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May 25, 2001

Mr. Barney Chan  
Hazardous Materials Specialists  
Alameda County Health Care Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Clayton Project No.70-97066.00

Subject: Response to Comments  
Risk Assessment and Feasibility Study  
Former Lemoine Sausage Facility  
630 29<sup>th</sup> Avenue in Oakland, California

Dear Mr. Chan:

Clayton Group Services, Inc. (Clayton) appreciated the opportunity to meet with you on April 24, 2001 to review your letter dated March 8, 2001. As we discussed, Clayton has prepared the following responses to comments raised in your letter.

*Comment 1: The risk from volatilization of chemicals from groundwater has been dismissed because of the results of previous indoor and outdoor air sampling. Please be aware that air sampling requires either shallow (3', 6' bgs) sampling in areas of concern or surface flux sampling in these same areas. Please elaborate how the March 1998 air sampling was performed and show the specific sampling locations. If the required methodology was not done, please provide a work plan to do this sampling.*

**Response 1:** The air quality sample results presented in the Risk Assessment and Feasibility Study (RAFS) were collected using 6-Liter Summa canisters. To evaluate indoor air quality, six Summa canisters were placed at various locations within the Building as shown on the attached Figure 1. The laboratory data sheets are presented as an attachment. The inlet of each Summa canister was placed at the approximate height of the adult breathing zone, approximately 5 to 6 feet above ground/floor surface. In addition, six background samples were also collected using Summa canisters mounted on utility poles located across the street and east (upwind) of the subject building.

As discussed, the shallow groundwater conditions, low permeability soil, and high soil moisture of shallow soils (within the capillary fringe) cause a situation where significant soil moisture would be drawn into the soil gas sample containers under the applied vacuum. The presence of soil moisture would influence the quality control of soil gas

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samples. In addition, Clayton investigated the possibility of performing a surface flux chamber test in a crawl space, if present. Based on our subsurface investigations, no crawl spaces exist at the subject building. Due to these conditions, Clayton evaluated the air quality within and around the subject building. At this point, Clayton does not see the need to perform additional indoor air quality testing at the subject building.

OK  
Shallow gw eliminates need for subsurface vapor sampling

*Comment 2: The presence of chlorinated volatile organics has been attributed to an off-site source. This, however, has not been shown since no off-site sampling has been done. Regardless, you will need to evaluate the health risk of the HVOCs.*

As we stated, the presence of the chlorinated volatile organic compounds (VOCs) detected in monitor well MW-8 are not related to the underground storage tank and are not the subject of investigations performed by Clayton. Clayton has collected some data associated with the underground storage tank investigation that can be used to evaluate the health risk of the fugitive emissions from chlorinated VOCs in groundwater. The accompanying Table 1 presents the complete list of analytes tested for and detected during the 1998 air sampling event. Cis-1, 2-dichloroethene and vinyl chloride were not detected in the indoor samples and trichloroethene (TCE) was detected in three of the six indoor samples at trace or slightly above laboratory reporting levels. TCE was detected in four of the six background samples at concentrations generally higher than those detected inside the subject building.

Clayton believes that the TCE found in both indoor and background samples are due to TCE in ambient air. Due to the industrial nature of the surrounding area, there are most likely multiple off-site emission sources of TCE and other volatile organic compounds (VOCs).

will need to continue to monitor HVOCs & discuss for closure inside.

Furthermore, the ~~highest VOCs found in samples collected at the subject property are significant when compared to USEPA Region 9 background levels for ambient air.~~ In fact, from the data collected, it appear that breathing exterior ambient air poses a greater health risk to the public than breathing indoor air at the subject property.

~~Two compounds, 1,4-dichlorobenzene (which is not a petroleum hydrocarbon) and chlorobenzene (styrene foam is commonly used as a packaging material) do show up in indoor air but not in ambient air.~~ 1,4-Dichlorobenzene is used as a general insecticide (commonly found in mothballs). The current property owners may wish to discontinue the use of 1,4-dichlorobenzene containing materials.

so appears methyl chloroform & benzene are higher inside bld @ levels > PRG

*Comment 3: The groundwater gradient has only recently been shown to be westerly, towards the Oakland-Alameda estuary. The presence of MW-7 as your only down-gradient data point is not sufficient to characterize the TPH plume. In addition, the upgradient extent of the TPH has not been defined. Please consider the need for additional wells or site characterization.*

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The groundwater gradient and flow direction has consistently been to the west with the exception of the initial monitoring event performed in February 1999. At the time of the initial monitoring event, only five, 3/4-inch diameter, pre-packed, monitoring wells (microwells) made up the groundwater monitoring network, and their areal distribution was less extensive than the present monitoring well network. As such, the initial monitoring event results may not have accurately represented true site conditions.

As we discussed in our meeting, there does appear to be some question as to the reliability of the microwells, particularly monitoring wells MW-3, MW-4, and MW-5. The microwells were installed due to the lack of access in the raised floor area. (AS) requested, Clayton will destroy MW-3, MW-4 and MW-5 and install monitoring wells with 2-inch diameter monitoring wells. [REDACTED] note MW-5 are all 3/4" wells

I did not request this.  
note MW-5 are all 3/4" wells

Also, Clayton will also install two additional monitoring wells. One down gradient well will be approximately 40 feet from MW-4 near building P-10. up gradient well will be approximately 40 feet from MW-4 near building P-10.

OK

**Comment 4:** Remediation clean-up levels for TPHg were not discussed. If the storm drains act as preferential pathways then the estuary may be jeopardy and the ecological clean-up level (640 ppb) must be considered. If the hydrocarbon plume extends beneath nearby buildings, the nuisance hydrocarbon clean-up (5000 ppb) must be considered. Please confirm the absence of on-site storm drains and off-site buildings above the TPH plume.

Remediation goals for total petroleum hydrocarbons as gasoline (TPHg) were not presented because the risk assessment indicated the primary risk elements were due to the associated VOCs. As presented in the RAFS, the inherent site conditions pose various difficulties (limited access, shallow groundwater, and extremely low permeability soils) for remediation and our evaluation finds that efforts to remediate this site using methods other than natural attention processes may be impractical.

As discussed in the meeting, storm water utilities do not discharge to the estuary and; therefore, the estuary cleanup levels do not appear appropriate. Historical groundwater monitoring data show that TPHg at levels above 5,000 ppm do not occur beneath any off-site buildings. The area immediately west of the subject property is an open scrap yard, which does not contain any permanent structures.

&  
>5000ppb  
TPH appear  
made bldg

**Comment 5:** Groundwater monitoring is recommended when natural bio-attenuation is expected to proceed. While site closure can be recommended when groundwater concentrations reach a stable or decreasing trend. The site is deficient in dissolved oxygen content and TPH concentrations are elevated and do not show a decreasing trend. Therefore, option one, enhanced in-situ bio-remediation should be considered. Please provide a work plan to perform this option.

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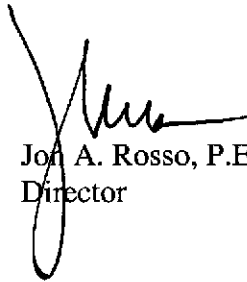
As discussed in the meeting, data from monitoring wells MW-3, MW-4, and MW-5 appear erratic. Clayton agrees to replace these monitoring points with new wells as discussed above and to continue monitoring on a quarterly basis. This monitoring should help in establishing a more reliable and accurate record of groundwater flow and TPHg trends. Following the collection of at least six quarters of data (beginning June 2001 and ending September 2002), Clayton would then like to evaluate the data trends and, if necessary, revisit the need for implementing active remediation at the subject property. Clayton will prepare a workplan for the installation of the new monitoring wells and submit it to your attention.

Thank you for the opportunity to meet as discuss site issues and we hope that the above discussion satisfies your questions with regard to the RAFS. If you have any further comments or questions please contact the undersigned at (925) 426-2600.

Sincerely,



Warren B. Chamberlain, R.G., C.H.G., P.E.  
Project Manager  
Environmental Services

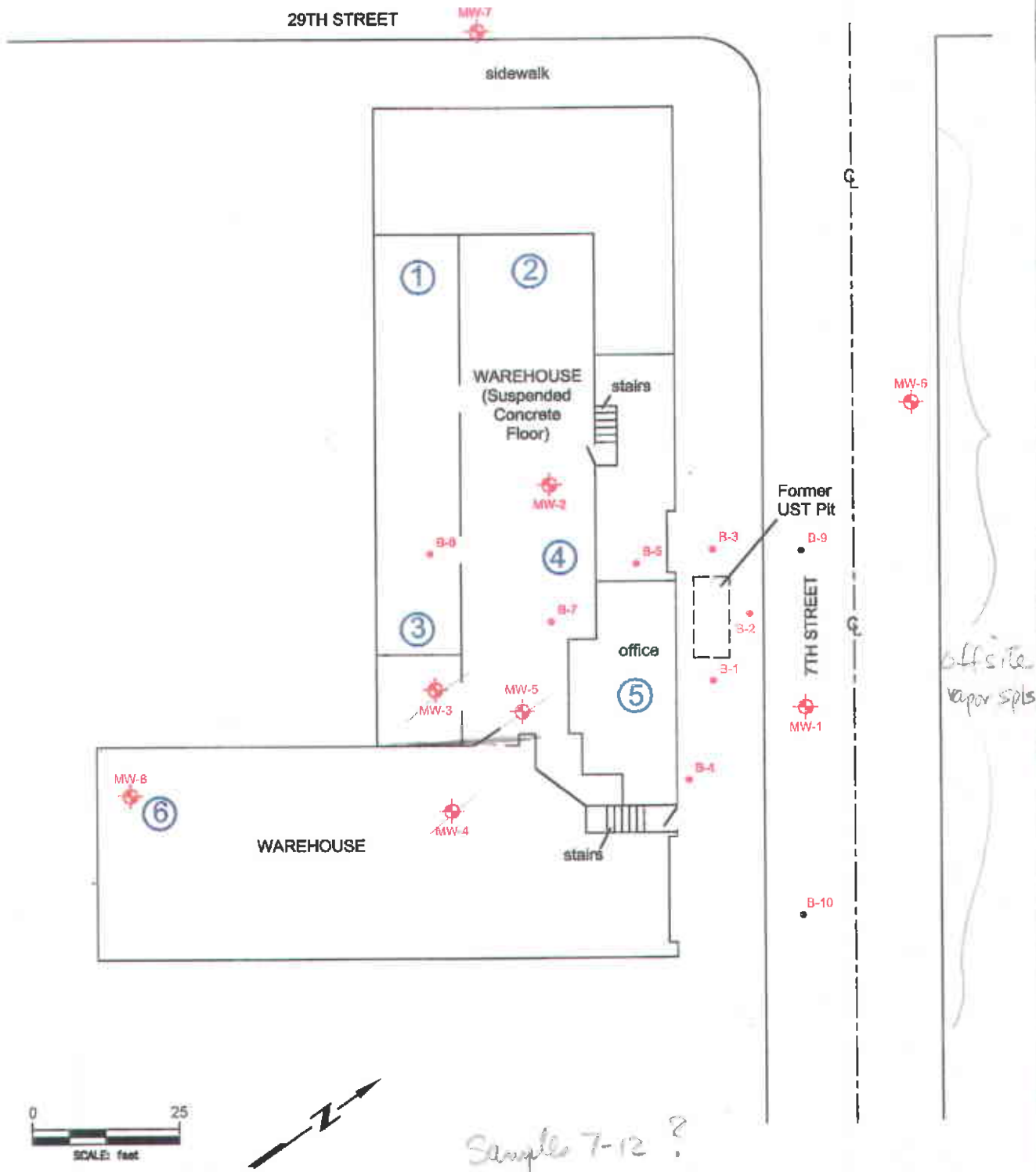


Joe A. Rosso, P.E.  
Director

WBC/wbc

cc: Donna Proffitt, Bank of America  
Marlin Zechman, ECS  
Kristy Williams, ECS  
Rita Repko, Clayton

Note:  
Sample locations are approximate



LEGEND

- MW-1  Monitoring Well Location
- B-1  Soil Boring/Temporary Monitoring Well Location
-  Indoor Air Sampling Location

MONITORING WELL AND INDOOR AIR SAMPLING LOCATIONS

FORMER LEMOINE SAUSAGE FACTORY  
630 29TH AVENUE  
OAKLAND, CALIFORNIA  
Clayton Project No. 70-97066.00

Figure

1

4/25/01  
SITEAIR DWG

**Clayton**  
ENVIRONMENTAL  
CONSULTANTS

Table 1  
 Summary of TO-14A Air Sampling Results  
 Former Lemoine Sausage Factory  
 630 29th Avenue, Oakland, California

Analyte	units	Indoor Air Samples						Upwind Background Ambient Air Samples						PRGs	Title 22
		630-1	630-2	630-3	630-4	630-5	630-6	630-7	630-8	630-9	630-10	630-11	630-12		
Chloromethane <i>retrodict</i> <chem>CH3-Cl</chem>	ug/m <sup>3</sup>	1.9	1.7	1.8	2.3	1.9	1.9	1.8	2.2	1.8	5.0	1.7	1.6	1.1	NE
	ppb	0.92	0.84	0.88	1.10	0.93	0.94	0.87	1.10	0.89	2.40	0.83	0.76	1.1	NE
Vinyl Chloride	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	4.2	<1	<1	0.22	3
	ppb	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	<0.39	1.6	<0.39	<0.39	0.22	3
Chloroethane	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.30	NE
	ppb	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	2.30	NE
Bromomethane	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5.20	NE
	ppb	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	5.20	NE
Acetone	ug/m <sup>3</sup>	45	23	48	26	29	44	72	42	33	43	140	33	6,200	NE
	ppb	19	9.6	20	11	12	18	30	18	14	18	58	14	6,200	NE
Trichlorofluoromethane	ug/m <sup>3</sup>	1.9	1.8	1.7	1.8	1.7	1.7	2	1.9	1.8	1.9	1.9	1.7	730	NE
	ppb	0.35	0.32	0.31	0.32	0.31	0.31	0.35	0.34	0.32	0.34	0.34	0.31	730	NE
1,1-Dichloroethene	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.038	NE
	ppb	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.038	NE
Methylene chloride	ug/m <sup>3</sup>	2.4	2.6	3.2	2.4	1.9	2.8	1.4	<1	1.6	1.1	2.1	<1	4.1	NE
	ppb	0.7	0.76	0.94	0.71	0.56	0.81	0.41	<0.29	0.45	0.31	0.6	<0.29	4.1	NE
Carbon Disulfide	ug/m <sup>3</sup>	3.6	3.3	5.9	3.7	1.3	3	1	2.2	1.7	<1	<1	3.3	730	NE
	ppb	1.2	1.1	1.9	1.2	0.42	0.96	0.32	0.71	0.53	<0.32	<0.32	1.1	730	NE
Trichlorotrifluoroethane	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	0.98 TR	<1	<1	<1	31,000	NE
	ppb	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	0.13 TR	<0.13	<0.13	<0.13	31,000	NE
trans-1,1-Dichloroethene	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	73	NE
	ppb	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	73	NE
cis-1,1-Dichloroethene	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	37	NE
	ppb	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	37	NE
1,1-Dichloroethane	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	520	1
	ppb	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	520	1
Methyl tert-Butyl Ether	ug/m <sup>3</sup>	25	25	21	22	17	18	15	15	13	13	18	24	3,100	NE
	ppb	6.9	7	5.8	6	4.6	4.9	4.2	4.2	3.6	3.7	5.1	6.5	3,100	NE
Vinyl Acetate	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	210	NE
	ppb	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	210	NE
2-Butanone	ug/m <sup>3</sup>	7.2	15	8.1	5.9	5.2	5.4	6.9	7.7	8.1	11	6.5	7.4	1,000	NE
	ppb	2.4	5.1	2.8	2	1.8	1.9	2.3	2.6	2.7	3.7	2.2	2.5	1,000	NE
Chloroform	ug/m <sup>3</sup>	1.3	1.1	<1	0.73 TR	<1	<1	<1	<1	<1	<1	0.79 TR	<1	0.084	40
	ppb	0.27	0.24	<0.21	0.15 TR	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	0.16 TR	<0.21	0.084	40
1,2-Dichloroethane	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	1.1	98	<1	<1	0.074	10
	ppb	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	0.28	24	<0.25	<0.25	0.074	10
1,1,1-Trichloroethane	ug/m <sup>3</sup>	<1	<1	0.71 TR	<1	<1	<1	<1	<1	<1	<1	<1	<1	1,000	NE
	ppb	<0.19	<0.19	0.13 TR	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	1,000	NE
Benzene	ug/m <sup>3</sup>	5.6	6.5	4.9	5.2	3.9	4.1	3.2	3.7	3.4	3.1	3.3	3.6	0.25	7
	ppb	1.8	2.0	1.5	1.6	1.2	1.3	1	1.2	1.1	0.99	1.00	1.10	0.25	7
Carbon Tetrachloride	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.13	5
	ppb	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	0.13	5
1,2-Dichloropropane	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.099	NE
	ppb	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	0.099	NE
Bromodichloromethane	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.11	5
	ppb	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	0.11	5

Table 1  
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		630-1	630-2	630-3	630-4	630-5	630-6	630-7	630-8	630-9	630-10	630-11	630-12		
Trichloroethene	ug/m <sup>3</sup>	<1	<1	<1	0.94 TR	1.2	0.97 TR	<1	1.9	2.1	1.1	3	<1	1.1	80 <sup>(1)</sup>
	ppb	<0.19	<0.19	<0.19	0.18 TR	0.22	0.18 TR	<1	<0.19	0.36	0.4	0.2	0.56	<0.19	
cis-1,3-Dichloropropene	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.48	NE
	ppb	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22		
4-Methyl-2-pentanone	ug/m <sup>3</sup>	1.5	1.8	1.5	1.2	0.96 TR	1.1	1.8	2.1	21	1.9	1.4	1.2	83	NE
	ppb	0.36	0.43	0.37	0.3	0.23 TR	0.27	0.45	0.52	0.51	0.46	0.33	0.3		
trans-1,1-Dichloropropene	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.48	NE
	ppb	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22		
1,1,2-Trichloroethane	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.12	NE
	ppb	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19		
Toluene	ug/m <sup>3</sup>	35	81	27	33	20	20	18	19	16	21	16	20	400	NE
	ppb	9.3	22	7.1	8.9	5.3	5.2	4.7	5.2	4.2	5.5	4.3	5.3		
Dibromochloromethane	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.08	NE
	ppb	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12		
2-Hexanone	ug/m <sup>3</sup>	<1	<1	2.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	NE	NE
	ppb	<0.24	<0.24	0.54	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24		
1,2-Dibromomethane	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.0087	NE
	ppb	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13		
Tetrachloroethene	ug/m <sup>3</sup>	1.9	3.0	3.7	2.9	3.9	2.8	1.7	8.2	11.0	1.2	9.1	1.2	3.3	14
	ppb	0.28	0.44	0.56	0.43	0.57	0.42	0.25	1.2	1.6	0.18	1.4	0.18		
Chlorobenzene	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	62	NE
	ppb	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22	<0.22		
Ethylbenzene	ug/m <sup>3</sup>	7.5	14	5.3	6.2	3.4	3.8	2.8	3	2.7	2.90	2.7	3.8	1,100	NE
	ppb	1.7	3.3	1.2	1.4	0.79	0.88	0.64	0.7	0.63	0.66	0.61	0.88		
Bromoform	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.7	NE
	ppb	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		
Styrene	ug/m <sup>3</sup>	1.0	11	<1	1	0.76 TR	0.71 TR	<1	<1	<1	<1	<1	<1	1,100	4 <sup>(2)</sup>
	ppb	0.24	2.6	<0.24	0.24	0.18 TR	0.17 TR	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24		
m,p-Xylenes	ug/m <sup>3</sup>	30	34	20	24	13	15	10	11	11	11	10	16	730	NE
	ppb	6.9	7.9	4.7	5.5	3	3.5	2.4	2.6	2.4	2.5	2.4	3.7		
o-Xylenes	ug/m <sup>3</sup>	9.3	11	6.6	7.8	4.5	5.2	3.7	4	3.5	3.8	3.6	4.3	730	NE
	ppb	2.2	2.6	1.5	1.8	1	1.2	0.85	0.92	0.82	0.87	0.83	0.99		
1,1,2,2-Tetrachloroethane	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.033	NE
	ppb	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15		
1,3-Dichlorobenzene	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3.3	20 <sup>(3)</sup>
	ppb	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17		
1,4-Dichlorobenzene	ug/m <sup>3</sup>	1.2	1.3	1.1	1.5	0.78 TR	0.79 TR	<1	<1	<1	<1	<1	<1	0.031	20 <sup>(3)</sup>
	ppb	0.2	0.22	0.19	0.26	0.13 TR	0.13 TR	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17		
1,2-Dichlorobenzene	ug/m <sup>3</sup>	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	210	20 <sup>(3)</sup>
	ppb	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17		

Notes:

- <1.0 = Analyte not detected above laboratory reporting limit.
- Volatile Organic Compounds analysis according to USEPA Method TO-14A.
- NE = Not established.
- PRG = USEPA Preliminary Remediation Goals for Ambient Air (micrograms per cubic meter).
- Title 22 = CFR Title 22 Section 12705 - Specific Regulatory Levels Posing No Significant Risk (micrograms per day).

- (1) inhalation dose
- (2) styrene oxide
- (3) para-dichlorobenzene

**ATTACHMENT A**  
**LABORATORY DATA SHEETS FOR AIR QUALITY SAMPLING**





# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Clayton Group Services

Client Sample ID : 630-1

PAI Sample ID : P9704037-001

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister

Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/06/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
		$\mu\text{g}/\text{M}^3$	LIMIT $\mu\text{g}/\text{M}^3$	ppb	LIMIT ppb
74-87-3	Chloromethane	1.9	1.0	0.92	0.49
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	45	1.0	19	0.42
75-69-4	Trichlorofluoromethane	1.9	1.0	0.35	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	2.4	1.0	0.70	0.29
75-15-0	Carbon Disulfide	3.6	1.0	1.2	0.32
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	25	1.0	6.9	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	7.2	1.0	2.4	0.34
67-66-3	Chloroform	1.3	1.0	0.27	0.21
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.19
71-43-2	Benzene	5.6	1.0	1.8	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by: RG

Date: 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-1

PAI Sample ID : P9704037-001

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister

Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/06/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{M}^3$	REPORTING LIMIT $\mu\text{g}/\text{M}^3$	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	1.5	1.0	0.36	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	35	1.0	9.3	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	1.9	1.0	0.28	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	7.5	1.0	1.7	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	1.0	1.0	0.24	0.24
1330-20-7	m,p-Xylenes	30	1.0	6.9	0.23
95-47-6	o-Xylene	9.3	1.0	2.2	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	1.2	1.0	0.20	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RG

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
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## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Clayton Group Services

Client Sample ID : 630-2

PAI Sample ID : P9704037-002

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister

Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/06/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT µg/M <sup>3</sup>	REPORTING LIMIT µg/M <sup>3</sup>	RESULT ppb	REPORTING LIMIT ppb
74-87-3	Chloromethane	1.7	1.0	0.84	0.49
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	23	1.0	9.6	0.42
75-69-4	Trichlorofluoromethane	1.8	1.0	0.32	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	2.6	1.0	0.76	0.29
75-15-0	Carbon Disulfide	3.3	1.0	1.1	0.32
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	25	1.0	7.0	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	15	1.0	5.1	0.34
67-66-3	Chloroform	1.1	1.0	0.24	0.21
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.19
71-43-2	Benzene	6.5	1.0	2.0	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by: RG

Date: 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-2  
PAI Sample ID : P9704037-002

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister

Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/06/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1  
Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{M}^3$	REPORTING LIMIT $\mu\text{g}/\text{M}^3$	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	1.8	1.0	0.43	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	81	1.0	22	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	3.0	1.0	0.44	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	14	1.0	3.3	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	11	1.0	2.6	0.24
1330-20-7	m,p-Xylenes	34	1.0	7.9	0.23
95-47-6	o-Xylene	11	1.0	2.6	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	1.3	1.0	0.22	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit  
ND = Not Detected

Verified by : RC

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Clayton Group Services

Client Sample ID : 630-3

PAI Sample ID : P9704037-003

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister

Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/06/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
		$\mu\text{g}/\text{M}^3$	$\mu\text{g}/\text{M}^3$	ppb	ppb
74-87-3	Chloromethane	1.8	1.0	0.88	0.49
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	48	1.0	20	0.42
75-69-4	Trichlorofluoromethane	1.7	1.0	0.31	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	3.2	1.0	0.94	0.29
75-15-0	Carbon Disulfide	5.9	1.0	1.9	0.32
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	21	1.0	5.8	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	8.1	1.0	2.8	0.34
67-66-3	Chloroform	ND	1.0	ND	0.21
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	0.71 TR	1.0	0.13 TR	0.19
71-43-2	Benzene	4.9	1.0	1.5	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RG

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-3

PAI Sample ID : P9704037-003

Test Code : GC/MS EPA TO-14A	Date Sampled : 10/03/97
Analyst : Chris Parnell/Chris Casteel	Date Received : 10/06/97
Instrument : HP 5973/Tekmar AUTOCAN Elite	Date Analyzed : 10/06/97
Matrix : Summa Canister	Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
		$\mu\text{g}/\text{M}^3$	LIMIT $\mu\text{g}/\text{M}^3$	ppb	LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	1.5	1.0	0.37	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	27	1.0	7.1	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	2.2	1.0	0.54	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	3.7	1.0	0.56	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	5.3	1.0	1.2	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.24
1330-20-7	m,p-Xylenes	20	1.0	4.7	0.23
95-47-6	o-Xylene	6.6	1.0	1.5	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	1.1	1.0	0.19	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit  
ND = Not Detected

Verified by : RG

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
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## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Clayton Group Services

Client Sample ID : 630-4

PAI Sample ID : P9704037-004

Test Code : GC/MS EPA TO-14A	Date Sampled : 10/03/97
Analyst : Chris Parnell/Chris Casteel	Date Received : 10/06/97
Instrument : HP 5973/Tekmar AUTOCAN Elite	Date Analyzed : 10/06/97
Matrix : Summa Canister	Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
		$\mu\text{g}/\text{M}^3$	$\mu\text{g}/\text{M}^3$	ppb	ppb
74-87-3	Chloromethane	2.3	1.0	1.1	0.49
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	26	1.0	11	0.42
75-69-4	Trichlorofluoromethane	1.8	1.0	0.32	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	2.4	1.0	0.71	0.29
75-15-0	Carbon Disulfide	3.7	1.0	1.2	0.32
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	22	1.0	6.0	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	5.9	1.0	2.0	0.34
67-66-3	Chloroform	0.73 TR	1.0	0.15 TR	0.21
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.19
71-43-2	Benzene	5.2	1.0	1.6	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RLS

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-4

PAI Sample ID : P9704037-004

Test Code : GC/MS EPA TO-14A	Date Sampled : 10/03/97
Analyst : Chris Parnell/Chris Casteel	Date Received : 10/06/97
Instrument : HP 5973/Tekmar AUTOCAN Elite	Date Analyzed : 10/06/97
Matrix : Summa Canister	Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT µg/M <sup>3</sup>	REPORTING LIMIT µg/M <sup>3</sup>	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	0.94 TR	1.0	0.18 TR	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	1.2	1.0	0.30	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	33	1.0	8.9	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	2.9	1.0	0.43	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	6.2	1.0	1.4	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	1.0	1.0	0.24	0.24
1330-20-7	m,p-Xylenes	24	1.0	5.5	0.23
95-47-6	o-Xylene	7.8	1.0	1.8	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	1.5	1.0	0.26	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RG

Date : 12/13/00





# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Clayton Group Services**

**Client Sample ID : 630-4**

**PAI Sample ID : P9704037-004 Dup**

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister

Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/06/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
		$\mu\text{g}/\text{M}^3$	$\mu\text{g}/\text{M}^3$	ppb	ppb
74-87-3	Chloromethane	2.1	1.0	1.0	0.49
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	27	1.0	11	0.42
75-69-4	Trichlorofluoromethane	1.7	1.0	0.30	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	2.5	1.0	0.73	0.29
75-15-0	Carbon Disulfide	3.8	1.0	1.2	0.32
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	22	1.0	6.0	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	5.9	1.0	2.0	0.34
67-66-3	Chloroform	0.79 TR	1.0	0.16 TR	0.21
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.19
71-43-2	Benzene	5.2	1.0	1.6	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RC

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-4

PAI Sample ID : P9704037-004 Dup

Test Code : GC/MS EPA TO-14A

Analyst : Chris Parnell/Chris Casteel

Instrument : HP 5973/Tekmar AUTOCAN Elite

Matrix : Summa Canister

Date Sampled : 10/03/97

Date Received : 10/06/97

Date Analyzed : 10/06/97

Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT µg/M <sup>3</sup>	REPORTING LIMIT µg/M <sup>3</sup>	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	0.91 TR	1.0	0.17 TR	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	1.3	1.0	0.32	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	34	1.0	9.0	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	2.8	1.0	0.42	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	6.1	1.0	1.4	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	1.1	1.0	0.26	0.24
1330-20-7	m,p-Xylenes	24	1.0	5.5	0.23
95-47-6	o-Xylene	7.8	1.0	1.8	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	1.6	1.0	0.26	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RC

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

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Client : Clayton Group Services

Client Sample ID : 630-5

PAI Sample ID : P9704037-005

Test Code : GC/MS EPA TO-14A	Date Sampled : 10/03/97
Analyst : Chris Parnell/Chris Casteel	Date Received : 10/06/97
Instrument : HP 5973/Tekmar AUTOCAN Elite	Date Analyzed : 10/06/97
Matrix : Summa Canister	Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

PF 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{M}^3$	REPORTING LIMIT $\mu\text{g}/\text{M}^3$	RESULT ppb	REPORTING LIMIT ppb
74-87-3	Chloromethane	1.9	1.0	0.93	0.49
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	29	1.0	12	0.42
75-69-4	Trichlorofluoromethane	1.7	1.0	0.31	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	1.9	1.0	0.56	0.29
75-15-0	Carbon Disulfide	1.3	1.0	0.42	0.32
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	17	1.0	4.6	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	5.2	1.0	1.8	0.34
67-66-3	Chloroform	ND	1.0	ND	0.21
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.19
71-43-2	Benzene	3.9	1.0	1.2	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RG

Date : 12/13/00



# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-5

PAI Sample ID : P9704037-005

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister

Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/06/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{M}^3$	REPORTING LIMIT $\mu\text{g}/\text{M}^3$	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	1.2	1.0	0.22	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	0.96 TR	1.0	0.23 TR	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	20	1.0	5.3	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	3.9	1.0	0.57	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	3.4	1.0	0.79	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	0.76 TR	1.0	0.18 TR	0.24
1330-20-7	m,p-Xylenes	13	1.0	3.0	0.23
95-47-6	o-Xylene	4.5	1.0	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	0.78 TR	1.0	0.13 TR	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RC

Date : 12/13/00



# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Clayton Group Services

Client Sample ID : 630-6

PAI Sample ID : P9704037-006

Test Code : GC/MS EPA TO-14A

Analyst : Chris Parnell/Chris Casteel

Instrument : HP 5973/Tekmar AUTOCAN Elite

Matrix : Summa Canister

Date Sampled : 10/03/97

Date Received : 10/06/97

Date Analyzed : 10/07/97

Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
		$\mu\text{g}/\text{M}^3$	$\mu\text{g}/\text{M}^3$	ppb	ppb
74-87-3	Chloromethane	1.9	1.0	0.94	0.49
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	44	1.0	18	0.42
75-69-4	Trichlorofluoromethane	1.7	1.0	0.31	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	2.8	1.0	0.81	0.29
75-15-0	Carbon Disulfide	3.0	1.0	0.96	0.32
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	18	1.0	4.9	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	5.4	1.0	1.9	0.34
67-66-3	Chloroform	ND	1.0	ND	0.21
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.19
71-43-2	Benzene	4.1	1.0	1.3	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RC

Date : 12/13/00



# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-6  
PAI Sample ID : P9704037-006

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister  
Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/07/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi = 0.1  
Pf = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT µg/M <sup>3</sup>	REPORTING LIMIT µg/M <sup>3</sup>	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	0.97 TR	1.0	0.18 TR	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	1.1	1.0	0.27	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	20	1.0	5.2	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	2.8	1.0	0.42	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	3.8	1.0	0.88	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	0.71 TR	1.0	0.17 TR	0.24
1330-20-7	m,p-Xylenes	15	1.0	3.5	0.23
95-47-6	o-Xylene	5.2	1.0	1.2	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	0.79 TR	1.0	0.13 TR	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit  
ND = Not Detected

Verified by : RC

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Clayton Group Services

Client Sample ID : 630-7

PAI Sample ID : P9704037-007

Test Code : GC/MS EPA TO-14A	Date Sampled : 10/03/97
Analyst : Chris Parnell/Chris Casteel	Date Received : 10/06/97
Instrument : HP 5973/Tekmar AUTOCAN Elite	Date Analyzed : 10/07/97
Matrix : Summa Canister	Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
		$\mu\text{g}/\text{M}^3$	LIMIT $\mu\text{g}/\text{M}^3$	ppb	LIMIT ppb
74-87-3	Chloromethane	1.8	1.0	0.87	0.49
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	72	1.0	30	0.42
75-69-4	Trichlorofluoromethane	2.0	1.0	0.35	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	1.4	1.0	0.41	0.29
75-15-0	Carbon Disulfide	1.0	1.0	0.32	0.32
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	15	1.0	4.2	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	6.9	1.0	2.3	0.34
67-66-3	Chloroform	ND	1.0	ND	0.21
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.19
71-43-2	Benzene	3.2	1.0	1.0	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RC

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-7

PAI Sample ID : P9704037-007

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister

Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/07/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{M}^3$	REPORTING LIMIT $\mu\text{g}/\text{M}^3$	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	1.8	1.0	0.45	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	18	1.0	4.7	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	1.7	1.0	0.25	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	2.8	1.0	0.64	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.24
1330-20-7	m,p-Xylenes	10	1.0	2.4	0.23
95-47-6	o-Xylene	3.7	1.0	0.85	0.23
79-34-5	1,1,1,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RG

Date : 12/13/00





# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Clayton Group Services

Client Sample ID : 630-8

PAI Sample ID : P9704037-008

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister

Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/07/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
		$\mu\text{g}/\text{M}^3$	LIMIT $\mu\text{g}/\text{M}^3$	ppb	LIMIT ppb
74-87-3	Chloromethane	2.2	1.0	1.1	0.49
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	42	1.0	18	0.42
75-69-4	Trichlorofluoromethane	1.9	1.0	0.34	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
75-15-0	Carbon Disulfide	2.2	1.0	0.71	0.32
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	15	1.0	4.2	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	7.7	1.0	2.6	0.34
67-66-3	Chloroform	ND	1.0	ND	0.21
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.19
71-43-2	Benzene	3.7	1.0	1.2	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RC

Date : 12/23/00



# Performance Analytical Inc.

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## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-8

PAI Sample ID : P9704037-008

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister

Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/07/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
		$\mu\text{g}/\text{M}^3$	LIMIT $\mu\text{g}/\text{M}^3$	ppb	LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	1.9	1.0	0.36	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	2.1	1.0	0.52	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	19	1.0	5.2	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	8.2	1.0	1.2	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	3.0	1.0	0.70	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.24
1330-20-7	m,p-Xylenes	11	1.0	2.6	0.23
95-47-6	o-Xylene	4.0	1.0	0.92	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RG

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Clayton Group Services

Client Sample ID : 630-9

PAI Sample ID : P9704037-009

Test Code : GC/MS EPA TO-14A

Analyst : Chris Parnell/Chris Casteel

Instrument : HP 5973/Tekmar AUTOCAN Elite

Matrix : Summa Canister

Date Sampled : 10/03/97

Date Received : 10/06/97

Date Analyzed : 10/07/97

Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
		$\mu\text{g}/\text{M}^3$	$\mu\text{g}/\text{M}^3$	ppb	ppb
74-87-3	Chloromethane	1.8	1.0	0.89	0.49
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	33	1.0	14	0.42
75-69-4	Trichlorofluoromethane	1.8	1.0	0.32	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	1.6	1.0	0.45	0.29
75-15-0	Carbon Disulfide	1.7	1.0	0.53	0.32
76-13-1	Trichlorotrifluoroethane	0.98 TR	1.0	0.13 TR	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	13	1.0	3.6	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	8.1	1.0	2.7	0.34
67-66-3	Chloroform	ND	1.0	ND	0.21
107-06-2	1,2-Dichloroethane	1.1	1.0	0.28	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.19
71-43-2	Benzene	3.4	1.0	1.1	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RG

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

**Client : Clayton Group Services**

**Client Sample ID : 630-9**

**PAI Sample ID : P9704037-009**

Test Code : GC/MS EPA TO-14A

Analyst : Chris Parnell/Chris Casteel

Instrument : HP 5973/Tekmar AUTOCAN Elite

Matrix : Summa Canister

Date Sampled : 10/03/97

Date Received : 10/06/97

Date Analyzed : 10/07/97

Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT µg/M <sup>3</sup>	REPORTING LIMIT µg/M <sup>3</sup>	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	2.1	1.0	0.40	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	2.1	1.0	0.51	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	16	1.0	4.2	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	11	1.0	1.6	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	2.7	1.0	0.63	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.24
1330-20-7	m,p-Xylenes	11	1.0	2.4	0.23
95-47-6	o-Xylene	3.5	1.0	0.82	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RL

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

**Client : Clayton Group Services**

**Client Sample ID : 630-10**  
**PAI Sample ID : P9704037-010**

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister

Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/07/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
		$\mu\text{g}/\text{M}^3$	LIMIT $\mu\text{g}/\text{M}^3$	ppb	LIMIT ppb
74-87-3	Chloromethane	5.0	1.0	2.4	0.49
75-01-4	Vinyl Chloride	4.2	1.0	1.6	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	43	1.0	18	0.42
75-69-4	Trichlorofluoromethane	1.9	1.0	0.34	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	1.1	1.0	0.31	0.29
75-15-0	Carbon Disulfide	ND	1.0	ND	0.32
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	13	1.0	3.7	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	11	1.0	3.7	0.34
67-66-3	Chloroform	ND	1.0	ND	0.21
107-06-2	1,2-Dichloroethane	98	1.0	24	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.19
71-43-2	Benzene	3.1	1.0	0.99	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RC

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-10  
PAI Sample ID : P9704037-010

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister  
Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/07/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0  
Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT µg/M <sup>3</sup>	REPORTING LIMIT µg/M <sup>3</sup>	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	1.1	1.0	0.20	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	1.9	1.0	0.46	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	21	1.0	5.5	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	1.2	1.0	0.18	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	2.9	1.0	0.66	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.24
1330-20-7	m,p-Xylenes	11	1.0	2.5	0.23
95-47-6	o-Xylene	3.8	1.0	0.87	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit  
ND = Not Detected

Verified by : RG

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-11

PAI Sample ID : P9704037-011

Test Code : GC/MS EPA TO-14A

Analyst : Chris Parnell/Chris Casteel

Instrument : HP 5973/Tekmar AUTOCAN Elite

Matrix : Summa Canister

Date Sampled : 10/03/97

Date Received : 10/06/97

Date Analyzed : 10/07/97

Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.1

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING	RESULT	REPORTING
		$\mu\text{g}/\text{M}^3$	LIMIT $\mu\text{g}/\text{M}^3$	ppb	LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	3.0	1.0	0.56	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	1.4	1.0	0.33	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	16	1.0	4.3	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	9.1	1.0	1.4	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	2.7	1.0	0.61	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.24
1330-20-7	m,p-Xylenes	10	1.0	2.4	0.23
95-47-6	o-Xylene	3.6	1.0	0.83	0.23
79-34-5	1,1,1,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RC

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-12

PAI Sample ID : P9704037-012

Test Code : GC/MS EPA TO-14A

Analyst : Chris Parnell/Chris Casteel

Instrument : HP 5973/Tekmar AUTOCAN Elite

Matrix : Summa Canister

Date Sampled : 10/03/97

Date Received : 10/06/97

Date Analyzed : 10/07/97

Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT $\mu\text{g}/\text{M}^3$	REPORTING LIMIT $\mu\text{g}/\text{M}^3$	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	1.2	1.0	0.30	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	20	1.0	5.3	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	1.2	1.0	0.18	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	3.8	1.0	0.88	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.24
1330-20-7	m,p-Xylenes	16	1.0	3.7	0.23
95-47-6	o-Xylene	4.3	1.0	0.99	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RC

Date : 12/13/00





# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 1 OF 2

Client : Clayton Group Services

Client Sample ID : 630-12

PAI Sample ID : P9704037-012 Dup

Test Code : GC/MS EPA TO-14A	Date Sampled : 10/03/97
Analyst : Chris Parnell/Chris Casteel	Date Received : 10/06/97
Instrument : HP 5973/Tekmar AUTOCAN Elite	Date Analyzed : 10/07/97
Matrix : Summa Canister	Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT	REPORTING LIMIT	RESULT	REPORTING LIMIT
		$\mu\text{g}/\text{M}^3$	$\mu\text{g}/\text{M}^3$	ppb	ppb
74-87-3	Chloromethane	1.5	1.0	0.71	0.49
75-01-4	Vinyl Chloride	ND	1.0	ND	0.39
75-00-3	Chloroethane	ND	1.0	ND	0.38
74-83-9	Bromomethane	ND	1.0	ND	0.26
67-64-1	Acetone	33	1.0	14	0.42
75-69-4	Trichlorofluoromethane	1.8	1.0	0.32	0.18
75-35-4	1,1-Dichloroethene	ND	1.0	ND	0.25
75-09-2	Methylene chloride	ND	1.0	ND	0.29
75-15-0	Carbon Disulfide	3.5	1.0	1.1	0.32
76-13-1	Trichlorotrifluoroethane	ND	1.0	ND	0.13
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ND	0.25
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ND	0.25
75-34-3	1,1-Dichloroethane	ND	1.0	ND	0.25
1634-04-4	Methyl tert-Butyl Ether	23	1.0	6.3	0.28
108-05-4	Vinyl Acetate	ND	1.0	ND	0.28
78-93-3	2-Butanone	7.1	1.0	2.4	0.34
67-66-3	Chloroform	ND	1.0	ND	0.21
107-06-2	1,2-Dichloroethane	ND	1.0	ND	0.25
71-55-6	1,1,1-Trichloroethane	ND	1.0	ND	0.19
71-43-2	Benzene	3.6	1.0	1.1	0.31
56-23-5	Carbon Tetrachloride	ND	1.0	ND	0.16
78-87-5	1,2-Dichloropropane	ND	1.0	ND	0.22

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RG

Date : 12/13/00



# Performance Analytical Inc.

Air Quality Laboratory  
A Division of Columbia Analytical Services, Inc.  
An Employee Owned Company

## RESULTS OF ANALYSIS

PAGE 2 OF 2

Client : Clayton Group Services

Client Sample ID : 630-12

PAI Sample ID : P9704037-012 Dup

Test Code : GC/MS EPA TO-14A  
Analyst : Chris Parnell/Chris Casteel  
Instrument : HP 5973/Tekmar AUTOCAN Elite  
Matrix : Summa Canister

Date Sampled : 10/03/97  
Date Received : 10/06/97  
Date Analyzed : 10/07/97  
Volume(s) Analyzed : 1.000 Liter(s)

Pi 1 = 0.0

Pf 1 = 3.0

D.F. = 1.20

CAS #	COMPOUND	RESULT µg/M <sup>3</sup>	REPORTING LIMIT µg/M <sup>3</sup>	RESULT ppb	REPORTING LIMIT ppb
75-27-4	Bromodichloromethane	ND	1.0	ND	0.15
79-01-6	Trichloroethene	ND	1.0	ND	0.19
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	ND	0.22
108-10-1	4-Methyl-2-pentanone	1.2	1.0	0.30	0.24
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	ND	0.22
79-00-5	1,1,2-Trichloroethane	ND	1.0	ND	0.19
108-88-3	Toluene	20	1.0	5.2	0.27
124-48-1	Dibromochloromethane	ND	1.0	ND	0.12
591-78-6	2-Hexanone	ND	1.0	ND	0.24
106-93-4	1,2-Dibromoethane	ND	1.0	ND	0.13
127-18-4	Tetrachloroethene	1.3	1.0	0.20	0.15
108-90-7	Chlorobenzene	ND	1.0	ND	0.22
100-41-4	Ethylbenzene	3.8	1.0	0.87	0.23
75-25-2	Bromoform	ND	1.0	ND	0.10
100-42-5	Styrene	ND	1.0	ND	0.24
1330-20-7	m,p-Xylenes	16	1.0	3.7	0.23
95-47-6	o-Xylene	4.3	1.0	0.99	0.23
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	ND	0.15
541-73-1	1,3-Dichlorobenzene	ND	1.0	ND	0.17
106-46-7	1,4-Dichlorobenzene	ND	1.0	ND	0.17
95-50-1	1,2-Dichlorobenzene	ND	1.0	ND	0.17

TR = Detected Below Indicated Reporting Limit

ND = Not Detected

Verified by : RC

Date : 12/13/00



**Performance Analytical Inc.**  
Air Quality Laboratory

26751 Esborne Street  
Canoga Park, California 91304  
Phone 818 709 1139  
Fax 818 709 2915

### Chain of Custody Record Analytical Services Request

Client/Project Name <b>CLAYTON ENVIRONMENTAL</b>			Address/Phone <b>P.O. Box 9019 PLEASANTON CA 94566</b>			ANALYSES			PAI Project No. <b>P9704037</b>	
Project Location <b>630 29TH STREET</b>			Client Project No. <b>70-97066.00</b>			<b>BENZENE</b>				
Contact <b>R. SUITAY</b>		Sampler (Signature) <i>R. Suitay</i>		P.O. No. <b>N/C</b>						
Sample Identification No.	Date	Time	Lab Sample No.	Type of Sample	Expected Turnaround Time					
<b>630-1</b>	<b>10/3/97</b>	<b>0900</b>	<b>-001</b>	<b>GRAB</b>	<b>X</b>	<b>4 WEEKS</b>	<b>113 833</b>			
<b>630-2</b>			<b>-002</b>				<b>122 871</b>			
<b>630-3</b>			<b>-003</b>				<b>361 841</b>			
<b>630-4</b>			<b>-004</b>				<b>174 883</b>			
<b>630-5</b>			<b>-005</b>				<b>100 882</b>			
<b>630-6</b>			<b>-006</b>				<b>104 869</b>			
<b>630-7</b>			<b>-007</b>				<b>351 889</b>			
<b>630-8</b>			<b>-008</b>			<b>730-8</b>	<b>131 873</b>			
<b>630-9</b>			<b>-009</b>				<b>493 878</b>			
<b>630-10</b>			<b>-010</b>				<b>295 866</b>			
<b>630-11</b>			<b>-011</b>				<b>442 894</b>			
<b>630-12</b>			<b>-012</b>				<b>321 840</b>			

Relinquished by: (Signature)	Date	Time	Received by: (Signature) <i>Katherine D. Lee</i>	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	<b>10/6/97</b>	<b>10:15 AM</b>
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Disposal Method			White Copy : Accompanies Samples Yellow Copy : Sampler		
Disposed by: (Signature)	Date	Time			