ENVIRONMENTAL RESOURCES MANAGEMENT GROUP

PHASE II SOIL INVESTIGATION REPORT

Southern Pacific Transportation Company
Passenger Depot Proposed Sale Parcel Site
Tucson, Arizona

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ERM

TABLE OF CONTENTS

LIST OF TABLES	i
LIST OF FIGURES	i
LIST OF APPENDICES	i
LIST OF ACRONYMS	ii
SECTION 1.0	**1-1**
INTRODUCTION	1-1
1.1 Background / Site History	1-1
1.1.1 Objective	1-3
1.1.2 Scope of Work	1-3
SECTION 2.0	**2-1**
BACKGROUND AND PREVIOUS INVESTIGATIONS	2-1
2.1 Geology/Hydrogeology	2-1
2.2 Previous Investigations	2-1
SECTION 3.0	**3-1**
ERM SOIL INVESTIGATION	3-1
3.1 Field Procedures	3-1
3.2 Access and Permits	3-1
3.3 Soil Investigation Results	3-2
SECTION 4.0	**4-1**
DISCUSSION AND CONCLUSIONS	4-1
4.1 Discussion	4-1
4.2 Conclusions	4-1
SECTION 5.0	**5-1**
REFERENCES	5-1
APPENDIX A	**A-1**
SOIL BORING LOGS	A-1
APPENDIX B	**B-2**
ANALYTICAL REPORTS	B-2

LIST OF TABLES

TABLE		PAGE
Table 2-1	Soil Analytical Results (1991-1995)	2-5
Table 2-2	Soil Analytical Results (1998)	2-8
Table 3-1	Soil Investigation Sample Results	3-4

LIST OF FIGURES

FIGURE		PAGE
Figure 1-1	Site Location Map	1-2
Figure 2-1	Passenger Depot Proposed Sale Parcel Site	2-2

LIST OF APPENDICES

APPENDIX		PAGE
Appendix A	Soil Boring Logs	A-1
Appendix B	Analytical Reports	B-1

LIST OF ACRONYMS

Acronym	Definition
ADWR	Arizona Department of Water Resources
AMA	Active Management Area
AR	Administrative Record
AST	aboveground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COT	City of Tucson
ERM	Environmental Resources Management
FID	flame ionization detector
IC	Industrial Compliance, Inc.
mg/kg	milligrams per kilogram
PAH	polynuclear aromatic hydrocarbons
PCB	polychlorinated biphenyl
RI	remedial investigation
SPEvS	SP Environmental Systems
SPTCo	Southern Pacific Railroad Company
SRL	soil remediation level
TCE	Trichloroethene
TCLP	toxicity characterization leaching procedure
TPH	total petroleum hydrocarbons
VOCs	volatile organic compounds
USEPA	United States Environmental Protection Agency
UPRR	Union Pacific Railroad Company
UST	underground storage tank
µg/l	micrograms per liter

SECTION 1.0

INTRODUCTION

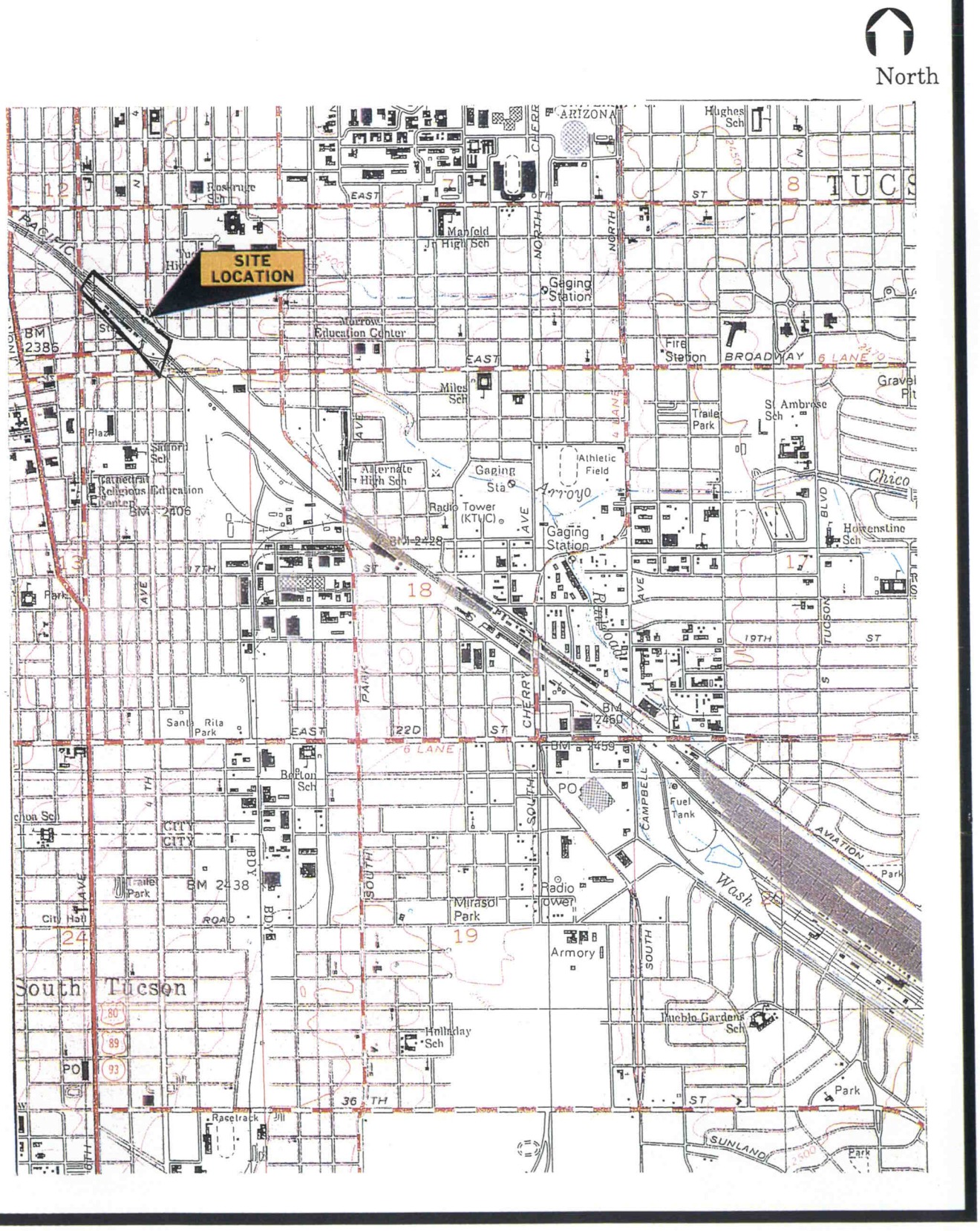
Environmental Resources Management (ERM) conducted a Phase II Soil Investigation from 23 through 28 August 1998 at a portion of the Southern Pacific Transportation Company (SPTCo) Passenger Depot Site located in Tucson, Arizona (Figure 1-1), known as the "proposed sale parcel". The Phase II Soil Investigation included the collection of 55 soil samples from eleven 55-foot deep soil borings from locations throughout the proposed sale parcel.

The site was formerly owned and operated by SPTCo, and was acquired by Union Pacific Railroad (UPRR) in 1997. The City of Tucson (COT) is in the process of potentially purchasing the portion of the UPRR property. This report was prepared by ERM, at the request of UPRR, for the COT as a portion of the potential property transaction.

The Phase II Soil Investigation was conducted by following the basic contents suggested in the United States Environmental Protection Agency (USEPA) document *Guidance for Conducting Remedial Investigation and Feasibility Studies Under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)* (USEPA, 1988). This was also described in the Scope of Work and Soil Investigation Field Procedures sections of the Draft Workplan for the Phase II Soil Investigation (ERM, 1998c).

1.1 Background / Site History

The SPTCo Passenger Depot Sale Parcel Site is an active rail facility located in downtown Tucson, Arizona (Figure 1-1). The geographical boundaries of the SPTCo Passenger Depot Site are from Sixth Avenue at its west end, to approximately Third Avenue at its east end, and measures approximately ¼ linear mile. The northern and southern property boundaries are relatively narrow, ranging from approximately 100 to 200 feet in width. The site has been in operation since 1880, and has included passenger and freight transportation, fueling, and their associated operations (Industrial Compliance [IC], 1990). For a complete site history, refer to the Scoping Document (IC, 1991). This site is currently utilized for office space by UPRR personnel, and by Amtrak as a passenger depot.



1" = 2000'

0 2000'

Based From USGS 7.5
Minute Topographic Map Series,
Tucson, Arizona (1983)

FIGURE 1-1
Site Location Map
SPTCo Passenger Depot
Tucson, Arizona

ERM-West, Inc. 8'95
8012.14/mp

Previous investigations and environmental work have been performed by numerous parties at the SPTCo Passenger Depot area. Documentation of this previous work is located in an Administrative Record (AR). The AR includes numerous letters, memorandums, workplans, remedial investigation (RI) reports, and miscellaneous documents associated with this site (ERM, 1998b).

1.1.1 Objective

The objective of the Phase II Soil Investigation was to assess the extent of possible impacted soil associated with former on-site activities (locomotive fueling and railyard operations). Soil samples were collected from 5 feet below ground surface (bgs) to a maximum depth of 55 feet bgs, and encompassed the SPTCo passenger depot proposed sale parcel.

1.1.2 Scope of Work

The Phase II Soil Investigation consisted of the following activities:

- Drilling;
- Soil sample collection;
- Lithologic logging (describing subsurface soil);
- Backfilling the bore holes;
- Laboratory analysis of select soil samples; and
- Preparation of this report.

Eleven 55-foot deep soil borings were installed at various locations throughout the SPTCo Passenger Depot Sale Parcel Site. Five soil samples from each soil boring were collected for analysis of the following: total petroleum hydrocarbons (TPH) (USEPA Method 8015 AZ), volatile organic compounds (VOCs) (USEPA Method 8021B), and polynuclear aromatic hydrocarbons (PAHs) (USEPA Method 8310). Additionally, one soil sample collected from the uppermost sample interval from each soil boring location was analyzed for PCBs (USEPA Method 8080). Analytical results are presented below in the Soil Investigation Results section of this report.

SECTION 2.0

BACKGROUND AND PREVIOUS INVESTIGATIONS

2.1 Geology/Hydrogeology

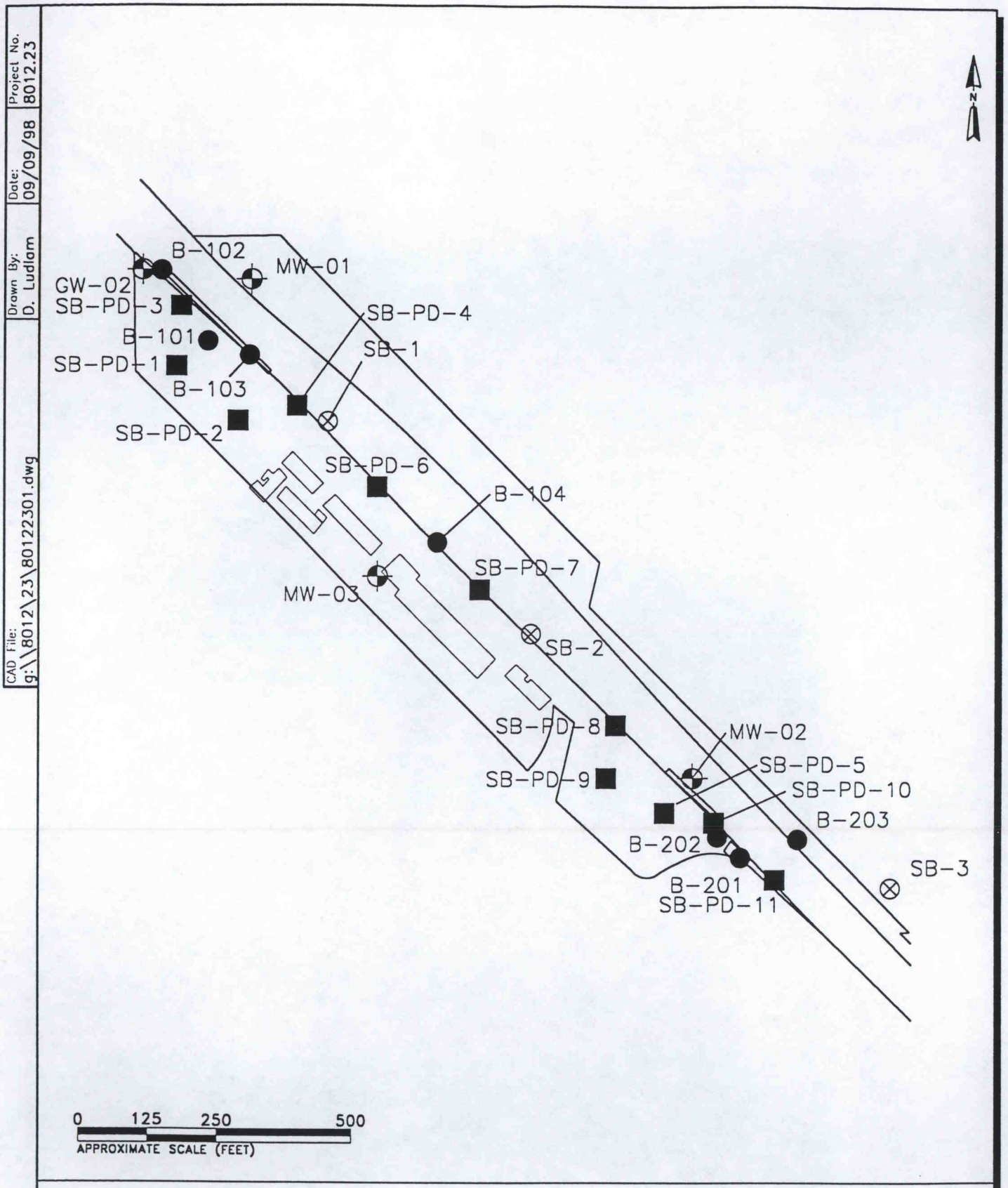
Hydrogeologically, the site is located in the Tucson Active Management Area (AMA) and Tucson subarea of the Santa Cruz Basin (Arizona Department of Water Resources [ADWR], 1984). The sedimentary rocks of three major units include: the Pantano Formation, Tinaja Beds and the Fort Lowell Formation. These units form a single regional aquifer system. The Fort Lowell Formation is reported to provide most of the water that is withdrawn from this subarea (ADWR, 1984). However, the locally or perched aquifer appears to be laterally continuous and seems to be separated from the regional aquifer 70 to 100 feet. The approximate depth to perched water beneath the site is 70 feet bgs.

The soils encountered in the borings on-site were interpreted as being part of the Fort Lowell Formation (IC, 1991). They consisted primarily of uncemented sand, silty sand, and clayey sand with minor occurrences of gravels, clays, and silts. The sand units generally consisted of subangular to round, poorly sorted (well graded) grains of a granitic source, and locally contains varying amounts of caliche (calcium carbonate). Samples of the Soil Boring Logs are included as Appendix A.

2.2 Previous Investigations

ERM has reviewed data derived from previous investigations performed on, and near the SPTCo Passenger Depot Parcel Site (Figure 2-1), and is used in this data as a basis for defining the goals of this Soil Investigation. The majority of the past investigations have focused on the on-site upper vadose zone soils and perched groundwater zone. The following is a summary of these investigations, as well as a brief explanation of the rationale for collecting or not collecting additional data on several portions of the site.

A Site Investigation Workplan was prepared by SP Environmental Systems (SPEvS) for SPTCo (SPEvS, 1990). This workplan outlined a five-phase approach to investigating all of the SPTCo facilities in Tucson, and included the following: a



LEGEND

- ⊗ Hydropunch/Temporary Well Location
- ■ Sale Parcel Soil Boring (11 Total)
- ● Existing Soil Boring
- ⊕ Existing Ground Water Monitoring Well

Figure 2-1

SPTCo Passenger Depot
Proposed Sale Parcel
Soil Boring / Well Locations
Tucson, Arizona

ERM *09/98*

scoping phase (historical background search); a site investigation phase (surface and shallow borings); a Phase II Investigation (deep soil borings and perched groundwater zone monitoring wells); a remedial alternative analysis (feasibility and risk evaluation); and a remediation plan (selection of the most feasible remedial action). The first three of the five phases of investigation were completed. Following is a brief description of the results:

- A Scoping Document, consisting of a detailed record search, was performed in May of 1991 by IC for SPTCo. This document outlined the historic activities at the railyard and evaluated the potential for release of petroleum products from various facilities. The report reviewed 74 facilities at the railyard. Of these, eight facilities were identified as higher priority, and ten were identified as lower priority (IC, 1991). The facilities at the SPTCo Passenger Depot Sale Parcel Site identified include two diesel fueling operations, two 10,000-gallon USTs and associated pipeline, and two 10,000-gallon ASTs used to store Bunker C oil (IC, 1991).

- The SPEvS initial site investigation included drilling 14 soil borings, soil sample collection and analysis, installation of two groundwater monitoring wells, and groundwater sample collection and analysis. Soil samples collected from these soil borings were analyzed for TPH. Soil samples were collected in additional areas and analyzed for total metals, toxicity characteristic leaching procedure (TCLP) metals, and VOCs. Values exceeding the industrial Soil Remediation Level (SRL) for these compounds were not detected in any of the samples. Soil analytical results for TPH are summarized in Table 2-1. Select soil boring/well locations are shown in Figure 2-1. This investigation data indicates that the only area where upper vadose zone soil is impacted by TPH above the ADEQ industrial SRL of 18,000 milligram per kilogram (mg/kg) is located near the former USTs. The previous investigation has adequately delineated impacts to the upper vadose zone soils. Therefore, further investigation of the upper vadose zone soils on the SPTCo Passenger Depot Site is not required for UPRR purposes; however, it was done per the COT requests as part of the impending sale of property.

Groundwater monitoring wells were installed in the perched groundwater zone near the two diesel fueling facilities formerly located on the western end (MW-01) and eastern end (MW-02) of the Passenger Depot Site. Monitoring and sampling these two wells identified free-phase diesel fuel on the perched groundwater table (IC, 1991 and SPEvS, 1991). Monitoring and sampling a monitoring well (MW-3) on the south side of the Passenger Depot building indicated the presence of free-phase diesel mixed with gasoline components, thus suggesting an off-site contributing source. It is not known if the free-phase diesel detected in these monitoring wells

forms a continuous plume or has migrated off-site. Delineating the extent of the free-phase diesel plume is beyond the focus of this soils investigation.

In 1998, ERM prepared a workplan for a RI at the UPRR Passenger Depot Site (ERM, 1998b) and submitted it to the ADEQ for review and approval. In May 1998, the first phase of the RI began and is currently nearing completion. Work in the first phase of the RI included:

1. Installing temporary monitoring wells on the Sale Parcel Site; and
2. Collecting two capillary fringe soil samples from each temporary monitoring well location.

Capillary fringe soil samples were analyzed for TPH (USEPA Method 8015AZ), polynuclear aromatic hydrocarbons (PAHs) (USEPA Method 8310), and VOCs (USEPA Method 8021B). Table 2-2 presents a summary of capillary fringe soil analytical results.

TABLE 2-1

Soil Analytical Results from Previous Investigations by SPEvS and IC (1991-1995)
SPTCo Passenger Depot Site
Tucson, Arizona

Boring/Well	Sample Interval	TPH by 418.1	TPH diesel
MW-1	0-0.5	45	N/A
	5.5-6	13	N/A
	14-14.5	<10	N/A
	29-29.5	<10	N/A
	39.5-40	<10	N/A
	53.5-54	13	N/A
	60-60.5	<10	N/A
	62-62.5	<10	N/A
	66.5-67	3,400	1,800
B-101	1-1.5	<10	N/A
	5.5-6	<10	N/A
	10.5-11	16	N/A
	15.5-16	<10	N/A
	20.5-21	10	N/A
B-102	1.5-2	330	N/A
	5.5-6	2,100	N/A
	15-15.5	5,400	N/A
	25-25.5	2,200	N/A
	30-30.5	210	N/A
	35-35.5	10	N/A
	41-41.5	3,700	N/A
	51-51.5	37	N/A
	55-55.5	42	N/A
	65-65.5	2,000	N/A
B-103	2-2.5	2,600	N/A
	5.5-6	21	N/A
	15-15.5	5,200	N/A
	20.5-21	15,000	N/A
	24.5-25	550	N/A
	35.5-36	26	N/A
	39.5-40	21	N/A
	45.5-46	15	N/A
ADEQ SRL (Industrial)		**18,000**	**18,000**

Boring/Well	Sample Interval	TPH by 418.1	TPH diesel
B-104	1.5-2	10	N/A
	5.5-6	10	N/A
	10-10.5	10	N/A
	10.5-11	21	N/A
	15-15.5	10	N/A
	20.5-21	16	N/A
MW-2 (Outside Sale Parcel Boundary)	0-0.5	688	N/A
	4.5-5	48,000	N/A
	5.5-6	15,000	N/A
	11.5-12	12,000	N/A
	22-22.5	5,800	N/A
	30-30.5	21	N/A
	38.5-39	<10	N/A
	44-44.5	11,000	N/A
	49-49.5	<10	N/A
	55-55.5	<10	N/A
	61.5-62	<10	N/A
	69-69.5	<10	N/A
	74-74.5	16	N/A
	90.5-91	165	N/A
B-201	1.5-2	540	N/A
	5-5.5	600	N/A
	10-10.5	37	N/A
	15.5-16	26	N/A
	20-20.5	21	N/A
	25-25.5	21	N/A
	30-30.5	31	N/A
	34.5-35	26	N/A
B-202	1.5-2	5,900	N/A
	5.5-6	13,000	N/A
	15.5-16	7,800	N/A
	25.5-26	1,600	N/A
	30.5-31	12,000	N/A
	35.5-36	11,000	N/A
	40.5-41	7,200	N/A
	45.5-46	9,100	N/A
	55.5-56	4,800	N/A
ADEQ SRL (Industrial)		**18,000**	**18,000**

Boring/Well	Sample Interval	TPH by 418.1	TPH diesel
B-202	60.5-61	6,600	N/A
	65.5-66	9,100	N/A
B-203	2.5-3	42	N/A
	11-11.5	15	N/A
	16-16.5	108	N/A
	21-21.5	15	N/A
	26-26.5	2,200	N/A
	31-31.5	7,400	N/A
	36-36.5	7,400	N/A
	41-41.5	7,800	N/A
	46-46.5	8,400	N/A
	56-56.5	4,800	N/A
	66-66.5	4,800	N/A
Former Amtrak Fuel Transfer (FT) FTB #1	10	5,100	N/A
	20	5,500	N/A
	30	4,600	N/A
	35	4,400	N/A
	40	8,400	N/A
	45	<20	N/A
FTB #2	10	<20	N/A
	20	<20	N/A
	30	6,800	N/A
	40	<20	N/A
FTB #3	10	<20	N/A
	20	<20	N/A
	25	<20	N/A
SP MW-3 [3] (installed 2/93)	10	<20	N/A
	30	<20	N/A
	50	<20	N/A
	65	<20	N/A
	67.5	<20	N/A
	70	<20	N/A
	72.5	17,000	N/A
	75	420	N/A
	77.5	4,700	N/A
	78.5	30	N/A
ADEQ SRL (Industrial)		**18,000**	**18,000**

Notes: N/A = Not Analyzed

TPH = Total Petroleum Hydrocarbons analyzed by USEPA Method 418.1

TPH = Total Petroleum Hydrocarbons as diesel analyzed by USEPA Method 8015.

* = Analyzed for Total or TCLP Metals (refer to SPEvS, 1991 for results).

[1] = Installed as soil boring only/not groundwater monitoring well in 1991.

[2] = Installed as groundwater monitoring well, but subsequently abandoned.

[3] = Installed as groundwater monitoring well in 1993.

Sample depth in feet below ground surface (bgs).

ADEQ = Arizona Department of Environmental Quality

SRL = Soil Remediation Level (for industrial land use) (Promulgated December 4, 1997)

Numbers in bold indicate concentrations above SRL.

TABLE 2-2

Soil Analytical Results from Previous Investigations by ERM (1998)

SPTCo Passenger Depot Sale Parcel Site

Tucson, Arizona

Boring/Well	Sample Interval	TPH by 418.1	TPH diesel
SB-1	72-72.5*	N/A	6,400
	74-74.5*	N/A	**44,000**
SB-2	74-74.5*	N/A	1,700
	76-76.5*	N/A	1,300
SB-3	83-83.5*	N/A	3,100
	85-85.5*	N/A	6,500
ADEQ SRL (Industrial)		**18,000**	**18,000**

Notes: N/A = Not Analyzed

TPH = Total Petroleum Hydrocarbons analyzed by USEPA Method 418.1

TPH = Total Petroleum Hydrocarbons as diesel analyzed by USEPA Method 8015AZ.

* = Analyzed for VOCs and PAHs (ERM, 1998 in progress).

Sample depth in feet below ground surface (bgs).

ADEQ = Arizona Department of Environmental Quality

SRL = Soil Remediation Level (for industrial land use) (Promulgated December 4, 1997)

Numbers in bold indicate concentrations above SRL

SECTION 3.0

ERM SOIL INVESTIGATION

3.1 Field Procedures

ERM installed soil borings at 11 locations (Figure 2-1) on the SPTCo Passenger Depot Sale Parcel Site in an effort to delineate the lateral extent of the petroleum hydrocarbons discovered during previous investigations. The location of the soil borings were selected on the following factors; 1) the areal distribution of previous soil borings; 2) for spatial coverage of known former fueling facilities; 3) where petroleum hydrocarbons had been previously discovered in the soil; and 4) per COT requests.

A high-torque, truck-mounted, drill rig equipped with an 8¼ inch outside diameter hollow-stem augers drilled to the desired soil sample collection depth. A stainless steel split spoon sampler was then advanced ahead of the hollow-stem auger to collect soil samples for both lithologic description and to be submitted for laboratory analysis. Soil samples were collected at 5-foot intervals from each of the soil borings to describe lithology from 5 to 55 feet bgs. The soil samples were field screened with a flame ionization detector (FID). The samples which exhibited the highest FID readings were collected for laboratory analysis. When the results of field screening did not clearly target a specific interval for laboratory analysis, samples were collected from the uppermost and bottom of each boring, and from three additional depths in between. Five soil samples were collected from each soil boring location based on field screening.

3.2 Access and Permits

The following section summarizes ERM's operating procedures that were followed during the course of this investigation. These procedures include the steps necessary to obtain permission to install 11 soil borings on-site.

Prior to initiating field activities, ERM obtained all necessary permits and observed the following guidelines:

- The ERM site manager marked on-site boring locations on the ground with white paint or placed a marker/stake.

- ERM coordinated and met with UPRR maintenance-of-way personnel and COT personnel one week prior to initiating field activities. All on-site boring locations were reviewed with UPRR personnel.

- ERM notified Arizona Blue Stake and requested a site meeting. Blue Stake marked (or notified the utility companies to mark) the utilities.

3.3 Soil Investigation Results

Five soil samples were collected from each soil boring location and analyzed for each of the following: TPH (USEPA Method 8015AZ), VOCs including benzene, toluene, ethylbenzene, total xylenes (BTEX) (USEPA Method 8021B), and PAHs (USEPA Method 8310). Additionally, the uppermost soil sample collected from each boring was analyzed for PCBs (USEPA Method 8080). As PCBs were not detected in any of the shallow soil samples, the samples collected from deeper depths were not be analyzed for PCBs. Appendix B contains the complete package of analytical results including the chain of custody documentation. The summary of this data is depicted in Table 3-1, and includes the soil concentration ranges as follows:

- TPH Gasoline Range Organics (GRO): range from none detect (<20 mg/kg) to 110 mg/kg (in sample SB-PD-1 at a depth of 30 feet bgs),

- TPH Diesel Range Organics (DRO): range from none detect (<30 mg/kg) to 6,800 mg/kg, (in sample SB-PD-1 at a depth of 30 feet bgs),

- TPH Heavy Oil Range Organics (HRO): range from none detect (<50 mg/kg) to 1,300 mg/kg (in sample SB-PD-1 at a depth of 30 feet bgs),

- Total TPH: ranged from none detect (<100 mg/kg) to 6,800 mg/kg (in sample SB-PD-1 at a depth of 30 feet bgs),

- Benzene: not detected at or above the detection limit (<50 μg/kg) in any of the 55 soil samples analyzed.

- Toluene: ranged from none detect (<50 μg/kg) to 120 μg/kg (in sample SB-PD-10 at a depth of 45 feet bgs),

- Ethylbenzene: ranged from none detect (<50 μg/kg) 120 μg/kg (in sample SB-PD-1 at a depth of 55 feet bgs),

- Total Xylenes: ranged from none detect (<50 μg/kg) 520 μg/kg(in sample SB-PD-1 at a depth of 55 feet bgs),

- PAHs: Trace concentrations of Acenaphthene (0.5 μg/kg), Fluorene (4 μg /kg), Phenanthrene (1.2 μg/kg), and Anthracene (0.2 μg/kg) were detected.
- Other VOCs: one sample contained detectable levels of Trichloroethene (TCE) at 56 μg/kg (in sample SB-PD-8 at a depth of 5 feet bgs),
- PCBs: not detected at or above the detection limit in any of the 11 soil samples analyzed.

TABLE 3-1

Phase II Soil Investigation - Soil Sample Results Collected by ERM
Amtrak Passenger Depot Sale Parcel Site
Tucson, Arizona

Location	Sample ID	Date Sampled	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH HRO (mg/kg)	Total TPH (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl Benzene (µg/kg)	Total Xylenes (µg/kg)	PAHs (mg/kg)	Other VOCs (µg/kg)	PCBs (µg/kg)
SB-PD-1	SB-PD-1-5'	8/23/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	ND
	SB-PD-1-30'	8/23/98	110	3,700	480	4,290	<200	<200	<200	<400	Acenaphthene = 0.5 Fluorene = 1.2 Anthracene = 0.20	ND	-
	SB-PD-1-35'	8/23/98	52	2,100	330	2,482	<250	<250	<250	<500	Acenaphthene = 0.4 Fluorene = 1.1 Anthracene = 0.16	ND	-
	SB-PD-1-45'	8/23/98	<20	870	140	1,010	<50	<50	<50	<100	Acenaphthene = 0.1 Fluorene = 0.2 Phenanthrene = 1.2 Anthracene = 0.05	ND	-
	SB-PD-1-55'	8/23/98	51	2,100	280	2,431	<50	<50	120	520	ND	ND	-
SB-PD-2	SB-PD-2-5'	8/23/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	ND
	SB-PD-2-25'	8/23/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-2-45'	8/23/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-2-50'	8/23/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-2-55'	8/23/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
SB-PD-3	SB-PD-3-5'	8/24/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	ND
	SB-PD-3-25'	8/24/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-3-35'	8/24/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-3-50'	8/24/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-3-55'	8/24/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
ADEQ SRL (Industrial)			**N/A**	**17,000**	**N/A**	**N/A**	**1,400**	**2,700,000**	**2,700,000**	**2,800,000**	**Acenaphthene = 41,000 Fluorene = 27,000 Anthracene = 200,000**	**TCE = 7,000**	**N/A**

Location	Sample ID	Date Sampled	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH HRO (mg/kg)	Total TPH (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl Benzene (µg/kg)	Total Xylenes (µg/kg)	PAHs (mg/kg)	Other VOCs (µg/kg)	PCBs (µg/kg)
SB-PD-4	SB-PD-4-5'	8/24/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	ND
	SB-PD-4-35'	8/24/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-4-45'	8/24/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-4-50'	8/24/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-4-55'	8/24/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
SB-PD-5	SB-PD-5-5'	8/24/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	ND
	SB-PD-5-35'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-5-45'	8/25/98	<20	1,100	1,300	2,400	<50	<50	<50	<100	Phenanthrene = 0.4	ND	-
	SB-PD-5-50'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-5-55'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
SB-PD-6	SB-PD-6-5'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	ND
	SB-PD-6-30'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-6-40'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-6-50'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-6-55'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
SB-PD-7	SB-PD-7-5'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	ND
	SB-PD-7-35'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-7-40'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-7-45'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-7-55'	8/25/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
SB-PD-8	SB-PD-8-5'	8/26/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	Trichloroethene (TCE) = 56	ND
	SB-PD-8-30'	8/26/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-8-35'	8/26/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-8-40'	8/26/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-8-55'	8/26/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
SB-PD-9	SB-PD-9-5'	8/26/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	ND
	SB-PD-9-40'	8/26/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-9-45'	8/26/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-9-50'	8/26/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-9-55'	8/26/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
ADEQ SRL (Industrial)			N/A	17,000	N/A	N/A	1,400	2,700,000	2,700,000	2,800,000	Acenaphthene = 41,000 Fluorene = 27,000 Anthracene = 200,000	TCE = 7,000	N/A

Location	Sample ID	Date Sampled	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH HRO (mg/kg)	Total TPH (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethyl Benzene (µg/kg)	Total Xylenes (µg/kg)	PAHs (mg/kg)	Other VOCs (µg/kg)	PCBs (µg/kg)
SB-PD-10	SB-PD-10-5'	8/26/98	<400	6,000	<1000	6,000	<50	63	<50	170	Fluorene = 3	ND	ND
	SB-PD-10-10'	8/26/98	<400	6,800	<1000	6,800	<50	<50	50	200	ND	ND	-
	SB-PD-10-15'	8/26/98	<100	2,300	460	2,760	<50	<50	<50	150	ND	ND	-
	SB-PD-10-45'	8/26/98	<200	4,700	930	5,630	<50	120	<50	120	Fluorene = 4	ND	-
	SB-PD-10-55'	8/26/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
SB-PD-11	SB-PD-11-5'	8/27/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	ND
	SB-PD-11-25'	8/27/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-11-30'	8/27/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-11-45'	8/27/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
	SB-PD-11-55'	8/27/98	<20	<30	<50	<100	<50	<50	<50	<100	ND	ND	-
ADEQ SRL (Industrial)			N/A	17,000	N/A	N/A	1,400	2,700,000	2,700,000	2,800,000	Acenaphthene = 41,000 Fluorene = 27,000 Anthracene = 200,000	TCE = 7,000	N/A

Notes: TPH = total petroleum hydrocarbons (analyzed by USEPA Method 8015 [AZ])
Benzene, toluene, ethylbenzene, and total xylenes (analyzed by USEPA Method 8021B)
PAH = polynuclear aromatic hydrocarbons (by USEPA Method 8310)
PCB = poly chlorinated biphenyl (by USEPA Method 8080)
mg/kg = milligrams per kilogram
ug/kg = micrograms per kilogram
ND = non-detect
< = less than the laboratory detection limit
- = sample collected but not submitted for laboratory analysis

SECTION 4.0

DISCUSSION AND CONCLUSIONS

4.1 Discussion

A brief review of the 4 December 1997 Arizona Department of Environmental Quality (ADEQ) soil remediation levels (SRLs) was conducted based on future industrial land use for the site. The review indicated that none of the soil samples collected during this or previous investigations exceed the ADEQ SRLs for TPH, VOCs, or PAHs for industrial land use.

4.2 Conclusions

ERM conducted a Phase II Soil Investigation from 23 through 28 August 1998 at a portion of the SPTCo Passenger Depot Site located in Tucson, Arizona. This enabled ERM to assess the extent of possible impacted soil associated with former on-site activities. The Phase II investigation was performed in response to a COT request to UPRR as part of a potential sale of the property. Eleven 55-foot deep soil borings were installed at various locations throughout the SPTCo Passenger Depot Sale Parcel Site. Five soil samples from each soil boring were collected for analysis of TPHs, VOCs, PAHs, and PCBs. None of these samples analyzed exceed their respective SRLs for industrial land use.

SECTION 5.0

REFERENCES

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Appendix A

APPENDIX A

SOIL BORING LOGS

BOREHOLE LOG

ERM

BOREHOLE NO:	SB-PD-1
TOTAL DEPTH:	57 FEET
TOP ELEVATION:	2384.40
WELL NO:	n/a

PROJECT NAME:	UPRR PASSENGER DEPOT	DRILLING CO.:	WATER DEVELOPMENT CORPORATION
JOB NUMBER:	8012.23	DRILLER:	TIM PRINCE
SITE LOCATION:	TUCSON, AZ	RIIG TYPE	CME-75
LOGGED BY:	JAMES ACKERMAN	DRILLING METHOD:	HOLLOW STEM AUGER (8.25" O.D.)
DATE DRILLED:	8/23/98	HAMMER WT./DROP:	140 LBS/30 INCH

NOTE:
adjacent to old spur line (north) in parking lot

EASTING: n/a NORTHING: n/a

▽ WATER LEVEL ▼ FREE PRODUCT LEVEL

CASING DIA: 2" SCREEN SLOTTED SIZE: 0.020

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
0		SC					CLAYEY SAND (SC): very pale brown (10YR 7/4), mottled grayish brown (10YR 5/2), not cemented, 75% fine sand to very coarse subangular to round Arkosic sand, 15% clay, 10% fine subangular to round granitic gravel, trace debris and brick fragments, no petroleum odor or staining.
2380							
5					18/13/11	1	
		SP					SAND (SP): light brown (7.5YR 6/4), medium dense, not cemented, moist, 90% medium to coarse subangular to round Arkosic sand, 10% clay, no petroleum odor or staining.
2375							
10					9/11/12	1	
2370							
15		SP			14/15/16	1	SAND (SP): reddish yellow (7.5YR 6/6), medium dense, not cemented, moist, 90% fine to medium sand, subangular to round Arkosic sand, 10% clay, no petroleum odor or staining.

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION

2365							
20					14/22/28	15	
		SC					CLAYEY SAND (SC): light gray (10YR 7/1), very dense, not cemented, slightly moist, 75% fine to coarse subangular to round Arkosic sand, 15% clay, 10% fine granitic gravel, strong petroleum odor, slight staining.
2360							
25					19/40/47	250	
		SW					SAND (SW): light gray (10YR 7/1), medium dense, not cemented, 95% fine to very coarse subangular to round Arkosic sand (75% feldspar, 15% quartz, 10% lithic granitic), 5% fine granitic gravel, strong petroleum odor, slight staining.
2355							
30					16/25/27	600	
		SP					SAND (SP): light gray (10YR 7/1), dense, not cemented, 95% fine to medium subangular to round Arkosic sand (75% feldspar, 15% quartz, 10% lithic granitic), 5% fine granitic gravel, strong petroleum odor, slight staining.
		SM					SILTY SAND (SM): light gray (10YR 7/1), dense, not cemented, slightly moist, 85% very fine to medium subangular to round Arkosic sand, 15% silt, micaceous, strong petroleum odor, slight staining.
2350							
35					11/23/30	1100	
2345							
40		SM			10/18/19	2000	SILTY SAND (SM): light brownish gray (10YR 6/2), medium dense, not cemented,slightly moist, 85% fine to coarse subangular to round Arkosic sand, 15% silt, strong

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
							petroleum odor, no staining.
2340 / 45		SP			17/36/50	500	SAND (SP): pale brown (10YR 6/5), very dense, not cemented,slightly moist, 90% fine to medium (some coarse) subangular to round Arkosic sand, 10% silt, strong petroleum odor, no staining.
2335 / 50		SC			14/40/50	300	CLAYEY SAND (SC): light brown (7.5YR 6/3), very dense, some zones slightly cemented, slightly moist, 85% coarse subangular to round Arkosic sand, 15% clay, strong petroleum odor, no staining.
2330 / 55		SW			12/50	600	SAND (SW): pinkish gray (7.5YR 6/2), dense, not cemented, slightly moist, 75% fine to very coarse subangular to round Arkosic sand, 15% fine to medium granitic gravel, 10% clay, strong petroleum odor, no staining, total depth 57 feet.

BOREHOLE LOG

ERM

BOREHOLE NO:	SB-PD-2
TOTAL DEPTH:	57 FEET
TOP ELEVATION:	2385.70
WELL NO:	n/a

PROJECT NAME:	UPRR PASSENGER DEPOT	**DRILLING CO.:**	WATER DEVELOPMENT CORPORATION
JOB NUMBER:	8012.23	**DRILLER:**	TIM PRINCE
SITE LOCATION:	TUCSON, AZ	**RIIG TYPE**	CME-75
LOGGED BY:	JAMES ACKERMAN	**DRILLING METHOD:**	HOLLOW STEM AUGER (8.25" O.D.)
DATE DRILLED:	8/23/98	**HAMMER WT./DROP:**	140 LBS/30 INCH

NOTE:
adjacent to old spur line (south) in parking lot

EASTING: n/a **NORTHING:** n/a

▽ **WATER LEVEL** ▼ **FREE PRODUCT LEVEL**

CASING DIA: 2" **SCREEN SLOTTED SIZE:** 0.020

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
0							FILL (ASPHALT): 6 inches of asphalt and baserock.
2385		SC					CLAYEY SAND (SC): light brown (7.5YR 6/3), loose, not cemented, moist, 85% fine-medium subangular-round Arkosic sand, 15% clay, no petroleum odor, no staining.
5					6/5/5	1	
2380							
		SW					SAND (SP): reddish yellow (7.5 YR 6/6), medium dense, not cemented, slightly moist, 85% fine-very coarse subangular-round Arkosic sand (80% feldspar, 15% quartz, 5% lithic/granitic), 5% silt, no petroleum odor or staining.
10					3/6/9	3	
2375							
15		SC			21/50	3	CLAYEY SAND (SC): very pale brown (10YR 7/4), very dense, not cemented, slightly moist, 85% fine-medium subangular-round Arkosic sand, 15% clay, no petroleum odor, no staining.
2370							

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION

		SP					SAND (SP): light brown (7.5YR 6/4), dense, not cemented, moist, 85% fine-medium subangular-round Arkosic sand, 15% clay, no petroleum odor, no staining.
20	2365				12/28/30	1	
		SM					SILTY SAND (SM): light brown (7.5YR 6/4), very dense, moderately cemented,slightly moist, 85% fine-medium subangular-round Arkosic sand, 15% silt, no petroleum odor, no staining.
25	2360				20/50	3	
30	2355	SW			13/25/30	3	SAND (SW): pale brown (10YR 6/5), dense, not cemented, moist, 75% fine-very coarse subangular-round Arkosic sand (75% feldspar, 15% quartz, 10% lithic/granitic) 15% fine granitic gravel, 10%silt, no petroleum odor, no staining.
35	2350	SW			26/27/33	3	SAND (SW): light gray (10YR 7/2), dense, not cemented, moist, 90% fine-very coarse angular-round Arkosic sand, (75% feldspar, 15% quartz, 10% lithic/granitic) 10% fine granitic gravel, above weathered feldspar, no petroleum odor, no staining.
40	2345	SW			14/21/30	3	SAND (SW): pink (7.5YR 7/4), dense, not cemented, moist, 90% fine-very coarse subangular-round Arkosic sand, 10% fine granitic gravel, no petroleum odor, no

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
							BOREHOLE: SB-PD-2 Page 3 of 3
							staining.
		SM					SILTY SAND (SM): light brown (7.5YR 6/4), dense, moist, moderately cemented in some zones, 85% fine-coarse subangular-round Arkosic sand, 15% silt, no petroleum odor, no staining.
45					11/13/18	20	
	2340						
50		SM			12/19/26	15	SILTY SAND (SM): light brown (7.5YR 6/4), medium dense, moist, not cemented, 85% fine-coarse subangular-round Arkosic sand, 15% silt, no petroleum odor, no staining.
	2335						
55					10/17/28	35	
	2330						

BOREHOLE LOG

ERM

BOREHOLE NO:	SB-PD-3
TOTAL DEPTH:	56 FEET
TOP ELEVATION:	2384.65
WELL NO:	n/a

PROJECT NAME:	UPRR PASSENGER DEPOT	**DRILLING CO.:**	WATER DEVELOPMENT CORPORATION
JOB NUMBER:	8012.23	**DRILLER:**	TIM PRINCE
SITE LOCATION:	TUCSON, AZ	**RIIG TYPE**	CME-75
LOGGED BY:	JAMES ACKERMAN	**DRILLING METHOD:**	HOLLOW STEM AUGER (8.25" O.D.)
DATE DRILLED:	8/24/98	**HAMMER WT./DROP:**	140 LBS/30 INCH

NOTE:
northmost boring along concrete; ~50 off mainline

EASTING: n/a **NORTHING:** n/a

▽ **WATER LEVEL** ▼ **FREE PRODUCT LEVEL**

CASING DIA: 2" **SCREEN SLOTTED SIZE:** 0.020

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
0		GW					FILL (BALLAST): well graded gravel-ballast to 3 feet
2380 / 5		ML			6/4/6	1	CLAYEY SILT (ML): very pale brown (10YR 7/4), stiff, slightly cemented in some zones, dry, 75% silt, 20% clay, 5% fine-medium Arkosic sand, no petroleum odor, no staining.
2375 / 10		SP			4/6/7	1	SAND (SP): reddish yellow (7.5 YR 6/6), loose, not cemented, dry, 100% medium-very coarse, angular-round Arkosic sand (75% feldspar, 15% quartz, 10% lithic/granitic), no petroleum odor or staining.
2370 / 15		SC			8/8/17	1	CLAYEY SAND (SC): pink (7.5YR 7/4), medium dense, not cemented, dry, 70% very fine-fine (some zones of coarse-very coarse sand) Arkosic sand, 20% clay, 10% silt, no petroleum odor, no staining.

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION

		CL					SILTY CLAY (CL): very pale brown (10YR 7/4), hard, not cemented, slightly moist, 50% clay, 30% silt, 10% fine-coarse Arkosic sand, 10% fine-medium granitic gravel, no petroleum odor, no staining.
20	2365				6/11/43	1	
		SM					SILTY SAND (SM): light brown (7.5YR 6/4), very dense, slightly cemented in some zones, slightly moist, 85% fine-very coarse subangular-round Arkosic sand, 15% silt, no petroleum odor, no staining.
25	2360				21/50	4	
		SW					SAND (SW): light gray (10YR 7/2), dense, not cemented, slightly moist, 80% fine-very coarse angular-round Arkosic sand, 10% fine granitic gravel above weathered feldspar, 10% silt, no petroleum odor, no staining.
30	2355				19/22/31	60	
35	2350	SW			17/35/36	20	SAND (SW): light gray (10YR 7/3), very dense, not cemented, slightly moist, 85% fine-very coarse angular-round Arkosic sand, 10% fine granitic gravel above weathered feldspar, trace silt, no petroleum odor, no staining.
40	2345	CL			20/15/24	30	SILTY CLAY (CL): very pale brown (10YR 7/4), hard, not cemented, slightly moist, 50% clay, 35% silt, 15% fine-coarse Arkosic sand, no petroleum odor, no staining.

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
2340 / 45		SC			7/21/50	5	CLAYEY SAND (SC): very pale brown (10YR 7/4), very dense , moderately cemented in some zones, slightly moist, 85% fine-coarse subangular-round Arkosic sand, 15% clay, no petroleum odor, no staining.
2335 / 50		CL			21/43/43	15	SILTY CLAY (CL): light brown (7.5YR 6/4), hard, not cemented, slightly moist, 40% clay, 30% silt, 30% fine-coarse Arkosic sand, no petroleum odor, no staining.
2330 / 55		SM			50	NM	SILTY SAND (SM): very pale brown (10YR 7/3), dense, moderately cemented in some zones, dry, 85% fine-very coarse Arkosic sand, 15% silt, no petroleum odor, no staining, total depth 56 feet.

BOREHOLE LOG

ERM

BOREHOLE NO:	SB-PD-4
TOTAL DEPTH:	57 FEET
TOP ELEVATION:	2386.31
WELL NO:	n/a

PROJECT NAME:	UPRR PASSENGER DEPOT	**DRILLING CO.:**	WATER DEVELOPMENT CORPORATION
JOB NUMBER:	8012.23	**DRILLER:**	TIM PRINCE
SITE LOCATION:	TUCSON, AZ	**RIIG TYPE**	CME-75
LOGGED BY:	JAMES ACKERMAN	**DRILLING METHOD:**	HOLLOW STEM AUGER (8.25" O.D.)
DATE DRILLED:	8/24/98	**HAMMER WT./DROP:**	140 LBS/30 INCH

NOTE:
boring along concrete; ~50' off mainline, south of B-103

EASTING: n/a **NORTHING:** n/a

▽ **WATER LEVEL** ▼ **FREE PRODUCT LEVEL**

CASING DIA: 2" **SCREEN SLOTTED SIZE:** 0.020

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
0		GW					FILL (BALLAST): well graded gravel-ballast.
2385							
		CL					SILTY CLAY (CL): very pale brown (10 YR 7/4), stiff, not cemented, dry, 50% clay, 40% silt, 10% fine-medium Arkosic sand, no petroleum odor or staining.
5					6/4/6	1	
2380							
		SW					SAND (SW): reddish yellow (7.5 YR 6/6), loose, not cemented, slightly moist, 85% fine-coarse subangular-round Arkosic sand (75% feldspar, 15% quartz, 10% lithic/granitic), 10% fine subangular-round feldspar/granitic gravel, no petroleum odor or staining.
10					4/6/7	1	
2375							
		SC					CLAYEY SAND (SC): very pale brown (10 YR 7/3), medium dense, not cemented, slightly moist, 85% fine-coarse subangular-round Arkosic sand, 15% clay, no petroleum odor or staining.
15					8/8/17	1	
2370							

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION

20 / 2365		SM			6/11/43	1	SILTY SAND (SM): very pale brown (10 YR 7/3), dense, not cemented, slightly moist, 80% fine-medium subangular-round Arkosic sand, 15% silt, 5% clay, no petroleum odor or staining
25 / 2360		SW			21/50	4	SAND (SW): very pale brown (10 YR 7/4), very dense, not cemented, slightly moist, 85% fine-coarse subangular-round Arkosic sand (75% feldspar, 15% quartz, 10% lithic/granitic), 10% fine-medium granitic gravel, 5% silt, no petroleum odor or staining.
30 / 2355		SC			19/22/31	60	CLAYEY SAND (SC): pink (7.5YR 7/4), dense, not cemented, slightly moist, 65% fine-coarse subangular-round Arkosic sand, 20% fine-medium (up to 2.5") subangular-round granitic gravel, 15% clay, no petroleum odor or staining.
35 / 2350		SP			17/35/36	20	SAND (SP): light gray (10 YR 7/1), very dense, not cemented, slightly moist, 100% medium-very coarse subangular-round Arkosic sand, (75% feldspar, 15% quartz, 10% lithic/granitic), common weathered feldspar, no petroleum odor or staining.
40 / 2345		SW			20/15/24	30	SAND (SW): pinkish gray (7.5YR 7/1), dense, not cemented, slightly moist, 75% fine-very coarse subangular-round Arkosic sand, (75% feldspar, 15% quartz, 20% fine-medium (up to 2.5") subangular-round granitic gravel", 15% clay, no petroleum odor or staining.

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
		SM					SILTY SAND (SM): very pale brown (10 YR 7/4), very dense, moderately cemented in some zones, slightly moist, 85% fine to coarse subangular-round Arkosic sand, 15% clay, no petroleum odor or staining.
45					7/21/50	5	
	2340						
50		SW			21/43/43	15	SILTY SAND (SM): light brown (7.5 YR 6/4), very dense, moderately cemented in laminar zones, slightly moist, 80% fine-medium Arkosic sand, 15% silt, 5% clay, no petroleum odor or staining.
	2335						
		SC					CLAYEY SAND (SC): strong brown (7.5 YR 5/6), dense, moderately cemented, slightly moist, 80% fine-medium subangular-rounded Arkosic sand, 15% clay, 5% silt, no petroleum odor or staining.
55					50	NM	
	2330						

BOREHOLE LOG

ERM

BOREHOLE NO:	SB-PD-5
TOTAL DEPTH:	57 FEET
TOP ELEVATION:	2396.67
WELL NO:	n/a

PROJECT NAME:	UPRR PASSENGER DEPOT	**DRILLING CO.:**	WATER DEVELOPMENT CORPORATION
JOB NUMBER:	8012.23	**DRILLER:**	TIM PRINCE
SITE LOCATION:	TUCSON, AZ	**RIIG TYPE**	CME-75
LOGGED BY:	JAMES ACKERMAN	**DRILLING METHOD:**	HOLLOW STEM AUGER (8.25" O.D.)
DATE DRILLED:	8/24/98, 8/25/98	**HAMMER WT./DROP:**	140 LBS/30 INCH

NOTE:
boring along concrete; ~70' off mainline, southwest of MW-2

EASTING: n/a **NORTHING:** n/a

▽ **WATER LEVEL** ▼ **FREE PRODUCT LEVEL**

CASING DIA: 2" **SCREEN SLOTTED SIZE:** 0.020

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
0							FILL (ASPHALT): 6 inches of asphalt and 2 inches of base.
2395		CL					SILTY CLAY (CL): very pale brown (10YR 7/4), stiff, not cemented, dry, 50% clay, 35% silt, 15% fine-medium Arkosic sand, no petroleum odor, no staining.
5					9/7/6	6	
2390							
10		SP			6/7/11	5	SAND (SP): very pale brown (10YR 7/4), medium dense, not cemented, dry, 90% very fine-medium subangular-round Arkosic sand, 10% clay, no petroleum odor, no staining.
2385							
15					12/14/15	2	
2380							

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION

		SM					SILTY SAND (SM): light yellowish brown (10YR 6/4), dense, not cemented, slightly moist, 80% fine- medium (some coarse) angular-round Arkosic sand (70% feldspar, 30% quartz), 15% silt, 5% clay, no petroleum odor, no staining.
20					14/19/33	3	
	2375	CL					CLAY (CL): white (10YR 8/1), mottled pale brown (10YR 6/3), very stiff, not cemented, slightly moist, 100% predominately Kaolinite (derived from weathered feldspar), some lean clay, no petroleum odor, no staining.
25					9/14/16	3	
	2370						
30		CL			10/9/12	5	SILTY CLAY (CL): light brown (7.5YR 6/4), very stiff, not cemented, slightly moist, 50% clay, 40% silt, 10% fine-medium Arkosic sand, micaceous, no petroleum odor, no staining.
	2365						
35					4/7/8	10	
	2360						
40		SP			22/25/27	5	SAND (SP): pale brown (10YR 6/3), dense, not cemented, slightly moist, 100% fine-medium (some coarse) subangular-round Arkosic sand (85% feldspar, 15%

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
2355							quartz) no petroleum odor, no staining.
		CL					SILTY CLAY (CL): light brownish gray (10YR 6/2), stiff, not cemented, moist, 55% clay, 35% silt, 10% fine-medium Arkosic sand, slightly micaceous, strong petroleum odor, mild staining, product on some partings.
45					8/8/8	400	
2350							
		SC					CLAYEY SAND (SC): light brown (7.5YR 6/2), medium dense, not cemented, slightly moist, 80% fine-very coarse Arkosic sand, 15% clay, 5% silt, micaceous, no petroleum odor, no staining.
50					4/8/10	150	
2345							
55		SW			13/23/20	5	SAND (SW): pale brown (10YR 6/3), loose, not cemented, slightly moist, 90% very fine-very coarse subangular-round Arkosic sand (75% feldspar, 15% quartz, 10% lithic/granitic) no petroleum odor, no staining.
2340							

BOREHOLE LOG

ERM

BOREHOLE NO:	SB-PD-6
TOTAL DEPTH:	57 FEET
TOP ELEVATION:	2388.29
WELL NO:	n/a

PROJECT NAME:	UPRR PASSENGER DEPOT	**DRILLING CO.:**	WATER DEVELOPMENT CORPORATION
JOB NUMBER:	8012.23	**DRILLER:**	TIM PRINCE
SITE LOCATION:	TUCSON, AZ	**RIIG TYPE**	CME-75
LOGGED BY:	JAMES ACKERMAN	**DRILLING METHOD:**	HOLLOW STEM AUGER (8.25" O.D.)
DATE DRILLED:	8/25/98	**HAMMER WT./DROP:**	140 LBS/30 INCH

NOTE:
boring along concrete; ~50' off mainline south of SB-2

EASTING: n/a **NORTHING:** n/a

▽ **WATER LEVEL** ▼ **FREE PRODUCT LEVEL**

CASING DIA: 2" **SCREEN SLOTTED SIZE:** 0.020

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
0		GW					FILL (BALLAST): well graded gravel-ballast.
2385		CL					SILTY CLAY (CL): very pale brown (10YR 8/2), mottled light gray (10YR 7/2), hard, not cemented, dry, 50% clay, 40% silt, 10% fine-coarse Arkosic sand, no petroleum odor, no staining.
5					10/20/25	1	
2380		ML					CLAYEY SILT (ML): very pale brown (10YR 7/3), very hard, slightly-well cemented in some zones, dry, 55% silt, 40% clay, 5% very fine-medium Arkosic sand, no petroleum odor, no staining.
10					10/42/50	0	
2375							
15		CL			50	3	SILTY CLAY (CL): very pale brown (10YR 8/2), hard, not cemented-well cemented in some zones, slightly moist, 60% clay (may be kaolinite), 40% silt, no petroleum odor, no staining.

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION

	2370						
20					16/42/50	50	
	2365	SC					CLAYEY SAND (SC): light yellowish brown (10YR 6/4), very dense, moderately cemented in some laminar zones, 85% fine-medium Arkosic sand, 15% clay, no petroleum odor or staining.
25					19/46/50	9	
	2360						
30		SW			21/29/31	80	SAND (SW): pale brown (10YR 6/5), dense, not cemented, slightly moist, 90% fine-very coarse subangular-round Arkosic sand (75% feldspar, 12% quartz, 10% lithic/granitic), 10% fine-medium subangular-rounded granitic gravel, common weathered feldspar, no petroleum odor or staining.
	2355						
35					32/40/41	9	
	2350	SM					SILTY SAND (SM): pale brown (10YR 6/5), medium dense, not cemented, slightly moist, 85% fine-medium subangular-round Arkosic sand, 15% silt, micaceous, no petroleum odor or staining.
40					8/19/23	110	

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
2345		SC					CLAYEY SAND (SC): light brown (7.5YR 6/4), medium dense, 80% fine-medium subangular-round Arkosic sand, 15%silt, clay, 5% silt, no petroleum odor or staining.
45					7/15/19	8	
2340		SM					SILTY SAND (SM): light reddish brown (5YR 6/4), very dense, not cemented, slightly moist, no petroeum odor, no staining.
50					37/44/45	200	
2335							
55					25/32/49	100	

BOREHOLE LOG

ERM

BOREHOLE NO:	SB-PD-7
TOTAL DEPTH:	57 FEET
TOP ELEVATION:	2400
WELL NO:	n/a

PROJECT NAME:	UPRR PASSENGER DEPOT	**DRILLING CO.:**	WATER DEVELOPMENT CORPORATION
JOB NUMBER:	8012.23	**DRILLER:**	TIM PRINCE
SITE LOCATION:	TUCSON, AZ	**RIIG TYPE**	CME-75
LOGGED BY:	JAMES ACKERMAN	**DRILLING METHOD:**	HOLLOW STEM AUGER (8.25" O.D.)
DATE DRILLED:	8/25/98	**HAMMER WT./DROP:**	140 LBS/30 INCH

NOTE:
boring along concrete; ~50' off mainline, north of SB-2

EASTING: n/a **NORTHING:** n/a

▽ **WATER LEVEL** ▼ **FREE PRODUCT LEVEL**

CASING DIA: 2" **SCREEN SLOTTED SIZE:** 0.020

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
0 / 2390							FILL (BALLAST): well graded gravel-ballast
		ML					CLAYEY SILT (ML): very pale brown (10YR 7/4), stiff, not cemented, slightly moist, 50% silt, 30% clay, 20% very fine Arkosic sand, no petroleum odor, no staining.
5 / 2385					8/6/4	6	
		SM					SILTY SAND (SM): reddish yellow (5YR 6/6), dense, not cemented, 85% fine-very coarse subangular-round Arkosic sand, 15%silt, no petroleum odor, no staining.
10 / 2380					16/23/33	6	
15 / 2375		SP			16/34/43	5	SAND (SP): yellow (10YR 7/6), very dense, not cemented, dry, 95% very fine-medium subangular-round Arkosic sand (80% feldspar, 20% quartz) 5%silt, no petroleum odor, no staining.

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION

		CL					CLAY (CL): white (10YR 8/1), hard, slightly-well cemented, dry, 100% Kaolinite clay, no petroleum odor, no staining.
20					14/20/36	7	
	2370						
25		CL			8/15/17	6	SILTY CLAY (CL): light brown (7.5YR 6/4), very stiff, not cemented, slightly moist, 50% clay, 40% silt, 10% fine-medium Arkosic sand, no petroleum odor, no staining.
	2365						
		SW					SAND (SW): light brown (10YR 4/4), medium dense, not cemented, slightly moist, 70% very fine-very coarse subangular-rounded Arkosic sand (75% feldspar, 15% quartz, 10% lithic/granitic), 20% fine-medium subangular-rounded granitic gravel, 10% clay, trace mica, no petroleum odor, no staining.
30					13/10/26	8	
	2360						
		SP					SAND (SP): light brownish gray (10YR 6/4), very dense, not cemented, slightly moist, 70% very fine-very coarse subangular-rounded Arkosic sand (75% feldspar, 15% quartz, 10% lithic/granitic), 10% fine subangular-rounded granitic gravel, trace mica, no petroleum odor, no staining.
35					14/23/50	12	
	2355						
40					15/30/25	18	
	2350	SC					CLAYEY SAND (SC): pale brown (10YR 6/3), medium

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
45 / 2345					10/16/19	60	dense, not cemented, slightly moist, 85% fine-coarse subangular-rounded Arkosic sand, 15% clay, no petroleum odor, no staining.
50 / 2340		SM			10/47/40	6	SILTY SAND (SM): pale brown (10YR 6/3), very dense, not cemented, slightly moist, 55% fine-coarse subangular-rounded Arkosic sand, 20% fine-medium subangular-rounded granitic gravel, 15% silt, 10% clay, trace mica, no petroleum odor, no staining.
55 / 2335					6/25/34	12	

BOREHOLE LOG

ERM

BOREHOLE NO:	**SB-PD-8**
TOTAL DEPTH:	**57 FEET**
TOP ELEVATION:	**2394.53**
WELL NO:	**n/a**

PROJECT NAME:	UPRR PASSENGER DEPOT	**DRILLING CO.:**	WATER DEVELOPMENT CORPORATION
JOB NUMBER:	8012.23	**DRILLER:**	TIM PRINCE
SITE LOCATION:	TUCSON, AZ	**RIIG TYPE**	CME-75
LOGGED BY:	JAMES ACKERMAN	**DRILLING METHOD:**	HOLLOW STEM AUGER (8.25" O.D.)
DATE DRILLED:	8/26/98	**HAMMER WT./DROP:**	140 LBS/30 INCH

NOTE:
boring along concrete; ~50' off mainline, south of 4th Ave.

EASTING: n/a **NORTHING:** n/a Page 1 of 3

▽ **WATER LEVEL** ▼ **FREE PRODUCT LEVEL**

CASING DIA: 2" **SCREEN SLOTTED SIZE:** 0.020

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
0		SC					CLAYEY SAND (SC): very pale brown (10YR 7/4), loose, not cemented, dry, 75% fine-medium subangular-round Arkosic sand, 15% clay, 10% silt, no petroleum odor, no staining.
2390							
5					9/7/4	4	
2385							
10		SP			3/4/4	15	SAND (SP): light brownish gray (10 YR 6/2), loose, not cemented, 95% medium-coarse subangular-round Arkosic sand (75% feldspar, 15% quartz, 10% lithic, granitic), 5% fine subangular-round granitic gravel, no petroleum odor or staining.
2380							
15					7/8/10	20	SAND (SP): light brownish gray (10 YR 6/2), medium dense, not cemented, 75% medium-coarse subangular-round Arkosic sand (75% feldspar, 15% quartz, 10% lithic, granitic), 15% fine to medium subangular-round granitic gravel, 10% clay, no petroleum odor or staining.

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION

2375 / 20		SW			16/23/30	15	SAND (SW): very pale brown (10YR 7/3), dense, not cemented, dry, 80% very fine-very coarse subangular-round Arkosic sand, 10% fine subangular-round feldspar/granitic gravel, 10% silt, no petroleum odor, no staining.
2370 / 25		SM			28/33/34	40	SILTY SAND (SM): reddish yellow (5YR 7/6), dense, not cemented, 80% fine-coarse Arkosic sand, 5% clay, no petroleum odor or staining.
2365 / 30		SC			4/16/24	110	CLAYEY SAND (SC): light brownish gray (2.5YR 6/2), dense, not cemented, 85% fine-coarse subangular-round Arkosic sand, 15% clay, no petroleum odor, no staining.
2360 / 35					13/8/4	300	
2355 / 40		SC			19/35/37	250	CLAYEY SAND (SC): pink (7.5YR 7/4), very dense, not cemented, 85% very fine-coarse subangular-round Arkosic sand, 15% clay, no petroleum odor or staining.

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
2350 / 45					7/4/11	100	CLAYEY SILT (ML): light brownish gray (10YR 6/2), stiff, not cemented, 45% silt, 35% clay, 20% fine-coarse Arkosic sand, slightly micaceous, no petroleum odor or staining.
2345 / 50		SM			8/19/30	40	SILTY SAND (SM): light brownish gray (10YR 6/2), dense, not cemented, 85% fine-coarse subangular-round Arkosic sand, 15% silt, trace mica, no petroleum odor, no staining
2340 / 55					8/13/21	180	

BOREHOLE LOG

ERM

BOREHOLE NO:	SB-PD-9
TOTAL DEPTH:	57 FEET
TOP ELEVATION:	2395.32
WELL NO:	n/a

PROJECT NAME:	UPRR PASSENGER DEPOT	**DRILLING CO.:**	WATER DEVELOPMENT CORPORATION
JOB NUMBER:	8012.23	**DRILLER:**	TIM PRINCE
SITE LOCATION:	TUCSON, AZ	**RIIG TYPE**	CME-75
LOGGED BY:	JAMES ACKERMAN	**DRILLING METHOD:**	HOLLOW STEM AUGER (8.25" O.D.)
DATE DRILLED:	8/2/98	**HAMMER WT./DROP:**	140 LBS/30 INCH

NOTE:
boring along concrete; ~90' off mainline, w-nw of MW-2

EASTING: n/a **NORTHING:** n/a

▽ **WATER LEVEL** ▼ **FREE PRODUCT LEVEL**

CASING DIA: 2" **SCREEN SLOTTED SIZE:** 0.020

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
0 / 2395							FILL (ASPHALT): 6 inches of asphalt and base.
		SM					SILTY SAND (SM): light yellowish brown (10YR 6/4), medium dense, not cemented, dry, 80% fine-medium Arkosic sand, 15% silt, 5% clay, no petroleum odor, no staining.
5 / 2390					6/10/14	1	
		SW					SAND (SW): reddish yellow (7.5YR 6/6), medium dense, not cemented, dry, 90% fine-coarse subangular-round Arkosic sand (75% feldspar, 15% quartz, 10% lithic/granitic) 5% fine feldspar/granitic gravel, 5% silt, no petroleum odor or staining.
10 / 2385					8/10/10	4	
15 / 2380					6/7/7	9	

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION

		SM					SILTY SAND (SM): reddish yellow (7.5YR 6/6), dense, not cemented, dry, 80% very fine-very coarse subangular-round Arkosic sand, 15% silt, 5% fine granitic gravel, no petroleum odor or staining.
20	2375				12/29/33	4	
		SP					SAND (SP): very pale brown (10YR 7/4), dense, not cemented, dry, 90% fine-coarse subangular-round Arkosic sand, 10% silt, no petroleum odor, no staining.
25	2370				8/28/29	6	
30	2365	SM			11/20/32	9	SILTY SAND (SM): very pale brown (10YR 7/3), mottled light greenish gray (10YR 7/1), dense, not cemented, dry, 75% fine-medium Arkosic sand, 15% silt, 10% clay, no petroleum odor, no staining.
35	2360	SM			9/15/18	6	SILTY SAND (SM): very yellowish brown (10YR 6/4), medium dense, not cemented, dry, 85% fine-coarse Arkosic sand, 15% silt, no petroleum odor, no staining.
40	2355	SC			50	25	CLAYEY SAND (SC): light brown (7.5YR 6/4), dense, not cemented, dry, 70% medium-very coarse Arkosic sand, 15%clay, 10% clay, 5% fine-medium gravel (some

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
							weathered granitic clasts), trace mica, no petroleum odor or staining.
		SM					SILTY SAND (SM): light brownish gray (10YR 6/2), medium dense, not cemented, dry, 75% very fine-coarse (some coarse) subangular-round Arkosic sand, 15%silt, 10% clay, mild petroleum odor.
45	2350				4/8/11	210	
		SC					CLAYEY SAND (SC): light brownish gray (10YR 6/2), dense, not cemented, dry, 85% fine-coarse subangular-round Arkosic sand, 15% clay, trace mica, no petroleum odor or staining.
50	2345				4/14/28	150	
55	2340				9/21/23	4	
		SP					SAND (SP): light gray (10YR 7/2), dense, not cemented, dry, 90% fine-medium subangular-round Arkosic sand, 10% silt, no petroleum odor, no staining.

BOREHOLE LOG

ERM

BOREHOLE NO:	SB-PD-10
TOTAL DEPTH:	57 FEET
TOP ELEVATION:	2397.20
WELL NO:	n/a

PROJECT NAME:	UPRR PASSENGER DEPOT	**DRILLING CO.:**	WATER DEVELOPMENT CORPORATION
JOB NUMBER:	8012.23	**DRILLER:**	TIM PRINCE
SITE LOCATION:	TUCSON, AZ	**RIIG TYPE**	CME-75
LOGGED BY:	JAMES ACKERMAN	**DRILLING METHOD:**	HOLLOW STEM AUGER (8.25" O.D.)
DATE DRILLED:	8/25/98	**HAMMER WT./DROP:**	140 LBS/30 INCH

NOTE:
boring along concrete; ~50' off mainline south of MW-2

EASTING: n/a **NORTHING:** n/a

▽ **WATER LEVEL** ▼ **FREE PRODUCT LEVEL**

CASING DIA: 2" **SCREEN SLOTTED SIZE:** 0.020

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
0							FILL (BALLAST): well graded gravel-ballast
2395							
		CL					SILTY CLAY (CL): light greenish gray (N 7/1) to dark gray (N 4), hard, not cemented, slightly moist, 60% clay, 40% silt, strong petroleum or solvent odor and staining.
5					9/13/26	800	
2390							
10		ML			23/17/18	800	CLAYEY SILT (ML): gray (2.5YR 10/1), stiff, not cemented, slightly moist, 50% silt, 40% clay, 10% fine-medium Arkosic sand, strong petroleum odor, mild staining.
2385							
15		SM			5/10/19	700	SAND (SP): gray (N 5), medium dense, not cemented, wet, 100% fine-coarse subrounded-well rounded Arkosic sand (85% feldspar, 15% quartz), trace mica, strong petroleum odor and staining.
2380							

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
20		SP			12/32/50	100	SAND (SP): light brownish gray (N 5), loose, not cemented, wet, 100% fine-coarse subrounded-well rounded Arkosic sand (85% feldspar, 15% quartz), trace mica, strong petroleum odor and staining, product appears to coat grains.
		CL				600	CLAY (CL): white (10YR) to light gray (10YR 7/1), hard, well cemented in some zones, 100% Kaolinite clay, mild petroleum odor, no staining.
2375							
25		CL			6/9/15	400	CLAY (CL): white (8YR 8/1) with mottling greenish gray (5YR 6/1), very stiff, slightly to well cemented, 100% Kaolinite clay, mild petroleum odor, petroleum impact along greenish zones.
2370							
30		CL			7/10/16	150	SILTY CLAY (CL): light brownish gray (10YR 6/2), very stiff, not cemented, slightly moist, 50%clay, 40% silt, 10% fine-medium Arkosic sand, mild petroleum odor, no staining.
2365							
		SC					CLAYEY SAND (SC): light brownish gray (10YR 6/2), medium dense, not cemented, slightly moist, 85% fine-very coarse subangular-round Arkosic sand, 15% clay, mild petroleum odor, no staining.
35					10/15/17	100	
2360							
		SW					SAND (SW): light brownish gray (10YR 6/2), dense, not cemented, slightly moist, 80% fine-very coarse subangular-round Arkosic sand (80% feldspar, 15% quartz, 5% lithic/granitic), 10% fine subrounded-rounded, granitic gravel, 10% silt, trace mica, no petroleum odor or staining.
40					16/27/34	350	

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
2355							
45		ML			3/5/6	700	CLAYEY SILT (ML): light gray (10YR 7/2), stiff, not cemented, dry, 90% fine-medium subangular-round Arkosic sand, 10% silt, no petroleum odor or staining.
2350							
50		SM			8/34/50	450	SILTY SAND (SM): pinkish gray (7.5YR 6/2), very dense, not cemented, slightly moist, 65% very fine-very coarse angular-rounded Arkosic sand, 15% fine-medium subrounded-rounded granitic gravel, 15% silt, 5% clay, trace mica, no petroleum odor or staining.
2345							
55		CL			9/21/25	200	SILTY CLAY (CL): brown (7.5YR 5/3), very hard, slightly cemented, slightly moist, 50% clay, 40% silt, 10% very fine-medium Arkosic sand, no petroleum odor or staining.
		SP					SAND (SP): light brownish gray (10YR 6/2), medium dense, not cemented, slightly moist, 100% fine-medium subangular-well rounded Arkosic sand (85% feldspar, 15% Quartz), trace mica, not petroleum odor or staining.

BOREHOLE LOG

ERM

BOREHOLE NO:	SB-PD-11
TOTAL DEPTH:	57 FEET
TOP ELEVATION:	2398.23
WELL NO:	n/a

PROJECT NAME:	UPRR PASSENGER DEPOT	**DRILLING CO.:**	WATER DEVELOPMENT CORPORATION
JOB NUMBER:	8012.23	**DRILLER:**	TIM PRINCE
SITE LOCATION:	TUCSON, AZ	**RIIG TYPE**	CME-75
LOGGED BY:	JAMES ACKERMAN	**DRILLING METHOD:**	HOLLOW STEM AUGER (8.25" O.D.)
DATE DRILLED:	8/26/98	**HAMMER WT./DROP:**	140 LBS/30 INCH

NOTE:
boring along concrete; ~50' off mainline, south of B-201

EASTING: n/a **NORTHING:** n/a

▽ **WATER LEVEL** ▼ **FREE PRODUCT LEVEL**

CASING DIA: 2" **SCREEN SLOTTED SIZE:** 0.020

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
0		CL					SILTY CLAY (CL): light gray (10YR 7/2), hard, slightly cemented, dry, 50% clay, 40% silt, 10% fine-medium Arkosic sand, no petroleum odor or staining.
2395							
5					29/32/33	4	
2390							
10		SM			24/15/20	7	SILTY SAND (SM): very pale brown (10YR 7/4), medium dense, not cemented, dry, 75% very fine-very coarse subangular-rounded Arkosic sand, 15% silt, 10% fine subangular-rounded granitic gravel, no petroleum odor or staining.
2385							
15		SP			7/16/25	10	SAND (SP): reddish yellow (7.5YR 6/6), loose, not cemented, dry, 85% medium-very coarse subangular-rounded Arkosic sand (75% feldspar, 15% quartz, 10% lithic/granitic) 10% silt, 5% fine subrounded-rounded feldspar/granitic gravel.

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION

2380							
20					18/12/20	18	
		CL					CLAY (CL): white (10YR 8/1), very stiff, well cemented in zones, dry, 100% Kaolinite clay, no petroleum odor, no staining.
2375							
25					31/38/33	110	
2370							
30		CL			6/8/10	130	SILTY CLAY (CL): light brown (7.5YR 6/4), very stiff, not cemented, slightly moist, 55% clay, 40% silt, 5% fine-medium Arkosic sand, root casts and some Magnesium Oxide staining, no petroleum odor or staining.
2365							
35		SC			10/15/25	80	CLAYEY SAND (SC): light brown (7.5YR 6/4), dense, not cemented, slightly moist, 75% medium-very coarse angular-rounded Arkosic sand, 20% clay, 5% fine subangular-rounded feldspar/granitic gravel, no petroleum odor or staining.
2360							
40		SM			22/30/31	50	SILTY SAND (SM): very pale brown (10YR 7/3), dense, not cemented, dry, 80% fine-very coarse angular-rounded Arkosic sand, 15% clay, 5% fine subangular-rounded

ELEVATION DEPTH	SYMBOLS SAMPLES	USCS	WELL CONSTRUCTION	SAMPLE #	BLOW COUNTS	FID (PPM)	SOIL DESCRIPTION
2355							feldspar/granitic gravel, no petroleum odor or staining.
45		SM			6/12/15	200	SILTY SAND (SM): pale brown (10YR 6/3), medium dense, not cemented, slightly moist, 75% fine-very coarse angular-rounded Arkosic sand, 15% silt, 10% clay, trace mica, no petroleum odor or staining.
2350							
50		SC			5/28/27	50	CLAYEY SAND (SC): light brown (7.5YR 6/3), dense, not cemented, slightly moist, 65% fine-coarse subangular-rounded Arkosic sand, 15% clay, 10% silt, 10% fine-medium (up to 2 inches) subrounded-rounded granitic gravel, trace mica, no petroleum odor or staining.
2345							
55		SW			20/42/20	0	SAND (SW): light grayish brown (10YR 5/2), dense, not cemented, slightly moist, 85% fine-very coarse subangular-rounded Arkosic sand (75% feldspar, 15% quartz, 10 lithic/granitic), 10% silt, 5% fine rounded granitic gravel, no petroleum odor, no staining.

Appendix B

APPENDIX B

ANALYTICAL REPORTS

DUPLICATE

Columbia Analytical Services inc.

RECEIVED

SEP 1 0 1998

ERM-WEST INC.
PHOENIX, AZ.

September 9, 1998

Manfred Plaschke
ERM West
5111 N. Scottsdale Road, Suite 108
Scottsdale, AZ 85250

Re: Tucson Passenger Depot Transfer / Project #8012.23

Dear Manfred:

Enclosed are the results of the samples submitted to our laboratory on August 24, 1998. The samples were analyzed for PAH 8310 by our Kelso, WA facility (K9805750). The samples were analyzed for 8021 B and 8082 by our Canoga Park facility (L9802820). For your reference, the 8015 AZ analyses have been assigned our service request number X9801973.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Columbia Analytical Services, Inc. is certified for environmental analyses by the Arizona Department of Health Services (Certificate #AZ0339; #AZ0136; and #AZ0497).

Please call if you have any questions. My extension is 12.

Respectfully submitted,

Columbia Analytical Services, Inc.

Tracy L Dutton

Tracy L. Dutton
Project Chemist

TLD/lm

3902 East University Drive, Suite D2 ▪ Phoenix, AZ 85034 ▪ (602) 437-2001 ▪ 800-695-7222 ▪ Fax (602) 437-5308

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ERM West	**Service Request No.:**	X9801973
Project:	Tucson-Passenger Depot Transfer / #8012.23	**Date Received:**	8/24/98
Sample Matrix:	Soil		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for sample(s) designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Duplicate (DUP) and Matrix Spike (MS).

All EPA recommended holding times have been met for analyses in this sample delivery group.

The following difficulties were experienced during analysis of this batch:

The Relative Percent Difference (RPD) for the replicate analysis of C6-C10 GRA and C10-C22 DROe in sample Batch QC (X9801972-006DUP) was not calculated because the analyte concentration was not significantly greater than the Method Detection Limit (MDL). Analytical values derived from measurements close to the detection limit are not subject to the same accuracy and precision criteria as results derived from measurements higher on the calibration range for the method.

Approved by JMD **Date** 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson-Passenger Depot Transfer/#8012.23
Sample Matrix: Soil

Service Request: X9801973
Date Collected: NA
Date Received: NA

C6 - C32 Hydrocarbons

Sample Name: Method Blank
Lab Code: X980824-MB
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/24/98	8/25/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/24/98	8/25/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/24/98	8/25/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: HD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson-Passenger Depot Transfer/#8012.23
Sample Matrix: Soil

Service Request: X9801973
Date Collected: 8/23/98
Date Received: 8/24/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-1-5
Lab Code: X9801973-001
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/24/98	8/25/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/24/98	8/25/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/24/98	8/25/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson-Passenger Depot Transfer/#8012.23
Sample Matrix: Soil

Service Request: X9801973
Date Collected: 8/23/98
Date Received: 8/24/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-1-30
Lab Code: X9801973-002
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/24/98	8/25/98	110	
C10 - C22 DRO	METHOD	8015AZ	30	2	8/24/98	8/26/98	3700	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/24/98	8/25/98	480	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	4290	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson-Passenger Depot Transfer/#8012.23
Sample Matrix: Soil

Service Request: X9801973
Date Collected: 8/23/98
Date Received: 8/24/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-1-35
Lab Code: X9801973-003
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/24/98	8/25/98	52	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/24/98	8/25/98	2100	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/24/98	8/25/98	330	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	2482	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JTD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson-Passenger Depot Transfer/#8012.23
Sample Matrix: Soil

Service Request: X9801973
Date Collected: 8/23/98
Date Received: 8/24/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-1-45
Lab Code: X9801973-004
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/24/98	8/25/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/24/98	8/25/98	870	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/24/98	8/25/98	140	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	1010	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801973
Project:	Tucson-Passenger Depot Transfer/#8012.23	**Date Collected:**	8/23/98
Sample Matrix:	Soil	**Date Received:**	8/24/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-1-55	Units:	mg/Kg (ppm)
Lab Code:	X9801973-005	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/24/98	8/25/98	51	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/24/98	8/25/98	2100	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/24/98	8/25/98	280	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	2431	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: HD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801973
Project:	Tucson-Passenger Depot Transfer/#8012.23	**Date Collected:**	8/23/98
Sample Matrix:	Soil	**Date Received:**	8/24/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-2-5	Units:	mg/Kg (ppm)
Lab Code:	X9801973-006	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/24/98	8/25/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/24/98	8/25/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/24/98	8/25/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson-Passenger Depot Transfer/#8012.23
Sample Matrix: Soil

Service Request: X9801973
Date Collected: 8/23/98
Date Received: 8/24/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-2-25
Lab Code: X9801973-007
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/24/98	8/25/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/24/98	8/25/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/24/98	8/25/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson-Passenger Depot Transfer/#8012.23
Sample Matrix: Soil

Service Request: X9801973
Date Collected: 8/23/98
Date Received: 8/24/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-2-45
Lab Code: X9801973-008
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/24/98	8/25/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/24/98	8/25/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/24/98	8/25/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801973
Project:	Tucson-Passenger Depot Transfer/#8012.23	**Date Collected:**	8/23/98
Sample Matrix:	Soil	**Date Received:**	8/24/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-2-50	Units:	mg/Kg (ppm)
Lab Code:	X9801973-009	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/24/98	8/25/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/24/98	8/25/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/24/98	8/25/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JTD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson-Passenger Depot Transfer/#8012.23
Sample Matrix: Soil

Service Request: X9801973
Date Collected: 8/23/98
Date Received: 8/24/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-2-55
Lab Code: X9801973-010
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/24/98	8/25/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/24/98	8/25/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/24/98	8/25/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson-Passenger Depot Transfer/#8012.23
Sample Matrix: Soil

Service Request: X9801973
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
C6 - C32 Hydrocarbons

Prep Method: METHOD
Analysis Method: 8015AZ

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Test Notes	Percent Recovery *o*-Terphenyl
SB-PD-1-5	X9801973-001		110
SB-PD-1-30	X9801973-002		83
SB-PD-1-35	X9801973-003		106
SB-PD-1-45	X9801973-004		111
SB-PD-1-55	X9801973-005		99
SB-PD-2-5	X9801973-006		94
SB-PD-2-25	X9801973-007		100
SB-PD-2-45	X9801973-008		112
SB-PD-2-50	X9801973-009		103
SB-PD-2-55	X9801973-010		112
Method Blank	X980824-MB		97
Batch QC	X9801972-006DUP		114
Batch QC	X9801972-005MS		121

CAS Acceptance Limits: 70-130

Approved By: JH Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson-Passenger Depot Transfer/#8012.23
Sample Matrix: Soil

Service Request: X9801973
Date Collected: 8/23/98
Date Received: 8/24/98
Date Extracted: 8/24/98
Date Analyzed: 8/25/98

Duplicate Summary
C6 - C32 Hydrocarbons

Sample Name: Batch QC
Lab Code: X9801972-006DUP
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Relative Percent Difference	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	33	ND	NA	*
C10 - C22 DRO	METHOD	8015AZ	30	53	33	47	*
C22 - C32 HRO	METHOD	8015AZ	50	ND	ND	<1	

* See Case Narrative

Approved By: JD Date: 9-9-98

DUP/020597p
X9801973.XLS - DUP 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ERM West	**Service Request:**	X9801973
Project:	Tucson-Passenger Depot Transfer/#8012.23	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
		Date Extracted:	8/24/98
		Date Analyzed:	8/25/98

Matrix Spike Summary
C6 - C32 Hydrocarbons

Sample Name:	Batch QC	Units:	mg/Kg (ppm)
Lab Code:	X9801972-005MS	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	100	ND	130	130	56-166	
C10 - C22 DRO	METHOD	8015AZ	30	150	ND	194	129	52-181	
C22 - C32 HRO	METHOD	8015AZ	50	250	ND	343	137	58-182	

Approved By: JH Date: 9-9-98

MS/020597p
X9801973.XLS - MS 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: NA
Date Received: NA

Polychlorinated Biphenyls (PCBs)

Sample Name: Method Blank
Lab Code: L980825-MB
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: 8/23/98
Date Received: 8/24/98

Polychlorinated Biphenyls (PCBs)

Sample Name: SB-PD-1-5
Lab Code: L9802820-001
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: 8/23/98
Date Received: 8/24/98

Polychlorinated Biphenyls (PCBs)

Sample Name: SB-PD-2-5
Lab Code: L9802820-006
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	8/25/98	8/27/98	ND	

Approved By: JMD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ERM-West, Inc.	**Service Request:**	L9802820
Project:	Tucson-Passenger Depot Transfer/8012.23	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	NA

Surrogate Recovery Summary
Polychlorinated Biphenyls (PCBs)

Prep Method:	EPA 3550	Units:	PERCENT
Analysis Method:	8082	Basis:	Wet

Sample Name	**Lab Code**	**Test Notes**	**Percent Recovery** Tetrachloro-m-xylene
SB-PD-1-5	L9802820-001		126
SB-PD-2-5	L9802820-006		121
Method Blank	L980825-MB		119
Batch QC	L9802724-001MS		125
Batch QC	L9802724-001DMS		124

CAS Acceptance Limits: 45-140

Approved By: _____ Date: 9-9-98

SUR1/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: NA
Date Received: NA
Date Extracted: 8/24/98
Date Analyzed: 8/24/98

Matrix Spike/Duplicate Matrix Spike Summary
Polychlorinated Biphenyls (PCBs)

Sample Name: Batch QC
Lab Code: L9802724-001MS, L9802724-001DMS
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Aroclor 1260	EPA 3550	8082	0.1	3.00	3.00	ND	3.54	3.29	118	110	62-154	7	

Approved By: JMD Date: 9-9-98

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: NA
Date Received: NA

Halogenated and Aromatic Volatile Organic Compounds

Units: ug/Kg (ppb)
Basis: Wet

Sample Name: Method Blank
Lab Code: L980824-MB
Test Notes:

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/24/98	8/26/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Benzene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/24/98	8/26/98	ND	
Toluene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: NA
Date Received: NA

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: L980827-MB
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	NA	8/27/98	ND	
Chloromethane	EPA 5030	8021B	100	1	NA	8/27/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	NA	8/27/98	ND	
Bromomethane	EPA 5030	8021B	100	1	NA	8/27/98	ND	
Chloroethane	EPA 5030	8021B	100	1	NA	8/27/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	NA	8/27/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	NA	8/27/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	NA	8/27/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	8/27/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	8/27/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	NA	8/27/98	ND	
Chloroform	EPA 5030	8021B	50	1	NA	8/27/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	NA	8/27/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	NA	8/27/98	ND	
Benzene	EPA 5030	8021B	50	1	NA	8/27/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	NA	8/27/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	NA	8/27/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	NA	8/27/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	NA	8/27/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	NA	8/27/98	ND	
Toluene	EPA 5030	8021B	50	1	NA	8/27/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	8/27/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	8/27/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	NA	8/27/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	NA	8/27/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	NA	8/27/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	NA	8/27/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	NA	8/27/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	NA	8/27/98	ND	
Bromoform	EPA 5030	8021B	50	1	NA	8/27/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	NA	8/27/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	NA	8/27/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	NA	8/27/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	NA	8/27/98	ND	

Approved By: JMD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: 8/23/98
Date Received: 8/24/98

Halogenated and Aromatic Volatile Organic Compounds

Units: ug/Kg (ppb)
Basis: Wet

Sample Name: SB-PD-1-5
Lab Code: L9802820-001
Test Notes:

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/24/98	8/26/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Benzene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/24/98	8/26/98	ND	
Toluene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: 8/23/98
Date Received: 8/24/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-1-30
Lab Code: L9802820-002
Test Notes: C2A

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	4	8/24/98	8/27/98	<400	
Chloromethane	EPA 5030	8021B	100	4	8/24/98	8/27/98	<400	
Vinyl Chloride	EPA 5030	8021B	100	4	8/24/98	8/27/98	<400	
Bromomethane	EPA 5030	8021B	100	4	8/24/98	8/27/98	<400	
Chloroethane	EPA 5030	8021B	100	4	8/24/98	8/27/98	<400	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
1,1-Dichloroethene	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
Methylene Chloride	EPA 5030	8021B	200	4	8/24/98	8/27/98	<800	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
1,1-Dichloroethane	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
Chloroform	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
Carbon Tetrachloride	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
Benzene	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
1,2-Dichloroethane	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
Trichloroethene (TCE)	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
1,2-Dichloropropane	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
Bromodichloromethane	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	4	8/24/98	8/27/98	<2000	
Toluene	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
1,1,2-Trichloroethane	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
Dibromochloromethane	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
Chlorobenzene	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
Ethylbenzene	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
Total Xylenes	EPA 5030	8021B	100	4	8/24/98	8/27/98	<400	
Bromoform	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	4	8/24/98	8/27/98	<200	
1,3-Dichlorobenzene	EPA 5030	8021B	100	4	8/24/98	8/27/98	<400	
1,4-Dichlorobenzene	EPA 5030	8021B	100	4	8/24/98	8/27/98	<400	
1,2-Dichlorobenzene	EPA 5030	8021B	100	4	8/24/98	8/27/98	<400	

C2A MRL is elevated because of matrix interferences and because the sample required diluting.

Approved By: _____ Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: 8/23/98
Date Received: 8/24/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-1-35
Lab Code: L9802820-003
Test Notes: C2A

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	5	8/24/98	8/26/98	<500	
Chloromethane	EPA 5030	8021B	100	5	8/24/98	8/26/98	<500	
Vinyl Chloride	EPA 5030	8021B	100	5	8/24/98	8/26/98	<500	
Bromomethane	EPA 5030	8021B	100	5	8/24/98	8/26/98	<500	
Chloroethane	EPA 5030	8021B	100	5	8/24/98	8/26/98	<500	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
1,1-Dichloroethene	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
Methylene Chloride	EPA 5030	8021B	200	5	8/24/98	8/26/98	<1000	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
1,1-Dichloroethane	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
Chloroform	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
Carbon Tetrachloride	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
Benzene	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
1,2-Dichloroethane	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
Trichloroethene (TCE)	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
1,2-Dichloropropane	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
Bromodichloromethane	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	5	8/24/98	8/26/98	<2500	
Toluene	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
1,1,2-Trichloroethane	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
Dibromochloromethane	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
Chlorobenzene	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
Ethylbenzene	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
Total Xylenes	EPA 5030	8021B	100	5	8/24/98	8/26/98	<500	
Bromoform	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	5	8/24/98	8/26/98	<250	
1,3-Dichlorobenzene	EPA 5030	8021B	100	5	8/24/98	8/26/98	<500	
1,4-Dichlorobenzene	EPA 5030	8021B	100	5	8/24/98	8/26/98	<500	
1,2-Dichlorobenzene	EPA 5030	8021B	100	5	8/24/98	8/26/98	<500	

C2A MRL is elevated because of matrix interferences and because the sample required diluting.

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: 8/23/98
Date Received: 8/24/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-1-45
Lab Code: L9802820-004
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/24/98	8/26/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Benzene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/24/98	8/26/98	ND	
Toluene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/24/98	8/26/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/26/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: 8/23/98
Date Received: 8/24/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-1-55
Lab Code: L9802820-005
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/24/98	8/27/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Benzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/24/98	8/27/98	ND	
Toluene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	120	
Total Xylenes	EPA 5030	8021B	100	1	8/24/98	8/27/98	520	
Bromoform	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	

Approved By: JMD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: 8/23/98
Date Received: 8/24/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-2-5
Lab Code: L9802820-006
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/24/98	8/27/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Benzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/24/98	8/27/98	ND	
Toluene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	

Approved By: JD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: 8/23/98
Date Received: 8/24/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-2-25
Lab Code: L9802820-007
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/24/98	8/27/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Benzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/24/98	8/27/98	ND	
Toluene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: 8/23/98
Date Received: 8/24/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-2-45
Lab Code: L9802820-008
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/24/98	8/27/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Benzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/24/98	8/27/98	ND	
Toluene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	

Approved By: JH Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: 8/23/98
Date Received: 8/24/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-2-50
Lab Code: L9802820-009
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/24/98	8/27/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Benzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/24/98	8/27/98	ND	
Toluene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	

Approved By: JJD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: 8/23/98
Date Received: 8/24/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-2-55
Lab Code: L9802820-010
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/24/98	8/27/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Benzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/24/98	8/27/98	ND	
Toluene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/24/98	8/27/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/24/98	8/27/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
Halogenated and Aromatic Volatile Organic Compounds

Prep Method: EPA 5030
Analysis Method: 8021B

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Test Notes	Percent Recovery 4-Bromochlorobenzene	Percent Recovery Fluorobenzene
SB-PD-1-5	L9802820-001		100	124
SB-PD-1-30	L9802820-002		98	94
SB-PD-1-35	L9802820-003		101	100
SB-PD-1-45	L9802820-004		99	139
SB-PD-1-55	L9802820-005		99	107
SB-PD-2-5	L9802820-006		97	133
SB-PD-2-25	L9802820-007		104	119
SB-PD-2-45	L9802820-008		96	129
SB-PD-2-50	L9802820-009		96	129
SB-PD-2-55	L9802820-010		102	128
Method Blank	L980824-MB		105	136
Method Blank	L980827-MB		101	101
Batch QC	L9802819-005MS		92	118
Batch QC	L9802819-005DMS		94	120

CAS Acceptance Limits: 47-147 70-150

Approved By: JD Date: 9-9-98

SUR2/061197p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: L9802820
Date Collected: NA
Date Received: NA
Date Extracted: 8/24/98
Date Analyzed: 8/27/98

Matrix Spike/Duplicate Matrix Spike Summary
Halogenated and Aromatic Volatile Organic Compounds

Sample Name: Batch QC
Lab Code: L9802819-005MS, L9802819-005DMS
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
1,1-Dichloroethene	EPA 5030	8021B	50	1000	1000	ND	706	740	71	74	28-167	5	
Trichloroethene (TCE)	EPA 5030	8021B	50	1000	1000	ND	815	827	82	83	35-146	2	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1000	1000	ND	749	747	75	75	26-162	<1	
Benzene	EPA 5030	8021B	50	1000	1000	ND	760	769	76	77	39-150	2	
Toluene	EPA 5030	8021B	50	1000	1000	ND	778	792	78	79	46-148	2	
Ethylbenzene	EPA 5030	8021B	50	1000	1000	ND	789	808	79	81	32-160	3	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1000	1000	ND	823	816	82	82	41-138	<1	
1,2-Dichloroethane (EDC)	EPA 5030	8021B	50	1000	1000	ND	705	693	70	69	51-147	2	

Approved By: _____ Date: 9-9-98

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ERM West, Inc.	**Service Request No.:**	K9805750
Project:	Tuscon-Passenger Depot Transfer/8012.23	**Date Received:**	8/24/98
Sample Matrix:	Soil		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for sample(s) designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Matrix/Duplicate Matrix Spike (MS/DMS).

All EPA recommended holding times have been met for analyses in this sample delivery group.

The following difficulties were experienced during analysis of this batch:

The surrogate recovery for 8310 in samples SB-PD-1-30 and SB-PD-1-55 were not calculated. The sample contained matrix interference's that prevented adequate resolution of the surrogate.

Approved by JJD **Date** 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tuscon-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: K9805750
Date Collected: 8/23/98
Date Received: 8/24/98
Date Extracted: 8/25/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-1-5**	**SB-PD-1-30**	**SB-PD-1-35**
	Lab Code:	K9805750-001(B)	K9805750-002	K9805750-003
	Date Analyzed:	8/27/98	8/27-29/98	8/27-29/98
Analyte	**MRL**			
Naphthalene	0.1	<1	<0.2(B)	<0.2(B)
Acenaphthylene	0.1	<1	<2(B)	ND
Acenaphthene	0.1	<1	0.5	0.4
Fluorene	0.02	<0.2	1.2	1.1
Phenanthrene	0.01	<0.1	<5(B)	<5(B)
Anthracene	0.01	<0.1	0.20	0.16
Fluoranthene	0.02	<0.2	<0.2(B)	<0.2(B)
Pyrene	0.02	<0.2	<25(B)	<23(B)
Benz(a)anthracene	0.01	<0.1	<0.02(B)	<0.02(B)
Chrysene	0.01	<0.1	<0.05(B)	ND
Benzo(b)fluoranthene	0.02	<0.2	<0.07(B)	ND
Benzo(k)fluoranthene	0.01	<0.1	<0.02(B)	ND
Benzo(a)pyrene	0.01	<0.1	ND	ND
Dibenz(a,h)anthracene	0.01	<0.1	ND	ND
Benzo(g,h,i)perylene	0.02	<0.2	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	<0.1	ND	ND

B The MRL is elevated because of matrix interferences.

Approved By: JD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tuscon-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: K9805750
Date Collected: 8/23/98
Date Received: 8/24/98
Date Extracted: 8/25/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-1-45**	**SB-PD-1-55**	**SB-PD-2-5**
	Lab Code:	K9805750-004	K9805750-005(B)	K9805750-006
	Date Analyzed:	8/27-29/98	8/28/98	8/27/98
Analyte	**MRL**			
Naphthalene	0.1	ND	<10	ND
Acenaphthylene	0.1	<0.2(B)	<10	ND
Acenaphthene	0.1	0.1	<10	ND
Fluorene	0.02	0.2	<2	ND
Phenanthrene	0.01	1.2	<5	ND
Anthracene	0.01	0.05	<1	ND
Fluoranthene	0.02	<0.2(B)	<2	ND
Pyrene	0.02	<7(B)	<2	ND
Benz(a)anthracene	0.01	ND	<1	ND
Chrysene	0.01	ND	<1	ND
Benzo(b)fluoranthene	0.02	ND	<2	ND
Benzo(k)fluoranthene	0.01	ND	<1	ND
Benzo(a)pyrene	0.01	ND	<1	ND
Dibenz(a,h)anthracene	0.01	ND	<1	ND
Benzo(g,h,i)perylene	0.02	ND	<2	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	<1	ND

B The MRL is elevated because of matrix interferences.

Approved By: JTD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM-West, Inc.	**Service Request:**	K9805750
Project:	Tuscon-Passenger Depot Transfer/8012.23	**Date Collected:**	8/23/98
Sample Matrix:	Soil	**Date Received:**	8/24/98
		Date Extracted:	8/25/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-2-25**	**SB-PD-2-45**	**SB-PD-2-50**
	Lab Code:	K9805750-007	K9805750-008	K9805750-009
	Date Analyzed:	8/28/98	8/27/98	8/27/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	ND
Acenaphthylene	0.1	ND	ND	ND
Acenaphthene	0.1	ND	ND	ND
Fluorene	0.02	ND	ND	ND
Phenanthrene	0.01	ND	ND	ND
Anthracene	0.01	ND	ND	ND
Fluoranthene	0.02	ND	ND	ND
Pyrene	0.02	ND	ND	ND
Benz(a)anthracene	0.01	ND	ND	ND
Chrysene	0.01	ND	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND	ND
Benzo(a)pyrene	0.01	ND	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	ND

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM-West, Inc.	**Service Request:**	K9805750
Project:	Tuscon-Passenger Depot Transfer/8012.23	**Date Collected:**	8/23/98
Sample Matrix:	Soil	**Date Received:**	8/24/98
		Date Extracted:	8/25/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-2-55**	**Method Blank**
	Lab Code:	K9805750-010	K980825-SB
	Date Analyzed:	8/27/98	8/27/98
Analyte	**MRL**		
Naphthalene	0.1	ND	ND
Acenaphthylene	0.1	ND	ND
Acenaphthene	0.1	ND	ND
Fluorene	0.02	ND	ND
Phenanthrene	0.01	ND	ND
Anthracene	0.01	ND	ND
Fluoranthene	0.02	ND	ND
Pyrene	0.02	ND	ND
Benz(a)anthracene	0.01	ND	ND
Chrysene	0.01	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND
Benzo(a)pyrene	0.01	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND

Approved By: JJD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tuscon-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: K9805750
Date Collected: 8/23/98
Date Received: 8/24/98
Date Extracted: 8/25/98
Date Analyzed: 8/27-28/98

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310

Sample Name	Lab Code	Percent Recovery *p*-Terphenyl
SB-PD-1-5	K9805750-001	63
SB-PD-1-30	K9805750-002	NA
SB-PD-1-35	K9805750-003	72
SB-PD-1-45	K9805750-004	75
SB-PD-1-55	K9805750-005	NA
SB-PD-2-5	K9805750-006	69
SB-PD-2-25	K9805750-007	67
SB-PD-2-45	K9805750-008	70
SB-PD-2-50	K9805750-009	72
SB-PD-2-55	K9805750-010	70
SB-PD-1-45	K9805750-004MS	67
SB-PD-1-45	K9805750-004DMS	59
Method Blank	K980825-SB	67

CAS Acceptance Limits: 33-110

Approved By: JHD Date: 9-9-98

SUR1/120594
K985750A.XLS - SUR1 9/4/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ERM-West, Inc.	**Service Request:**	K9805750
Project:	Tuscon-Passenger Depot Transfer/8012.23	**Date Collected:**	8/23/98
Sample Matrix:	Soil	**Date Received:**	8/24/98
		Date Extracted:	8/25/98
		Date Analyzed:	8/27/98

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

Sample Name: SB-PD-1-45
Lab Code: K9805750-004MS, K9805750-004DMS

	Spike Level		Sample	Spike Result		Percent Recovery		CAS Acceptance	Relative Percent
Analyte	MS	DMS	**Result**	MS	DMS	MS	DMS	Limits	**Difference**
Acenaphthene	0.4	0.4	ND	0.4	0.4	100	100	20-122	<1
Fluoranthene	0.07	0.07	ND	0.05	0.04	71	57	27-140	22
Benzo(a)pyrene	0.04	0.04	ND	0.03	0.03	75	75	37-116	<1

Approved By: JH Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM-West, Inc.	**Service Request:**	K9805750
Project:	Tuscon-Passenger Depot Transfer/8012.23	**Date Collected:**	8/23/98
Sample Matrix:	Soil	**Date Received:**	8/24/98

Total Solids

Prep Method:	NONE	Units:	PERCENT
Analysis Method:	160.3M	Basis:	Wet
Test Notes:			

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
SB-PD-1-5	K9805750-001	8/25/98	88.5	
SB-PD-1-30	K9805750-002	8/25/98	91.0	
SB-PD-1-35	K9805750-003	8/25/98	86.8	
SB-PD-1-45	K9805750-004	8/25/98	91.1	
SB-PD-1-55	K9805750-005	8/25/98	90.9	
SB-PD-2-5	K9805750-006	8/25/98	85.8	
SB-PD-2-25	K9805750-007	8/25/98	80.1	
SB-PD-2-45	K9805750-008	8/25/98	84.4	
SB-PD-2-50	K9805750-009	8/25/98	90.6	
SB-PD-2-55	K9805750-010	8/25/98	88.7	

Approved By: JM Date: 9-9-98

TSOLIDS.XLT_Sample/01071998a

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tuscon-Passenger Depot Transfer/8012.23
Sample Matrix: Soil

Service Request: K9805750
Date Collected: 8/23/98
Date Received: 8/24/98

Duplicate Summary

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
SB-PD-1-5	K9805750-001DUP	8/25/98	88.5	94.5	91.5	7	

Approved By: JHD Date: 9-9-98

TSOLIDS.XLT_DUP/01071998a

CHAIN OF CUSTODY RECORD

ERM West, Inc.

NO: - 1258

5111 N. Scottsdale Road, Suite 108 • Scottsdale, AZ 85250 • (602) 990-9350 • Fax: (602) 990-0107 X9801973 Page _____ of _____

PROJECT #	PROJECT NAME
8012 A6 23	TUCSON – PASSENGER DEPOT TRANSFER

SAMPLER: (PRINT NAME)	(SIGNATURE)
JAMES ACKERMAN	James Ackerman

RECEIVING LABORATORY

COLUMBIA ANALYTICAL SERVICES
3902 E. UNIVERSITY #D-2
PHOENIX, AZ 85034 (602) 437-2001

SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX SOIL	MATRIX WATER	MATRIX GAS	TPH 8015AZ	VOCs 8021B	PAHs 8310	PCBs 8080							
SB PD-1-5	8-23-98	0850		X	SOLIT SPOON	NONE	Y	2"x6" BRASS TUBE	1	X			X	X	X	X							1973 01
SB-PD-1-30	↓	0947		X	↓	↓	Y	↓	1	X			X	X	X								02
SB-PD-1-35	↓	0955		X	↓	↓	Y	↓	1	X			X	X	X								03
SB-PD-1-45	↓	1015		X	↓	↓	Y	↓	1	X			X	X	X								04
SB-PD-1-55	↓	1045		X	↓	↓	Y	↓	1	X			X	X	X								05
SB-PD-2-5	↓	1255		X	↓	↓	Y	↓	1	X			X	X	X	X							06
SB-PD-2-25	↓	1325		X	↓	↓	Y	↓	1	X			X	X	X								07
SB-PD-2-45	↓	1410		X	↓	↓	Y	↓	1	X			X	X	X								08
SB-PD-2-50	↓	1420		X	↓	↓	Y	↓	1	X			X	X	X								09
SB-PD-2-55	↓	1430		X	↓	↓	Y	↓	1	X			X	X	X								10

REQUESTED PARAMETERS

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
James Ackerman	8-24-98	0620	Tracy Sutton	8/24/98	1120
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME

FIELD REMARKS

5 DAY T.A.T.
X9801973

REMARKS ON SAMPLE RECEIPT

☐ BOTTLE INTACT ☐ CUSTODY SEALS ☐ CHILLED
☐ PRESERVED ☐ SEALS INTACT ☐ SEE REMARKS

ERM REMARKS

SEND REPORT TO:
MANFRED PLASCHKE

DUPLICATE

Columbia Analytical Services inc.

RECEIVED

SEP 1 ? 1998

ERM-WEST INC.
PHOENIX, AZ

September 9, 1998

Manfred Plaschke
ERM West
5111 N. Scottsdale Road, Suite 108
Scottsdale, AZ 85250

Re: Tucson Passenger Depot (Sales) / Project #8012.23

Dear Manfred:

Enclosed are the results of the samples submitted to our laboratory on August 25, 1998. The samples were analyzed for PAH 8310 by our Kelso, WA facility (K9805790). The samples were analyzed for 8021 B and 8082 by our Canoga Park facility (L9802863). For your reference, the 8015 AZ analyses have been assigned our service request number X9801988.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Columbia Analytical Services, Inc. is certified for environmental analyses by the Arizona Department of Health Services (Certificate #AZ0339; #AZ0136; and #AZ0497).

Please call if you have any questions. My extension is 12.

Respectfully submitted,

Columbia Analytical Services, Inc.

Tracy L Dutton

Tracy L. Dutton
Project Chemist

TLD/lm

3902 East University Drive, Suite D2 ▪ Phoenix, AZ 85034 ▪ (602) 437-2001 ▪ 800-695-7222 ▪ Fax (602) 437-5308

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801988
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

C6 - C32 Hydrocarbons

Sample Name:	Method Blank	Units:	mg/Kg (ppm)
Lab Code:	X980825-MB	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/25/98	8/26/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/25/98	8/26/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/25/98	8/26/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JMD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801988
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/24/98
Sample Matrix:	Soil	**Date Received:**	8/25/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-3-5	Units:	mg/Kg (ppm)
Lab Code:	X9801988-001	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/25/98	8/27/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/25/98	8/27/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/25/98	8/27/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9801988
Date Collected: 8/24/98
Date Received: 8/25/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-3-30
Lab Code: X9801988-002
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/25/98	8/27/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/25/98	8/27/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/25/98	8/27/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JTD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801988
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/24/98
Sample Matrix:	Soil	**Date Received:**	8/25/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-3-35	Units:	mg/Kg (ppm)
Lab Code:	X9801988-003	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/25/98	8/27/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/25/98	8/27/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/25/98	8/27/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: HD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9801988
Date Collected: 8/24/98
Date Received: 8/25/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-3-40
Lab Code: X9801988-004
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/25/98	8/27/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/25/98	8/27/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/25/98	8/27/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801988
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/24/98
Sample Matrix:	Soil	**Date Received:**	8/25/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-3-55	Units:	mg/Kg (ppm)
Lab Code:	X9801988-005	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/25/98	8/27/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/25/98	8/27/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/25/98	8/27/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801988
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/24/98
Sample Matrix:	Soil	**Date Received:**	8/25/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-4-5	Units:	mg/Kg (ppm)
Lab Code:	X9801988-006	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/25/98	8/27/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/25/98	8/27/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/25/98	8/27/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801988
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/24/98
Sample Matrix:	Soil	**Date Received:**	8/25/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-4-35	Units:	mg/Kg (ppm)
Lab Code:	X9801988-007	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/25/98	8/27/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/25/98	8/27/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/25/98	8/27/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9801988
Date Collected: 8/24/98
Date Received: 8/25/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-4-45
Lab Code: X9801988-008
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/25/98	8/27/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/25/98	8/27/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/25/98	8/27/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801988
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/24/98
Sample Matrix:	Soil	**Date Received:**	8/25/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-4-50	Units:	mg/Kg (ppm)
Lab Code:	X9801988-009	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/25/98	8/27/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/25/98	8/27/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/25/98	8/27/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9801988
Date Collected: 8/24/98
Date Received: 8/25/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-4-55
Lab Code: X9801988-010
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/25/98	8/27/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/25/98	8/27/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/25/98	8/27/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ERM West	**Service Request:**	X9801988
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	NA

Surrogate Recovery Summary
C6 - C32 Hydrocarbons

Prep Method:	METHOD	Units:	PERCENT
Analysis Method:	8015AZ	Basis:	Wet

Sample Name	Lab Code	Test Notes	Percent Recovery *o*-Terphenyl
SB-PD-3-5	X9801988-001		120
SB-PD-3-30	X9801988-002	A7a	133
SB-PD-3-35	X9801988-003		123
SB-PD-3-40	X9801988-004		110
SB-PD-3-55	X9801988-005		119
SB-PD-4-5	X9801988-006	A7a	131
SB-PD-4-35	X9801988-007		124
SB-PD-4-45	X9801988-008		104
SB-PD-4-50	X9801988-009	A7a	136
SB-PD-4-55	X9801988-010		109
Method Blank	X980825-MB		81
SB-PD-3-5	X9801988-001DUP		124
SB-PD-3-5	X9801988-001MS		117

CAS Acceptance Limits: 70-130

A7a Outside of acceptance limits. Since no target analytes were detected in the sample, it is the opinion of CAS that the quality of the sample data has not been significantly affected by the elevated recovery.

Approved By: HD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9801988
Date Collected: 8/24/98
Date Received: 8/25/98
Date Extracted: 8/25/98
Date Analyzed: 8/29/98

Duplicate Summary
C6 - C32 Hydrocarbons

Sample Name: SB-PD-3-5
Lab Code: X9801988-001DUP
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Relative Percent Difference	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	ND	ND	<1	
C10 - C22 DRO	METHOD	8015AZ	30	ND	ND	<1	
C22 - C32 HRO	METHOD	8015AZ	50	ND	ND	<1	

Approved By: JMD Date: 9-9-98

DUP/020597p
X9801988.XLS - DUP 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9801988
Date Collected: NA
Date Received: NA
Date Extracted: 8/25/98
Date Analyzed: 8/27/98

Matrix Spike Summary
C6 - C32 Hydrocarbons

Sample Name: SB-PD-3-5
Lab Code: X9801988-001MS
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	100	ND	131	131	56-166	
C10 - C22 DRO	METHOD	8015AZ	30	150	ND	197	131	52-181	
C22 - C32 HRO	METHOD	8015AZ	50	250	ND	325	130	58-182	

Approved By: JM Date: 9-9-98

MS/020597p
X9801988.XLS - MS 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: NA
Date Received: NA

Polychlorinated Biphenyls (PCBs)

Sample Name: Method Blank
Lab Code: L980901-MB
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: 8/24/98
Date Received: 8/26/98

Polychlorinated Biphenyls (PCBs)

Sample Name: SB-PD-3-5
Lab Code: L9802863-001
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: 8/24/98
Date Received: 8/26/98

Polychlorinated Biphenyls (PCBs)

Sample Name: SB-PD-4-5
Lab Code: L9802863-006
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ERM-West, Inc.	**Service Request:**	L9802863
Project:	Tucson Passenger Depot (Sale)/8012.23	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	NA

Surrogate Recovery Summary
Polychlorinated Biphenyls (PCBs)

Prep Method:	EPA 3550	Units:	PERCENT
Analysis Method:	8082	Basis:	Wet

Sample Name	**Lab Code**	**Test Notes**	**Percent Recovery** Tetrachloro-m-xylene
SB-PD-3-5	L9802863-001		125
SB-PD-4-5	L9802863-006		129
Method Blank	L980901-MB		126
Batch QC	L9802918-001MS		126
Batch QC	L9802918-001DMS		127

CAS Acceptance Limits: 45-140

Approved By: HD Date: 9-9-98

SUR1/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: NA
Date Received: NA
Date Extracted: 9/1/98
Date Analyzed: 9/3/98

Matrix Spike/Duplicate Matrix Spike Summary
Polychlorinated Biphenyls (PCBs)

Sample Name: Batch QC
Lab Code: L9802918-001MS, L9802918-001DMS
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Aroclor 1260	EPA 3550	8082	0.1	3.00	3.00	ND	3.29	3.51	110	117	62-154	6	

Approved By: _____ Date: 9-9-98

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: NA
Date Received: NA

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: L980825-MB
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/25/98	8/31/98	1300	AC2
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Benzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/25/98	8/31/98	ND	
Toluene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	

AC2 Methylene Chloride is a normal laboratory contaminant. It is the opinion of CAS that this result is due to laboratory contamination.

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: 8/24/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-3-5
Lab Code: L9802863-001
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/25/98	8/31/98	1200	AC2
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Benzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/25/98	8/31/98	ND	
Toluene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	

AC2 Methylene Chloride is a normal laboratory contaminant. It is the opinion of CAS that this result is due to laboratory contamination.

Approved By: JHD Date: 9-9-98
1S44/021397p

000021

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: 8/24/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-3-30
Lab Code: L9802863-002
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/25/98	8/31/98	1200	AC2
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Benzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/25/98	8/31/98	ND	
Toluene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	

AC2 Methylene Chloride is a normal laboratory contaminant. It is the opinion of CAS that this result is due to laboratory contamination.

Approved By: JMD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: 8/24/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-3-35
Lab Code: L9802863-003
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/25/98	8/31/98	1300	AC2
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Benzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/25/98	8/31/98	ND	
Toluene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	

AC2 Methylene Chloride is a normal laboratory contaminant. It is the opinion of CAS that this result is due to laboratory contamination.

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: 8/24/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-3-40
Lab Code: L9802863-004
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/25/98	8/31/98	1200	AC2
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Benzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/25/98	8/31/98	ND	
Toluene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	

AC2 Methylene Chloride is a normal laboratory contaminant. It is the opinion of CAS that this result is due to laboratory contamination.

Approved By: JD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: 8/24/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-3-55
Lab Code: L9802863-005
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/25/98	8/31/98	1300	AC2
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Benzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/25/98	8/31/98	ND	
Toluene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	

AC2 Methylene Chloride is a normal laboratory contaminant. It is the opinion of CAS that this result is due to laboratory contamination.

Approved By: JMD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM-West, Inc.	**Service Request:**	L9802863
Project:	Tucson Passenger Depot (Sale)/8012.23	**Date Collected:**	8/24/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name:	SB-PD-4-5	Units:	ug/Kg (ppb)
Lab Code:	L9802863-006	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/25/98	8/31/98	1200	AC2
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Benzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/25/98	8/31/98	ND	
Toluene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	

AC2 Methylene Chloride is a normal laboratory contaminant. It is the opinion of CAS that this result is due to laboratory contamination.

Approved By: JMD Date: 9-9-98

1S44/021397p

000026

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: 8/24/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-4-35
Lab Code: L9802863-007
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/25/98	8/31/98	1200	AC2
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Benzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/25/98	8/31/98	ND	
Toluene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	

AC2 Methylene Chloride is a normal laboratory contaminant. It is the opinion of CAS that this result is due to laboratory contamination.

Approved By: MD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: 8/24/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-4-45
Lab Code: L9802863-008
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/25/98	8/31/98	1000	AC2
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Benzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/25/98	8/31/98	ND	
Toluene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	

AC2 Methylene Chloride is a normal laboratory contaminant. It is the opinion of CAS that this result is due to laboratory contamination.

Approved By: JMD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: 8/24/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-4-50
Lab Code: L9802863-009
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/25/98	8/31/98	1200	AC2
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Benzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/25/98	8/31/98	ND	
Toluene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	

AC2 Methylene Chloride is a normal laboratory contaminant. It is the opinion of CAS that this result is due to laboratory contamination.

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: 8/24/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-4-55
Lab Code: L9802863-010
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/25/98	8/31/98	1200	AC2
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Benzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/25/98	8/31/98	ND	
Toluene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/25/98	8/31/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/25/98	8/31/98	ND	

AC2 Methylene Chloride is a normal laboratory contaminant. It is the opinion of CAS that this result is due to laboratory contamination.

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ERM-West, Inc.	**Service Request:**	L9802863
Project:	Tucson Passenger Depot (Sale)/8012.23	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	NA

Surrogate Recovery Summary
Halogenated and Aromatic Volatile Organic Compounds

Prep Method:	EPA 5030	Units:	PERCENT
Analysis Method:	8021B	Basis:	Wet

Sample Name	Lab Code	Test Notes	Percent Recovery 4-Bromochlorobenzene	Percent Recovery Fluorobenzene
SB-PD-3-5	L9802863-001		102	134
SB-PD-3-30	L9802863-002		107	129
SB-PD-3-35	L9802863-003		93	147
SB-PD-3-40	L9802863-004		104	142
SB-PD-3-55	L9802863-005		104	141
SB-PD-4-5	L9802863-006		101	131
SB-PD-4-35	L9802863-007		95	144
SB-PD-4-45	L9802863-008		99	136
SB-PD-4-50	L9802863-009		99	137
SB-PD-4-55	L9802863-010		100	138
Method Blank	L980825-MB		90	141
SB-PD-3-5	L9802863-001MS		90	125
SB-PD-3-5	L9802863-001DMS		93	115
CAS Acceptance Limits:			47-147	70-150

Approved By: JHD Date: 9-9-98

SUR2/061197p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802863
Date Collected: NA
Date Received: NA
Date Extracted: 8/25/98
Date Analyzed: 9/1/98

Matrix Spike/Duplicate Matrix Spike Summary
Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-3-5
Lab Code: L9802863-001MS, L9802863-001DMS
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
1,1-Dichloroethene	EPA 5030	8021B	50	1000	1000	ND	854	825	85	82	28-167	4	
Trichloroethene (TCE)	EPA 5030	8021B	50	1000	1000	ND	1040	858	104	86	35-146	20	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1000	1000	ND	850	827	85	83	26-162	3	
Benzene	EPA 5030	8021B	50	1000	1000	ND	846	825	85	82	39-150	3	
Toluene	EPA 5030	8021B	50	1000	1000	ND	880	834	88	83	46-148	6	
Ethylbenzene	EPA 5030	8021B	50	1000	1000	ND	878	822	88	82	32-160	7	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1000	1000	ND	950	898	95	90	41-138	6	
1,2-Dichloroethane (EDC)	EPA 5030	8021B	50	1000	1000	ND	870	842	87	84	51-147	4	

Approved By: JHD Date: 9-9-98

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tuscon Passenger Depot/Sales/8012.23
Sample Matrix: Soil

Service Request: K9805790
Date Collected: 8/24/98
Date Received: 8/25/98
Date Extracted: 8/26/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3550B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-3-5**	**SB-PD-3-30**	**SB-PD-3-35**
	Lab Code:	K9805790-001	K9805790-002	K9805790-003
	Date Analyzed:	8/28/98	8/28/98	8/28/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	ND
Acenaphthylene	0.1	ND	ND	ND
Acenaphthene	0.1	ND	ND	ND
Fluorene	0.02	ND	ND	ND
Phenanthrene	0.01	ND	ND	ND
Anthracene	0.01	ND	ND	ND
Fluoranthene	0.02	ND	ND	ND
Pyrene	0.02	ND	ND	ND
Benz(a)anthracene	0.01	ND	ND	ND
Chrysene	0.01	ND	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND	ND
Benzo(a)pyrene	0.01	ND	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	ND

Approved By: JD Date: 9-9-98

3S22/120594
K985790A.XLS - 1-3 9/3/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tuscon Passenger Depot/Sales/8012.23
Sample Matrix: Soil

Service Request: K9805790
Date Collected: 8/24/98
Date Received: 8/25/98
Date Extracted: 8/26/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3550B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-3-40**	**SB-PD-3-55**	**SB-PD-4-5**
	Lab Code:	K9805790-004	K9805790-005	K9805790-006
	Date Analyzed:	8/28/98	8/28/98	8/28/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	ND
Acenaphthylene	0.1	ND	ND	ND
Acenaphthene	0.1	ND	ND	ND
Fluorene	0.02	ND	ND	ND
Phenanthrene	0.01	ND	ND	ND
Anthracene	0.01	ND	ND	ND
Fluoranthene	0.02	ND	ND	ND
Pyrene	0.02	ND	ND	ND
Benz(a)anthracene	0.01	ND	ND	ND
Chrysene	0.01	ND	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND	ND
Benzo(a)pyrene	0.01	ND	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	ND

Approved By: JD Date: 9-9-98

3S22/120594
K985790A.XLS - 4-6 9/3/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tuscon Passenger Depot/Sales/8012.23
Sample Matrix: Soil

Service Request: K9805790
Date Collected: 8/24/98
Date Received: 8/25/98
Date Extracted: 8/26/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3550B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-4-35**	**SB-PD-4-45**	**SB-PD-4-50**
	Lab Code:	K9805790-007	K9805790-008	K9805790-009
	Date Analyzed:	8/28/98	8/28/98	8/28/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	ND
Acenaphthylene	0.1	ND	ND	ND
Acenaphthene	0.1	ND	ND	ND
Fluorene	0.02	ND	ND	ND
Phenanthrene	0.01	ND	ND	ND
Anthracene	0.01	ND	ND	ND
Fluoranthene	0.02	ND	ND	ND
Pyrene	0.02	ND	ND	ND
Benz(a)anthracene	0.01	ND	ND	ND
Chrysene	0.01	ND	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND	ND
Benzo(a)pyrene	0.01	ND	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	ND

Approved By: JD Date: 9-9-98

3S22/120594
K985790A.XLS - 7-9 9/3/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tuscon Passenger Depot/Sales/8012.23
Sample Matrix: Soil

Service Request: K9805790
Date Collected: 8/24/98
Date Received: 8/25/98
Date Extracted: 8/26/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3550B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-4-55**	**Method Blank**
	Lab Code:	K9805790-010	K980826-SB
	Date Analyzed:	8/28/98	8/28/98
Analyte	**MRL**		
Naphthalene	0.1	ND	ND
Acenaphthylene	0.1	ND	ND
Acenaphthene	0.1	ND	ND
Fluorene	0.02	ND	ND
Phenanthrene	0.01	ND	ND
Anthracene	0.01	ND	ND
Fluoranthene	0.02	ND	ND
Pyrene	0.02	ND	ND
Benz(a)anthracene	0.01	ND	ND
Chrysene	0.01	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND
Benzo(a)pyrene	0.01	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND

Approved By: HD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tuscon Passenger Depot/Sales/8012.23
Sample Matrix: Soil

Service Request: K9805790
Date Collected: 8/24/98
Date Received: 8/25/98
Date Extracted: 8/26/98
Date Analyzed: 8/28/98

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons
EPA Methods 3550B/8310

Sample Name	Lab Code	Percent Recovery *p*-Terphenyl
SB-PD-3-5	K9805790-001	64
SB-PD-3-30	K9805790-002	66
SB-PD-3-35	K9805790-003	69
SB-PD-3-40	K9805790-004	71
SB-PD-3-55	K9805790-005	72
SB-PD-4-5	K9805790-006	72
SB-PD-4-35	K9805790-007	70
SB-PD-4-45	K9805790-008	64
SB-PD-4-50	K9805790-009	71
SB-PD-4-55	K9805790-010	68
SB-PD-3-30	K9805790-002MS	71
SB-PD-3-30	K9805790-002DMS	72
Method Blank	K980826-SB	70

CAS Acceptance Limits: 33-110

Approved By: JTD Date: 9-9-98

SUR1/120594
K985790A.XLS - SUR1 9/3/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ERM-West, Inc.	**Service Request:**	K9805790
Project:	Tuscon Passenger Depot/Sales/8012.23	**Date Collected:**	8/24/98
Sample Matrix:	Soil	**Date Received:**	8/25/98
		Date Extracted:	8/26/98
		Date Analyzed:	8/28/98

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons
EPA Methods 3550B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

Sample Name: SB-PD-3-30
Lab Code: K9805790-002MS, K9805790-002DMS

Analyte	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference
Acenaphthene	0.4	0.4	ND	0.3	0.3	75	75	20-122	<1
Fluoranthene	0.07	0.07	ND	0.07	0.07	100	100	27-140	<1
Benzo(a)pyrene	0.04	0.04	ND	0.03	0.03	75	75	37-116	<1

Approved By: JD Date: 9-9-98

DMS1S/120594
K985790A.XLS - DMS 9/3/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tuscon Passenger Depot/Sales/8012.23
LCS Matrix: Soil

Service Request: K9805790
Date Collected: NA
Date Received: NA
Date Extracted: 8/26/98
Date Analyzed: 8/28/98

Laboratory Control Sample Summary
Polynuclear Aromatic Hydrocarbons
EPA Methods 3550B/8310
Units: mg/Kg (ppm)

Analyte	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits
Acenaphthene	0.3	0.3	100	53-107
Fluoranthene	0.07	0.06	86	60-115
Benzo(a)pyrene	0.03	0.03	100	59-112

Approved By: JMD Date: 9-9-98

LCS/121594
K985790A.XLS - LCS-nr 9/3/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tuscon Passenger Depot/Sales/8012.23
Sample Matrix: Soil

Service Request: K9805790
Date Collected: 8/24/98
Date Received: 8/25/98

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
SB-PD-3-5	K9805790-001	8/27/98	91.2	
SB-PD-3-30	K9805790-002	8/27/98	89.1	
SB-PD-3-35	K9805790-003	8/27/98	94.7	
SB-PD-3-40	K9805790-004	8/27/98	87.4	
SB-PD-3-55	K9805790-005	8/27/98	95.6	
SB-PD-4-5	K9805790-006	8/27/98	87.8	
SB-PD-4-35	K9805790-007	8/27/98	89.0	
SB-PD-4-45	K9805790-008	8/27/98	88.1	
SB-PD-4-50	K9805790-009	8/27/98	89.0	
SB-PD-4-55	K9805790-010	8/27/98	88.4	

Approved By: JD Date: 9-9-98

TSOLIDS.XLT_Sample/01071998a

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tuscon Passenger Depot/Sales/8012.23
Sample Matrix: Soil

Service Request: K9805790
Date Collected: 8/24/98
Date Received: 8/25/98

Duplicate Summary

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
SB-PD-3-5	K9805790-001DUP	8/27/98	91.2	91.2	91.2	<1	

Approved By: JMD Date: 9-9-98

TSOLIDS.XLT_DUP/01071998a

CHAIN OF CUSTODY RECORD

NO: 1257

ERM West, Inc.

5111 N. Scottsdale Road, Suite 108 • Scottsdale, AZ 85250 • (602) 990-9350 • Fax: (602) 990-0107

Page _____ of _____

PROJECT #	PROJECT NAME
8012.X023	TUCSON PASSENGER DEPOT (SALES)

SAMPLER: (PRINT NAME)	(SIGNATURE)
JAMES ACKERMAN	James Ackerman

RECEIVING LABORATORY

CHEMICAL ANALYTICAL SERVICES
3902 E. UNIVERSITY #D-2
PHOENIX AZ, 85132

SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX SOIL	MATRIX WATER	MATRIX GAS	TPH 8015AZ	VOCs 8021B	PAHs 8310	PCBs 8080							1988
SB-PD-3-5	8-24-98	0850		X	SPLIT SPOON	NONE	Y	2"x6" BRASS TUBE	1	X			X	X	X	X							01
SB-PD-3-30		0935		X			Y		1	X			X	X	X								02
SB-PD-3-35		0945		X			Y		1	X			X	X	X								03
SB-PD-3-40		0955		X			Y		1	X			X	X	X								04
SB-PD-3-55		1030		X			Y		1	X			X	X	X								05
SB-PD-4-5		1240		X			Y		1	X			X	X	X	X							06
SB-PD-4-35		1355		X			Y		1	X			X	X	X								07
SB-PD-4-45		1425		X			Y		1	X			X	X	X								08
SB-PD-4-50		1435		X			Y		1	X			X	X	X								09
SB-PD-4-55		1445		X			Y		1	X			X	X	X								10

REQUESTED PARAMETERS

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
James Ackerman	8-25-98	0845	Leslie May CAS	8/25/98	1130
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME

FIELD REMARKS

5 DAY T.A.T.
X980 1988

REMARKS ON SAMPLE RECEIPT

☐ BOTTLE INTACT ☐ CUSTODY SEALS ☐ CHILLED
☐ PRESERVED ☐ SEALS INTACT ☐ SEE REMARKS

ERM REMARKS

SEND REPORT TO:
MANFRED PLASCHKE

WHITE - LABORATORY COPY CANARY - FIELD COPY PINK - DATABASE MANAGER GOLD - PROJECT FILE

DUPLICATE

Columbia Analytical Services INC.

RECEIVED

SEP 1 ? 1998

ERM-WEST INC.
PHOENIX, AZ.

September 9, 1998

Manfred Plaschke
ERM West
5111 N. Scottsdale Road, Suite 108
Scottsdale, AZ 85250

Re: Tucson Passenger Depot (Sale) / Project #8012.23

Dear Manfred:

Enclosed are the results of the samples submitted to our laboratory on August 26, 1998. The samples were analyzed for PAH 8310 by our Kelso, WA facility (K9805809). The samples were analyzed for 8021 B and 8082 by our Canoga Park facility (L9802882). For your reference, the 8015 AZ analyses have been assigned our service request number X9801993.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Columbia Analytical Services, Inc. is certified for environmental analyses by the Arizona Department of Health Services (Certificate #AZ0339; #AZ0136; and #AZ0497).

Please call if you have any questions. My extension is 12.

Respectfully submitted,

Columbia Analytical Services, Inc.

Tracy L. Dutton

Tracy L. Dutton
Project Chemist

TLD/lm

3902 East University Drive, Suite D2 ▪ Phoenix, AZ 85034 ▪ (602) 437-2001 ▪ 800-695-7222 ▪ Fax (602) 437-5308

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

C6 - C32 Hydrocarbons

Sample Name:	Method Blank	Units:	mg/Kg (ppm)
Lab Code:	X980826-MB	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/27/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/27/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/27/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	8/26/98	8/27/98	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9801993
Date Collected: 8/24/98
Date Received: 8/26/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-5-5
Lab Code: X9801993-001
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	8/26/98	8/28/98	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9801993
Date Collected: 8/25/98
Date Received: 8/26/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-5-35
Lab Code: X9801993-002
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	8/26/98	8/28/98	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-5-45	Units:	mg/Kg (ppm)
Lab Code:	X9801993-003	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	9/4/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	9/4/98	1100	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	9/4/98	1300	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	8/26/98	9/4/98	2400	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-5-50	Units:	mg/Kg (ppm)
Lab Code:	X9801993-004	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	8/26/98	8/28/98	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-5-55	Units:	mg/Kg (ppm)
Lab Code:	X9801993-005	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	8/26/98	8/28/98	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-6-5	Units:	mg/Kg (ppm)
Lab Code:	X9801993-006	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	8/26/98	8/28/98	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-6-30	Units:	mg/Kg (ppm)
Lab Code:	X9801993-007	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	8/26/98	8/28/98	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-6-40	Units:	mg/Kg (ppm)
Lab Code:	X9801993-008	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	8/26/98	8/28/98	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JKD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9801993
Date Collected: 8/25/98
Date Received: 8/26/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-6-50
Lab Code: X9801993-009
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	8/26/98	8/28/98	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-6-55	Units:	mg/Kg (ppm)
Lab Code:	X9801993-010	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	8/26/98	8/28/98	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-7-5	Units:	mg/Kg (ppm)
Lab Code:	X9801993-011	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-7-35	Units:	mg/Kg (ppm)
Lab Code:	X9801993-012	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

1S22/020597p
X981993B.XLS - Sample (2) 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-7-40
Lab Code: X9801993-013
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9801993
Date Collected: 8/25/98
Date Received: 8/26/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-7-45
Lab Code: X9801993-014
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JH Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-7-55	Units:	mg/Kg (ppm)
Lab Code:	X9801993-015	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/26/98	8/28/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/26/98	8/28/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/26/98	8/28/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ERM West	**Service Request:**	X9801993
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	NA

Surrogate Recovery Summary
C6 - C32 Hydrocarbons

Prep Method:	METHOD	Units:	PERCENT
Analysis Method:	8015AZ	Basis:	Wet

Sample Name	Lab Code	Test Notes	Percent Recovery *o*-Terphenyl
SB-PD-5-5	X9801993-001		108
SB-PD-5-35	X9801993-002		116
SB-PD-5-45	X9801993-003		95
SB-PD-5-50	X9801993-004		124
SB-PD-5-55	X9801993-005		115
SB-PD-6-5	X9801993-006		117
SB-PD-6-30	X9801993-007		102
SB-PD-6-40	X9801993-008		118
SB-PD-6-50	X9801993-009		108
SB-PD-6-55	X9801993-010		108
SB-PD-7-5	X9801993-011		102
SB-PD-7-35	X9801993-012		111
SB-PD-7-40	X9801993-013		123
SB-PD-7-45	X9801993-014		110
SB-PD-7-55	X9801993-015		112
Method Blank	X980826-MB		100
Lab Control Sample	X980826-LCS		90
SB-PD-7-55	X9801993-015DUP		127
SB-PD-7-55	X9801993-015MS		114

CAS Acceptance Limits: 70-130

Approved By: JTD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9801993
Date Collected: 8/24/98
Date Received: 8/26/98
Date Extracted: 8/26/98
Date Analyzed: 9/1/98

Duplicate Summary
C6 - C32 Hydrocarbons

Sample Name: SB-PD-7-55
Lab Code: X9801993-015DUP
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Relative Percent Difference	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	ND	ND	<1	
C10 - C22 DRO	METHOD	8015AZ	30	ND	ND	<1	
C22 - C32 HRO	METHOD	8015AZ	50	ND	ND	<1	

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9801993
Date Collected: NA
Date Received: NA
Date Extracted: 8/26/98
Date Analyzed: 8/28/98

Matrix Spike Summary
C6 - C32 Hydrocarbons

Sample Name: SB-PD-7-55
Lab Code: X9801993-015MS
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	100	ND	122	122	56-166	
C10 - C22 DRO	METHOD	8015AZ	30	150	ND	192	128	52-181	
C22 - C32 HRO	METHOD	8015AZ	50	250	ND	401	160	58-182	

Approved By: JD Date: 9-9-98

MS/020597p
X981993A.XLS - MS 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
LCS Matrix: Soil

Service Request: X9801993
Date Collected: NA
Date Received: NA
Date Extracted: 8/26/98
Date Analyzed: 8/27/98

Laboratory Control Sample Summary
C6 - C32 Hydrocarbons

Sample Name: Lab Control Sample
Lab Code: X980826-LCS
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
C6 - C10 GRO	METHOD	8015AZ	100	116	116	70-130	
C10 - C22 DRO	METHOD	8015AZ	150	174	116	70-130	
C22 - C32 HRO	METHOD	8015AZ	250	280	112	70-130	

Approved By: JD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: NA
Date Received: NA

Polychlorinated Biphenyls (PCBs)

Sample Name: Method Blank
Lab Code: L980901-MB
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/24/98
Date Received: 8/26/98

Polychlorinated Biphenyls (PCBs)

Sample Name: SB-PD-5-5
Lab Code: L9802882-001
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/25/98
Date Received: 8/26/98

Polychlorinated Biphenyls (PCBs)

Sample Name: SB-PD-6-5
Lab Code: L9802882-006
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JMD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM-West, Inc.	**Service Request:**	L9802882
Project:	Tucson Passenger Depot (Sale)/8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

Polychlorinated Biphenyls (PCBs)

Sample Name:	SB-PD-7-5	Units:	mg/Kg (ppm)
Lab Code:	L9802882-011	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JD Date: 9-9-98

1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
Polychlorinated Biphenyls (PCBs)

Prep Method: EPA 3550
Analysis Method: 8082

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Test Notes	Percent Recovery Tetrachloro-m-xylene
SB-PD-5-5	L9802882-001		120
SB-PD-6-5	L9802882-006		127
SB-PD-7-5	L9802882-011		122
Method Blank	L980901-MB		126
Batch QC	L9802918-001MS		126
Batch QC	L9802918-001DMS		127

CAS Acceptance Limits: 45-140

Approved By: JHD Date: 9-9-98

SUR1/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: NA
Date Received: NA
Date Extracted: 9/1/98
Date Analyzed: 9/3/98

Matrix Spike/Duplicate Matrix Spike Summary
Polychlorinated Biphenyls (PCBs)

Sample Name: Batch QC
Lab Code: L9802918-001MS, L9802918-001DMS
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Aroclor 1260	EPA 3550	8082	0.1	3.00	3.00	ND	3.29	3.51	110	117	62-154	6	

Approved By: JLD Date: 9-9-98

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: NA
Date Received: NA

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: L980826-MB
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: NA
Date Received: NA

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: L980831-MB
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	NA	8/31/98	ND	
Chloromethane	EPA 5030	8021B	100	1	NA	8/31/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	NA	8/31/98	ND	
Bromomethane	EPA 5030	8021B	100	1	NA	8/31/98	ND	
Chloroethane	EPA 5030	8021B	100	1	NA	8/31/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	NA	8/31/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	NA	8/31/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	NA	8/31/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	8/31/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	8/31/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	NA	8/31/98	ND	
Chloroform	EPA 5030	8021B	50	1	NA	8/31/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	NA	8/31/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	NA	8/31/98	ND	
Benzene	EPA 5030	8021B	50	1	NA	8/31/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	NA	8/31/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	NA	8/31/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	NA	8/31/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	NA	8/31/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	NA	8/31/98	ND	
Toluene	EPA 5030	8021B	50	1	NA	8/31/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	8/31/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	8/31/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	NA	8/31/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	NA	8/31/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	NA	8/31/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	NA	8/31/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	NA	8/31/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	NA	8/31/98	ND	
Bromoform	EPA 5030	8021B	50	1	NA	8/31/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	NA	8/31/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	NA	8/31/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	NA	8/31/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	NA	8/31/98	ND	

Approved By: JD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/24/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-5-5
Lab Code: L9802882-001
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/25/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-5-35
Lab Code: L9802882-002
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/25/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-5-45
Lab Code: L9802882-003
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/25/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-5-50
Lab Code: L9802882-004
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/25/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-5-55
Lab Code: L9802882-005
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JJD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/25/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-6-5
Lab Code: L9802882-006
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/25/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-6-30
Lab Code: L9802882-007
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM-West, Inc.	**Service Request:**	L9802882
Project:	Tucson Passenger Depot (Sale)/8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name:	SB-PD-6-40	Units:	ug/Kg (ppb)
Lab Code:	L9802882-008	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JM Date: 9-9-98

1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/25/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-6-50
Lab Code: L9802882-009
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JMD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM-West, Inc.	**Service Request:**	L9802882
Project:	Tucson Passenger Depot (Sale)/8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name:	SB-PD-6-55	Units:	ug/Kg (ppb)
Lab Code:	L9802882-010	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JM Date: 9-9-98

1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/25/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-7-5
Lab Code: L9802882-011
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM-West, Inc.	**Service Request:**	L9802882
Project:	Tucson Passenger Depot (Sale)/8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name:	SB-PD-7-35	Units:	ug/Kg (ppb)
Lab Code:	L9802882-012	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JM Date: 9-9-98

1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/25/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-7-40
Lab Code: L9802882-013
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM-West, Inc.	**Service Request:**	L9802882
Project:	Tucson Passenger Depot (Sale)/8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name:	SB-PD-7-45	Units:	ug/Kg (ppb)
Lab Code:	L9802882-014	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JHD Date: 9-9-98

1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: 8/25/98
Date Received: 8/26/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-7-55
Lab Code: L9802882-015
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/26/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/26/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/26/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/26/98	9/1/98	ND	

Approved By: JMD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
Halogenated and Aromatic Volatile Organic Compounds

Prep Method: EPA 5030
Analysis Method: 8021B

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Test Notes	Percent Recovery 4-Bromochlorobenzene	Percent Recovery Fluorobenzene
SB-PD-5-5	L9802882-001		99	135
SB-PD-5-35	L9802882-002		97	130
SB-PD-5-45	L9802882-003		97	118
SB-PD-5-50	L9802882-004		95	132
SB-PD-5-55	L9802882-005		92	133
SB-PD-6-5	L9802882-006		86	130
SB-PD-6-30	L9802882-007		96	134
SB-PD-6-40	L9802882-008		102	135
SB-PD-6-50	L9802882-009		92	137
SB-PD-6-55	L9802882-010		93	134
SB-PD-7-5	L9802882-011		107	133
SB-PD-7-35	L9802882-012		93	131
SB-PD-7-40	L9802882-013		111	135
SB-PD-7-45	L9802882-014		103	136
SB-PD-7-55	L9802882-015		98	134
Method Blank	L980826-MB		94	142
Method Blank	L980831-MB		106	97
SB-PD-7-55	L9802882-015MS		92	105
SB-PD-7-55	L9802882-015DMS		93	105
CAS Acceptance Limits:			47-147	70-150

Approved By: JHD Date: 9-9-98

SUR2/061197p

L982882B.XLS - SUR2 9/4/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802882
Date Collected: NA
Date Received: NA
Date Extracted: 8/26/98
Date Analyzed: 9/1/98

Matrix Spike/Duplicate Matrix Spike Summary
Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-7-55
Lab Code: L9802882-015MS, L9802882-015DMS
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
1,1-Dichloroethene	EPA 5030	8021B	50	1000	1000	ND	540	554	54	55	28-167	3	
Trichloroethene (TCE)	EPA 5030	8021B	50	1000	1000	ND	604	607	60	61	35-146	<1	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1000	1000	ND	833	779	83	78	26-162	7	
Benzene	EPA 5030	8021B	50	1000	1000	ND	726	656	73	66	39-150	11	
Toluene	EPA 5030	8021B	50	1000	1000	ND	690	668	69	67	46-148	4	
Ethylbenzene	EPA 5030	8021B	50	1000	1000	ND	692	688	69	69	32-160	<1	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1000	1000	ND	584	570	58	57	41-138	3	
1,2-Dichloroethane (EDC)	EPA 5030	8021B	50	1000	1000	ND	547	532	55	53	51-147	3	

Approved By: JHD Date: 9-9-98

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ERM-West, Inc.	**Service Request No.:**	K9805809
Project:	U.P. Tuscon Yard Passenger Depot/8012.23	**Date Received:**	8/26/98
Sample Matrix:	Soil		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for sample(s) designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Duplicate (DUP) and Matrix/Duplicate Matrix Spike (MS/DMS).

All EPA recommended holding times have been met for analyses in this sample delivery group.

The following difficulties were experienced during analysis of this batch:

The surrogate recovery for EPA 8310 in sample SB-PD-5-45 was outside normal CAS control limits because of matrix interference. The chromatogram showed components that prevented accurate quantitation of the surrogate. No further corrective action was taken.

Approved by JJD **Date** 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805809
Date Collected: 8/24-25/98
Date Received: 8/26/98
Date Extracted: 8/27/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-5-5**	**SB-PD-5-35**	**SB-PD-5-45**
	Lab Code:	K9805809-001	K9805809-002	K9805809-003(B)
	Date Analyzed:	8/29/98	8/29/98	8/30/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	<1
Acenaphthylene	0.1	ND	ND	<1
Acenaphthene	0.1	ND	ND	<1
Fluorene	0.02	ND	ND	<0.2
Phenanthrene	0.01	ND	ND	0.4
Anthracene	0.01	ND	ND	<0.1
Fluoranthene	0.02	ND	ND	<0.2
Pyrene	0.02	ND	ND	<2
Benz(a)anthracene	0.01	ND	ND	<0.1
Chrysene	0.01	ND	ND	<0.1
Benzo(b)fluoranthene	0.02	ND	ND	<0.2
Benzo(k)fluoranthene	0.01	ND	ND	<0.1
Benzo(a)pyrene	0.01	ND	ND	<0.1
Dibenz(a,h)anthracene	0.01	ND	ND	<0.1
Benzo(g,h,i)perylene	0.02	ND	ND	<0.2
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	<0.1

B The MRL is elevated because of matrix interferences.

Approved By: JHP Date: 9-9-98

3S22/120594
K985809A.XLS - 1-3 9/3/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805809
Date Collected: 8/25/98
Date Received: 8/26/98
Date Extracted: 8/27/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-5-50**	**SB-PD-5-55**	**SB-PD-6-5**
	Lab Code:	K9805809-004	K9805809-005	K9805809-006
	Date Analyzed:	8/29/98	8/29/98	8/29/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	ND
Acenaphthylene	0.1	ND	ND	ND
Acenaphthene	0.1	ND	ND	ND
Fluorene	0.02	ND	ND	ND
Phenanthrene	0.01	ND	ND	ND
Anthracene	0.01	ND	ND	ND
Fluoranthene	0.02	ND	ND	ND
Pyrene	0.02	ND	ND	ND
Benz(a)anthracene	0.01	ND	ND	ND
Chrysene	0.01	ND	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND	ND
Benzo(a)pyrene	0.01	ND	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	ND

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805809
Date Collected: 8/25/98
Date Received: 8/26/98
Date Extracted: 8/27/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-6-30**	**SB-PD-6-40**	**SB-PD-6-50**
	Lab Code:	K9805809-007	K9805809-008	K9805809-009
	Date Analyzed:	8/29/98	8/29/98	8/30/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	ND
Acenaphthylene	0.1	ND	ND	ND
Acenaphthene	0.1	ND	ND	ND
Fluorene	0.02	ND	ND	ND
Phenanthrene	0.01	ND	ND	ND
Anthracene	0.01	ND	ND	ND
Fluoranthene	0.02	ND	ND	ND
Pyrene	0.02	ND	ND	ND
Benz(a)anthracene	0.01	ND	ND	ND
Chrysene	0.01	ND	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND	ND
Benzo(a)pyrene	0.01	ND	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	ND

Approved By: JH Date: 9-9-98

3S22/120594
K985809A.XLS - 7-9 9/3/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805809
Date Collected: 8/25/98
Date Received: 8/26/98
Date Extracted: 8/27/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-6-55**	**SB-PD-7-5**	**SB-PD-7-35**
	Lab Code:	K9805809-010	K9805809-011	K9805809-012
	Date Analyzed:	8/30/98	8/30/98	8/30/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	ND
Acenaphthylene	0.1	ND	ND	ND
Acenaphthene	0.1	ND	ND	ND
Fluorene	0.02	ND	ND	ND
Phenanthrene	0.01	ND	ND	ND
Anthracene	0.01	ND	ND	ND
Fluoranthene	0.02	ND	ND	ND
Pyrene	0.02	ND	ND	ND
Benz(a)anthracene	0.01	ND	ND	ND
Chrysene	0.01	ND	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND	ND
Benzo(a)pyrene	0.01	ND	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	ND

Approved By: JH Date: 9-9-98

3S22/120594
K985809A.XLS - 10-12 9/3/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805809
Date Collected: 8/25/98
Date Received: 8/26/98
Date Extracted: 8/27/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-7-40**	**SB-PD-7-45**	**SB-PD-7-55**
	Lab Code:	K9805809-013	K9805809-014	K9805809-015
	Date Analyzed:	8/30/98	8/30/98	8/30/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	ND
Acenaphthylene	0.1	ND	ND	ND
Acenaphthene	0.1	ND	ND	ND
Fluorene	0.02	ND	ND	ND
Phenanthrene	0.01	ND	ND	ND
Anthracene	0.01	ND	ND	ND
Fluoranthene	0.02	ND	ND	ND
Pyrene	0.02	ND	ND	ND
Benz(a)anthracene	0.01	ND	ND	ND
Chrysene	0.01	ND	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND	ND
Benzo(a)pyrene	0.01	ND	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	ND

Approved By: JHD Date: 9-9-98

3S22/120594
K985809A.XLS - 13-15 9/3/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805809
Date Collected: NA
Date Received: NA
Date Extracted: 8/27/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

Sample Name:	**Method Blank**
Lab Code:	K980827-SB
Date Analyzed:	8/29/98

Analyte	**MRL**	
Naphthalene	0.1	ND
Acenaphthylene	0.1	ND
Acenaphthene	0.1	ND
Fluorene	0.02	ND
Phenanthrene	0.01	ND
Anthracene	0.01	ND
Fluoranthene	0.02	ND
Pyrene	0.02	ND
Benz(a)anthracene	0.01	ND
Chrysene	0.01	ND
Benzo(b)fluoranthene	0.02	ND
Benzo(k)fluoranthene	0.01	ND
Benzo(a)pyrene	0.01	ND
Dibenz(a,h)anthracene	0.01	ND
Benzo(g,h,i)perylene	0.02	ND
Indeno(1,2,3-cd)pyrene	0.01	ND

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805809
Date Collected: 8/24-25/98
Date Received: 8/26/98
Date Extracted: 8/27/98
Date Analyzed: 8/29-30/98

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310

Sample Name	Lab Code	Percent Recovery *p*-Terphenyl
SB-PD-5-5	K9805809-001	65
SB-PD-5-35	K9805809-002	62
SB-PD-5-45	K9805809-003	31(A)
SB-PD-5-50	K9805809-004	61
SB-PD-5-55	K9805809-005	66
SB-PD-6-5	K9805809-006	71
SB-PD-6-30	K9805809-007	69
SB-PD-6-40	K9805809-008	62
SB-PD-6-50	K9805809-009	62
SB-PD-6-55	K9805809-010	69
SB-PD-7-5	K9805809-011	67
SB-PD-7-35	K9805809-012	66
SB-PD-7-40	K9805809-013	71
SB-PD-7-45	K9805809-014	71
SB-PD-7-55	K9805809-015	67
SB-PD-7-35	K9805809-012MS	70
SB-PD-7-35	K9805809-012DMS	68
Method Blank	K980827-SB	69

CAS Acceptance Limits: 33-110

A Outside acceptance limits; see case narrative.

Approved By: JD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ERM-West, Inc.	**Service Request:**	K9805809
Project:	U.P. Tucson Yard Passenger Depot/8012.23	**Date Collected:**	8/25/98
Sample Matrix:	Soil	**Date Received:**	8/26/98
		Date Extracted:	8/27/98
		Date Analyzed:	8/30/98

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)
Dry Weight Basis

Sample Name: SB-PD-7-35
Lab Code: K9805809-012MS, K9805809-012DMS

	Spike Level		Sample	Spike Result		Percent Recovery		CAS Acceptance	Relative Percent
Analyte	MS	DMS	**Result**	MS	DMS	MS	DMS	Limits	**Difference**
Acenaphthene	0.4	0.4	ND	0.3	0.3	75	75	20-122	<1
Fluoranthene	0.08	0.08	ND	0.07	0.07	88	88	27-140	<1
Benzo(a)pyrene	0.04	0.04	ND	0.03	0.03	75	75	37-116	<1

Approved By: _____ Date: 9-9-98

DMS1S/120594
K985809A.XLS - DMS 9/3/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ERM-West, Inc.	**Service Request:**	K9805809
Project:	U.P. Tucson Yard Passenger Depot/8012.23	**Date Collected:**	NA
LCS Matrix:	Soil	**Date Received:**	NA
		Date Extracted:	8/27/98
		Date Analyzed:	8/29/98

Laboratory Control Sample Summary
Polynuclear Aromatic Hydrocarbons
EPA Methods 3540B/8310
Units: mg/Kg (ppm)

Analyte	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits
Acenaphthene	0.3	0.2	67	53-107
Fluoranthene	0.06	0.06	100	60-115
Benzo(a)pyrene	0.03	0.03	100	59-112
		SURR	72	

Approved By: JH Date: 9-9-98

LCS/121594

K985809A.XLS - NR 9/3/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805809
Date Collected: 8/24 - 8/25/98
Date Received: 8/26/98

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
SB-PD-5-5	K9805809-001	8/27/98	85.4	
SB-PD-5-35	K9805809-002	8/27/98	80.3	
SB-PD-5-45	K9805809-003	8/27/98	78.0	
SB-PD-5-50	K9805809-004	8/27/98	81.4	
SB-PD-5-55	K9805809-005	8/27/98	93.6	
SB-PD-6-5	K9805809-006	8/27/98	85.6	
SB-PD-6-30	K9805809-007	8/27/98	88.6	
SB-PD-6-40	K9805809-008	8/27/98	78.7	
SB-PD-6-50	K9805809-009	8/27/98	90.2	
SB-PD-6-55	K9805809-010	8/27/98	85.2	
SB-PD-7-5	K9805809-011	8/27/98	89.5	
SB-PD-7-35	K9805809-012	8/27/98	87.4	
SB-PD-7-40	K9805809-013	8/27/98	89.0	
SB-PD-7-45	K9805809-014	8/27/98	87.1	
SB-PD-7-55	K9805809-015	8/27/98	84.9	

Approved By: JHD Date: 9-9-98

TSOLIDS.XLT_Sample/01071998a

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805809
Date Collected: 8/24/98
Date Received: 8/26/98

Duplicate Summary

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
SB-PD-5-5	K9805809-001DUP	8/27/98	85.4	85.6	85.5	<1	

Approved By: JH Date: 9-9-98

TSOLIDS.XLT_DUP/01071998a

CHAIN OF CUSTODY RECORD

NO: 1256

ERM West, Inc.

5111 N. Scottsdale Road, Suite 108 • Scottsdale, AZ 85250 • (602) 990-9350 • Fax: (602) 990-0107

Page _____ of _____

PROJECT #	PROJECT NAME
8012.16.23	TUCSON PASSENGER DEPOT (SALE)

SAMPLER: (PRINT NAME)	(SIGNATURE)
JAMES ACKERMAN	James Ackerman

RECEIVING LABORATORY

~~COLUMBIA~~ ANALYTICAL SERVICES
3902 E. UNIVERSITY #D-2
PHOENIX AZ 85034 (602) 437-2001

SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX SOIL	MATRIX WATER	MATRIX GAS	TPH 8015 AZ	VOCs 8021B	PAHs 8310	PCBs 8080							1993
SB-PD-5-5	8-25-98	1605		X	SPLIT SPOON	NONE	Y	12x6" GLASS TUBE	1	X			X	X	X	X							01
SB-PD-5-35	8-25-98	0815		X	↓	↓	Y	↓	1	X			X	X	X								02
SB-PD-5-45	↓	0830		X	↓	↓	Y	↓	1	X			X	X	X								03
SB-PD-5-50	↓	0835		X	↓	↓	Y	↓	1	X			X	X	X								04
SB-PD-5-55	↓	0845		X	↓	↓	Y	↓	1	X			X	X	X								05
SB-PD-6-5	↓	0935		X	↓	↓	Y	↓	1	X			X	X	X	X							06
SB-PD-6-30	↓	1215		X	↓	↓	Y	↓	1	X			X	X	X								07
SB-PD-6-40	↓	1245		X	↓	↓	Y	↓	1	X			X	X	X								08
SB-PD-6-50	↓	1310		X	↓	↓	Y	↓	1	X			X	X	X								09
SB-PD-6-55	↓	1335		X	↓	↓	Y	↓	1	X			X	X	X								10

REQUESTED PARAMETERS

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
James Ackerman	8-26-98	0820	Leslie May	8/24/98	1030
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME

FIELD REMARKS

X9801993
5 DAY T.A.T.

REMARKS ON SAMPLE RECEIPT

☐ BOTTLE INTACT ☐ CUSTODY SEALS ☐ CHILLED
☐ PRESERVED ☐ SEALS INTACT ☐ SEE REMARKS

ERM REMARKS

SEND REPORT TO:
MANFRED PLASCHKE

WHITE - LABORATORY COPY YELLOW - FIELD COPY PINK - DATABASE MANAGER GOLD - PROJECT FILE

CHAIN OF CUSTODY RECORD

NO: 1282

ERM West, Inc.

5111 N. Scottsdale Road, Suite 108 • Scottsdale, AZ 85250 • (602) 990-9350 • Fax: (602) 990-0107

Page _____ of _____

PROJECT #	PROJECT NAME
8012.X6 23	TUCSON PASSENGER DEPOT (SALE)

SAMPLER: (PRINT NAME)	(SIGNATURE)
JAMES ACKERMAN	James Ackerman

RECEIVING LABORATORY

COLUMBIA ANALYTICAL SERVICES
3902 E. UNIVERSITY #D-2
PHOENIX AZ 85034 (602) 437-2001

SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	MATRIX: GAS	TPH 8015AZ	VOCs 8021B	PAHs 8310	PCBs 8080							1993
SB-PD-7-5	8-25-98	1425		X	SPLIT SPOON	NONE	X	2x6" BRASS TUBE	1	X			X	X	X	X							11
SB-PD-7-35	↓	1545		X	↓		Y	↓	1	X			X	X	X								12
SB-PD-7-40	↓	1555		X	↓		Y	↓	1	X			X	X	X								13
SB-PD-7-45	↓	1605		X	↓		Y	↓	1	X			X	X	X								14
SB-PD-7-55	↓	1655		X	↓		X	↓	1	X			X	X	X								15

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
James Ackerman	8-26-98	0620	Leslie May CAS	8/26/98	1030
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME

FIELD REMARKS

X980 1993
5 DAY T.A.T.

REMARKS ON SAMPLE RECEIPT

☐ BOTTLE INTACT ☐ CUSTODY SEALS ☐ CHILLED
☐ PRESERVED ☐ SEALS INTACT ☐ SEE REMARKS

ERM REMARKS

SEND REPORT TO:
MANFRED PLASCHKE

WHITE - LABORATORY COPY CANARY - FIELD COPY PINK - DATABASE MANAGER GOLD - PROJECT FILE

DUPLICATE

Columbia Analytical Services INC.

RECEIVED

SEP 1 0 1998

ERM-WEST INC.
PHOENIX, AZ

September 9, 1998

Manfred Plaschke
ERM West
5111 N. Scottsdale Road, Suite 108
Scottsdale, AZ 85250

Re: Tucson Passenger Depot (Sale) / Project #8012.23

Dear Manfred:

Enclosed are the results of the samples submitted to our laboratory on August 27, 1998. The samples were analyzed for PAH 8310 by our Kelso, WA facility (K9805856). The samples were analyzed for 8021 B and 8082 by our Canoga Park facility (L9802906). For your reference, the 8015 AZ analyses have been assigned our service request number X9802002.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Columbia Analytical Services, Inc. is certified for environmental analyses by the Arizona Department of Health Services (Certificate #AZ0339; #AZ0136; and #AZ0497).

Please call if you have any questions. My extension is 12.

Respectfully submitted,

Columbia Analytical Services, Inc.

Tracy L Dutton

Tracy L. Dutton
Project Chemist

TLD/lm

3902 East University Drive, Suite D2 ▪ Phoenix, AZ 85034 ▪ (602) 437-2001 ▪ 800-695-7222 ▪ Fax (602) 437-5308

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ERM West	**Service Request No.:**	X9802002
Project:	Tucson Passenger Depot (Sales) / #8012.23	**Date Received:**	8/27/98
Sample Matrix:	Soil		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for sample(s) designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Duplicate (DUP) and Matrix Spike (MS).

All EPA recommended holding times have been met for analyses in this sample delivery group.

The following difficulties were experienced during analysis of this batch:

The surrogate recovery for 8015 AZ in sample SB-PD-10-45 (X9802002-014) was outside normal CAS control limits because of suspected matrix interference. The sample was re-analyzed, and again produced results outside control limits. The results of the original analysis are reported.

Approved by JTD **Date** 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9802002
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA

C6 - C32 Hydrocarbons

Sample Name:	Method Blank	Units:	mg/Kg (ppm)
Lab Code:	X980827-MB	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/27/98	9/1/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/27/98	9/1/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/27/98	9/1/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9802002
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/26/98
Sample Matrix:	Soil	**Date Received:**	8/27/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-8-5	Units:	mg/Kg (ppm)
Lab Code:	X9802002-001	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/27/98	9/1/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/27/98	9/1/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/27/98	9/1/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: 8/26/98
Date Received: 8/27/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-8-35
Lab Code: X9802002-003
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/27/98	9/1/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/27/98	9/1/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/27/98	9/1/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: MD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: 8/26/98
Date Received: 8/27/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-8-40
Lab Code: X9802002-004
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/27/98	9/1/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/27/98	9/1/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/27/98	9/1/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9802002
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/26/98
Sample Matrix:	Soil	**Date Received:**	8/27/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-8-55	Units:	mg/Kg (ppm)
Lab Code:	X9802002-005	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/27/98	9/1/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/27/98	9/1/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/27/98	9/1/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

1S22/020597p
X982002A.XLS - Sample (4) 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9802002
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/26/98
Sample Matrix:	Soil	**Date Received:**	8/27/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-9-5	Units:	mg/Kg (ppm)
Lab Code:	X9802002-006	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/27/98	9/1/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/27/98	9/1/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/27/98	9/1/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JMD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: 8/26/98
Date Received: 8/27/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-9-40
Lab Code: X9802002-007
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/27/98	9/1/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/27/98	9/1/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/27/98	9/1/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: 8/26/98
Date Received: 8/27/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-9-45
Lab Code: X9802002-008
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/27/98	9/1/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/27/98	9/1/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/27/98	9/1/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JTD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9802002
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/26/98
Sample Matrix:	Soil	**Date Received:**	8/27/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-9-50	Units:	mg/Kg (ppm)
Lab Code:	X9802002-009	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/27/98	9/1/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/27/98	9/1/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/27/98	9/1/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

Approved By: JM Date: 9-9-98

1S22/020597p
X982002A.XLS - Sample (8) 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: 8/26/98
Date Received: 8/27/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-9-55
Lab Code: X9802002-010
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/27/98	9/2/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/27/98	9/2/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/27/98	9/2/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9802002
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/26/98
Sample Matrix:	Soil	**Date Received:**	8/27/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-10-5	Units:	mg/Kg (ppm)
Lab Code:	X9802002-011	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	20	8/27/98	9/2/98	<400	C2
C10 - C22 DRO	METHOD	8015AZ	30	20	8/27/98	9/2/98	6000	
C22 - C32 HRO	METHOD	8015AZ	50	20	8/27/98	9/2/98	<1000	C2
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	20	NA	NA	6000	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics
C2	MRL is elevated because the sample required diluting.

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9802002
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/26/98
Sample Matrix:	Soil	**Date Received:**	8/27/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-10-10	Units:	mg/Kg (ppm)
Lab Code:	X9802002-012	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	20	8/27/98	9/2/98	<400	C2
C10 - C22 DRO	METHOD	8015AZ	30	20	8/27/98	9/2/98	6800	
C22 - C32 HRO	METHOD	8015AZ	50	20	8/27/98	9/2/98	<1000	C2
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	20	NA	NA	6800	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

C2 MRL is elevated because the sample required diluting.

Approved By: _____ Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9802002
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/26/98
Sample Matrix:	Soil	**Date Received:**	8/27/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-10-15	Units:	mg/Kg (ppm)
Lab Code:	X9802002-013	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	5	8/27/98	9/3/98	<100	C2
C10 - C22 DRO	METHOD	8015AZ	30	5	8/27/98	9/3/98	2300	
C22 - C32 HRO	METHOD	8015AZ	50	5	8/27/98	9/3/98	460	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	5	NA	NA	2760	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

C2 MRL is elevated because the sample required diluting.

Approved By: JMD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9802002
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/26/98
Sample Matrix:	Soil	**Date Received:**	8/27/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-10-45	Units:	mg/Kg (ppm)
Lab Code:	X9802002-014	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	10	8/27/98	9/4/98	<200	C2
C10 - C22 DRO	METHOD	8015AZ	30	10	8/27/98	9/4/98	4700	
C22 - C32 HRO	METHOD	8015AZ	50	10	8/27/98	9/4/98	930	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	10	NA	NA	5630	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

C2 MRL is elevated because the sample required diluting.

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: 8/26/98
Date Received: 8/27/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-10-55
Lab Code: X9802002-015
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/27/98	9/2/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/27/98	9/2/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/27/98	9/2/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
C6 - C32 Hydrocarbons

Prep Method: METHOD
Analysis Method: 8015AZ

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Test Notes	Percent Recovery *o*-Terphenyl
SB-PD-8-5	X9802002-001		94
SB-PD-8-35	X9802002-003		107
SB-PD-8-40	X9802002-004		106
SB-PD-8-55	X9802002-005		100
SB-PD-9-5	X9802002-006		98
SB-PD-9-40	X9802002-007		122
SB-PD-9-45	X9802002-008	A7a	135
SB-PD-9-50	X9802002-009		105
SB-PD-9-55	X9802002-010		110
SB-PD-10-5	X9802002-011	B4	NA
SB-PD-10-10	X9802002-012	B4	NA
SB-PD-10-15	X9802002-013		108
SB-PD-10-45	X9802002-014	*	134
SB-PD-10-55	X9802002-015		126
Method Blank	X980827-MB	A7a	136
SB-PD-9-50	X9802002-009DUP	A7a	132
SB-PD-9-50	X9802002-009MS		125

CAS Acceptance Limits: 70-130

A7a Outside of acceptance limits. Since no target analytes were detected in the sample, it is the opinion of CAS that the quality of the sample data has not been significantly affected by the elevated recovery.

B4 Not Applicable because of the sample matrix. Analysis of this sample required a dilution such that the surrogate concentration was diluted below the method reporting limit.

* See Case Narrative

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: 8/26/98
Date Received: 8/27/98
Date Extracted: 8/27/98
Date Analyzed: 9/2/98

Duplicate Summary
C6 - C32 Hydrocarbons

Sample Name: SB-PD-9-50
Lab Code: X9802002-009DUP
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Relative Percent Difference	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	ND	ND	<1	
C10 - C22 DRO	METHOD	8015AZ	30	ND	ND	<1	
C22 - C32 HRO	METHOD	8015AZ	50	ND	ND	<1	

Approved By: JMD Date: 9-9-98

DUP/020597p
X982002A.XLS - DUP 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: NA
Date Received: NA
Date Extracted: 8/27/98
Date Analyzed: 9/2/98

Matrix Spike Summary
C6 - C32 Hydrocarbons

Sample Name: SB-PD-9-50
Lab Code: X9802002-009MS
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	100	ND	133	133	56-166	
C10 - C22 DRO	METHOD	8015AZ	30	150	ND	214	143	52-181	
C22 - C32 HRO	METHOD	8015AZ	50	250	ND	324	130	58-182	

Approved By: JMD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: NA
Date Received: NA

C6 - C32 Hydrocarbons

Sample Name: Method Blank
Lab Code: X980903-MB
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	9/3/98	9/4/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	9/3/98	9/4/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	9/3/98	9/4/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JD Date: 9-9-98

1S22/020597p
X982002C.XLS - MBlank 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM West	**Service Request:**	X9802002
Project:	Tucson Passenger Depot (Sales)/#8012.23	**Date Collected:**	8/26/98
Sample Matrix:	Soil	**Date Received:**	8/27/98

C6 - C32 Hydrocarbons

Sample Name:	SB-PD-8-30	Units:	mg/Kg (ppm)
Lab Code:	X9802002-002	Basis:	Wet
Test Notes:	F2		

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	9/3/98	9/4/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	9/3/98	9/4/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	9/3/98	9/4/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO	Gasoline Range Organics
DRO	Diesel Range Organics
HRO	Heavy Oil Range Organics

F2 Sample was extracted 4 days past the end of the recommended maximum extraction holding time. The original extraction solvent had evaporated. The re-analysis met our QC criteria. It is the opinion of CAS that the quality of the sample data has not been significantly affected.

Approved By: _____ Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
C6 - C32 Hydrocarbons

Prep Method: METHOD
Analysis Method: 8015AZ

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Test Notes	Percent Recovery *o*-Terphenyl
SB-PD-8-30	X9802002-002		90
Method Blank	X980903-MB		76
Batch QC	X9802058-001DUP		93
Batch QC	X9802058-001MS		95

CAS Acceptance Limits: 70-130

Approved By: _____ Date: 9-9-98

SUR1/061197p
X982002C.XLS - SUR1 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: 8/26/98
Date Received: 8/27/98
Date Extracted: 9/3/98
Date Analyzed: 9/4/98

Duplicate Summary
C6 - C32 Hydrocarbons

Sample Name: Batch QC
Lab Code: X9802058-001DUP
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Relative Percent Difference	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	ND	ND	<1	
C10 - C22 DRO	METHOD	8015AZ	30	ND	ND	<1	
C22 - C32 HRO	METHOD	8015AZ	50	ND	ND	<1	

Approved By: JTD Date: 9-9-98

DUP/020597p
X982002C.XLS - DUP 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802002
Date Collected: NA
Date Received: NA
Date Extracted: 9/3/98
Date Analyzed: 9/4/98

Matrix Spike Summary
C6 - C32 Hydrocarbons

Sample Name: Batch QC
Lab Code: X9802058-001MS
Test Notes: #REF!

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	100	ND	95	95	56-166	
C10 - C22 DRO	METHOD	8015AZ	30	150	ND	153	102	52-181	
C22 - C32 HRO	METHOD	8015AZ	50	250	ND	196	78	58-182	

Approved By: JHD Date: 9-9-98

MS/020597p
X982002C.XLS - MS 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: NA
Date Received: NA

Polychlorinated Biphenyls (PCBs)

Sample Name: Method Blank
Lab Code: L980901-MB
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JMD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Polychlorinated Biphenyls (PCBs)

Sample Name: SB-PD-8-5
Lab Code: L9802906-001
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Polychlorinated Biphenyls (PCBs)

Sample Name: SB-PD-9-5
Lab Code: L9802906-006
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Polychlorinated Biphenyls (PCBs)

Sample Name: SB-PD-10-5
Lab Code: L9802906-011
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JAD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
Polychlorinated Biphenyls (PCBs)

Prep Method: EPA 3550
Analysis Method: 8082

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Test Notes	Percent Recovery Tetrachloro-m-xylene
SB-PD-8-5	L9802906-001		119
SB-PD-9-5	L9802906-006		124
SB-PD-10-5	L9802906-011		111
Method Blank	L980901-MB		126
Batch QC	L9802918-001MS		126
Batch QC	L9802918-001DMS		127

CAS Acceptance Limits: 45-140

Approved By: JMD Date: 9-9-98

SUR1/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: NA
Date Received: NA
Date Extracted: 9/1/98
Date Analyzed: 9/3/98

Matrix Spike/Duplicate Matrix Spike Summary
Polychlorinated Biphenyls (PCBs)

Sample Name: Batch QC
Lab Code: L9802918-001MS, L9802918-001DMS
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Aroclor 1260	EPA 3550	8082	0.1	3.00	3.00	ND	3.29	3.51	110	117	62-154	6	

Approved By: JMD Date: 9-9-98

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: NA
Date Received: NA

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: L980827-MB
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/27/98	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/27/98	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: NA
Date Received: NA

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: L980901-MB
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	NA	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	NA	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	NA	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	NA	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	NA	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	NA	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	NA	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	NA	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	NA	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	NA	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	NA	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	NA	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	NA	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	NA	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	NA	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	NA	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	NA	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	NA	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	NA	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	NA	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	NA	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	NA	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	NA	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	NA	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	NA	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	NA	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	NA	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/1/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-8-5
Lab Code: L9802906-001
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/27/98	9/1/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/27/98	9/1/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/27/98	9/1/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/27/98	9/1/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/27/98	9/1/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/27/98	9/1/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
Benzene	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/27/98	9/1/98	ND	
Toluene	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/27/98	9/1/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/27/98	9/1/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/1/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/1/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/1/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-8-30
Lab Code: L9802906-002
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/27/98	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/27/98	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	

Approved By: JM Date: 9-9-98
1S4/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-8-35
Lab Code: L9802906-003
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/27/98	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/27/98	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

000034

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-8-40
Lab Code: L9802906-004
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/27/98	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/27/98	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-8-55
Lab Code: L9802906-005
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/27/98	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/27/98	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-9-5
Lab Code: L9802906-006
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/27/98	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/27/98	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-9-40
Lab Code: L9802906-007
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/27/98	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/27/98	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-9-45
Lab Code: L9802906-008
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/27/98	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/27/98	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/27/98	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/27/98	9/2/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-9-50
Lab Code: L9802906-009
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	NA	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	NA	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Bromoform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	

Approved By: JMD Date: 9-9-98
1S44/021397p

000040

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-9-55
Lab Code: L9802906-010
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	NA	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	NA	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Bromoform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	

Approved By: JKD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-10-5
Lab Code: L9802906-011
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	NA	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	NA	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	NA	9/2/98	63	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	NA	9/2/98	170	
Bromoform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

000042

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Units: ug/Kg (ppb)
Basis: Wet

Sample Name: SB-PD-10-10
Lab Code: L9802906-012
Test Notes:

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	NA	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	NA	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	NA	9/2/98	50	
Total Xylenes	EPA 5030	8021B	100	1	NA	9/2/98	200	
Bromoform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	

Approved By: JD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	ERM-West, Inc.	**Service Request:**	L9802906
Project:	Tucson Passenger Depot (Sale)/8012.23	**Date Collected:**	8/26/98
Sample Matrix:	Soil	**Date Received:**	8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name:	SB-PD-10-15	Units:	ug/Kg (ppb)
Lab Code:	L9802906-013	Basis:	Wet
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	NA	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	NA	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	NA	9/2/98	150	
Bromoform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	

Approved By: JHD Date: 9-9-98

1S44/021397p

000044

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-10-45
Lab Code: L9802906-014
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	NA	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	NA	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	NA	9/2/98	120	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	NA	9/2/98	120	
Bromoform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	

Approved By: HD Date: 9-9-98
1S44/021397p

000045

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: 8/26/98
Date Received: 8/27/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-10-55
Lab Code: L9802906-015
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloromethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Bromomethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Chloroethane	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	NA	9/2/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chloroform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Benzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	NA	9/2/98	ND	
Toluene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	NA	9/2/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	NA	9/2/98	ND	
Bromoform	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	NA	9/2/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	NA	9/2/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
Halogenated and Aromatic Volatile Organic Compounds

Prep Method: EPA 5030
Analysis Method: 8021B

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Test Notes	Percent Recovery 4-Bromochlorobenzene	Percent Recovery Fluorobenzene
SB-PD-8-5	L9802906-001		98	132
SB-PD-8-30	L9802906-002		91	132
SB-PD-8-35	L9802906-003		103	137
SB-PD-8-40	L9802906-004		95	144
SB-PD-8-55	L9802906-005		98	131
SB-PD-9-5	L9802906-006		99	128
SB-PD-9-40	L9802906-007		96	126
SB-PD-9-45	L9802906-008		99	117
SB-PD-9-50	L9802906-009		94	136
SB-PD-9-55	L9802906-010		98	133
SB-PD-10-5	L9802906-011		95	96
SB-PD-10-10	L9802906-012		108	88
SB-PD-10-15	L9802906-013		100	98
SB-PD-10-45	L9802906-014		101	114
SB-PD-10-55	L9802906-015		103	134
Method Blank	L980827-MB		88	130
Method Blank	L980901-MB		102	100
SB-PD-9-50	L9802906-009MS		104	106
SB-PD-9-50	L9802906-009DMS		104	94

CAS Acceptance Limits: 47-147 70-150

Approved By: JM Date: 9-9-98

SUR2/061197p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802906
Date Collected: NA
Date Received: NA
Date Extracted: 8/27/98
Date Analyzed: 9/1/98

Matrix Spike/Duplicate Matrix Spike Summary
Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-9-50
Lab Code: L9802906-009MS, L9802906-009DMS
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
1,1-Dichloroethene	EPA 5030	8021B	50	1000	1000	ND	515	524	52	52	28-167	2	
Trichloroethene (TCE)	EPA 5030	8021B	50	1000	1000	ND	624	580	62	58	35-146	8	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1000	1000	ND	804	792	80	79	26-162	2	
Benzene	EPA 5030	8021B	50	1000	1000	ND	728	635	73	64	39-150	14	
Toluene	EPA 5030	8021B	50	1000	1000	ND	688	649	69	65	46-148	6	
Ethylbenzene	EPA 5030	8021B	50	1000	1000	ND	704	660	70	66	32-160	7	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1000	1000	ND	548	511	55	51	41-138	7	
1,2-Dichloroethane (EDC)	EPA 5030	8021B	50	1000	1000	ND	579	578	58	58	51-147	<1	

Approved By: JM Date: 9-9-98

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	ERM-West, Inc.	**Service Request No.:**	K9805856
Project:	U.P. Tuscon Yard Passenger Depot/8012.23	**Date Received:**	8/27/98
Sample Matrix:	Soil		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for sample(s) designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Matrix/Duplicate Matrix Spike (MS/DMS).

All EPA recommended holding times have been met for analyses in this sample delivery group.

The following difficulties were experienced during analysis of this batch:

The surrogate recoveries for EPA 8310 in samples SB-PD-10-5, SB-PD-10-10, SB-PD-10-15 AND SB-PD-10-45 were not calculated. The samples contained matrix interferences that prevented adequate resolution of the surrogate. The analysis of these samples also required dilutions which resulted in a surrogate concentration below the Method Reporting Limit (MRL). No further corrective action was taken.

Approved by JM **Date** 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805856
Date Collected: 8/26/98
Date Received: 8/27/98
Date Extracted: 8/29/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3550A/8310
Units: mg/Kg (ppm)
Dry Weight Basis

Sample Name:		**SB-PD-8-5**	**SB-PD-9-5**	**SB-PD-10-5**
Lab Code:		K9805856-001	K9805856-002	K9805856-003(B)
Date Analyzed:		9/1/98	9/1/98	9/1/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	<10
Acenaphthylene	0.1	ND	ND	<10
Acenaphthene	0.1	ND	ND	<10
Fluorene	0.02	ND	ND	3
Phenanthrene	0.01	ND	ND	<9
Anthracene	0.01	ND	ND	<1
Fluoranthene	0.02	ND	ND	<2
Pyrene	0.02	ND	ND	<27
Benz(a)anthracene	0.01	ND	ND	<1
Chrysene	0.01	ND	ND	<2
Benzo(b)fluoranthene	0.02	ND	ND	<2
Benzo(k)fluoranthene	0.01	ND	ND	<1
Benzo(a)pyrene	0.01	ND	ND	<1
Dibenz(a,h)anthracene	0.01	ND	ND	<1
Benzo(g,h,i)perylene	0.02	ND	ND	<2
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	<1

B The MRL is elevated because of matrix interferences.

Approved By: JM Date: 9-9-98

3S22/120594
K985856A.XLS - 1-3 9/4/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805856
Date Collected: 8/26/98
Date Received: 8/27/98
Date Extracted: 8/29/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3550A/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-8-30**	**SB-PD-8-35**	**SB-PD-8-40**
	Lab Code:	K9805856-004	K9805856-005	K9805856-006
	Date Analyzed:	9/2/98	9/3/98	9/3/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	ND
Acenaphthylene	0.1	ND	ND	ND
Acenaphthene	0.1	ND	ND	ND
Fluorene	0.02	ND	ND	ND
Phenanthrene	0.01	ND	ND	ND
Anthracene	0.01	ND	ND	ND
Fluoranthene	0.02	ND	ND	ND
Pyrene	0.02	ND	ND	ND
Benz(a)anthracene	0.01	ND	ND	ND
Chrysene	0.01	ND	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND	ND
Benzo(a)pyrene	0.01	ND	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	ND

Approved By: JM Date: 9-9-98

3S22/120594
K985856A.XLS - 4-6 9/4/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805856
Date Collected: 8/26/98
Date Received: 8/27/98
Date Extracted: 8/29/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3550A/8310
Units: mg/Kg (ppm)
Dry Weight Basis

Sample Name:		SB-PD-8-55	SB-PD-9-40	SB-PD-9-45
Lab Code:		K9805856-007	K9805856-008	K9805856-009
Date Analyzed:		9/3/98	9/3/98	9/2/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	ND
Acenaphthylene	0.1	ND	ND	ND
Acenaphthene	0.1	ND	ND	ND
Fluorene	0.02	ND	ND	ND
Phenanthrene	0.01	ND	ND	ND
Anthracene	0.01	ND	ND	ND
Fluoranthene	0.02	ND	ND	ND
Pyrene	0.02	ND	ND	ND
Benz(a)anthracene	0.01	ND	ND	ND
Chrysene	0.01	ND	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND	ND
Benzo(a)pyrene	0.01	ND	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	ND

Approved By: JKD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805856
Date Collected: 8/26/98
Date Received: 8/27/98
Date Extracted: 8/29/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3550A/8310
Units: mg/Kg (ppm)
Dry Weight Basis

Sample Name:		**SB-PD-9-50**	**SB-PD-9-55**	**SB-PD-10-10**
Lab Code:		K9805856-010	K9805856-011	K9805856-012(B)
Date Analyzed:		9/2/98	9/2/98	9/2/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	<10
Acenaphthylene	0.1	ND	ND	<10
Acenaphthene	0.1	ND	ND	<10
Fluorene	0.02	ND	ND	<2
Phenanthrene	0.01	ND	ND	<4
Anthracene	0.01	ND	ND	<1
Fluoranthene	0.02	ND	ND	<2
Pyrene	0.02	ND	ND	<2
Benz(a)anthracene	0.01	ND	ND	<1
Chrysene	0.01	ND	ND	<1
Benzo(b)fluoranthene	0.02	ND	ND	<2
Benzo(k)fluoranthene	0.01	ND	ND	<1
Benzo(a)pyrene	0.01	ND	ND	<1
Dibenz(a,h)anthracene	0.01	ND	ND	<1
Benzo(g,h,i)perylene	0.02	ND	ND	<2
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	<1

B The MRL is elevated because of matrix interferences.

Approved By: JD Date: 9-9-98

3S22/120594
K985856A.XLS - 10-12 9/4/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805856
Date Collected: 8/26/98
Date Received: 8/27/98
Date Extracted: 8/29/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3550A/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-10-15**	**SB-PD-10-45**	**SB-PD-10-55**
	Lab Code:	K9805856-013(B)	K9805856-014(B)	K9805856-015
	Date Analyzed:	9/2/98	9/2-3/98	9/2/98
Analyte	**MRL**			
Naphthalene	0.1	<5	<10	ND
Acenaphthylene	0.1	<5	<10	ND
Acenaphthene	0.1	<5	<10	ND
Fluorene	0.02	<1	4	ND
Phenanthrene	0.01	<2	<18	ND
Anthracene	0.01	<0.5	<1	ND
Fluoranthene	0.02	<1	<2	ND
Pyrene	0.02	<3	<82	ND
Benz(a)anthracene	0.01	<0.5	<1	ND
Chrysene	0.01	<0.5	<3	ND
Benzo(b)fluoranthene	0.02	<1	<2	ND
Benzo(k)fluoranthene	0.01	<0.5	<1	ND
Benzo(a)pyrene	0.01	<0.5	<1	ND
Dibenz(a,h)anthracene	0.01	<0.5	<1	ND
Benzo(g,h,i)perylene	0.02	<1	<2	ND
Indeno(1,2,3-cd)pyrene	0.01	<0.5	<1	ND

B The MRL is elevated because of matrix interferences.

Approved By: JHD Date: 9-9-98

3S22/120594
K985856A.XLS - 13-15 9/4/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805856
Date Collected: NA
Date Received: NA
Date Extracted: 8/29/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3550A/8310
Units: mg/Kg (ppm)
Dry Weight Basis

Sample Name:	**Method Blank**
Lab Code:	K980829-SB
Date Analyzed:	9/1/98

Analyte	**MRL**	
Naphthalene	0.1	ND
Acenaphthylene	0.1	ND
Acenaphthene	0.1	ND
Fluorene	0.02	ND
Phenanthrene	0.01	ND
Anthracene	0.01	ND
Fluoranthene	0.02	ND
Pyrene	0.02	ND
Benz(a)anthracene	0.01	ND
Chrysene	0.01	ND
Benzo(b)fluoranthene	0.02	ND
Benzo(k)fluoranthene	0.01	ND
Benzo(a)pyrene	0.01	ND
Dibenz(a,h)anthracene	0.01	ND
Benzo(g,h,i)perylene	0.02	ND
Indeno(1,2,3-cd)pyrene	0.01	ND

Approved By: MD Date: 9-9-98

3S22/120594
K985856A.XLS - MB 9/4/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805856
Date Collected: 8/26/98
Date Received: 8/27/98
Date Extracted: 8/29/98
Date Analyzed: 9/1-3/98

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons
EPA Methods 3550A/8310

Sample Name	Lab Code	Percent Recovery *p*-Terphenyl
SB-PD-8-5	K9805856-001	64
SB-PD-9-5	K9805856-002	67
SB-PD-10-5	K9805856-003	NA
SB-PD-8-30	K9805856-004	69
SB-PD-8-35	K9805856-005	68
SB-PD-8-40	K9805856-006	72
SB-PD-8-55	K9805856-007	66
SB-PD-9-40	K9805856-008	68
SB-PD-9-45	K9805856-009	68
SB-PD-9-50	K9805856-010	67
SB-PD-9-55	K9805856-011	67
SB-PD-10-10	K9805856-012	NA
SB-PD-10-15	K9805856-013	NA
SB-PD-10-45	K9805856-014	NA
SB-PD-10-55	K9805856-015	66
SB-PD-8-40	K9805856-006MS	67
SB-PD-8-40	K9805856-006DMS	70
Method Blank	K980829-SB	52

CAS Acceptance Limits: 33-110

NA Not Applicable; see case narrative.

Approved By: JID Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805856
Date Collected: 8/26/98
Date Received: 8/27/98
Date Extracted: 8/29/98
Date Analyzed: 9/3/98

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons
EPA Methods 3550A/8310
Units: mg/Kg (ppm)
Dry Weight Basis

Sample Name: SB-PD-8-40
Lab Code: K9805856-006MS, K9805856-006DMS

Analyte	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference
Acenaphthene	0.4	0.4	ND	0.3	0.3	75	75	20-122	<1
Fluoranthene	0.07	0.07	ND	0.06	0.06	86	86	27-140	<1
Benzo(a)pyrene	0.04	0.04	ND	0.02	0.02	50	50	37-116	<1

Approved By: JM Date: 9-9-98

DMS1S/120594
K985856A.XLS - DMS 9/4/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805856
Date Collected: 8/26/98
Date Received: 8/27/98

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
SB-PD-8-5	K9805856-001	8/31/98	86.3	
SB-PD-9-5	K9805856-002	8/31/98	83.9	
SB-PD-10-5	K9805856-003	8/31/98	82.8	
SB-PD-8-30	K9805856-004	8/31/98	85.5	
SB-PD-8-35	K9805856-005	8/31/98	86.4	
SB-PD-8-40	K9805856-006	8/31/98	89.6	
SB-PD-8-55	K9805856-007	8/31/98	87.3	
SB-PD-9-40	K9805856-008	8/31/98	82.7	
SB-PD-9-45	K9805856-009	8/31/98	81.9	
SB-PD-9-50	K9805856-010	8/31/98	91.6	
SB-PD-9-55	K9805856-011	8/31/98	92.7	
SB-PD-10-10	K9805856-012	8/31/98	86.5	
SB-PD-10-15	K9805856-013	8/31/98	88.4	
SB-PD-10-45	K9805856-014	8/31/98	82.9	
SB-PD-10-55	K9805856-015	8/31/98	89.2	

Approved By: JMD Date: 9-9-98

TSOLIDS.XLT_Sample/01071998a

K985856B.XLS - 015 9/4/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: U.P. Tucson Yard Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805856
Date Collected: 8/26/98
Date Received: 8/27/98

Duplicate Summary

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
SB-PD-8-5	K9805856-001DUP	8/31/98	86.3	85.7	86.0	<1	

Approved By: JHD Date: 9-9-98

TSOLIDS.XLT_DUP/01071998a

CHAIN OF CUSTODY RECORD

NO: 1283

ERM West, Inc.

5111 N. Scottsdale Road, Suite 108 • Scottsdale, AZ 85250 • (602) 990-9350 • Fax: (602) 990-0107

Page _____ of _____

PROJECT #	PROJECT NAME
8012 4623	TUCSON PASSENGER DEPOT (SALE)

SAMPLER: (PRINT NAME)	(SIGNATURE)
JAMES ALKERMAN	James Alkerman

RECEIVING LABORATORY

COLUMBIA ANALYTICAL SERVICES
3902 E. UNIVERSITY #D-2
PHOENIX, AZ 85034 (602) 437-2001

REQUESTED PARAMETERS

SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	MATRIX: GAS	TPH 8015A2	VOCs 8021B	PAHs 8310	PCBs 8080							2001
SB-PD-8-5	8-26-98	0805		X	SPLIT SPOON	NONE	Y	2"x6" TUBE	1	X			X	X	X	X							01
SB-PD-8-30		0840		X			Y		1	X			X	X	X								02
SB-PD-8-35		0850		X			Y		1	X			X	X	X								03
SB-PD-8-40		0900		X			Y		1	X			X	X	X								04
SB-PD-8-55		0925		X			Y		1	X			X	X	X								05
SB-PD-9-5		1150		X			Y		1	X			X	X	X	X							06
SB-PD-9-40		1255		X			Y		1	X			X	X	X								07
SB-PD-9-45		1305		X			Y		1	X			X	X	X								08
SB-PD-9-50		1310		X			Y		1	X			X	X	X								09
SB-PD-9-55		1320		X			Y		1	X			X	X	X								10

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
James Alkerman	8-27-98	0645	Leslie May CAS	8/27/98	1115
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME

FIELD REMARKS

X9802002

5 DAY T.A.T.

REMARKS ON SAMPLE RECEIPT

☐ BOTTLE INTACT ☐ CUSTODY SEALS ☐ CHILLED
☐ PRESERVED ☐ SEALS INTACT ☐ SEE REMARKS

ERM REMARKS

SEND REPORT TO:

WHITE - LABORATORY COPY YELLOW - FIELD COPY PINK - DATABASE MANAGER GOLD - PROJECT FILE

CHAIN OF CUSTODY RECORD

ERM West, Inc.

5111 N. Scottsdale Road, Suite 108 • Scottsdale, AZ 85250 • (602) 990-9350 • Fax: (602) 990-0107

NO: 1284

Page _____ of _____

PROJECT #	PROJECT NAME
8012.K6 23	TUSCON PASSENGER DEPOT (SALE)

SAMPLER: (PRINT NAME) JAMES ACKERMAN

(SIGNATURE) James Ackerman

RECEIVING LABORATORY
COLUMBIA ANALYTICAL SERVICES
3102 E. UNIVERSITY #D-2
PHOENIX, AZ 85034 (602) 437-2001

SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	MATRIX: GAS	TPH 8015AZ	VOCs 8021B	PAHs 8310	PCBs 8080							
SB-PD-10-5	8-26-98	1445		X	SPLIT SPOON	NONE	Y	2"x6" BRASS TUBE	1	X			X	X	X	X							200
SB-PD-10-10	↓	1455		X	↓	↓	Y	↓	1	X			X	X	X								1
SB-PD-10-15		1505		X			Y		1	X			X	X	X								1
SB-PD-10-45		1605		X			X		1	X			X	X	X								1
SB-PD-10-55	↓	1625		X	↓	↓	Y	↓	1	X			X	X	X								14
																							15

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
James Ackerman	8-27-98	0845	Leslie May CAS	8/27/98	1115
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME

FIELD REMARKS

5 DAY T.A.T
X980 2002

REMARKS ON SAMPLE RECEIPT

☐ BOTTLE INTACT ☐ CUSTODY SEALS ☐ CHILLED
☐ PRESERVED ☐ SEALS INTACT ☐ SEE REMARKS

ERM REMARKS

SEND REPORT TO:
MANFRED PLUASCHKE

WHITE - LABORATORY COPY CANARY - FIELD COPY

DUPLICATE

Columbia Analytical Services INC.

RECEIVED

SEP 1 ? 1998

ERM-WEST INC.
PHOENIX, AZ.

September 9, 1998

Manfred Plaschke
ERM West
5111 N. Scottsdale Road, Suite 108
Scottsdale, AZ 85250

Re: Tucson Passenger Depot (Sale) / Project #8012.23

Dear Manfred:

Enclosed are the results of the samples submitted to our laboratory on August 28, 1998. The samples were analyzed for PAH 8310 by our Kelso, WA facility (K9805913). The samples were analyzed for 8021 B and 8082 by our Canoga Park facility (L9802918). For your reference, the 8015 AZ analyses have been assigned our service request number X9802024.

All analyses were performed according to our laboratory's quality assurance program. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Columbia Analytical Services, Inc. is certified for environmental analyses by the Arizona Department of Health Services (Certificate #AZ0339; #AZ0136; and #AZ0497).

Please call if you have any questions. My extension is 12.

Respectfully submitted,

Columbia Analytical Services, Inc.

Tracy L Dutton

Tracy L. Dutton
Project Chemist

TLD/lm

3902 East University Drive, Suite D2 ▪ Phoenix, AZ 85034 ▪ (602) 437-2001 ▪ 800-695-7222 ▪ Fax (602) 437-5308

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802024
Date Collected: NA
Date Received: NA

C6 - C32 Hydrocarbons

Sample Name: Method Blank
Lab Code: X980828-MB
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/28/98	9/2/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/28/98	9/2/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/28/98	9/2/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802024
Date Collected: 8/27/98
Date Received: 8/28/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-11-5
Lab Code: X9802024-001
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/28/98	9/2/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/28/98	9/2/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/28/98	9/2/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802024
Date Collected: 8/27/98
Date Received: 8/28/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-11-25
Lab Code: X9802024-002
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/28/98	9/2/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/28/98	9/2/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/28/98	9/2/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JTD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802024
Date Collected: 8/27/98
Date Received: 8/28/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-11-30
Lab Code: X9802024-003
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/28/98	9/2/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/28/98	9/2/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/28/98	9/2/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802024
Date Collected: 8/27/98
Date Received: 8/28/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-11-45
Lab Code: X9802024-004
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/28/98	9/2/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/28/98	9/2/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/28/98	9/2/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802024
Date Collected: 8/27/98
Date Received: 8/28/98

C6 - C32 Hydrocarbons

Sample Name: SB-PD-11-55
Lab Code: X9802024-005
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	1	8/28/98	9/2/98	ND	
C10 - C22 DRO	METHOD	8015AZ	30	1	8/28/98	9/2/98	ND	
C22 - C32 HRO	METHOD	8015AZ	50	1	8/28/98	9/2/98	ND	
Total Petroleum Hydrocarbons	METHOD	8015AZ	100	1	NA	NA	ND	

GRO Gasoline Range Organics
DRO Diesel Range Organics
HRO Heavy Oil Range Organics

Approved By: JHD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802024
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
C6 - C32 Hydrocarbons

Prep Method: METHOD
Analysis Method: 8015AZ

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Test Notes	Percent Recovery *o*-Terphenyl
SB-PD-11-5	X9802024-001		118
SB-PD-11-25	X9802024-002		117
SB-PD-11-30	X9802024-003		104
SB-PD-11-45	X9802024-004		111
SB-PD-11-55	X9802024-005		124
Method Blank	X980828-MB		115
Batch QC	X9802023-006DUP		109
Batch QC	X9802023-006MS		114

CAS Acceptance Limits: 70-130

Approved By: _____ Date: 9-9-98

SUR1/061197p
X9802024.XLS - SUR1 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802024
Date Collected: 8/27/98
Date Received: 8/28/98
Date Extracted: 8/28/98
Date Analyzed: 9/3/98

Duplicate Summary
C6 - C32 Hydrocarbons

Sample Name: Batch QC
Lab Code: X9802023-006DUP
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Relative Percent Difference	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	ND	ND	<1	
C10 - C22 DRO	METHOD	8015AZ	30	ND	ND	<1	
C22 - C32 HRO	METHOD	8015AZ	50	ND	ND	<1	

Approved By: JMD Date: 9-9-98

DUP/020597p
X9802024.XLS - DUP 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM West
Project: Tucson Passenger Depot (Sales)/#8012.23
Sample Matrix: Soil

Service Request: X9802024
Date Collected: NA
Date Received: NA
Date Extracted: 8/28/98
Date Analyzed: 9/3/98

Matrix Spike Summary
C6 - C32 Hydrocarbons

Sample Name: Batch QC
Lab Code: X9802023-006MS
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
C6 - C10 GRO	METHOD	8015AZ	20	100	ND	122	122	56-166	
C10 - C22 DRO	METHOD	8015AZ	30	150	ND	211	140	52-181	
C22 - C32 HRO	METHOD	8015AZ	50	250	ND	316	126	58-182	

Approved By: JD Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802918
Date Collected: NA
Date Received: NA

Polychlorinated Biphenyls (PCBs)

Units: mg/Kg (ppm)
Basis: Wet

Sample Name: Method Blank
Lab Code: L980901-MB
Test Notes:

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JMD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802918
Date Collected: 8/27/98
Date Received: 8/29/98

Polychlorinated Biphenyls (PCBs)

Sample Name: SB-PD-11-5
Lab Code: L9802918-001
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Aroclor 1016	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1221	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1232	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1242	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1248	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1254	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	
Aroclor 1260	EPA 3550	8082	0.1	1	9/1/98	9/3/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802918
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: NA

Surrogate Recovery Summary
Polychlorinated Biphenyls (PCBs)

Prep Method: EPA 3550
Analysis Method: 8082

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Test Notes	Percent Recovery Tetrachloro-m-xylene
SB-PD-11-5	L9802918-001		119
Method Blank	L980901-MB		126
SB-PD-11-5	L9802918-001MS		126
SB-PD-11-5	L9802918-001DMS		127

CAS Acceptance Limits: 45-140

Approved By: JMD Date: 9-9-98

SUR1/020597p

L982918A.XLS - SUR1 9/4/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802918
Date Collected: NA
Date Received: NA
Date Extracted: 9/1/98
Date Analyzed: 9/3/98

Matrix Spike/Duplicate Matrix Spike Summary
Polychlorinated Biphenyls (PCBs)

Sample Name: SB-PD-11-5
Lab Code: L9802918-001MS, L9802918-001DMS
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Aroclor 1260	EPA 3550	8082	0.1	3.00	3.00	ND	3.29	3.51	110	117	62-154	6	

Approved By: JHD Date: 9-9-98

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802918
Date Collected: NA
Date Received: NA

Halogenated and Aromatic Volatile Organic Compounds

Units: ug/Kg (ppb)
Basis: Wet

Sample Name: Method Blank
Lab Code: L980828-MB
Test Notes:

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/28/98	9/3/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Benzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/28/98	9/3/98	ND	
Toluene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802918
Date Collected: 8/27/98
Date Received: 8/29/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-11-5
Lab Code: L9802918-001
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/28/98	9/3/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Benzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/28/98	9/3/98	ND	
Toluene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	

Approved By: JHD Date: 9-9-98
1S44/021397p

000015

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802918
Date Collected: 8/27/98
Date Received: 8/29/98

Halogenated and Aromatic Volatile Organic Compounds

Units: ug/Kg (ppb)
Basis: Wet

Sample Name: SB-PD-11-25
Lab Code: L9802918-002
Test Notes:

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/28/98	9/3/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Benzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/28/98	9/3/98	ND	
Toluene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	

Approved By: JH Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802918
Date Collected: 8/27/98
Date Received: 8/29/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-11-30
Lab Code: L9802918-003
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/28/98	9/3/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Benzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/28/98	9/3/98	ND	
Toluene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	

Approved By: JM Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802918
Date Collected: 8/27/98
Date Received: 8/29/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-11-45
Lab Code: L9802918-004
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/28/98	9/3/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Benzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/28/98	9/3/98	ND	
Toluene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	

Approved By: JH Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802918
Date Collected: 8/27/98
Date Received: 8/29/98

Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-11-55
Lab Code: L9802918-005
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Dichlorodifluoromethane (CFC 12)	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Chloromethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Vinyl Chloride	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Bromomethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Chloroethane	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Trichlorofluoromethane (CFC 11)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Methylene Chloride	EPA 5030	8021B	200	1	8/28/98	9/3/98	ND	
trans-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
cis-1,2-Dichloroethene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1-Dichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Chloroform	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Carbon Tetrachloride	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Benzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,2-Dichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Trichloroethene (TCE)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,2-Dichloropropane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Bromodichloromethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
2-Chloroethyl Vinyl Ether	EPA 5030	8021B	500	1	8/28/98	9/3/98	ND	
Toluene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
trans-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
cis-1,3-Dichloropropene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,2-Trichloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Dibromochloromethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Chlorobenzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Ethylbenzene	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
Total Xylenes	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
Bromoform	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,1,2,2-Tetrachloroethane	EPA 5030	8021B	50	1	8/28/98	9/3/98	ND	
1,3-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
1,4-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	
1,2-Dichlorobenzene	EPA 5030	8021B	100	1	8/28/98	9/3/98	ND	

Approved By: HD Date: 9-9-98
1S44/021397p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	ERM-West, Inc.	**Service Request:**	L9802918
Project:	Tucson Passenger Depot (Sale)/8012.23	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	NA

Surrogate Recovery Summary
Halogenated and Aromatic Volatile Organic Compounds

Prep Method:	EPA 5030	Units:	PERCENT
Analysis Method:	8021B	Basis:	Wet

Sample Name	**Lab Code**	**Test Notes**	**Percent Recovery** 4-Bromochlorobenzene	Fluorobenzene
SB-PD-11-5	L9802918-001		101	123
SB-PD-11-25	L9802918-002		102	134
SB-PD-11-30	L9802918-003		91	132
SB-PD-11-45	L9802918-004		100	133
SB-PD-11-55	L9802918-005		97	110
Method Blank	L980828-MB		102	137
SB-PD-11-30	L9802918-003MS		94	98
SB-PD-11-30	L9802918-003DMS		95	98

CAS Acceptance Limits:	47-147	70-150

Approved By: JD Date: 9-9-98

SUR2/061197p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: L9802918
Date Collected: NA
Date Received: NA
Date Extracted: 8/28/98
Date Analyzed: 9/3/98

Matrix Spike/Duplicate Matrix Spike Summary
Halogenated and Aromatic Volatile Organic Compounds

Sample Name: SB-PD-11-30
Lab Code: L9802918-003MS, L9802918-003DMS
Test Notes:

Units: ug/Kg (ppb)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
1,1-Dichloroethene	EPA 5030	8021B	50	1000	1000	ND	524	489	52	49	28-167	7	
Trichloroethene (TCE)	EPA 5030	8021B	50	1000	1000	ND	628	603	63	60	35-146	5	
Tetrachloroethene (PCE)	EPA 5030	8021B	50	1000	1000	ND	746	648	75	65	26-162	15	
Benzene	EPA 5030	8021B	50	1000	1000	ND	660	639	66	64	39-150	4	
Toluene	EPA 5030	8021B	50	1000	1000	ND	618	617	62	62	46-148	<1	
Ethylbenzene	EPA 5030	8021B	50	1000	1000	ND	645	642	64	64	32-160	<1	
1,1,1-Trichloroethane (TCA)	EPA 5030	8021B	50	1000	1000	ND	531	528	53	53	41-138	<1	
1,2-Dichloroethane (EDC)	EPA 5030	8021B	50	1000	1000	ND	533	539	53	54	51-147	2	

Approved By: JHD Date: 9-9-98

DMS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: K9805913
Date Collected: 8/27/98
Date Received: 8/27/98
Date Extracted: 8/29/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3550/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-11-5**	**SB-PD-11-25**	**SB-PD-11-30**
	Lab Code:	K9805913-001	K9805913-002	K9805913-003
	Date Analyzed:	9/2/98	9/2/98	9/2/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	ND
Acenaphthylene	0.1	ND	ND	ND
Acenaphthene	0.1	ND	ND	ND
Fluorene	0.02	ND	ND	ND
Phenanthrene	0.01	ND	ND	ND
Anthracene	0.01	ND	ND	ND
Fluoranthene	0.02	ND	ND	ND
Pyrene	0.02	ND	ND	ND
Benz(a)anthracene	0.01	ND	ND	ND
Chrysene	0.01	ND	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND	ND
Benzo(a)pyrene	0.01	ND	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	ND

Approved By: JH Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: K9805913
Date Collected: 8/27/98
Date Received: 8/27/98
Date Extracted: 8/29/98

Polynuclear Aromatic Hydrocarbons
EPA Methods 3550/8310
Units: mg/Kg (ppm)
Dry Weight Basis

	Sample Name:	**SB-PD-11-45**	**SB-PD-11-55**	**Method Blank**
	Lab Code:	K9805913-004	K9805913-005	K980829-SB
	Date Analyzed:	9/2/98	9/2/98	9/1/98
Analyte	**MRL**			
Naphthalene	0.1	ND	ND	ND
Acenaphthylene	0.1	ND	ND	ND
Acenaphthene	0.1	ND	ND	ND
Fluorene	0.02	ND	ND	ND
Phenanthrene	0.01	ND	ND	ND
Anthracene	0.01	ND	ND	ND
Fluoranthene	0.02	ND	ND	ND
Pyrene	0.02	ND	ND	ND
Benz(a)anthracene	0.01	ND	ND	ND
Chrysene	0.01	ND	ND	ND
Benzo(b)fluoranthene	0.02	ND	ND	ND
Benzo(k)fluoranthene	0.01	ND	ND	ND
Benzo(a)pyrene	0.01	ND	ND	ND
Dibenz(a,h)anthracene	0.01	ND	ND	ND
Benzo(g,h,i)perylene	0.02	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.01	ND	ND	ND

Approved By: JM Date: 9-9-98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: K9805913
Date Collected: 8/27/98
Date Received: 8/27/98
Date Extracted: 8/29/98
Date Analyzed: 9/1-3/98

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons
EPA Methods 3550/8310

Sample Name	Lab Code	Percent Recovery *p*-Terphenyl
SB-PD-11-5	K9805913-001	62
SB-PD-11-25	K9805913-002	65
SB-PD-11-30	K9805913-003	60
SB-PD-11-45	K9805913-004	62
SB-PD-11-55	K9805913-005	63
Batch QC	K9805856-006	72
Batch QC	K9805856-006MS	67
Batch QC	K9805856-006DMS	70
Method Blank	K980829-SB	52

CAS Acceptance Limits: 33-110

Approved By: JHD Date: 9-9-98

SUR1/120594
K985913A.XLS - SUR1 9/4/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot (Sale)/8012.23
Sample Matrix: Soil

Service Request: K9805913
Date Collected: NA
Date Received: NA
Date Extracted: 8/29/98
Date Analyzed: 9/3/98

Matrix Spike/Duplicate Matrix Spike Summary
Polynuclear Aromatic Hydrocarbons
EPA Methods 3550/8310
Units: mg/Kg (ppm)
Dry Weight Basis

Sample Name: Batch QC
Lab Code: K9805856-006MS, K9805856-006DMS

Analyte	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference
Acenaphthene	0.4	0.4	ND	0.3	0.3	75	75	20-122	<1
Fluoranthene	0.07	0.07	ND	0.06	0.06	86	86	27-140	<1
Benzo(a)pyrene	0.04	0.04	ND	0.02	0.02	50	50	37-116	<1

Approved By: JM Date: 9-9-98

DMS1S/120594
K985913A.XLS - DMS 9/4/98

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805915
Date Collected: 8/27/98
Date Received: 8/28/98

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Result	Result Notes
SB-24-78	K9805915-001	8/31/98	81.3	
SB-24-80	K9805915-002	8/31/98	79.5	

Approved By: JMD Date: 9-9-98

TSOLIDS.XLT_Sample/01071998a

K985915B.XLS - 002 9/9/98

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: ERM-West, Inc.
Project: Tucson Passenger Depot/8012.23
Sample Matrix: Soil

Service Request: K9805915
Date Collected: 8/27/98
Date Received: 8/28/98

Duplicate Summary

Total Solids

Prep Method: NONE
Analysis Method: 160.3M
Test Notes:

Units: PERCENT
Basis: Wet

Sample Name	Lab Code	Date Analyzed	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
SB-24-78	K9805915-001DUP	8/31/98	81.3	79.2	80.3	3	

Approved By: JM Date: 9-9-98

TSOLIDS.XLT_DUP/01071998a

CHAIN OF CUSTODY RECORD

NO: 1470

ERM West, Inc.

5111 N. Scottsdale Road, Suite 108 • Scottsdale, AZ 85250 • (602) 990-9350 • Fax: (602) 990-0107

Page _____ of _____

PROJECT #	PROJECT NAME
8012.23	TUCSON PASSENGER DEPOT (SALE)

SAMPLER: (PRINT NAME)	(SIGNATURE)
JAMES ALKERMAN	James Alkerman

RECEIVING LABORATORY

COLUMBIA ANALYTICAL SERVICES
3102 E. UNIVERSITY #D-2
PHOENIX AZ 85034

REQUESTED PARAMETERS

SAMPLE I.D.	DATE	TIME	COMP	GRAB	SAMPLING METHOD	PRESERVATIVE	ICE (Y/N)	SAMPLING VOLUME	# OF CONTAINERS	MATRIX: SOIL	MATRIX: WATER	MATRIX: GAS	TPH 8015AZ	VOCs 8021B	PAHs 8310	PCBs 8080							2024
SB-PD-11-5	8-27-98	0835		X	SPLIT SPOON	NONE	Y	2"x6" BRASS TUBE	1	X			X	X	X	X							01
SB-PD-11-25	↓	0915		X	↓	↓	Y	↓	1	X			X	X	X								02
SB-PD-11-30	↓	0925		X	↓	↓	Y	↓	1	X			X	X	X								03
SB-PD-11-45	↓	1005		X	↓	↓	Y	↓	1	X			X	X	X								04
SB-PD-11-55	↓	1025		X	↓	↓	Y	↓	1	X			X	X	X								05

RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
James Alkerman	8-28-98	0715	Leslie May CAS	8/28/98	1110
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME
RELINQUISHED BY (SIGNATURE)	DATE	TIME	RECEIVED BY	DATE	TIME

FIELD REMARKS

x980 2024

5 DAY T.A.T.

REMARKS ON SAMPLE RECEIPT

☐ BOTTLE INTACT ☐ CUSTODY SEALS ☐ CHILLED
☐ PRESERVED ☐ SEALS INTACT ☐ SEE REMARKS

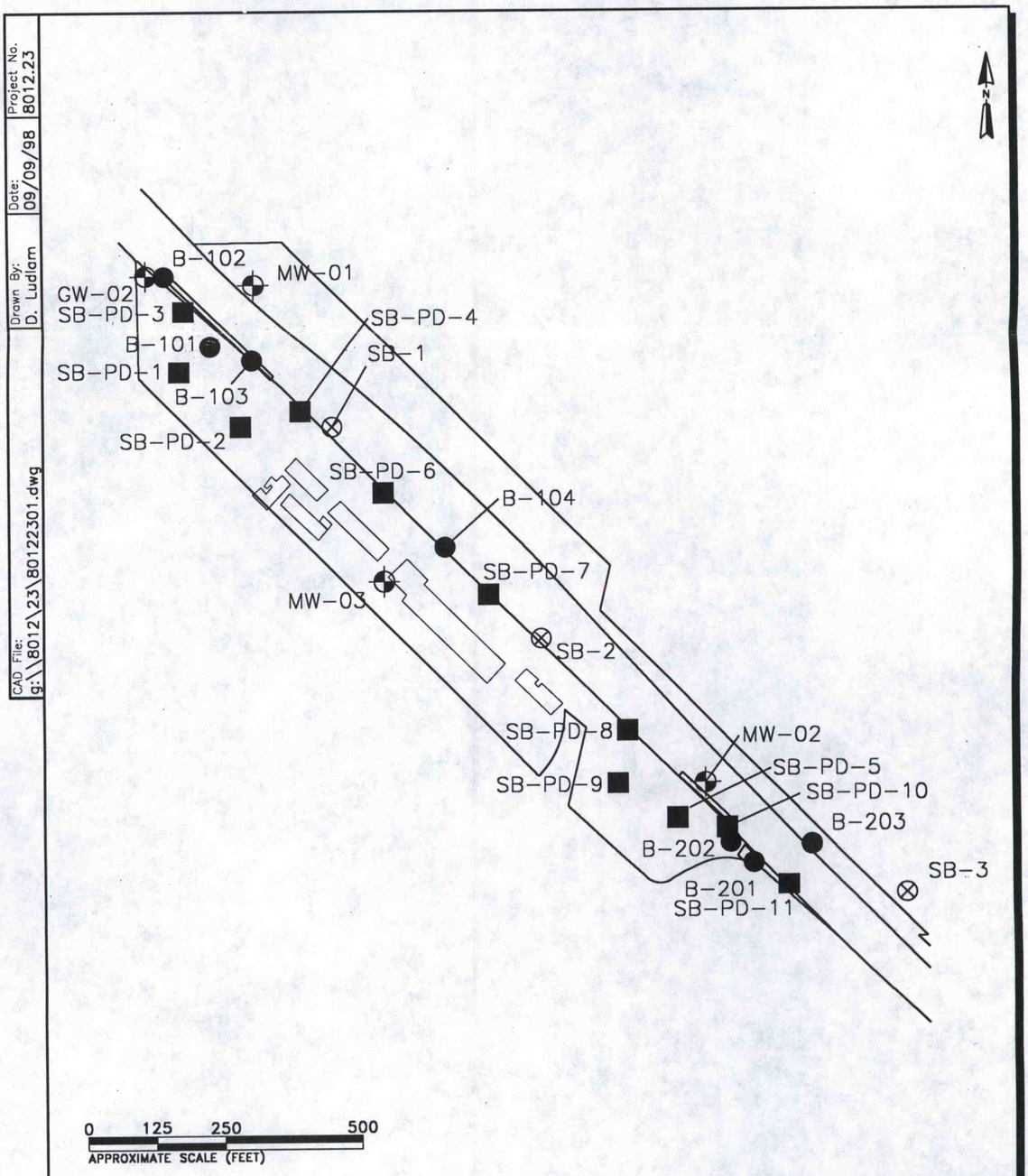
ERM REMARKS

SEND REPORT TO:

MANFRED PLASCHKE

WHITE - LABORATORY COPY CANARY - FIELD COPY PINK - DATABASE MANAGER GOLD - PROJECT FILE

FIGURE 2-1



LEGEND

- ⊗ Hydropunch/Temporary Well Location
- ■ Sale Parcel Soil Boring (11 Total)
- ● Existing Soil Boring
- ⊕ Existing Ground Water Monitoring Well

Figure 2-1

SPTCo Passenger Depot
Proposed Sale Parcel
Soil Boring / Well Locations
Tucson, Arizona

ERM 09/98