 25, 1995 to February 12, 1996.

Summary of Work Performed

The design of the remediation systems in the Southeast, Southwest, and satellite paint booth areas of the UTM site were based upon (see Plate 1 for site plan):

- Information presented in HLA's August 1994 *Phase II Site Assessment Report.*
- Experience gained and operational data collected from North area SVE operations (as detailed in HLA's February 5, 1996 report entitled *IRAP Implementation, North Area Soil-Vapor Extraction System Progress Report*).
- Continuing discussions with the RWQCB.

New vapor extraction wells and trenches were installed in the Southeast, Southwest, and satellite paint booth areas from September 25 through 27, 1995. SVE system construction began on September 28, 1995 and was completed on November 10, 1995. Soil-gas probes and vacuum piezometers were installed from November 13 through 15, 1995.

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Refrigeration/condensation (R/C) unit operations began at the paint booth area on December 5, 1995. R/C operations in the South areas began on January 16, 1996.

SVE System Construction

The Southeast and Southwest areas SVE system consists of two discrete networks of wells, trenches, and piping connected to a central blower and treatment compound. An as-built sketch, included as Plate 2, shows both the Southeast and Southwest areas systems. The Southeast area includes Well VE-15 and its associated vapor extraction trench, TR-16. Each area has a separate manifold where the subsurface pipes are joined. Sample ports, flow measurement devices, and control valves were installed at these manifolds for system control and monitoring. The Southwest manifold is joined to the central treatment compound by a single 4" conveyance pipe, and the Southeast manifold is within the treatment compound itself.

- The Southeast area network consists of 5 vapor extraction wells and 19 vapor extraction trench segments. Vapor extraction wells are screened in the sand zone at approximately 12' to 25' below ground surface (bgs). Vapor extraction piping in the trenches was placed at 4' bgs within approximately 18"to 24" of filter pack in the shallow clay zone. Screened trench segment lengths vary from approximately 20' to 50'. In total, approximately 835' of screened pipe was placed in trenches in the Southeast area. An as-built sketch of a typical trench cross section is included as Plate 3.

- The Southwest area network consists of 7 vapor extraction wells and 20 vapor extraction trench segments. Vapor extraction wells were screened at the same depths as in the Southeast area. Trench vapor extraction piping installation was similar to that in the Southeast area. Screened trench segment lengths vary from approximately 40' to 50'. In total, approximately 915' of screened pipe was placed in trenches in the Southwest area.

Paint booth area - Two wells were installed near the satellite paint booth area located at the southernmost boundary of the North area. One well is screened in the shallow clay zone at approximately 4' to 10' bgs and the other is screened in the sand zone at approximately 12' to 22' bgs. The wells were installed to address a small, localized area of chlorinated volatile organic compound (CVOC)-impacted soil that was identified by previous investigations.

Treatment stockpile construction - Approximately 700 cubic yards (cy) of soil was excavated during SVE trench and vapor extraction well completion. The soil was stockpiled in the existing North area treatment compound.

- Two tiers of vapor extraction pipes (9 pipes in all) were laid longitudinally within the stockpile. The stockpile was covered with visqueen plastic sheeting and secured with sandbags. The extraction pipes were manifolded and connected to the granular activated carbon (GAC) -based SVE system, which is still operating in the North area primarily to treat the soil stockpile.

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Vacuum Piezometer Installation/Soil-Gas Probe Installation/Soil-Gas Sample Collection

To allow the effectiveness of the SVE system to be assessed, vacuum piezometers and soil-gas probes were installed. Vacuum piezometers provide data to demonstrate that the radius of vacuum influence fully addresses identified zones containing CVOCs. The soil-gas probes allow samples to be collected from different locations and depths, providing baseline information that can be used for comparison to later analyses as a check on CVOC removal.

- Nineteen new vacuum piezometers were installed in the Southeast and Southwest areas (including 4 near Well VE-15), and 4 were installed near the satellite paint booth. Piezometers were installed in locations that would adequately characterize the extent of the vacuum influence of trench segments and wells. Vacuum piezometers were constructed of 3/4" PVC casing with a 1' screened interval and were completed in both the clay and sand zones, at 6' and 20' bgs, respectively.

- Nineteen soil-gas probes were installed in the Southeast and Southwest areas, and 6 were installed near the paint booth. Probes were installed in locations that were determined in previous investigations to have elevated concentrations of CVOCs. Soil-gas probes were constructed of 1/8" tubing and were completed in both the clay and sand zones, at 6' and 14' bgs, respectively.

- Locations of the piezometers and probes in the Southeast and Southwest areas are shown on Plate 2. Locations in the Southeast area near Well VE-15 and locations near the satellite paint booth area are both shown on Plate 4.

Twenty-five samples were collected and analyzed for CVOCs by EPA Method 8010, according to RWQCB soil-gas survey guideline standards, to provide a baseline for comparison to later soil-gas samples. Soil-gas results are included as Table 1. Analytical laboratory reports are included in Appendix A.

R/C Unit Strategy and Operation

The strategy for R/C operations in the paint booth, Southeast, and Southwest areas is to maximize recovery by operating on the wells and trench segments with the most elevated concentrations of CVOCs. The R/C unit will operate on these wells and trenches until concentrations drop to levels which are more economically treated by GAC. At that time, the GAC-based SVE unit will be moved from the North area to the central treatment compound in the Southeast area for startup and operation.

- Paint booth operations - The R/C unit operated at the paint booth area wells for approximately 1 month and removed between 0.25 to 0.5 gallon of CVOCs and 170 gallons of condensate water. Operational data (Table 2) and vacuum influence data (Table 3) are attached. A Tedlar bag sample was collected from each well after 1 month of operation and

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submitted to a state-certified laboratory for analysis by EPA Method 8010. The results of the analysis are included as Table 4. Analytical laboratory reports are included as Appendix B.

- RWQCB visit to site - Mr. Walter Salas visited the site on December 19, 1995 to observe the R/C unit operations at the paint booth area location and inspect the Southeast and Southwest area SVE system.

- Southeast area operations - Each well and trench segment was tested after startup to identify those that had the most elevated inlet-stream CVOC concentration (data included in Table 5). Southeast area operations began on January 16, 1996.

  - HLA engineering technicians recorded system operational data (PID measurements, vacuums, and flows) during each site visit (Table 5).

  - HLA engineering technicians recorded vacuum influence data for representative trench segments and wells to help assess remedial effectiveness (Table 6).

  - Approximately 2 gallons of CVOCs and 350 gallons of condensate water have been recovered by the R/C unit. All fluids were stored in a containment area awaiting proper disposal.

Future Operations

- R/C-based SVE operations

  - Southwest area - The strategy for operation of the R/C unit in the Southwest area will follow that of the Southeast area.

  - Paint booth area - Once SVE with the R/C unit is complete in the Southwest area, the unit will be returned to the paint booth area to test CVOC concentration rebound.

- GAC-based SVE operations

  - The GAC-based SVE unit will be moved to the central treatment compound located in the Southeast area when the following conditions are satisfied:

    a) Current North area GAC-based SVE operations are complete.

    b) Concentrations in the Southeast and Southwest areas have dropped to levels more economically treated by GAC.

  - It is anticipated that the GAC-based SVE system will be moved to the central treatment compound to begin operations in April 1996.

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- RWQCB will be notified via telephone before the GAC-based SVE system is moved from the North area.

CONCLUSION

HLA and UTM will continue to keep the RWQCB informed of operations in the Southeast, Southwest, and satellite paint booth areas by regular telephone updates. If you have any questions or comments, please call Mr. Kurt Wiebe of HLA at (714) 260-1800 or Mr. Bob Griffis of UTM at (818) 854-7324.

Very truly yours,

HARDING LAWSON ASSOCIATES

Kevin J. Trout
Staff Engineer

Kurt H. Wiebe, P.E.
Associate Engineer

KJT/KHW/kt
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Attachments:
Table 1 - Summary of Soil-Gas Data
Table 2 - Satellite Paint Booth Area R/C Operations Data
Table 3 - Satellite Paint Booth Area Vacuum Influence Data
Table 4 - Satellite Paint Booth Area Tedlar-Bag Sample Analytical Results
Table 5 - Southeast Area R/C Operations Data
Table 6 - Southeast Area Vacuum Influence Data

Plate 1 - Site Plan
Plate 2 - South Areas As-Built SVE System Sketch
Plate 3 - Typical Vapor Extraction Trench Cross Section Sketch
Plate 4 - Satellite Paint Booth and Southeast Area (VE-15) Sketch

Appendix A - Analytical Laboratory Reports: Soil Gas
Appendix B - Analytical Laboratory Reports: Tedlar-Bag Samples

cc: Mr. Arthur Heath - RWQCB
Mr. Eric Nupen - RWQCB
Mr. Robert Griffis - UTM

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TABLES

Utility Trailer Manufacturing Company
City of Industry, California

Table 1. Summary of Soil-Gas Data

Sample Designation	Depth (ft. bgs)	1,1-DCA (ug/l)	1,1-DCE (ug/l)	c-1,2-DCE (ug/l)	PCE (ug/l)	1,1,1-TCA (ug/l)	TCE (ug/l)
SG-1-14	14	4	560	(1.0)	27	(1.0)	3
SG-2-6	6	(1.0)	87	(1.0)	4	(1.0)	(1.0)
SG-3-14	14	(1.0)	91	(1.0)	9.8	(1.0)	(1.0)
SG-4-6	6	(1.0)	115	(1.0)	4.9	(1.0)	(1.0)
SG-5-14	14	(1.0)	83	(1.0)	26	(1.0)	1.9
SG-6-6	6	(1.0)	45	(1.0)	19	(1.0)	1.1
SG-7-14	14	(1.0)	164	(1.0)	20	11	5.2
SG-8-6	6	(1.0)	150	(1.0)	33	5.7	4.4
SG-9-6	6	14	672	(1.0)	32	36	10
SG-10-14	14	(1.0)	398	(1.0)	29	131	3.5
SG-11-6	6	(1.0)	60	(1.0)	6.4	20	1
SG-12-6	6	(1.0)	18	(1.0)	5.1	(1.0)	1
SG-13-6	6	(1.0)	10	(1.0)	2.3	(1.0)	(1.0)
SG-14-6	6	3.1	296	(1.0)	31	15	5.9
SG-15-14	14	(1.0)	62	(1.0)	13	4.6	1.3
SG-16-6	6	(1.0)	7.2	(1.0)	1.8	(1.0)	(1.0)
SG-17-6	6	20	266	1.5	49	113	8.7
SG-18-14	14	44	917	2.7	42	388	9.4
SG-19-6	6	11	79	1	23	35	5
SG-20-14	14	1.7	81.9	(1.0)	54	103	7.4
SG-21-6	6	1.1	30.1	(1.0)	33.8	48.7	3.6
SG-22-14	14	(1.0)	1.2	(1.0)	4	4.1	1
SG-23-6	6	(1.0)	(1.0)	(1.0)	1.6	(1.0)	(1.0)
VP-38-20	20	(1.0)	(1.0)	3.5	(1.0)	(1.0)	(1.0)
VP-39-7	7	(1.0)	(1.0)	1.1	(1.0)	(1.0)	(1.0)

Notes:

1) DCA= Dichloroethane, DCE= Dichloroethene, PCE= Tetrachloroethene, TCA= Trichloroethane, TCE= Trichoroethene
2) (1.0) - Indicates compound not detected at or above enclosed detection limit
3) ug/l = micrograms per liter

Utility Trailer Manufacturing Company
City of Industry, California

Table 2. Satellite Paint Booth Area R/C Operations Data

Recorder Initials	Date	Time	Active Well	Well Vacuum ("H2O)	Well Flow (CFM)	Well PID (ppm)
JWH	12/5/95	13:12	VE-18	22-38	36	749
JWH	12/6/95	14:05	VE-18	25-38	36	291
JWH	12/11/95	10:00	VE-18	25-38	36	180
JWH	12/13/95	09:00	VE-18	35-50	33	286
JWH	12/15/95	13:01	VE-18	35-50	38	143
JWH	12/19/95	10:40	VE-17	32-50	62-71	4
KJT	12/22/95	10:30	VE-17	17-25	66-72	7
JWH	12/26/95	11:34	VE-17	21-28	66-77	14
JWH	12/29/95	09:22	VE-17	27-32	77-110	19
JWH	12/29/95	11:14	VE-17/	24-29	81-89	12
			VE-18	24-29	-------	202
JWH	1/5/96	14:50	VE-17/	24-36	54-60	24
			VE-18	24-36	-------	247
JWH	1/8/96	12:10	VE-17/	17-24	55-63	12
			VE-18	17-24	-------	125
KJT	1/11/96	10:56	VE-17/	37-45	73-83	45
			VE-18	22-25	-------	226
JWH	1/12/96	09:20	VE-17	34.5-41.5	44-83	37
JWH	1/16/96	08:33	VE-18	37-57	34-37	46

Table 3. Satellite Paint Booth Area Vacuum Influence Data

Recorder Initials	Date	Time	Active Well	Wellhead Vacuum ("H2O)	Barometer ("Hg)	Piezometer Vacuum ("H2O) PV-20-20	PV-21-6	PV-22-20	PV-23-6	VP-18	VP-20	VP-21	VP-22	VP-25
JWH	12/6/95	14:37	VE-18	25-38	---	---	---	0.000	0.000	0.050	---	0.000	0.000	1.800
JWH	12/13/95	11:12	VE-18	35-50	29.33	0.015	0.020	0.000	0.150	---	---	---	---	---
JWH	12/15/95	13:26	VE-18	35-50	29.35	0.015	0.025	0.005	0.039	0.000	---	0.010	0.000	0.010
KJT	12/22/95	10:45	VE-17	17-25	29.35	0.030	0.027	0.032	0.048	---	---	---	---	---
JWH	12/29/95	09:22	VE-17	27-32	29.42	0.047	0.085	0.070	0.095	0.000	0.225	0.000	---	0.090
JWH	12/29/95	11:14	VE-17/VE-18	24-29	29.42	0.040	0.055	0.055	0.110	---	---	---	---	---
JWH	1/5/96	14:24	VE-17/VE-18	24-36	29.29	0.113	0.180	0.250	0.245	0.025	0.155	0.000	0.015	0.004
KJT	1/11/96	10:15	VE-17	37-45	29.41	0.220	0.370	0.490	0.600	0.000	0.480	0.000	0.025	0.060
			VE-18	22-25	---	---	---	---	---	---	---	---	---	---
JWH	1/12/96	09:45	VE-17	34.5-41.5	29.30	---	0.400	0.670	0.665	0.460	0.000	0.560	0.620	0.175
JWH	1/16/96	08:33	VE-18	37-57	29.30	0.055	0.055	0.110	0.120	0.400	0.040	0.510	0.600	0.010

Utility Trailer Manufacturing Company
City of Industry, California

Table 4. Satellite Paint Booth Area Tedlar-Bag Sample Analytical Results

Sample Designation	1,1-DCA (mg/m^3)	1,1-DCE (mg/m^3)	c-1,2-DCE (mg/m^3)	PCE (mg/m^3)	1,1,1-TCA (mg/m^3)	TCE (mg/m^3)
VE-17	(5.0)	(5.0)	(5.0)	23	7.6	(5.0)
VE-18	(5.0)	53	(5.0)	110	71	9.9

Notes:

1) DCA= Dichloroethane, DCE= Dichloroethene, PCE= Tetrachloroethene, TCA= Trichloroethane, TCE= Trichoroethene
2) (5.0) - Indicates compound not detected above enclosed detection limit.
3) mg/m^3 = milligrams per cubic meter, which is equivalent to ug/l = micrograms per liter

Utility Trailer Manufacturing Company
City of Industry, California

Table 5. Southeast Area R/C Operations Data

Recorder Initials	Date	Time	Active Well/Trench	Well/Trench head Vacuum ("H2O)	Well/Trench Manifold Vacuum ("H2O)	R/C Unit Vacuum ("H2O)	Well/Trench Pitot Tube Total Flow (CFM)	R/C Unit Total Flow (CFM)	Well/Trench Individual PID (ppm)	Well/Trench Combination PID (ppm)
JWH	1/16/96	14:00	VE-5	36-48	36-49	34-50	26-40	60-66	1342	—
			TR-5C	4-5.5	5-7.5	8-11	43-54	63-73	8	—
			TR-5D	5-7.5	6.5-10	9-14	43-57	63-73	146	—
			TR-6C	5-6.5	6-9	9-13	46-61	63-77	293	—
			TR-6D	6-8.5	6-10	9-14	46-61	63-73	217	—
			TR-6C/TR-6D	4.5-5.5	6-8	10-15	66-75	71-82	—	255
JWH	1/18/96	09:00	TR-6C/TR-6D	4-5	8-10	15-18	—	71-82	—	268
			TR-5A	8.5-10.5	10-13.5	15-20	35-61	71-82	214	—
			TR-5B	6.2-8	8.5-11.5	14-17	54-66	68-80	206	—
			TR-6A	8-10	12-15	17-22	61-179	68-80	257	—
			TR-6B	5-7	9-12	15-19	59-70	71-80	18	—
			VE-15	81-102	81-102	84-90	46-70	60-63	655	—
			TR-16B	28-34	32-40	35-42	57-70	70-78	300	—
			TR-16A	5-6.5	10.5-14	14-19	61-73	68-78	22	—
			VE-6	163-170	177-190	145-186	0-68	48-60	345	—
			VE-7	136-163	136-163	119-140	28-61	56-62	648	—
			TR-7D	7-8.5	9.5-12	13-17	61-73	69-80	151	—
			TR-7C	8-10.5	11.5-14	15-19.5	61-73	69-80	81	—
			TR-7B	6.3-8	9-11.5	13-17	61-75	69-81	452	—
			TR-7A	8-10.5	11.5-14	14.5-19	61-74	69-81	127	—
			TR-8A	8.5-11	11.5-14.5	14-19	61-75	69-80	301	—
			TR-8B	4.7-6	7.5-10	11-15	61-75	69-80	85	—
			TR-8C	4.5-6	8-10	11-15	61-75	69-81	22	—
			TR-8D	7.3-9.5	10-13	14-18	61-77	70-81	14	—
			VE-16	102-109	109-129	60-74	54-70	64-76	138	—
			TR-9	5.5-7	7-9	11-15	64-75	68-81	170	—
JWH	1/22/96	10:30	VE-5/	35-47	41-49	44-52	46-79	67-76	241	264
			VE-7	31-40	41-49	—	—	—	467	—
JWH	1/26/96	10:28	VE-5/	42-50	46-50+	45-57	90-121	67-80	149	170
			VE-7	32-38	47-50+	—	—	—	314	—
			VE-15	84-102	102-108	98-115	46-57	68-77	1500	—
KJT	1/30/96	10:15	VE-15	No access	22-30	27-38	—	45-51	260	—
			TR-7B	7-9	15-17	20-26	—	66-77	80	—
KJT	2/2/96	09:00	TR-7B	7-9	10-15	15-25	187-194	63-76	140	—
JWH	2/5/96	09:05	VE-5/	12-17	17-21	23-28	28-52	65-74	64	75
			TR-6C	12-18	17-21	—	—	—	86	—
JWH	2/7/96	10:40	VE-7/	15-20	20-25	24-30	64-72	67-78	—	85
			TR-7B	15-20	—	—	—	—	—	—
JWH	2/9/96	10:54	TR-8A/	5	3.5-7.5	5-14	46-92	62-67	216	145
			TR-16B	5	3.7-7	—	—	—	116	—
JWH	2/12/96	12:00	VE-15/	19-26	19-27	20-28	66-112	55-63	235	118
			VE-16	20-28	21-29	—	—	—	38	—

Utility Trailer Manufacturing Company
City of Industry, California

Table 6. Southeast Area Vacuum Influence Data

Recorder Initials	Date	Time	Active Well/Trench	Well/Trench head Vacuum ("H2O)	Barometer ("Hg)	Piezometer Vacuum ("H2O) PV-5-6	PV-6-20	PV-7-6	PV-8-6	PV-9-6	PV-13-6	PV-14-20	PV-15-6	PV-16-20	PV-17-6
JWH	2/9/96	08:59	TR-8A/	5	29.52	0.50	0.70	0.86	0.08	0	—	—	—	—	—
			TR-16B	5	29.52	—	—	—	—	—	0.28	0.15	0.12	—	0
JWH	2/12/96	09:45	VE-15/	23	29.05	—	—	—	—	—	0.36	0.24	0.19	0.03	0
			VE-16	25	29.05	0	0	0	—	—	—	—	—	—	—

Recorder Initials	Date	Time	Active Well/Trench	Well/Trench head Vacuum ("H2O)	Barometer ("Hg)	Piezometer Vacuum ("H2O) PV-18-6	VP-1-9	VP-1-16	VP-1-24.5	VP-2-9	VP-2-16	VP-2-23	VP-26	VE-7
JWH	2/9/96	08:59	TR-8A/	5	29.52	—	8.00	0.12	0.20	—	—	—	0	0.14
			TR-16B	5	29.52	0	—	—	—	0.17	0.15	0.18	—	—
JWH	2/12/96	09:45	VE-15/	23	29.05	0	—	—	—	0.23	0.26	0.26	—	—
			VE-16	25	29.05	—	0.09	0.07	0	—	—	—	—	0.03

PLATES

UTM 005749

LOS ANGELES WATER COMPANY

MAXIM LIGHTING

E/S

Fire Lane

Maintenance and repair shed

VE-15

SOUTHEAST AREA

Stationary crane

Former unpaved area (portions paved mid- to late-1970's)

Equipment & parts storage

Fire Lane

SATELLITE PAINT BOOTH AREA

Wash booth

MANUFACTURING BUILDING

SOMITEX PRINTS OF CALIFORNIA

Parts & storage Warehouse

NORTH AREA

Parking

DRIVE

Fire Lane

PLANT OFFICES

Former asphalt-paved road and run-off pathway

Parking

Drainage conduit

SOUTHWEST AREA

Aftermarket Parts Sales Office

Records storage area

Fire Lane

Guard shack

Test track (unpaved)

CORPORATE OFFICES

Parking

EXPLANATION

Fence

Scale 0 50 100 feet

UTM 005750

HARDING LAWSON ASSOCIATES
Engineering and Environmental Services

DRAWN JTL

PROJECT-TASK NUMBER 28739-04.08

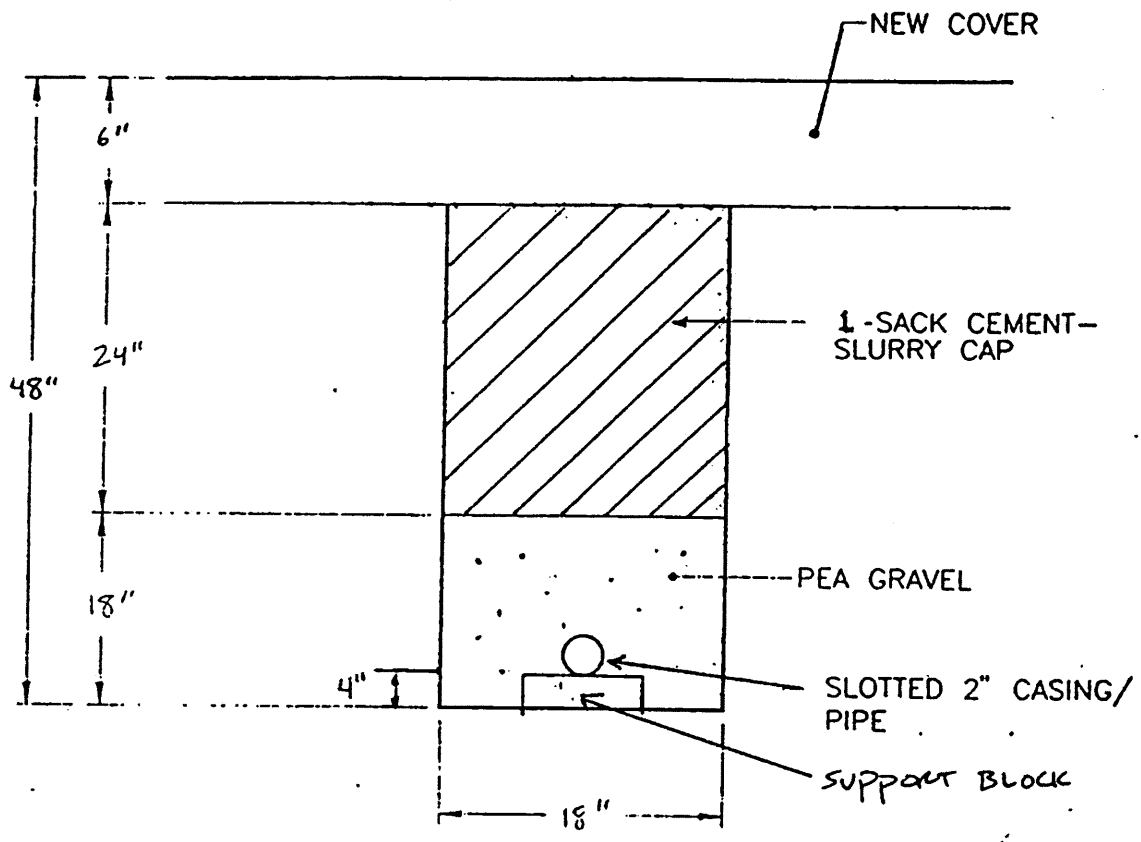
SITE PLAN
Utility Trailer Manufacturing Company
City of Industry, California

APPROVED

DATE 4/95

REVISED DATE

PLATE 1

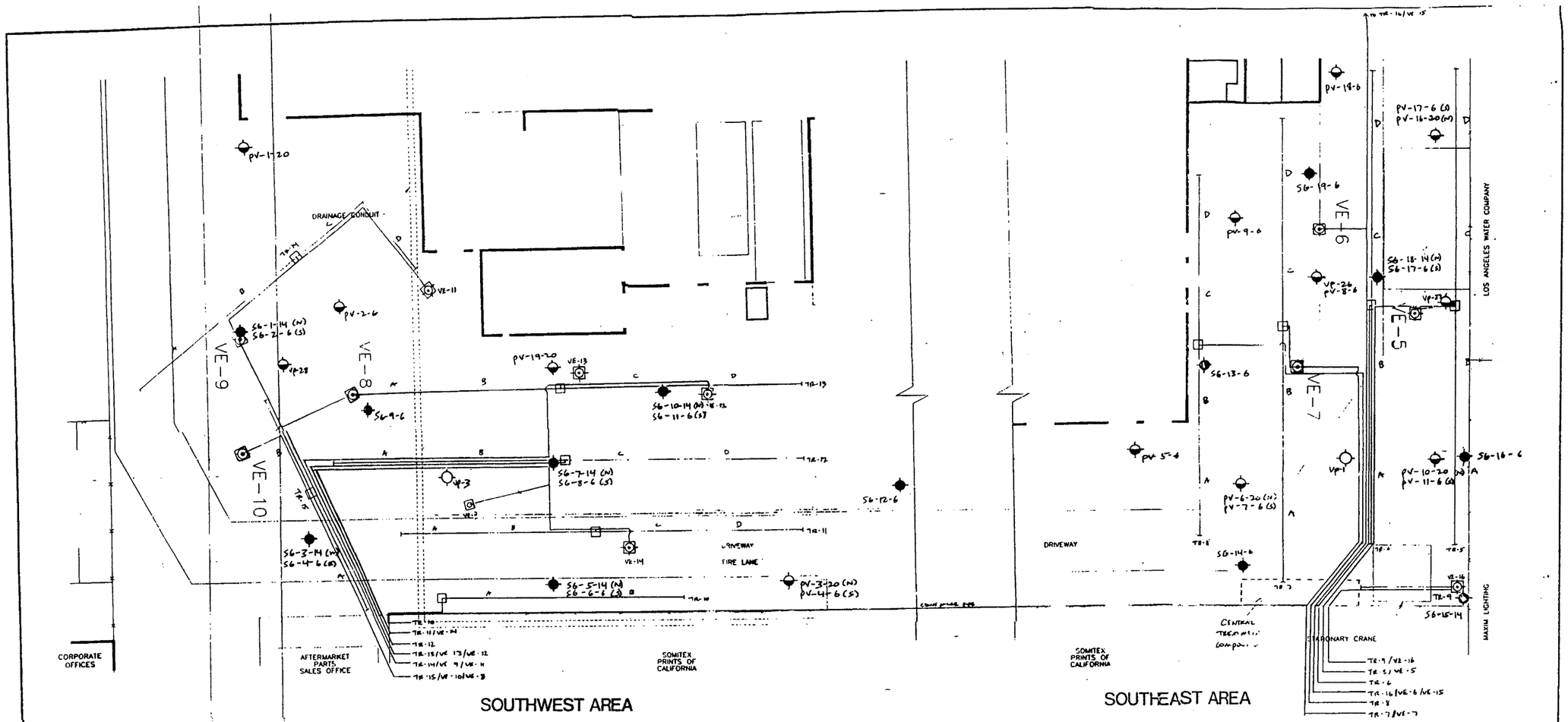


TYPICAL VAPOR EXTRACTION TRENCH

NOT TO SCALE

Plate

3



EXPLANATION

- EXISTING VAPOR EXTRACTION WELL
- EXISTING 1-1/2" DIAMETER MULTILEVEL VAPOR/VACUUM PIEZOMETER LOCATION
- LARGE DIAMETER (3/4") VAPOR/VACUUM PIEZOMETER LOCATION
- SMALL DIAMETER (1/8") SOIL GAS PROBE LOCATION
- VAPOR EXTRACTION TRENCH SEGMENT
- TRENCH BOX (WITH TRENCH SEGMENT CONTROL VALVES)

PIEZOMETER DEPTHS	
VAPOR/VACUUM PIEZOMETER	PIEZOMETER DEPTH (FEET BGS)
VP-3	10, 19, 27
VP-28	20

PIEZOMETER DEPTHS	
VAPOR/VACUUM PIEZOMETER	PIEZOMETER DEPTH (FEET BGS)
VP-1	9, 16, 25
VP-26	17
VP-27	17

NOTE: VACUUM PIEZOMETERS INSTALLED PRIOR TO 11/95 WERE DESIGNATED BY VP-[illegible] PHYSICAL LOCATION
VACUUM PIEZOMETERS INSTALLED 11/95 ARE DESIGNATED PV-[illegible] NUMBER
SOIL GAS PROBES ARE DESIGNATED IN SAME MANNER AS 11/95 PIEZOMETERS

SCALE IN FEET: 0 20 40

NO.	DATE	REVISIONS	BY	CHK

DRAWN	JL	PROJECT NO.	33270-1
ENGINEER		SCALE	1" = 20'
CHECKED		APPROVED	
DATE		DATE	

Harding Lawson Associates
Engineering and Environmental Services
3 HUTTON CENTRE DRIVE, SUITE 300
SANTA ANA, CALIFORNIA 92707
(714) 556-7992

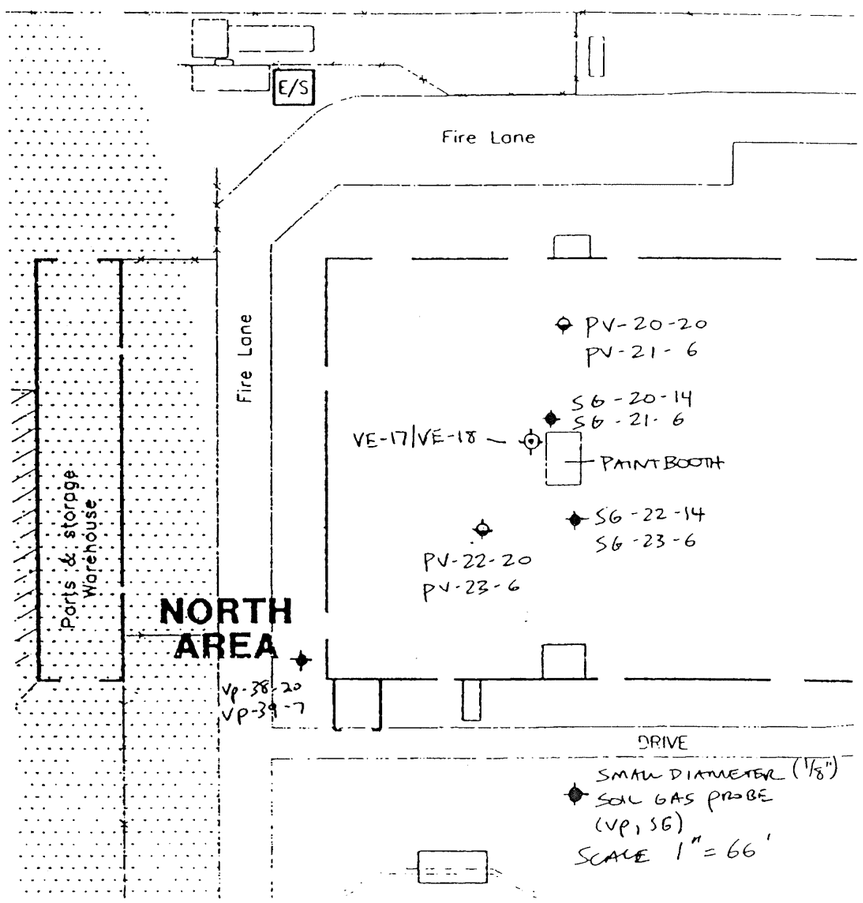
Utility Trailer Manufacturing Company
City of Industry, California

AS-BUILT SOUTHEAST AND SOUTHWEST AREAS PIPING LAYOUT WITH PIEZOMETER AND PROBE LOCATIONS

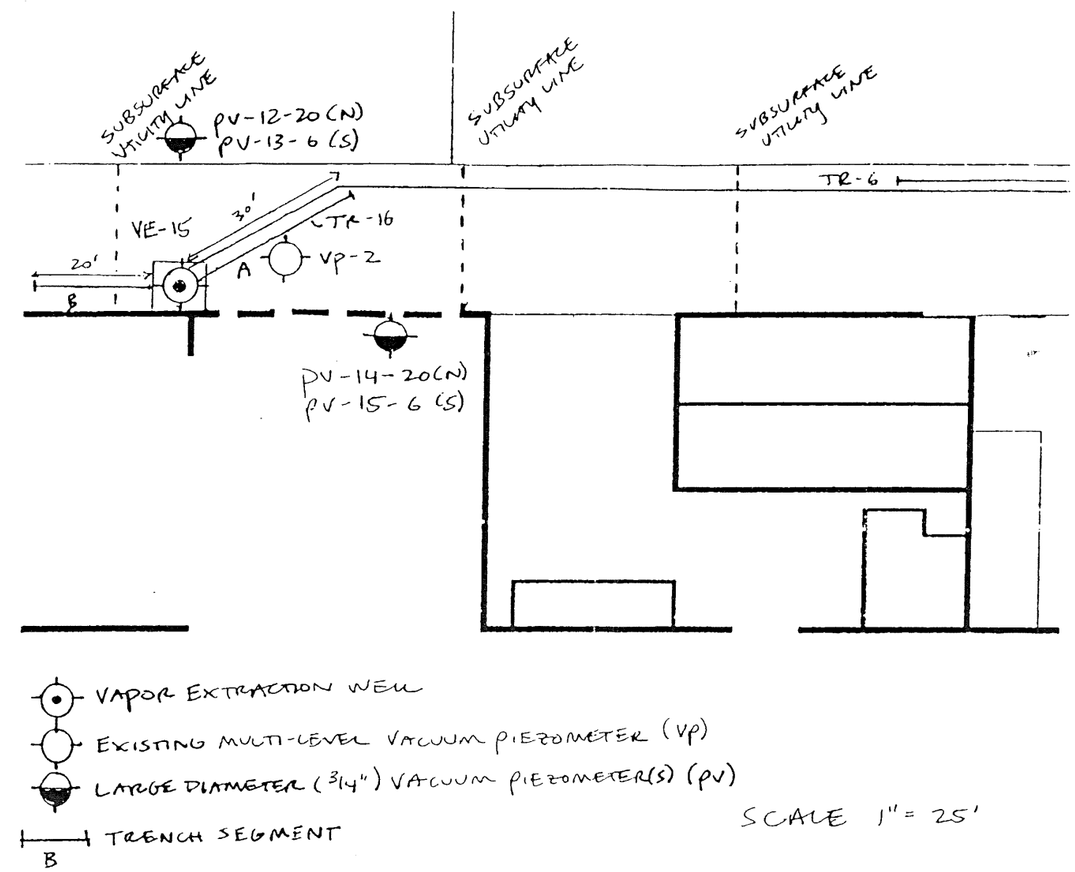
DRAWING: 2
SHEET: OF
REVISION NUMBER:
DATE: 6/95

UTM 005752

SATELLITE PAINT BOOTH AREA



SOUTHEAST AREA (VE-15)



Plate

4

UTM 005753

APPENDIX A

teg

HARDING LAWSON ASSOCIATES PROJECT
UTILITY TRAILER
17300 E. CHESTNUT
INDUSTRY, CA

TEG Project #951113T3
GC SHIMADZU 14A LEFT
VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8010/8020) SOIL VAPOR ANALYSES
SOIL VAPOR DATA IN UG/L-VAPOR

	BLANK	VP-38-20	VP-39-7	SG-1-14	SG-2-6	SG-3-14	SG-4-6	SG-5-14	SG-6-6	SG-6-6DUP
DATE	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95
ANALYSIS TIME	9:58	13:52	14:16	14:48	15:21	15:43	16:09	16:30	16:52	17:13
SAMPLING DEPTH (feet)	–	20	7	14	6	14	6	14	6	6
VOLUME WITHDRAWN (cc)	60	190	70	140	70	140	70	140	60	60
VOLUME INJECTED	1	1	1	1	1	0.1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	10	1	1	1	1
CARBON TETRACHLORIDE	nd	nd	nd	3.1	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	4.0	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	*560	87	91	115	83	45	52
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	3.5	1.1	27	4.0	9.8	4.9	26	19	40
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	3.0	nd	nd	nd	1.9	1.1	1.8
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

ND INDICATES NOT DETECTED AT DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND
* REPORTED VALUE FROM 10 TIMES DILUTION

ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

Blayne Hartman
1-16-96

HARDING LAWSON ASSOCIATES PROJECT
UTILITY TRAILER
17300 E. CHESTNUT
INDUSTRY, CA

TEG Project #951113T3
GC SHIMADZU 14A LEFT
VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8010/8020) SOIL VAPOR ANALYSES
SOIL VAPOR DATA IN UG/L-VAPOR

	BLANK	SG-7-14	SG-8-6	SG-9-6	SG-10-14	SG-11-6	SG-12-6	SG-13-6	SG-14-6	SG-15-14	SG-16-6	SG-17-6	SG-18-14	SG-19-6	SG-19-6DUP
DATE	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95
ANALYSIS TIME	8:50	9:22	10:02	10:32	11:33	12:10	13:27	13:52	14:19	14:57	15:29	15:56	16:40	17:24	17:47
SAMPLING DEPTH (feet)	--	14	6	6	14	6	6	6	6	14	6	6	14	6	6
VOLUME WITHDRAWN (cc)	60	140	60	60	140	60	60	60	60	140	60	60	140	60	60
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	14	nd	nd	nd	nd	3.1	nd	nd	20	44	11	10
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	*164	*150	*672	*398	60	18	10	*296	62	7.2	*266	*917	79	82
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	1.5	2.7	1.0	1.0
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	*20	33	*32	29	6.4	5.1	2.3	*31	13	1.8	*49	42	23	18
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	11	5.7	*36	*131	20	nd	nd	15	4.6	nd	*113	*388	35	30
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	5.2	4.4	10	3.5	1.0	1.0	nd	5.9	1.3	nd	8.7	9.4	5.0	4.0
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

ND INDICATES NOT DETECTED AT DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND
* REPORTED VALUE FROM 10 TIMES DILUTION

ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

Blayne Hartman
1-16-96

HARDING LAWSON ASSOCIATES PROJECT
UTILITY TRAILER
17300 E. CHESTNUT
INDUSTRY, CA

TEG Project #951113T3
GC SHIMADZU 14A LEFT
VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8010/8020) SOIL VAPOR ANALYSES
SOIL VAPOR DATA IN UG/L-VAPOR

	BLANK	SG-20-14	SG-21-6	SG-22-14	SG-23-6	SG-23-6DUP
DATE	11/15/95	11/15/95	11/15/95	11/15/95	11/15/95	11/15/95
ANALYSIS TIME	8:54	9:48	10:09	10:52	11:15	11:34
SAMPLING DEPTH (feet)	--	14	6	14	6	6
VOLUME WITHDRAWN (cc)	60	140	60	140	60	60
VOLUME INJECTED	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	1.7	1.1	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	81.9	30.1	1.2	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	54.0	33.8	4.0	1.6	1.5
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	**103	48.7	4.1	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	7.4	3.6	1.0	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd

ND INDICATES NOT DETECTED AT DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND
** INDICATES THAT THE ANALYTE WAS QUANTIFIED FROM THE FID

ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

Blayne Hartman
1-16-96

HARDING LAWSON ASSOCIATES PROJECT
UTILITY TRAILER
17300 E. CHESTNUT
INDUSTRY, CA

TEG Project #951113T3
GC SHIMADZU 14A LEFT
VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8010/8020) SOIL VAPOR ANALYSES
AREA COUNTS

	BLANK	BLANK	VP-38-20	VP-38-20	VP39-7	VP39-7	SG-1-14	SG-1-14	SG-2-6	SG-2-6
DATE	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95
ANALYSIS TIME	9:58	9:58	13:52	13:52	14:16	14:16	14:48	14:48	15:21	15:21
SAMPLING DEPTH (feet)	--	--	20	20	7	7	14	14	6	6
VOLUME WITHDRAWN (cc)	60	60	190	190	70	70	140	140	60	60
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	6.3	368.0	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	4.8	370.9	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	3.4	*394.0	3.6	608.4
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	11.8	44.2	11.7	13.7	11.8	344.0	12.0	50.9
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	nd	nd	7.9	44.7	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

ND INDICATES NOT DETECTED AT DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND
* REPORTED VALUE FROM 10 TIMES DILUTION

ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

HARDING LAWSON ASSOCIATES PROJECT
UTILITY TRAILER
17300 E. CHESTNUT
INDUSTRY, CA

TEG Project #951113T3
GC SHIMADZU 14A LEFT
VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8010/8020) SOIL VAPOR ANALYSES
AREA COUNTS

	SG-3-14	SG-3-14	SG-4-6	SG-4-6	SG-5-14	SG-5-14	SG-6-6	SG-6-6	SG-6-6DUP	SG-6-6DUP
DATE	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95	11/13/95
ANALYSIS TIME	15:43	15:43	16:09	16:09	16:30	16:30	16:52	16:52	17:13	17:13
SAMPLING DEPTH (feet)	14	14	6	6	14	14	6	6	6	6
VOLUME WITHDRAWN (cc)	140	140	60	60	140	140	60	60	60	60
VOLUME INJECTED	0.1	0.1	1	1	1	1	1	1	1	1
DILUTION FACTOR	10	10	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	2.8	63.7	3.4	806.4	3.5	581.4	3.2	313.8	3.3	363.7
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	11.0	12.5	11.7	62.1	11.5	326.6	11.3	235.9	11.4	505.7
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	nd	nd	7.8	27.8	7.6	16.6	7.6	27.6
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

ND INDICATES NOT DETECTED AT DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND
* REPORTED VALUE FROM 10 TIMES DILUTION

ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

HARDING LAWSON ASSOCIATES PROJECT
UTILITY TRAILER
17300 E. CHESTNUT
INDUSTRY, CA

TEG Project #951113T3
GC SHIMADZU 14A LEFT
VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8010/8020) SOIL VAPOR ANALYSES
AREA COUNTS

	BLANK	BLANK	SG-7-14	SG-7-14	SG-8-6	SG-8-6	SG-9-6	SG-9-6	SG-10-14	SG-10-14
DATE	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95
ANALYSIS TIME	8:50	8:50	9:22	9:22	10:02	10:02	10:32	10:32	11:33	11:33
SAMPLING DEPTH (feet)	--	--	14	14	6	6	6	6	14	14
VOLUME WITHDRAWN (cc)	60	60	140	140	60	60	60	60	140	140
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	4.7	1285.0	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	3.2	*115.2	3.2	*105.8	3.2	4726.1	3.2	*278.5
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	11.7	*25.3	11.7	416.1	11.7	40.1	11.7	366.7
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	6.2	1077.0	6.2	558.1	6.2	358.3	6.2	*1281.5
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	7.8	77.9	7.8	65.2	7.8	156.7	7.8	53.0
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

ND INDICATES NOT DETECTED AT DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND
* REPORTED VALUE FROM 10 TIMES DILUTION

ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

HARDING LAWSON ASSOCIATES PROJECT
UTILITY TRAILER
17300 E. CHESTNUT
INDUSTRY, CA

TEG Project #951113T3
GC SHIMADZU 14A LEFT
VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8010/8020) SOIL VAPOR ANALYSES
AREA COUNTS

	SG-11-6	SG-11-6	SG-12-6	SG-12-6	SG-13-6	SG-13-6	SG-14-6	SG-14-6	SG-15-14	SG-15-14
DATE	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95
ANALYSIS TIME	12:10	12:10	13:27	13:27	13:52	13:52	14:19	14:19	14:57	14:57
SAMPLING DEPTH (feet)	6	6	6	6	6	6	6	6	14	14
VOLUME WITHDRAWN (cc)	60	60	60	60	60	60	60	60	140	140
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	4.7	291.2	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	3.3	422.9	3.3	123.6	3.3	72.3	3.3	*208.3	3.3	432.8
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	11.7	81.1	11.7	64.2	11.7	29.6	11.7	*39.5	11.7	168.5
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	6.2	1973.7	nd	nd	nd	nd	6.2	1491.9	6.2	455.3
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	7.8	10.0	7.8	8.9	nd	nd	7.8	87.7	7.8	19.9
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

ND INDICATES NOT DETECTED AT DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND
* REPORTED VALUE FROM 10 TIMES DILUTION

ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

HARDING LAWSON ASSOCIATES PROJECT
UTILITY TRAILER
17300 E. CHESTNUT
INDUSTRY, CA

TEG Project #951113T3
GC SHIMADZU 14A LEFT
VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8010/8020) SOIL VAPOR ANALYSES
AREA COUNTS

	SG-16-6	SG-16-6	SG-17-6	SG-17-6	SG-18-14	SG-18-14	SG-19-6	SG-19-6	SG-19-6DUP	SG-19-6DUP
DATE	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95	11/14/95
ANALYSIS TIME	15:29	15:29	15:56	15:56	16:40	16:40	17:24	17:24	17:47	17:47
SAMPLING DEPTH (feet)	6	6	6	6	14	14	6	6	6	6
VOLUME WITHDRAWN (cc)	60	60	60	60	140	140	60	60	60	60
VOLUME INJECTED	1	1	1	1	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	4.7	1904.6	4.7	4156.7	4.7	1012.6	4.7	975.9
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	3.3	50.6	3.3	*187.3	3.3	*642.0	3.3	558.8	3.3	579.8
CIS-1,2-DICHLORO ETHENE	nd	nd	5.4	19.5	5.4	36.2	5.4	12.7	5.4	10.8
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	11.7	23.4	11.7	*61.7	11.7	531.8	11.7	288.4	11.7	207.0
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	6.2	*1104.4	6.2	*3810.3	6.2	3455.2	6.2	2989.0
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	7.9	129.5	7.9	141.1	7.9	74.3	7.9	60.1
BENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

ND INDICATES NOT DETECTED AT DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND
* REPORTED VALUE FROM 10 TIMES DILUTION

ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

HARDING LAWSON ASSOCIATES PROJECT
UTILITY TRAILER
17300 E. CHESTNUT
INDUSTRY, CA

TEG Project #951113T3
GC SHIMADZU 14A LEFT
VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8010/8020) SOIL VAPOR ANALYSES
AREA COUNTS

	BLANK	BLANK	SG-20-14	SG-20-14	SG-21-6	SG-21-6
DATE	11/15/95	11/15/95	11/15/95	11/15/95	11/15/95	11/15/95
ANALYSIS TIME	8:54	8:54	9:48	9:48	10:09	10:09
SAMPLING DEPTH (feet)	--	--	14	14	6	6
VOLUME WITHDRAWN (cc)	60	60	140	140	60	60
VOLUME INJECTED	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	4.7	162.1	4.7	104.4
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	nd	nd	3.3	576.2	3.3	212.0
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	nd	nd	11.6	685.8	11.6	429.0
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	nd	nd	2.5	**120.9	6.2	4775.2
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	nd	nd	7.8	111.1	7.8	53.4
BENZENE	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd

ND INDICATES NOT DETECTED AT DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND
** INDICATES THAT THE ANALYTE WAS QUANTIFIED FROM THE FID

ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

HARDING LAWSON ASSOCIATES PROJECT
UTILITY TRAILER
17300 E. CHESTNUT
INDUSTRY, CA

TEG Project #951113T3
GC SHIMADZU 14A LEFT
VOLATILE HALOGENATED AND AROMATIC HYDROCARBONS (EPA Method 8010/8020) SOIL VAPOR ANALYSES
AREA COUNTS

	SG-22-14	SG-22-14	SG-23-6	SG-23-6	SG-23-6DUP	SG-23-6DUP
DATE	11/15/95	11/15/95	11/15/95	11/15/95	11/15/95	11/15/95
ANALYSIS TIME	10:52	10:52	11:15	11:15	11:34	11:34
SAMPLING DEPTH (feet)	14	14	6	6	6	6
VOLUME WITHDRAWN (cc)	140	140	60	60	60	60
VOLUME INJECTED	1	1	1	1	1	1
DILUTION FACTOR	1	1	1	1	1	1
	RT	AREA	RT	AREA	RT	AREA
CARBON TETRACHLORIDE	nd	nd	nd	nd	nd	nd
CHLOROFORM	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,2-DICHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1-DICHLORO ETHENE	3.3	8.7	nd	nd	nd	nd
CIS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
TRANS-1,2-DICHLORO ETHENE	nd	nd	nd	nd	nd	nd
DICHLOROMETHANE	nd	nd	nd	nd	nd	nd
TETRACHLORO ETHENE	11.6	51.1	11.6	20.7	11.6	18.7
1,1,1,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,2,2-TETRACHLORO ETHANE	nd	nd	nd	nd	nd	nd
1,1,1-TRICHLORO ETHANE	6.3	404.4	nd	nd	nd	nd
1,1,2-TRICHLORO ETHANE	nd	nd	nd	nd	nd	nd
TRICHLORO ETHENE	7.8	9.6	nd	nd	nd	nd
BENZENE	nd	nd	nd	nd	nd	nd
ETHYLBENZENE	nd	nd	nd	nd	nd	nd
TOLUENE	nd	nd	nd	nd	nd	nd
m&p-XYLENES	nd	nd	nd	nd	nd	nd
o-XYLENE	nd	nd	nd	nd	nd	nd

ND INDICATES NOT DETECTED AT DETECTION LIMIT OF 1.0 UG/L-VAPOR FOR EACH COMPOUND
** INDICATES THAT THE ANALYTE WAS QUANTIFIED FROM THE FID

ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

teg

QA/QC REPORT - CALIBRATION DATA

TEG Project #951113T3

DATE: 11/13/95
SUPPLY SOURCE: ACCUSTANDARD 075-114
INSTRUMENT: T3 GC SHIMADZU 14A LEFT

					OPENING STANDARD			CLOSING STANDARD		
COMPOUND	DETECTOR	AVE RF	MASS	RT	AREA	RF	%DIFF	AREA	RF	%DIFF
CARBON TETRACHLORIDE	HALL	117.9	20	7.3	2,202	110.1	6.7%	2,407	120.4	2.0%
CHLOROFORM	HALL	103.4	20	6.7	2,251	112.6	8.9%	2,298	114.9	11.1%
1,1-DICHLORO ETHANE	HALL	93.7	20	5.3	2,069	103.5	10.4%	1,749	87.5	6.6%
1,2-DICHLORO ETHANE	HALL	127.3	20	7.7	2,382	119.1	6.5%	2,203	110.2	13.5%
1,1-DICHLORO ETHENE	PID	7.0	20	3.7	153	7.7	8.8%	124	6.2	11.8%
CIS-1,2-DICHLORO ETHENE	PID	13.2	20	6.1	255	12.8	3.7%	256	12.8	3.3%
TRANS-1,2-DICHLORO ETHENE	PID	16.5	20	4.7	293	14.7	11.2%	290	14.5	12.1%
DICHLOROMETHANE	HALL	72.2	20	4.4	1,414	70.7	2.1%	1,356	67.8	6.1%
TETRACHLORO ETHENE	PID	12.7	20	12.9	229	11.5	9.8%	231	11.6	9.0%
1,1,1,2-TETRACHLORO ETHANE	HALL	136.0	20	15.4	3,071	153.6	12.9%	3,101	155.1	14.0%
1,1,2,2-TETRACHLORO ETHANE	HALL	105.6	20	18.9	2,071	103.6	1.9%	2,229	111.5	5.6%
1,1,1-TRICHLORO ETHANE	HALL	98.1	20	7.0	1,859	93.0	5.2%	2,020	101.0	3.0%
1,1,2-TRICHLORO ETHANE	HALL	76.8	20	12.6	1,696	84.8	10.4%	1,724	86.2	12.2%
TRICHLORO ETHENE	PID	15.0	20	8.8	278	13.9	7.0%	279	14.0	6.7%
BENZENE	PID	26.1	20	7.6	468	23.4	10.4%	487	24.4	6.8%
CHLOROBENZENE	PID	38.1	20	15.1	768	38.4	0.9%	727	36.4	4.5%
ETHYLBENZENE	PID	27.5	20	15.4	548	27.4	0.4%	530	26.5	3.7%
TOLUENE	PID	28.6	20	11.6	537	26.9	6.1%	549	27.5	4.0%
m&p-XYLENES	PID	33.6	40	15.8	1,284	32.1	4.4%	1,247	31.2	7.1%
o-XYLENE	PID	30.9	20	16.8	599	30.0	3.0%	582	29.1	5.8%

MASS UNITS ARE ng UNLESS OTHERWISE STATED
ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

Blayne Hartman
1-16-96

teg

QA/QC REPORT - CALIBRATION DATA

TEG Project #951113T3

DATE: 11/14/95
SUPPLY SOURCE: ACCUSTD 075-114
INSTRUMENT: T3 GC-LEFT

					OPENING STANDARD			CLOSING STANDARD		
COMPOUND	DETECTOR	AVE RF	MASS	RT	AREA	RF	%DIFF	AREA	RF	%DIFF
CARBON TETRACHLORIDE	HALL	117.9	20	7.3	2,630	131.5	11.5%	2,494	124.7	5.7%
CHLOROFORM	HALL	103.4	20	6.7	2,162	108.1	4.6%	2,097	104.9	1.4%
1,1-DICHLORO ETHANE	HALL	93.7	20	5.3	1,832	91.6	2.2%	1,884	94.2	0.6%
1,2-DICHLORO ETHANE	HALL	127.3	20	7.7	2,653	132.7	4.2%	2,195	109.8	13.8%
1,1-DICHLORO ETHENE	PID	7.0	20	3.7	127	6.4	9.7%	129	6.5	8.3%
CIS-1,2-DICHLORO ETHENE	PID	13.2	20	6.1	227	11.4	14.2%	276	13.8	4.3%
TRANS-1,2-DICHLORO ETHENE	PID	16.5	20	4.7	370	18.5	12.1%	378	18.9	14.5%
DICHLOROMETHANE	HALL	72.2	20	4.4	1,501	75.1	3.9%	1,704	85.2	18.0%
TETRACHLORO ETHENE	PID	12.7	20	12.9	288	14.4	13.5%	271	13.6	6.8%
1,1,1,2-TETRACHLORO ETHANE	HALL	136.0	20	15.4	2,396	119.8	11.9%	2,765	138.3	1.7%
1,1,2,2-TETRACHLORO ETHANE	HALL	105.6	20	18.9	2,186	109.3	3.6%	2,385	119.3	13.0%
1,1,1-TRICHLORO ETHANE	HALL	98.1	20	7.0	2,185	109.3	11.4%	2,100	105.0	7.0%
1,1,2-TRICHLORO ETHANE	HALL	76.8	20	12.6	1,445	72.3	6.0%	1,779	89.0	15.8%
TRICHLORO ETHENE	PID	15.0	20	8.8	267	13.4	10.7%	267	13.4	10.7%
BENZENE	PID	26.1	20	7.6	541	27.1	3.6%	561	28.1	7.4%
CHLOROBENZENE	PID	38.1	20	15.1	733	36.7	3.7%	713	35.7	6.3%
ETHYLBENZENE	PID	27.5	20	15.4	626	31.3	13.7%	635	31.8	15.4%
TOLUENE	PID	28.6	20	11.6	626	31.3	9.5%	572	28.6	0.1%
m&p-XYLENES	PID	33.6	40	15.8	1,417	35.4	5.5%	1,455	36.4	8.4%
o-XYLENE	PID	30.9	20	16.8	654	32.7	5.9%	658	32.9	6.5%

MASS UNITS ARE ng UNLESS OTHERWISE STATED
ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

Blayne Hartman
1-16-96

teg

QA/QC REPORT - CALIBRATION DATA

TEG Project #951113T3

DATE: 11/15/95
SUPPLY SOURCE: ACCUSTANDARD 075-114
INSTRUMENT: T3 GC-LEFT

COMPOUND	DETECTOR	AVE RF	MASS	RT	OPENING STANDARD AREA	OPENING STANDARD RF	OPENING STANDARD %DIFF	CLOSING STANDARD AREA	CLOSING STANDARD RF	CLOSING STANDARD %DIFF
CARBON TETRACHLORIDE	HALL	117.9	20	7.3	2,202	110.1	6.7%	2,309	115.5	2.1%
CHLOROFORM	HALL	103.4	20	6.7	2,251	112.6	8.9%	2,279	114.0	10.2%
1,1-DICHLORO ETHANE	HALL	93.7	20	5.3	2,069	103.5	10.4%	1,667	83.4	11.0%
1,2-DICHLORO ETHANE	HALL	127.3	20	7.7	2,382	119.1	6.5%	2,325	116.3	8.7%
1,1-DICHLORO ETHENE	PID	7.0	20	3.7	153	7.7	8.8%	152	7.6	8.1%
CIS-1,2-DICHLORO ETHENE	PID	13.2	20	6.1	255	12.8	3.7%	261	13.1	1.4%
TRANS-1,2-DICHLORO ETHENE	PID	16.5	20	4.7	293	14.7	11.2%	305	15.3	7.6%
DICHLOROMETHANE	HALL	72.2	20	4.4	1,414	70.7	2.1%	1,292	64.6	10.5%
TETRACHLORO ETHENE	PID	12.7	20	12.9	229	11.5	9.8%	228	11.4	10.2%
1,1,1,2-TETRACHLORO ETHANE	HALL	136.0	20	15.4	3,071	153.6	12.9%	2,793	139.7	2.7%
1,1,2,2-TETRACHLORO ETHANE	HALL	105.6	20	18.9	2,071	103.6	1.9%	2,313	115.7	9.6%
1,1,1-TRICHLORO ETHANE	HALL	98.1	20	7.0	1,859	93.0	5.2%	2,066	103.3	5.3%
1,1,2-TRICHLORO ETHANE	HALL	76.8	20	12.6	1,696	84.8	10.4%	1,712	85.6	11.4%
TRICHLORO ETHENE	PID	15.0	20	8.8	278	13.9	7.0%	309	15.5	3.3%
BENZENE	PID	26.1	20	7.6	468	23.4	10.4%	446	22.3	14.6%
CHLOROBENZENE	PID	38.1	20	15.1	768	38.4	0.9%	799	40.0	5.0%
ETHYLBENZENE	PID	27.5	20	15.4	548	27.4	0.4%	561	28.1	1.9%
TOLUENE	PID	28.6	20	11.6	537	26.9	6.1%	527	26.4	7.8%
m&p-XYLENES	PID	33.6	40	15.8	1,284	32.1	4.4%	1,321	33.0	1.6%
o-XYLENE	PID	30.9	20	16.8	599	30.0	3.0%	630	31.5	2.0%

MASS UNITS ARE ng UNLESS OTHERWISE STATED
ANALYSES PERFORMED ON-SITE IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

Blayne Hartman
1-16-96

teg

INITIAL CALIBRATION (3-POINT)

SUPPLY SOURCE: ACCUSTANDARD 075-114

LAB: TIOGA 3
INSTRUMENT: GC SHIMADZU 14A LEFT

COMPOUND	DETECTOR	CAL DATE	LOW STANDARD RT	MASS	AREA	RF	MID STANDARD RT	MASS	AREA	RF	HIGH STANDARD RT	MASS	AREA	RF	SUMMARY AVE RT	AVE RF	SD	%RSD
CARBON TETRACHLORIDE	HALL	11/7/95	6.5	10	1,203	120.3	6.5	20	2,272	113.6	6.5	40	4,798	119.9	6.5	117.9	3.8	3.2%
CHLOROFORM	HALL	11/7/95	5.9	10	969	96.9	5.9	20	2,111	105.6	5.9	40	4,307	107.7	5.9	103.4	5.7	5.5%
1,1-DICHLORO ETHANE	HALL	11/7/95	4.7	10	965	96.5	4.7	20	1,830	91.5	4.7	40	3,721	93.0	4.7	93.7	2.6	2.7%
1,2-DICHLORO ETHANE	HALL	11/7/95	6.8	10	1,385	138.5	6.8	20	2,498	124.9	6.8	40	4,743	118.6	6.8	127.3	10.2	8.0%
1,1-DICHLORO ETHENE	PID	11/7/95	3.2	10	69	6.9	3.2	20	127	6.4	3.2	40	314	7.9	3.2	7.0	0.8	10.8%
CIS-1,2-DICHLORO ETHENE	PID	11/7/95	5.4	10	129	12.9	5.4	20	261	13.1	5.4	40	550	13.8	5.4	13.2	0.5	3.4%
TRANS-1,2-DICHLORO ETHENE	PID	11/7/95	4.1	10	157	15.7	4.1	20	301	15.1	4.1	40	750	18.8	4.1	16.5	2.0	12.0%
DICHLOROMETHANE	HALL	11/7/95	3.8	10	686	68.6	3.8	20	1,333	66.7	3.8	40	3,254	81.4	3.8	72.2	8.0	11.1%
TETRACHLORO ETHENE	PID	11/7/95	11.7	10	130	13.0	11.7	20	244	12.2	11.7	40	515	12.9	11.7	12.7	0.4	3.4%
1,1,1,2-TETRACHLORO ETHANE	HALL	11/7/95	14.2	10	1,377	137.7	14.2	20	2,825	141.3	14.2	40	5,159	129.0	14.2	136.0	6.3	4.6%
1,1,2,2-TETRACHLORO ETHANE	HALL	11/7/95	17.6	10	979	97.9	17.6	20	2,149	107.5	17.6	40	4,452	111.3	17.6	105.6	6.9	6.5%
1,1,1-TRICHLORO ETHANE	HALL	11/7/95	6.2	10	948	94.8	6.2	20	1,949	97.5	6.2	40	4,082	102.1	6.2	98.1	3.7	3.7%
1,1,2-TRICHLORO ETHANE	HALL	11/7/95	11.5	10	678	67.8	11.5	20	1,636	81.8	11.5	40	3,236	80.9	11.5	76.8	7.8	10.2%
TRICHLORO ETHENE	PID	11/7/95	7.9	10	148	14.8	7.9	20	291	14.6	7.9	40	620	15.5	7.9	15.0	0.5	3.3%
BENZENE	PID	11/7/95	6.7	10	253	25.3	6.7	20	506	25.3	6.7	40	1,110	27.8	6.7	26.1	1.4	5.4%
CHLOROBENZENE	PID	11/7/95	13.9	10	412	41.2	13.9	20	756	37.8	13.9	40	1,407	35.2	13.9	38.1	3.0	7.9%
ETHYLBENZENE	PID	11/7/95	14.2	10	272	27.2	14.2	20	555	27.8	14.2	40	1,104	27.6	14.2	27.5	0.3	1.0%
TOLUENE	PID	11/7/95	10.5	10	289	28.9	10.5	20	556	27.8	10.5	40	1,162	29.1	10.5	28.6	0.7	2.4%
m&p-XYLENES	PID	11/7/95	14.5	20	653	32.7	14.5	40	1,318	33.0	14.5	80	2,807	35.1	14.5	33.6	1.3	4.0%
o-XYLENE	PID	11/7/95	15.6	10	309	30.9	15.6	20	612	30.6	15.6	40	1,246	31.2	15.6	30.9	0.3	0.9%

MASS UNITS ARE ng UNLESS OTHERWISE STATED
ANALYSES PERFORMED IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

Blayne Hartman
1-16-96

teg

INITIAL LCS STANDARD REPORT (CALIBRATION VERIFICATION)

SUPPLY SOURCE: ACCUSTANDARD 075-114
INSTRUMENT: GC SHIMADZU 14A LEFT

COMPOUND	DETECTOR	CAL DATE	AVE RF	MASS	RT	AREA	RF	%DIFF
CARBON TETRACHLORIDE	HALL	11/7/95	117.9	20	6.5	2,483	124.2	5.3%
CHLOROFORM	HALL	11/7/95	103.4	20	5.9	2,257	112.9	9.2%
1,1-DICHLORO ETHANE	HALL	11/7/95	93.7	20	4.7	1,931	96.6	3.1%
1,2-DICHLORO ETHANE	HALL	11/7/95	127.3	20	6.8	2,722	136.1	6.9%
1,1-DICHLORO ETHENE	PID	11/7/95	7.0	20	3.2	127	6.4	9.7%
CIS-1,2-DICHLORO ETHENE	PID	11/7/95	13.2	20	5.4	263	13.2	0.6%
TRANS-1,2-DICHLORO ETHENE	PID	11/7/95	16.5	20	4.1	302	15.1	8.5%
DICHLOROMETHANE	HALL	11/7/95	72.2	20	3.8	1,473	73.7	2.0%
TETRACHLORO ETHENE	PID	11/7/95	12.7	20	11.7	245	12.3	3.5%
1,1,1,2-TETRACHLORO ETHANE	HALL	11/7/95	136.0	20	14.2	2,767	138.4	1.7%
1,1,2,2-TETRACHLORO ETHANE	HALL	11/7/95	105.6	20	17.6	2,255	112.8	6.8%
1,1,1-TRICHLORO ETHANE	HALL	11/7/95	98.1	20	6.2	2,061	103.1	5.0%
1,1,2-TRICHLORO ETHANE	HALL	11/7/95	76.8	20	11.5	1,663	83.2	8.2%
TRICHLORO ETHENE	PID	11/7/95	15.0	20	7.9	293	14.7	2.0%
BENZENE	PID	11/7/95	26.1	20	6.7	509	25.5	2.6%
CHLOROBENZENE	PID	11/7/95	38.1	20	13.9	761	38.1	0.0%
ETHYLBENZENE	PID	11/7/95	27.5	20	14.2	560	28.0	1.8%
TOLUENE	PID	11/7/95	28.6	20	10.5	548	27.4	4.1%
m&p-XYLENES	PID	11/7/95	33.6	40	14.5	1,314	32.9	2.1%
o-XYLENE	PID	11/7/95	30.9	20	15.6	612	30.6	0.9%

MASS UNITS ARE ng UNLESS OTHERWISE NOTED
ANALYSES PERFORMED IN TEG'S CA DOHS CERTIFIED MOBILE LABORATORY (CERT #1317)
ANALYSES PERFORMED BY: PATRICK LAO
DATA REVIEWED BY: DR. BLAYNE HARTMAN

Blayne Hartman
1-16-96

APPENDIX B

Del Mar Analytical

2852 Alton Ave., Irvine, CA 92714 (714) 261-1022 FAX (714) 261 1228
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
16525 Sherman Way, Suite C-11, Van Nuys, CA 91406 (818) 779-1844 FAX (818) 779 1843
2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92714
Attention: Kevin Trout

Client Project ID: 28739-06.04
Utility Trailer/Industry
Sample Descript: Air Sample in Tedlar Bag, Well VE-17
Lab Number: FA00468

Sampled: Jan 5, 1996
Received: Jan 5, 1996
Analyzed: Jan 5, 1996
Reported: Jan 8, 1996

HALOGENATED VOLATILE ORGANICS by GC (EPA 8010)

Analyte	Detection Limit mg/m3	Sample Result mg/m3	Detection Limit ppm/vol	Sample Result ppm/vol
Bromodichloromethane	5.0	N.D.	0.75	N.D.
Bromoform	10	N.D.	0.97	N.D.
Bromomethane	5.0	N.D.	1.3	N.D.
Carbon tetrachloride	5.0	N.D.	0.79	N.D.
Chlorobenzene	5.0	N.D.	1.1	N.D.
Chloroethane	25	N.D.	9.3	N.D.
2-Chloroethylvinyl ether	25	N.D.	5.7	N.D.
Chloroform	10	N.D.	2.0	N.D.
Chloromethane	5.0	N.D.	2.4	N.D.
Dibromochloromethane	5.0	N.D.	0.59	N.D.
1,2-Dichlorobenzene	10	N.D.	1.7	N.D.
1,3-Dichlorobenzene	10	N.D.	1.7	N.D.
1,4-Dichlorobenzene	10	N.D.	1.7	N.D.
1,1-Dichloroethane	5.0	N.D.	1.2	N.D.
1,2-Dichloroethane	5.0	N.D.	1.2	N.D.
1,1-Dichloroethene	5.0	N.D.	1.3	N.D.
cis-1,2-Dichloroethene	5.0	N.D.	1.3	N.D.
trans-1,2-Dichloroethene	5.0	N.D.	1.3	N.D.
1,2-Dichloropropane	5.0	N.D.	1.1	N.D.
cis-1,3-Dichloropropene	5.0	N.D.	1.1	N.D.
trans-1,3-Dichloropropene	5.0	N.D.	1.1	N.D.
Methylene chloride	10	N.D.	2.9	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.	0.73	N.D.
Tetrachloroethene	**5.0**	**23**	**0.74**	**3.4**
1,1,1-Trichloroethane	**5.0**	**7.6**	**0.92**	**1.4**
1,1,2-Trichloroethane	5.0	N.D.	0.92	N.D.
Trichloroethene	5.0	N.D.	0.93	N.D.
Trichlorofluoromethane	5.0	N.D.	0.89	N.D.
Vinyl chloride	10	N.D.	3.9	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Debbie Ranck
Debbie Ranck
Quality Assurance Officer

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene	107%

UTM 005771

Results pertain only to samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

Del Mar Analytical

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2465 W. 12th St., Suite 1, Tempe, AZ 85281 (602) 968-8272 FAX (602) 968-1338

Harding Lawson Associates
30 Corporate Park, Suite 400
Irvine, CA 92714
Attention: Kevin Trout

Client Project ID: 28739-06.04
Utility Trailer/Industry
Sample Descript: Air Sample in Tedlar Bag, Well VE-18
Lab Number: FA00469

Sampled: Jan 5, 1996
Received: Jan 5, 1996
Analyzed: Jan 5, 1996
Reported: Jan 8, 1996

HALOGENATED VOLATILE ORGANICS by GC (EPA 8010)

Analyte	Detection Limit mg/m3	Sample Result mg/m3	Detection Limit ppm/vol	Sample Result ppm/vol
Bromodichloromethane	5.0	N.D.	0.75	N.D.
Bromoform	10	N.D.	0.97	N.D.
Bromomethane	5.0	N.D.	1.3	N.D.
Carbon tetrachloride	5.0	N.D.	0.79	N.D.
Chlorobenzene	5.0	N.D.	1.1	N.D.
Chloroethane	25	N.D.	9.3	N.D.
2-Chloroethylvinyl ether	25	N.D.	5.7	N.D.
Chloroform	10	N.D.	2.0	N.D.
Chloromethane	5.0	N.D.	2.4	N.D.
Dibromochloromethane	5.0	N.D.	0.59	N.D.
1,2-Dichlorobenzene	10	N.D.	1.7	N.D.
1,3-Dichlorobenzene	10	N.D.	1.7	N.D.
1,4-Dichlorobenzene	10	N.D.	1.7	N.D.
1,1-Dichloroethane	5.0	N.D.	1.2	N.D.
1,2-Dichloroethane	5.0	N.D.	1.2	N.D.
1,1-Dichloroethene	**5.0**	**53**	**1.3**	**13**
cis-1,2-Dichloroethene	5.0	N.D.	1.3	N.D.
trans-1,2-Dichloroethene	5.0	N.D.	1.3	N.D.
1,2-Dichloropropane	5.0	N.D.	1.1	N.D.
cis-1,3-Dichloropropene	5.0	N.D.	1.1	N.D.
trans-1,3-Dichloropropene	5.0	N.D.	1.1	N.D.
Methylene chloride	10	N.D.	2.9	N.D.
1,1,2,2-Tetrachloroethane	5.0	N.D.	0.73	N.D.
Tetrachloroethene	**5.0**	**110**	**0.74**	**16**
1,1,1-Trichloroethane	**5.0**	**71**	**0.92**	**13**
1,1,2-Trichloroethane	5.0	N.D.	0.92	N.D.
Trichloroethene	**5.0**	**9.9**	**0.93**	**1.8**
Trichlorofluoromethane	5.0	N.D.	0.89	N.D.
Vinyl chloride	10	N.D.	3.9	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

DEL MAR ANALYTICAL, IRVINE (ELAP #1197)

Debbie Ranck
Debbie Ranck
Quality Assurance Officer

Surrogate Standard Recovery:	
1-Chloro-3-fluorobenzene	107%

UTM 005772

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...ng L... Associates
...21 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1376

CHAIN OF CUSTODY FORM

Lab: Del Mar

Samplers: JWH

Job Number: 28739 - 06.04

Name/Location: Utility Trailer/Industry

Project Manager: Kevin Trout

Recorder: [signature] (Signature Required)

SOURCE CODE	MATRIX: AIR	Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr Wk Seq	DATE: Yr Mo Dy Time	STATION DESCRIPTION/ NOTES	EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	Priority Pllnt. Metals	Benzene/Toluene/Xylene	Total Petrol. Hydrocarb.
62	X					1			Well VE17	960105 1446	Well VE-17	X						
62	X					1			Well VE18	960105 1448	Well VE-18	X						

LAB NUMBER: Yr Wk Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
				Normal Turnaround for Air

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
[signature]	1.5.96 1627		
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)	
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature)	
DISPATCHED BY: (Signature)	DATE/TIME	RECEIVED FOR LAB BY: (Signature) [signature]	DATE/TIME 1/5/96 1627

METHOD OF SHIPMENT: hand del, intact, room temp.

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

UTM 005773