C O V E R	FAX
SHEET	

To:

eva chu, Hazardous Materials Specialist, ACHCSA

Fax#:

510-337-9335

Subject:

San Leandro - Printpack Report

Date:

August 4, 1998

Pages:

18, including this cover sheet.

FROM: Ed Shaw - CTEC-ESCM, Inc.

I will call later this week. Hard copy is in the mail.

Thanks,

Ed.

From the desk of...

CTEC-ESCM, Inc. P.O. Box 387 Monroe, UT 84754

PH 435-527-3103 Fax 435-527-3047

CTEC-ESCM, Inc.

"Saving the Earth"

P.O. Box 271 Pinellas Park, FL 33780 (813) 573-4471 Fax (813) 572-7831

August 4, 1998

Alameda County Health Care Services Agency Environmental Health Services 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Attn: eva chu, Hazardous Materials Specialist

Subject:

Air Sampling Report

Printpack, Inc.

2101 Williams Street

San Leandro, Alameda County, California

90 MIS-9 MH 8: 45

Dear Ms. chu;

The subject report is forwarded pursuant to our discussions of July 1, 1998. I will call to discuss it with you after you have had an opportunity to review it.

Basically, the soil gas sampling indicates that there are no chlorinated gaseous compounds in the areas sampled. The indications are that there are no exposure pathways of concern in regards to humans or the environment.

We appreciate your working with us in the field and in reviewing the collected data on this project. If you have questions before I call, you can reach me at (435) 527-3103.

Sincerely,

Edward A. Shaw, PE

President

- cannot compane & Vocampies to

Matta

my/m3 = (PPM)(MU))

Air Sampling Report Printpack, Inc. 2101 Williams Street San Leandro, Alameda County, California August 4, 1998

CTEC-ESCM, Inc. 11443 43rd Street North Clearwater, Florida 33762 (813) 573-4471

A Company

TABLE OF CONTENTS

HISTORY Page 1 CONCLUSIONS AND RECOMMENDATIONS Page 4 TABLES & GRAPHS Table 1 - Groundwater Elevation Data summary Table 2 - Groundwater Sample Analytical Results Table 3 - Acetone concentrations in Monitor Well "W-10"

FIGURES

Figure 1 - Site Map

Figure 2 - Groundwater Isopleths

Figure 3 - Soil Gas Sample Locations

Graph - Concentrations of Acetone in Groundwater

Figure 4 - Topographic Map of Area

CTEC-ESCM, Inc has been commissioned by Printpack to provide environmental services at their San Leandro Plant. The following report is presented as part of these services.

HISTORY

The original building was constructed in 1943 by Western Waxide, a producer of wax coated paper products. Crown Zellerbach subsequently acquired the property and sold it to James River Corporation in 1988. James River Corporation used the property as a flexible coatings plant until they sold it to Printpack, Inc. in late 1996. Printpack closed the facility in 1997 and placed it on the market for sale. There are approximately 12.7 acres included the with the property. (Figure 1)

The facility is surrounded by numerous industrial and storage facilities. The Dom Tar Company is located to the south and east of the Printpack property. Norcal Pottery is east of the facility. An industrial recycling center is located just south of the property. The Scott Company, the Olympia Gas Company, and the Bettes Spring Company are located north and northwest of the property. American Can and Silgen Containers are northeast of the property.

The Alameda County Health Care Services Agency (ACHCSA) has identified two upgradient, offsite, sources of chlorinated hydrocarbon releases. These are known as the "Williams Street Site" and the "Caterpillar Site". It is noted that the Singer-Friden site is also somewhat upgradient of the site. The California Lust List indicates that there are 16 upgradient sites within one half mile of the facility with reported leaks. One of these is the Scott Company that is located just north of the property. The California Environmental Protection Agency/Office of Emergency Information's CORTESE List identifies 34 upgradient sites within a mile of the Printpack property that have had a release of hazardous substances.

The ACHCSA notified James River Corporation on August 20, 1996, that the agency's concerns with the site were:

- 1. Removal of the then free-phase hydraulic fluid from the vicinity of monitor well TW-1;
- Acetone had been documented as having been used by Crown Zellerbach at the site in 1964; and
- James River was to adhere to an annual (1st quarter) schedule of well sampling, monitoring, and report submittal. The analysis was to be for total petroleum hydrocarbons as diesel and hydraulic fluid for monitor wells W-7 and W-8; acetone, methyl isobutyl ketone (MIBK), benzene, toluene, ethyl benzene, and total xylene (BTEX) for monitor well W-10, and TPHhf and BTEX for temporary monitor wells TW-2 and TW-3. Groundwater elevation readings were to be taken for all monitor wells.

Air Sampling Report Printpack, San Leandro August 4, 1998 Page 2 of 4

By letter dated October 23, 1996, the ACHCSA requested that James River Corporation prepare a Risk Based Corrective Action Plan in conformance with ASTM Designation: E 1739-95.

Printpack and ESCM personnel met with the ACHCSA on December 5, 1996. During that meeting it was agreed that the monitoring and sampling requested by the ACHCSA letter of August 20, 1996, would be completed and a report submitted. Printpack/ESCM agreed to aggressively remove the free-phase hydraulic fluid from TW-1. Printpack/ESCM agreed to prepare and submit a Risk Based Corrective Action Plan (RBCA) for the site. It was agreed that if the RBCA were approved then "Clean Closure" for the site would be granted in regards to any releases that had occurred on the facility. The wells on site would be closed after the "Clean Closure" was approved. The ACHCSA agreed that their were no records indicating that chlorinated compounds had ever been used at the property by Printpack nor any of Printpack's predecessors and that any chlorinated compounds found in the groundwater beneath the site would be attributed to others (i.e., Caterpillar, Williams Street Site, Singer-Friden, and other surrounding release sites) who had been contributing to what is known as the San Leandro Plume.

A Groundwater Elevation report was submitted to the ACHCSA on December 31, 1996 (Table 1). A RBCA Report was submitted to the ACHCSA on April 25, 1997. These reports stated that:

- More than 68 gallons of free-phase hydraulic fluid had been removed and that no free phase hydraulic fluid had been detected since February 24, 1997. All Freephase has been removed.
- The groundwater sampling (Table 2) detected only 0.39 mg/L of TPHhf in monitor well TW-2, and 2.4 mg/L of Acetone in W-10 with all other results being "Non-Detect".
- 3. The aquifer testing indicated that the averaged groundwater flow velocity was 0.12 feet per day.
- 4. Bioactivity was measured in W-10 indicating that the acetone is bioattenuating. Acetone concentration in the well has attenuated from the original 150,000 mg/L to the current 2.4 mg/L (Table 3).

Air Sampling Report Printpack, San Leandro August 4, 1998 Page 3 of 4

- 5. The "Worst Case" Fate and Transport Model indicates that the dissolved acetone plume would reach equilibrium and stop moving downgradient at a maximum distance of 630 feet from monitor well W-10. The maximum concentration at the leading edge of the plume would be 1 ug/L. The California code of Regulations, Title 22, Section 66261.126, Appendix X lists acetone as being ignitable only, but not toxic, not corrosive, not reactive, and not as being extremely hazardous. Review of other data indicated that a Risk Based Screening Level for acetone of 1,297 mg/Kg (or mg/L) would be appropriate. The current 2.4 mg/L is several orders of magnitude below this screening level.
- 6. There is no demonstrable long term threat to human health, safety, of sensitive environmental receptors from the constituents on the Printpack site.
- 7. Since there are no hazardous associated with the property, all monitor wells should be closed.

By letter dated March 2, 1998, the ACHCSA notified Printpack that remedial action had been completed for soil and groundwater contaminated with alcohol, acetate, and acetone compounds, as well as BTEX constituents. The ACHCSA stated that based upon the available information that No Further Action related to the above contaminants was required. However, the ACHCSA noted that the site contained chlorinated hydrocarbons in excess of drinking water MCLs. The agency stated that the site could be designated as a containment zone once a management plan had been submitted and approved. They stated that the vertical and lateral extent of the plume must be defined and that it must be demonstrated that the contaminant concentrations do not pose a risk human health or the environment. The agency requested that potential exposure pathways be evaluated by collecting soil gas vapors on site.

A Soil Gas Sampling Work Plan and an Illness and Injury Prevention Plan were developed on June 19, 1998, and submitted to the ACHCSA. They approved the plan and soil gas samples were collected on July 1, 1998. (See Figure 2) ACHCSA personnel were onsite during the sample collection activity. Samples were collected by using Summa canisters in conformance with the guidance provided in the work plan. The collection canisters were transported the same day to Air Toxics, Ltd., (the laboratory) in Folsum, California. The laboratory ran TO-14 test on all three canisters. The three canisters still contained a slight vacuum, indicating that the testing procedure had been accomplished correctly. No chlorinated gaseous compounds were detected in any of the samples. Reporting limits were 4 to 16 ppbv for samples A and B. The reporting limits were 9.9 to 39 ppbv for sample C.

Air Sampling Report Printpack, San Leandro August 4, 1998 Page 4 of 4

During the collection of the soil gas samples, Printpack's Mr. Ed Wirthin, showed ESCM and the ACHCSA representatives where previously contaminated soil had been excavated and removed. He explained that the soils had been removed to below the water table in an area adjoining the ink room. The area was approximately sixty feet long by fifteen feet wide. Mr. Wirthin stated that he had been at the plant for more than twenty four years and to his knowledge, there had never been any chlorinated solvents used or stored at the facility.

CONCLUSIONS AND RECOMMENDATIONS:

No gaseous chlorinated compounds were detected. The PELs, TWAs, and IDLHs for all constituents of concern are above the reporting limits (i.e., detection limits) used by the laboratory. According to Mr. Wirthin, there have never been chlorinated compounds stored or used at the facility. Therefore, it is evident that there are no exposure pathways for chlorinated compounds.

The reported gaseous concentrations of the non-chlorinated hydrocarbon constituents are also below the PEL, TWA, and IDLH levels for all reported constituents. The previous groundwater sampling indicates that these constituents are of no concern. Therefore no additional action needs to be considered for these constituents.

It is recommended that "No Further Action" be approved for this facility and that all monitor wells be properly closed.

TABLE 1 GROUND-WATER ELEVATION DATA SUMMARY PRINTPACK FACILITY 2101 WILLIAMS STREET SAN LEANDRO, CALIFORNIA APRIL 14, 1997

Monitor Well	W-6	W-7	W-8	W-10	B-1	TW-1	TW-2	TW-3
Sample Date								
May 1995	10.75	10.11	9.95	9.27	10.2			
July 1995	7.30	8.71	9.36	8.38	5			
Oct 1995	8.58	8.02	8.69	7.68	9.34			
Jan 1996	13.24	12.33	12.82	13.10	8.61	12.88	10,50	11.47
April	13.42	13.18	13.60	13.89	13.1	ND	10.90	12.04
1996	14.18	13.27	13.70	13.99	3	12.90		12.04
Dec 1996					13.9		10.80	
					5		•	
					14.0			
					0			

TABLE 2 GROUND-WATER SAMPLE ANALYTICAL RESULTS PRINTPACK FACILITY 2101 WILLIAMS STREET SAN LEANDRO, CALIFORNIA APRIL 14, 1997

Monitor	Sample	TPH-D	TPH-HF	Benzene	Toluene	Ethylben	Xylenes	Acetone	MIBK
Well	Date	(μg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)	(µg/L)	(μg/L)
TW-2	12/28/95	NA	2200	ND	ND	ND	ND	NA	NA
	04/11/96	NA	ND	ND	ND	ND	ND	NA	NA
	01/22/97	NA	390	ND	ND	ND	ND	NA	NA
TW-3	12/28/95	NA	ND	ND	ND	ND	ND	NA	NA
	04/11/96	NA	ND	0.58	ND	ND	ND	NA	NA
	01/22/97	NA	ND	ND	ND	ND	ND	NA	NA
W-7	12/28/95	ND	ND	ND	ND	ND	ND	NA	NA
	04/11/96	ND	ND	NA	NA	NA	NA	NA	NA
	01/22/97	ND	ND	ND	ND	ND	ND	ND	ND
W-8	12/28/95	NA	NA	NA	NA	NA	NA	NA	NA
	04/11/96	ND	ND	NA	NA	NA	NA	NA	NA
	01/22/97	ND	ND	ND	ND	ND	ND	ND	ND
W-10	12/28/95 04/11/96 01/22/97	1700 NA ND	2500 NA ND	1.8 2.2 ND	91 100 ND	11 12 ND	64 62 ND	NA 1400 0 2400	NA NA ND

NA means analyte not applicable to this sample round ND means not detected above the reporting limit

TABLE 3 ACETONE CONCENTRATIONS IN MONITOR WELL "W-10" PRINTPACK FACILITY 2101 WILLIAMS STREET SAN LEANDRO, CALIFORNIA APRIL 14, 1997

DATE	CONCENTRATI ON mg/L
JUN 94	150,000
SEP 94	74,000
DEC 94	18,000
FEB 95	47,000
MAY 95	21,000
JUL 95	19,000
OCT 95	39,000
APR 96	14
DEC 96	2.4

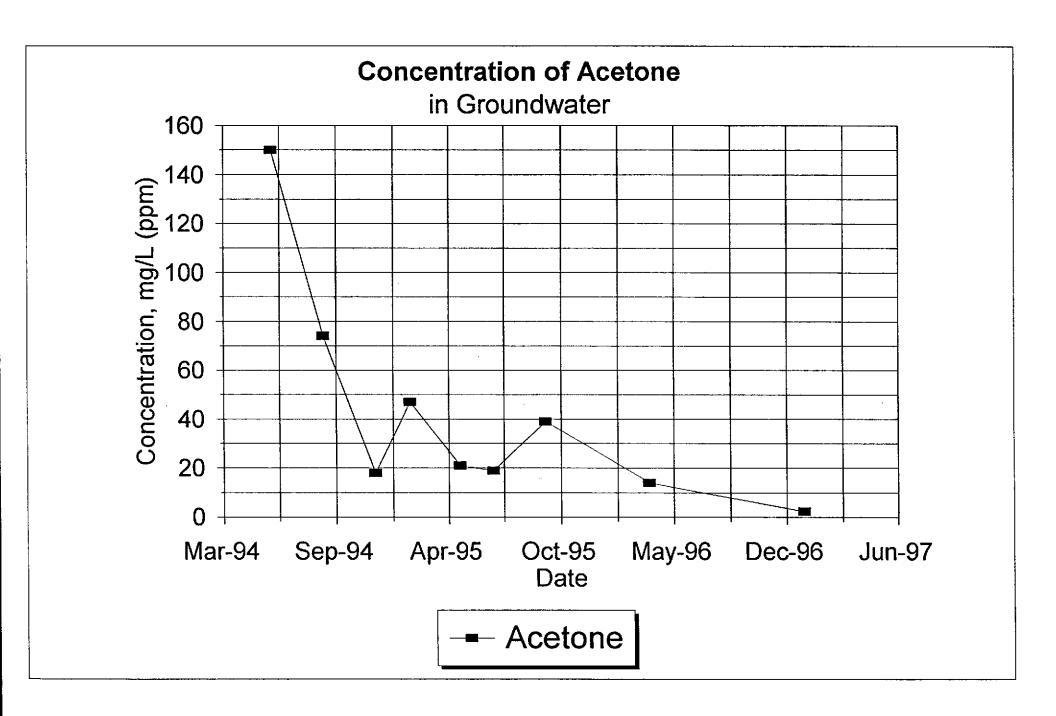
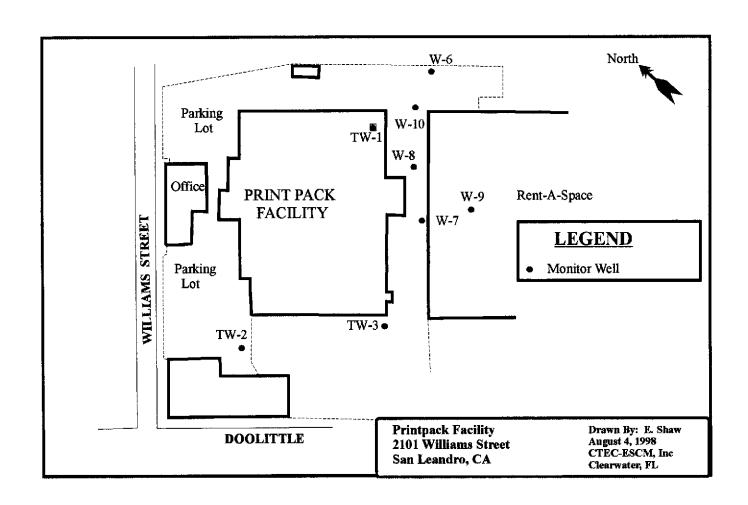
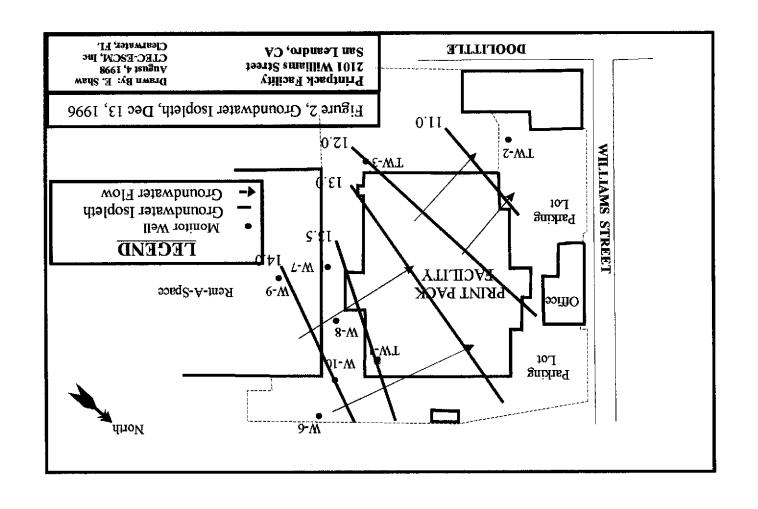
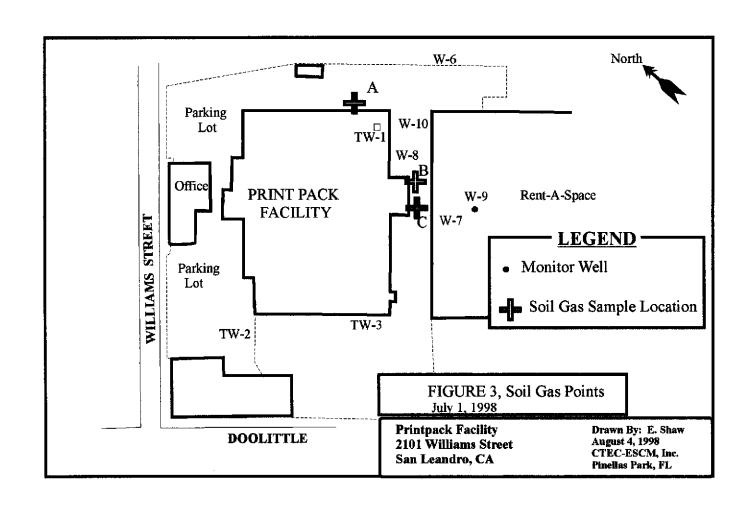
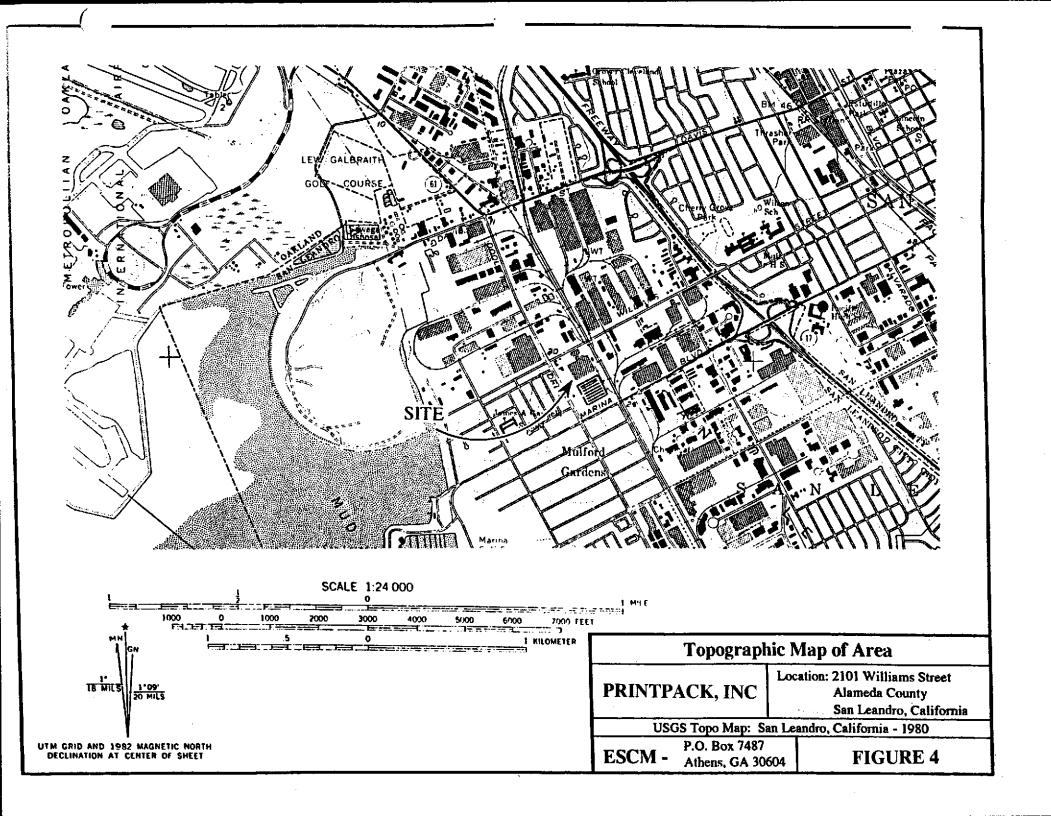


Figure 3. Exponential Decrease in the Concentration of Acetone in Groundwater









WORK ORDER #: 9807010

Work Order Summary

CLIENT:

Mr. Edward Shaw

BILL TO: Same

CTEL-ESCM P.O. Box 387

Monroe, UT 84754

PHONE:

435-527-3103

P.O. # EAS7198

FAX:

435-527-3047

PROJECT # PRINTPACK @ SAN LEANDRO

DATE RECEIVED:

7/1/98

DATE COMPLETED: 7/16/98

			RECEIPT
FRACTION #	NAME	TEST	VAC./PRES.
01A	PRINTPACK-A @ 3'	TO-14	0.2 psi
02A	PRINTPACK-B @ 3'	TO-14	0.2 psi
03A	PRINTPACK-C @ 3'	TO-14	0.4 psi
04A	Lab Blank	TO-14	NA

CERTIFIED BY:

Certification numbers: CA ELAP - 1149, NY ELAP - 11291, UT ELAP - E-217

SAMPLE NAME: PRINTPACK-A @ 3'

ID#: 9807010-01A

EPA METHOD TO-14 GC/MS Full Scan

1070825 Date of Collection: 7/1/98

File Name:

2-Propanol

trans-1,2-Dichloroethene

Compound	Rpt. Limit (ppbv)	Amount (ppb
		Not Detected
Freon 12 Freon 114	4.0	Not Detected
Chloromethane	4.0 4.0	Not Detected
/inyl Chloride	4.0	Not Detected
Bromomethane	4.0	Not Detected
Chloroethane	4.0	Not Detected
Freon 11	4.0	Not Detected
1,1-Dichloroethene	4.0	Not Detected
Freon 113	4.0	Not Detected
Nethylene Chloride	4.0	Not Detected
,1-Dichloroethane	4.0	Not Detected
is-1,2-Dichloroethene	4.0	Not Detected
Chloroform	4.0	Not Detected
,1,1-Trichloroethane	4.0	Not Detected
Carbon Tetrachloride	4.0	Not Detected
Benzene	4.0	Not Detected
1,2-Dichloroethane	4.0	Not Detected
Frichloroethene	4.0	Not Detected
,2-Dichloropropane	4.0	Not Detected
is-1,3-Dichloropropene	4.0	Not Detected
Toluene	4.0	220
rans-1,3-Dichloropropene	4.0	Not Detected
I,1,2-Trichloroethane	4.0	Not Detected
Tetrachloroethene	4.0	Not Detected
Ethylene Dibromide	4.0	Not Detected
Chlorobenzene	4.0	Not Detected
Ethyl Benzene	4.0	6.9
n,p-Xylene	4.0	24
o-Xylene	4.0	4.3
Styrene	4.0	Not Detected
1,1,2,2-Tetrachloroethane	4.0	Not Detected
1,3,5-Trimethylbenzene	4.0	Not Detected
1,2,4-Trimethylbenzene	4.0	6.1
1,3-Dichlorobenzene	4.0	Not Detected
,4-Dichlorobenzene	4.0	Not Detected
Chlorotoluene	4.0	Not Detected
1,2-Dichlorobenzene	4.0	Not Detected
1,2,4-Trichlorobenzene	4.0	Not Detected
Hexachlorobutadiene	4.0	Not Detected
Propylene	16	Not Detected
1,3-Butadiene	16	Not Detected
Acetone	16	Not Detected
Carbon Disulfide	16	Not Detected

16

16

Not Detected

Not Detected

SAMPLE NAME: PRINTPACK-A @ 3'

ID#: 9807010-01A

EPA METHOD TO-14 GC/MS Full Scan

	Date of Collection: 7/ 1/98
File Name: 1070825	
File Name: 1070825	
Dil Factor 7.96	Date of Analysis: 7/ 9/98

Compound	Rpt. Limit (ppbv)	Amount (ppbv)
Vinyl Acetate	16	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	Not Detected
Hexane	16	Not Detected
Tetrahydrofuran	16	Not Detected
Cyclohexane	16	Not Detected
1,4-Dioxane	16	Not Detected
Bromodichloromethane	16	Not Detected
4-Methyl-2-pentanone	16	Not Detected
2-Hexanone	16	Not Detected
Dibromochloromethane	16	Not Detected
Bromoform	16	Not Detected
4-Ethyltoluene	16	Not Detected
Ethanol	16	Not Detected
Methyl tert-Butyl Ether	16	Not Detected
Heptane	16	81

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	97	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	94	70-130

SAMPLE NAME: PRINTPACK-B @ 3'

ID#: 9807010-02A

EPA METHOD TO-14 GC/MS Full Scan

File Name: 1070826 Date of Collection: 7/ 1/98
Dil. Factor: 7.96 Date of Analysis: 7/ 9/98

Compound	Rpt. Limit (ppbv)	Amount (ppbv
reon 12	4.0	Not Detected
Freon 114	4.0	Not Detected
Chloromethane	4.0	Not Detected
Vinyl Chloride	4.0	Not Detected
3romomethane	4.0	Not Detected
Chloroethane	4.0	Not Detected
Freon 11	4.0	Not Detected
1,1-Dichloroethene	4.0	Not Detected
Freon 113	4.0	Not Detected
Methylene Chloride	4.0	Not Detected
1,1-Dichloroethane	4.0	Not Detected
cis-1,2-Dichloroethene	4.0	Not Detected
Chloroform	4.0	Not Detected
1,1,1-Trichloroethane	4.0	Not Detected
Carbon Tetrachloride	4.0	Not Detected
Benzene	4.0	Not Detected
1,2-Dichloroethane	4.0	Not Detected
Frichloroethene	4.0	Not Detected
1,2-Dichloropropane	4.0	Not Detected
sis-1,3-Dichloropropene	4.0	Not Detected
Foluene	4.0	290
rans-1,3-Dichloropropene	4.0	Not Detected
1,1,2-Trichloroethane	4.0	Not Detected
Tetrachioroethene	4.0	Not Detected
Ethylene Dibromide	4.0	Not Detected
Chlorobenzene	4.0	Not Detected
Ethyl Benzene	4.0	7.4
m,p-Xylene	4.0	27
o-Xylene	4.0	6.1
Styrene	4.0	Not Detected
1,1,2,2-Tetrachloroethane	4.0	Not Detected
1,3,5-Trimethylbenzene	4.0	4.2
1,2,4-Trimethylbenzene	4.0	5.6
1,3-Dichlorobenzene	4.0	Not Detected
I,4-Dichlorobenzene	4.0	Not Detected
Chlorotoluene	4.0	Not Detected
1,2-Dichlorobenzene	4.0	Not Detected
1,2,4-Trichlorobenzene	4.0	Not Detected
Hexachlorobutadiene	4.0	Not Detected
Propylene	16	Not Detected
Topylene 1,3-Butadiene		Not Detected
r,s-butadiene Acetone	16 16	Not Detected
Acetorie Carbon Disulfide	16	Not Detected
2-Propanol		Not Detected
z-riopanoi	16	Not Detected

SAMPLE NAME: PRINTPACK-B @ 3'

ID#: 9807010-02A

EPA METHOD TO-14 GC/MS Full Scan

File Name: 1070826 Date of Collection: 7/	
File Name: 1070826 Date of Collection: 7/	
Dil. Factor: 7.96 Date of Analysis: 7/9/	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)
Vinyl Acetate	16	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	Not Detected
Hexane	16	Not Detected
Tetrahydrofuran	16	Not Detected
Cyclohexane	16	Not Detected
1,4-Dioxane	16	Not Detected
Bromodichloromethane	16	Not Detected
4-Methyl-2-pentanone	16	Not Detected
2-Hexanone	16	Not Detected
Dibromochloromethane	16	Not Detected
Bromoform	16	Not Detected
4-Ethyltoluene	16	Not Detected
Ethanol	16	Not Detected
Methyl tert-Butyl Ether	16	Not Detected
Heptane	16	80

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	94	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	94	70-130

SAMPLE NAME: PRINTPACK-C @ 3'

ID#: 9807010-03A

EPA METHOD TO-14 GC/MS Full Scan

File Name: 1070827	Date of Collection: 7/ 1/98
Dil. Factor:	
	Date of Analysis: 7/ 9/98

Compound	Rpt. Limit (ppbv)	Amount (ppbv)
Freon 12	9.9	Not Detected
Freon 114	9.9	Not Detected
Chloromethane	9.9	Not Detected
Vinyl Chloride	9.9	18
Bromomethane	9.9	Not Detected
Chloroethane	9.9	Not Detected
Freon 11	9.9	Not Detected
1,1-Dichloroethene	9.9	Not Detected
Freon 113	9.9	Not Detected
Methylene Chloride	9.9	Not Detected
1,1-Dichloroethane	9.9	Not Detected
cis-1,2-Dichloroethene	9.9	17* ⁴
Chloroform	9.9	Not Detected
1,1,1-Trichloroethane	9.9	Not Detected
Carbon Tetrachloride	9.9	Not Detected
Benzene	9.9	68
1,2-Dichloroethane	9.9	12
Trichloroethene	9.9	± 10°
1,2-Dichloropropane	9.9	Not Detected
cis-1,3-Dichloropropene	9.9	Not Detected
Toluene	9.9	2300
trans-1,3-Dichloropropene	9.9	Not Detected
1,1,2-Trichloroethane	9.9	Not Detected
Tetrachloroethene	9.9	Not Detected
Ethylene Dibromide	9.9	Not Detected
Chlorobenzene	9.9	Not Detected
Ethyl Benzene	9.9	Not Detected
m,p-Xylene	9.9	26
o-Xylene	9.9	Not Detected
Styrene	9.9	Not Detected
1,1,2,2-Tetrachloroethane	9.9	Not Detected
1,3,5-Trimethylbenzene	9.9	Not Detected
1,2,4-Trimethylbenzene	9.9	Not Detected
1,3-Dichlorobenzene	9.9	Not Detected
1,4-Dichlorobenzene	9.9	Not Detected
Chlorotoluene	9.9	Not Detected
1,2-Dichlorobenzene	9.9	Not Detected
1,2,4-Trichlorobenzene	9.9	Not Detected
Hexachlorobutadiene	9.9	Not Detected
Propylene	39	Not Detected
1,3-Butadiene	39	Not Detected
Acetone	39	Not Detected
Carbon Disulfide	39	Not Detected
2-Propanol	39	Not Detected
trans-1,2-Dichloroethene	39	Not Detected

SAMPLE NAME: PRINTPACK-C @ 3'

ID#: 9807010-03A

EPA METHOD TO-14 GC/MS Full Scan

File Name: 10708	
	27 Date of Collection: 7/ 1/98
Dil. Factor:	1.7 Date of Analysis: 7/ 9/98

Compound	Rpt. Limit (ppbv)	Amount (ppbv)
Vinyl Acetate	39	Not Detected
2-Butanone (Methyl Ethyl Ketone)	39	Not Detected
Hexane	39	Not Detected
Tetrahydrofuran	39	Not Detected
Cyclohexane	39	Not Detected
1,4-Dioxane	39	Not Detected
Bromodichloromethane	39	Not Detected
4-Methyl-2-pentanone	39	Not Detected
2-Hexanone	39	Not Detected
Dibromochloromethane	39	Not Detected
Bromoform	39	Not Detected
4-Ethyltoluene	39	Not Detected
Ethanol	39	Not Detected
Methyl tert-Butyl Ether	39	Not Detected
Heptane	39	92

Container Type: 1 Liter Summa Canister

Surrogates	% Recovery	Method Limits
Octafluorotoluene	97	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	85	70-130

SAMPLE NAME : Lab Blank

ID#: 9807010-04A

EPA METHOD TO-14 GC/MS Full Scan

File Name: 1070804 Date of Collection; NA
Dil. Factor: 1.00 Date of Analysis: 7/8/98
Dil. Factor: Date of Analysis: 7/ 8/98

Compound	Rpt. Limit (ppbv)	Amount (ppbv)
Freon 12	0.50	Not Detected
Freon 114	0.50	Not Detected
Chloromethane	0.50	Not Detected
Vinyl Chloride	0.50	Not Detected
Bromomethane	0.50	Not Detected
Chloroethane	0.50	Not Detected
Freon 11	0.50	Not Detected
1,1-Dichloroethene	0.50	Not Detected
Freon 113	0.50	Not Detected
Methylene Chloride	0.50	Not Detected
1,1-Dichloroethane	0.50	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected
Chloroform	0.50	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected
Carbon Tetrachloride	0.50	Not Detected
Benzene	0.50	Not Detected
1,2-Dichloroethane	0.50	Not Detected
Trichloroethene	0.50	Not Detected
1,2-Dichloropropane	0.50	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected
Toluene	0.50	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected
Tetrachloroethene	0.50	Not Detected
Ethylene Dibromide	0.50	Not Detected
Chlorobenzene	0.50	Not Detected
Ethyl Benzene	0.50	Not Detected
m,p-Xylene	0.50	Not Detected
o-Xylene		Not Detected
Styrene	0.50	Not Detected
1,1,2,2-Tetrachloroethane	0.50	Not Detected
	0.50	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected
1,2,4-Trimethylbenzene	0.50	
1,3-Dichlorobenzene	0.50	Not Detected
1,4-Dichlorobenzene	0.50	Not Detected
Chlorotoluene	0.50	Not Detected
1,2-Dichlorobenzene	0.50	Not Detected
1,2,4-Trichlorobenzene	0.50	Not Detected
Hexachlorobutadiene	0.50	Not Detected
Propylene	2.0	Not Detected
1,3-Butadiene	2.0	Not Detected
Acetone	2.0	Not Detected
Carbon Disulfide	2.0	Not Detected
2-Propanol	2.0	Not Detected
trans-1,2-Dichloroethene	2.0	Not Detected

SAMPLE NAME: Lab Blank

ID#: 9807010-04A

EPA METHOD TO-14 GC/MS Full Scan

File Name: 1070804 Date of Collection: NA
File Name: Date of Collection: NA
File Name: 1070804 Pate of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 7/ 8/98

Compound	Rpt. Limit (ppbv)	Amount (ppbv)
Vinyl Acetate	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected
Hexane	2.0	Not Detected
Tetrahydrofuran	2.0	Not Detected
Cyclohexane	2.0	Not Detected
1,4-Dioxane	2.0	Not Detected
Bromodichloromethane	2.0	Not Detected
4-Methyl-2-pentanone	2.0	Not Detected
2-Hexanone	2.0	Not Detected
Dibromochloromethane	2.0	Not Detected
Bromoform	2.0	Not Detected
4-Ethyltoluene	2.0	Not Detected
Ethanol	2.0	Not Detected
Methyl tert-Butyl Ether	2.0	Not Detected
Heptane	2.0	Not Detected

Container Type: NA

Surrogates	% Recovery	Method Limits
Octafluorotoluene	98	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	96	70-130

AIR TOXICS LTD. AN ENVIRONMENTAL ANALYTICAL LABORATORY

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA 95630-4719 (916) 985-1000 FAX: (916) 985-1020

Nº 015829

Page \perp of \perp

CHAIN-OF-CUSTODY RECORD

Contact Person ED SHAW Company CT6Z-ESCM Address P.U. Box 387 City Monroe State 41 Zip 84154 Phone 435-527-3103 FAX 435-527-3047 Collected By: Signature Elward allow			Project info: P.O. #_EAS 7/98 Project #PRINTANCE Project Name (SAN) LEMNORO	Turn Around Time: X Normal Rush Specify		
Lab I.D. Field Sample I.D.	Date & Time	Analy	ses Requested	Canister Initial	Pressure /	Vacuum Receipt
OIN PRINTPACK-A@3	7/1/98 1021 PDST	TO14				0.2pp
ON PRINTACK-BQ 3'	7/19 1010 POST					0.268
031 PRINTPAN-CE 3'	7/198 1630 PAST	7014				0.400
					<i>6</i>	, 7/1/a
1						1171
- C. S. C. S. S. S. C. C. S.						
Relinquished By: (Signature) Date/Time Relinquished By: (Signature) Date/Time	Print Name	59 Pm 98	Notes:	:		
Relinquished By: (Signature) Date/Time Redeived By: (Signature) Date/Time Date/Time Pate/Time Pa						
Shipper Name Air E Lab Hand de l'Ueted / Only	3ill # Opened By	y: Date/Time To	emp. (°C) Condition Custody Seal		980	