### BLAES ENVIRONMENTAL MANAGEMENT, INC.

October 31, 2003

Mr. Robert Westin Alameda County Environmental Health Department 1131 Harbor Bay Parkway Alameda, California 94602 Alameda County

NOV 1 0 2003

Environmental Health

Re:

Well Installation and Groundwater Monitoring Report

19100-19600 Mission Boulevard

Hayward, California

Dear Mr. Westin:

Blaes Environmental Management, Inc. (Blaes Environmental), on behalf of Amerco Real Estate Company /U-Haul International, is submitting the *Well Installation and Groundwater Monitoring Report, 2003* for the above-mentioned facility (the site). If you have any questions please call me at (602) 728-0707.

Sincerely,

Blaes Environmental Management, Inc.

It Modhell

Steven Woodhull Staff Geologist

cc: Reid Riner, U-Haul

### Alameda County

NOV 1 0 2003

# WELL INSTALLATION AND GROUNDWATER MONITORING REPORT

AMERCO REAL ESTATE COMPANY PROPERTY ALAMEDA COUNTY ASSESSOR PARCEL NUMBERS 414-11-4-6 AND 414-11-4-7 19100 – 19600 MISSION BOULEVARD HAYWARD, CALIFORNIA

#### Prepared For:

AMERCO REAL ESTATE COMPANY/U-HAUL INTERNATIONAL 2727 NORTH CENTRAL AVENUE, SUITE 500 PHOENIX, ARIZONA 85004

Prepared By:

BLAES ENVIRONMENTAL MANAGEMENT, INC. 1433 NORTH THIRD AVENUE PHOENIX, ARIZONA 85003

BLAES PROJECT #001-00008-02

OCTOBER 16, 2003

This Well Installation and Groundwater Monitoring Report has been prepared by Blaes Environmental Management, Inc. for the exclusive use of Amerco Real Estate Company/U-Haul International, Inc. (Amerco/U-Haul) as it pertains to the Amerco Property located at 19100-19600 Mission Boulevard in Hayward, California. Our professional services have been performed using that degree of care and skill ordinarily exercised under similar circumstances by other geologists, engineers, and environmental consultants practicing in this field. No other warranty, express or implied, is made as to the professional advice in this report. Any use of or reliance on this report by a third party shall be at such a party's sole risk.

Blaes Environmental Management, Inc. can offer no assurances and assumes no responsibility for site conditions or activities outside the scope of the inquiry requested by Amerco Real Estate Company/U-Haul International, Inc. as outlined in this document. It should be understood by all parties that Blaes Environmental Management, Inc. has relied on the accuracy of documents, oral information, and other materials, services, and information provided by Amerco Real Estate Company/U-Haul International, subcontractors, and other associated parties. Any subsequent modification, revision or verification of this report must be provided in writing by Blaes Environmental Management, Inc.

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Blaes Project #001-00008-02

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#### 1.0 INTRODUCTION

This report documents the procedures and findings of monitoring well installation activities and a groundwater monitoring and sampling event conducted at the Amerco Real Estate Company Property (the site) located at 19100 - 19600 Mission Boulevard in Hayward, California (Figure 1). Blaes Environmental Management, Inc. (Blaes Environmental) conducted the well installation in April 2003 and the groundwater monitoring event in June 2003 at the request and authorization of Amerco Real Estate Company/U-Haul International, Inc. (Amerco/U-Haul). This investigation was conducted in response to the detection of petroleum hydrocarbons initially encountered in the soil and groundwater during an underground storage tank (UST) removal program conducted at the site in 1990. The objective of this investigation was to evaluate the extent and concentration of dissolved-phase petroleum hydrocarbons in the groundwater at the site.

#### 2.0 SITE BACKGROUND

#### 2.1 SITE LOCATION AND DESCRIPTION

The subject property consists of approximately 2.73 acres (comprised of two adjacent properties) located immediately south of State Highway 238 and northeast of Mission Boulevard in Hayward, California. The site is currently an empty lot with no surface cover. Several vacant structures formerly occupied the site; however, all structures have since been removed. The former structures included two multi-story residential buildings, a water tower/pump house, and two single-story commercial buildings. The current site features are shown on the Site Map in Figure 2. The former site features are shown on the Site Map from Pinnacle Environmental's Environmental Site Assessment Report (1998) presented in Appendix A.

#### 2.2 LOCAL HYDROLOGY

The nearest surface water is San Lorenzo Creek, located approximately 0.2 miles south of the site. Based on observations from the installation of MW-1, the depth to groundwater was estimated at approximately 32 feet below the ground surface (bgs) in late 1992. The average depth to water encountered at the site during this investigation was 22.49 feet below the ground surface.

#### 2.3 GENERAL LITHOLOGY OF THE SITE

As identified during well installation activities, subsurface sediments at the site consist predominantly of clays and silty clays to a depth of approximately 34 feet bgs, where an eight foot thick sand unit was encountered. The sand unit was underlain by clay from 42 to 43 feet bgs, where the boring was terminated.

#### 2.4 SUMMARY OF UST REMOVAL AND PREVIOUS GROUNDWATER MONITORING

According to the Geocon Environmental Consultants Preliminary Site Assessment Report (1994), a 550-gallon unleaded gasoline UST and a 280-gallon waste-oil UST were removed from the site on June 5, 1990 by Decon Environmental Services, Inc. (DES). One soil sample was obtained from beneath the center of each tank pit at a depth of approximately one-foot below the bottom of the tank excavation. The analytical test results from the soil sample collected from beneath the gasoline UST for total petroleum hydrocarbons as gasoline (TPHg) indicated no detectable concentrations. Benzene and Toluene concentrations of 4 and 3 parts per billion (ppb), respectively, were detected. The soil sample collected

from beneath the waste oil tank was analyzed for total oil and grease. The analytical test results indicated 51 parts per million (ppm) total oil and grease in the sample.

Additional soil was removed from the tank excavation beneath the location of the former waste oil UST on June 8, 1990. Soil samples were collected from the tank pit at depths of one, two, and three feet below the bottom of the tank pit. Two of the tank pit samples (one and three feet below the excavation bottom) were analyzed for total oil and grease. Oil and grease concentrations in the sample from a depth of one foot were reported to be 140 ppm. Oil and grease concentrations in the soil sample obtained from a depth of three feet were below detectable limits.

Subsequent investigative work at the site was required by the Alameda County Health Care Services Agency (ACHCSA). On November 6, 1992, one well (MW-1) was installed at the site near the former location of the gasoline UST and single dispenser. Soil samples taken at five foot intervals to a total depth of 43 feet for monitoring well MW-1 were analyzed for concentrations of TPHg, total petroleum hydrocarbons as diesel (TPHd) and as motor oil (TPHmo), Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX), and halogenated volatile organics. No detectable concentrations of the constituents listed above were reported. A second monitor well (MW-2) was found by Pinnacle during a site visit conducted in March 1998. No records could be found regarding the installation or construction details of MW-2.

Following installation, a groundwater sample from MW-1 was collected and analyzed for the same constituents as the soil samples. No detectable concentrations of the above listed constituents were reported in the groundwater sample. Groundwater monitoring well MW-1 was sampled again on December 7, 1992. The groundwater sample was analyzed for the same constituents analyzed in the samples obtained during the soil and groundwater investigation. TPHg concentrations of 78 ppb, and Ethylbenzene and Total Xylene concentrations of 1.6 and 6.4 ppb, respectively were reported. Two additional groundwater monitoring events were conducted on March 15, 1993 and June 10, 1993. No detectable concentrations of the above listed constituents were reported in either well (Geocon, 1994)

Pinnacle sampled monitoring wells MW-1 and MW-2 again in March 1998. The samples did not contain concentrations of TPHG, BTEX, or MTBE above detection limits. However, the screened interval of

well MW-1 (33 to 43 feet bgs) was below the measured depth to groundwater (15.91 feet below top of casing), indicating that groundwater may be under confined conditions and that the analytical results may not be representative of TPHG and BTEX concentrations at depth (Pinnacle, 1998).

Blaes Environmental also conducted another groundwater monitoring event at the site on October 21, 1999. The depth to groundwater measured at monitoring wells MW-1 and MW-2 was 23.98 and 24.00 feet below top of casing, respectively. This is approximately eight feet lower than measurements presented in the previous Pinnacle report (1998). Analytical results of groundwater collected from monitoring well MW-1 indicated that the sample did not contain reportable concentrations of petroleum hydrocarbons or fuel oxygenate compounds. Analytical results of groundwater collected from monitoring well MW-2 indicated the presence of TPH-G (290 micrograms per liter  $[\mu g/L]$ ), MTBE (0.6  $\mu g/L$ ), toluene (32  $\mu g/L$ ), ethylbenzene (26  $\mu g/L$ ), and total xylenes (110  $\mu g/L$ ). With exception to MTBE, no other analyzed fuel oxygenate compounds were reported in the groundwater sample from MW-2.

#### 3.0 WELL INSTALLATION AND GROUNDWATER MONITORING ACTIVITIES

Based on the detection of petroleum hydrocarbons in the soil and groundwater following the tank removal program and subsequent periodic groundwater monitoring events, Amerco/U-Haul authorized Blaes Environmental to investigate the extent of petroleum hydrocarbon impacted groundwater at the site. The investigation involved three tasks including: (1) drilling and installing groundwater monitoring wells (MW-3, MW-4, MW-5, MW-6, and MW-7) on the site property; (2) collecting groundwater samples; and (3) analyzing the groundwater samples at a California certified laboratory. This section presents a description of the equipment, procedures, and findings of monitor well installation and subsequent groundwater monitoring activities.

#### 3.1 DRILLING AND WELL INSTALLATION ACTIVITIES

On April 24 and 25, 2003, Blaes Environmental supervised the installation of five groundwater monitoring wells at the site. One monitoring well (MW-3) was installed in the area next to the former UST's and fuel dispenser. Two monitoring wells (MW-2 and MW-4) were installed approximately 30 and 70 feet south of the former UST locations. The remaining two monitoring wells (MW-6 and MW-7) were installed approximately 25 and 70 feet north of the former UST locations. The locations of the monitoring wells are shown on the site map (Figure 2). The following sections describe the subtasks associated with the drilling and well installation program.

#### 3.1.1 Health and Safety Meeting

Prior to initiating field activities, Blaes Environmental conducted a health and safety meeting at the site. Attendees at the meeting included each member of the drilling crew and the Blaes Environmental staff member. During the meeting, the Health and Safety Plan was reviewed and discussed by all personnel. The field program was conducted in strict adherence with the provisions described in the site-specific Health and Safety Plan.

#### 3.1.2 <u>Drilling Activities</u>

On April 24, 2003, a California licensed drilling company drilled five soil borings on the site property using a CME-75 hollow-stem auger drilling rig. Soil boring MW-3 was drilled within the location of

the former fuel USTs and fuel dispenser. Soil borings MW-2 and MW-4 were drilled approximately 30 and 70 feet south of the former UST locations. The remaining two soil borings, MW-6 and MW-7, were drilled approximately 25 and 70 feet north of the former UST locations. Soil borings MW-3, MW-4, MW-5, and MW-7 were each drilled to a depth of approximately 30 feet bgs. Soil boring B-6 was drilled to approximately 42 feet bgs. Subsurface sediments observed from soil borings MW-3, MW-4, MW-5, and MW-7 consist predominantly of clays and silty clays to a depth of approximately 30 feet bgs. Subsurface sediments observed from soil boring MW-6 consist predominantly of clays and silty clays to a depth of approximately 33.5 feet bgs and sand and gravelly sand from 33.5 to 42 feet bgs.

Based on the boring log of MW-1, historic groundwater levels, and the lack of observed groundwater within MW-6 to 33.5 feet bgs, it was suspected that groundwater was under confined conditions within the sand unit observed from approximately 33.5 to 42 feet bgs. As such, MW-6 was screened from 31 to 40 feet bgs. During subsequent drilling activities, it was discovered that groundwater was present above the sand unit at approximately 23 feet bgs. As such, the remaining monitoring wells (MW-3, MW-4, MW-5, and MW-7) were screened from 10 to 30 feet bgs.

#### 3.1.2.1 Soil Sampling

Soil samples were collected from soil borings MW-3 through MW-7 at five-foot depth intervals beginning at a depth of approximately five feet bgs. Blaes Environmental logged the physical characteristics of the soil samples from each soil boring using the Unified Soil Classification System (USCS) in order to evaluate stratigraphy and visually verify the absence or presence of petroleum hydrocarbons. Soil samples were collected using a modified California split-spoon sampler consisting of an outer sampling barrel lined with three 6-inch long brass sample sleeves. Lithologic descriptions from the soil borings are presented in Appendix B.

#### 3.1.2.2 <u>Soil Disposal</u>

Excess soil cuttings generated during the drilling program were containerized in 11 Department of Transportation (DOT) 17H 55-gallon steel drums. The soil drums were labeled and left on-site pending proper treatment/disposal. On September 17, 2003, Integrated Waste Management, Inc. (IWM) removed the soil drums from the site and transported them to Republic Services Vasco Road Landfill in Livermore, California for treatment and disposal. The certificate of disposal is included in Appendix C.

#### 3.1.3 Monitoring Well Installation and Development

Upon completion of each of the five soil borings, each soil boring was converted into a 2-inch diameter Schedule 40 PVC groundwater monitoring well. Monitoring wells MW-3, MW-4, MW-5, and MW-7 consist of 20-feet of slotted well casing (0.020-inch slots) installed from depths of approximately 10-feet to 30-feet bgs. Monitoring well MW-6 consists of nine feet of slotted well casing (0.020-inch slots) installed from a depth of approximately 31-feet to 40-feet bgs. In each monitoring well, blank well casing was installed above the screen interval to the ground surface. A sand pack was placed in the annular space between the slotted well casing and the borehole wall from the bottom of each boring to approximately one foot above the screened interval. A layer of hydrated bentonite was placed in the annular space above the sand pack. The remaining annular space was filled with cement grout to the ground surface. At the ground surface, the monitor wells were capped and enclosed within 12-inch diameter, flush mounted, locking well box, and cemented in place. Due to the lack of an existing well box for MW-2, a 24-inch square locking well box was also installed over the monitoring well. Well construction diagrams are presented in Appendix D.

Following well installation, the two existing monitoring wells (MW-1 and MW-2) as well as the five recently installed monitoring wells (MW-3, MW-4, MW-5, MW-6, and MW-7) were developed. Each well was surged approximately 50 times to allow communication of the well fluids with the surrounding formation fluids. Groundwater monitoring wells MW-1, MW-3, MW-4, MW-5, MW-6, and MW-7 were purged of 20 to 30-gallons of water (until the water was clear of sediment) using a stainless steel bailer. Groundwater monitoring well MW-2 was purged of 55-gallons of water using a stainless steel bailer. A total of 180-gallons of groundwater was purged from the monitoring wells on-site.

Groundwater developed from each well was contained on site in Department of Transportation (DOT) 17H 55-gallon drums pending analytical results and proper recycling or disposal. Each drum was labeled with the site name, address, date, contents (water), and well number. The water generated during development activities was transported to a recycling facility for treatment and disposal with the purged groundwater generated during the scheduled groundwater monitoring and sampling event

#### 3.1.4 Monitor Well Survey

On June 19, 2003, Morrow Surveying, located in West Sacramento, California, conducted a level survey of each of the groundwater monitoring wells at the site. The objective of the survey was to obtain the elevation of the top of the well casing for each well. These measurements together with the groundwater depth measurements within each well were used to calculate the elevation of the groundwater surface body below the site and the resultant groundwater flow direction. The Monitor Well Survey Report is included in Appendix E.

#### 3.2 GROUNDWATER MONITORING AND SAMPLING

On June 3 and 4, 2003, Blaes Environmental returned to the site to conduct a groundwater monitoring and sampling event. A description of each task associated with groundwater monitoring and sampling activities is presented in the following sections.

#### 3.2.1 Groundwater Depth Measurements

Blaes Environmental measured the depth to groundwater in monitoring wells MW-1 through MW-7 to the nearest 0.01-foot using a Heron™ water level meter. The water level meter was decontaminated with an Alconox™ wash and tap water rinse prior to initiating groundwater depth measurements and between each well. Groundwater depth measurements were performed in accordance with industry standards and followed the requirements described in documents ASTM D4448-85a and ASTM D5088-90.

The average depth to groundwater recorded during the June 2003 sampling event was 22.49 feet below the top of individual well casings. The average groundwater hydraulic gradient across the site in June 2003 was 0.0065 feet/foot with a groundwater flow direction to the south (Figure 3). In addition to collecting groundwater level information, Blaes Environmental also collected dissolved oxygen readings from the undisturbed water in the wells. Dissolved oxygen measurements were obtained using a YSI–85 dissolved oxygen probe. A summary of the depth to water and dissolved oxygen measurements recorded by Blaes Environmental is provided in Table 1

#### 3.2.2 Groundwater Sampling

Prior to groundwater sampling, Blaes Environmental purged a minimum of three casing volumes of water from each monitoring well. Blaes Environmental purged each well using a portable, 12-volt.

battery operated whale pump. The pump was decontaminated with an Alconox™ wash and tap water rinse prior to initiating the purging process and between each well. All purged groundwater was stored on-site in properly labeled DOT 17H 55-gallon drums pending analytical results and proper recycling and disposal. A description of the purging process is included in Appendix F. A copy of the field notes is presented as Appendix G.

Following purging activities, groundwater samples were collected from each monitoring well using dedicated disposable bailers. Each groundwater sample was decanted from the bailer into laboratory supplied sample containers. The sample containers were sealed with a teflon lined cap, labeled, and placed on ice in a cooler. A written record of each sample was entered onto a chain-of-custody document for transport to the analytical laboratory.

#### 3.2.3 Purged Groundwater Disposal

On September 17, 2003, Integrated Waste Management, Inc. (IWM) removed the six drums containing purged groundwater/development water from the site and transported them to Seaport Refining and Environmental in Redwood City, California for treatment and disposal. The certificate of disposal is included in Appendix H.

#### 3.3 LABORATORY ANALYSIS

#### 3.3.1 Groundwater Laboratory Analytical Results

Groundwater samples were transported, under proper chain-of-custody record, to Sequoia Analytical for laboratory analysis. Each groundwater sample was analyzed for Gasoline Range Organics (GRO), Benzene, Toluene, Ethyl-benzene, and Total Xylenes (BTEX), and Fuel Oxygenates including tert-Butyl alcohol (TBA), Methyl tert-butyl ether (MTBE), Di-isopropyl ether (DIPE), Ethyl tert-butyl ether (ETBE), tert-Amyl methyl ether (TAME), 1,2 Dichloroethane (1,2 DCA), and 1,2 Dibromoethane (EDB) according to EPA Method 8260B. In addition, monitoring wells MW-1 and MW-3 were analyzed for the full list Volatile Organic Compounds (VOC's) according to EPA Method 8260B as well as Polynuclear Aromatic Compounds (PAC's) according to EPA Method 8310

Laboratory analytical results of the groundwater samples collected from monitoring wells MW-1 through

MW-7 indicated no detectable concentrations of GRO, BTEX, TBA, MTBE, DIPE, ETBE, TAME, 1,2 DCA OR EDB above laboratory reporting limits for the June 2003 groundwater sampling event. Additionally, laboratory analytical results of the groundwater samples collected from monitoring wells MW-1 and MW-3 indicated no detectable concentrations of VOC's or PAC's above laboratory reporting limits. A summary of the groundwater laboratory analytical results is presented in Table 2. Copies of the corresponding June 2003 laboratory analytical reports and chain-of-custody documentation are provided in Appendix H.

#### 4.0 CONCLUSIONS

Including the results of the groundwater Site Characterization Investigation, Blaes Environmental has obtained records of at least six groundwater monitoring events that have been conducted at the site since the two UST's were removed in 1990. According to the records obtained by Blaes Environmental, all analytical results for all monitoring wells sampled from the six groundwater sampling events have been below reporting limits with the exception of monitoring well MW-1 on December 7, 1992 (78 ppb THPg, 1.6 ppb Ethylbenzene, and 6.4 ppb Total Xylenes) and MW-2 on October 21, 1999 (290 TPHg, 32 ppb Toluene, 26 ppb Ethylbenzene, 110 ppb Total Xylenes, and 0.6 ppb MTBE). There is no established California Department of Health Services (CDHS) Maximum Contaminant Level (MCL) established for TPHg, and the above results are below the published MCL's of 150, 300, 1,750, and 5.0 ppb for Toluene, Ethylbenzene, Total Xylenes, and MTBE, respectively. Since all laboratory analytical results are below the respective MCL's, and the most recent groundwater sampling event did not indicate the presence of any hydrocarbon compounds above laboratory reporting limits, it appears that the impact to groundwater at the site from the former UST's does not pose a threat to human health or the environment.

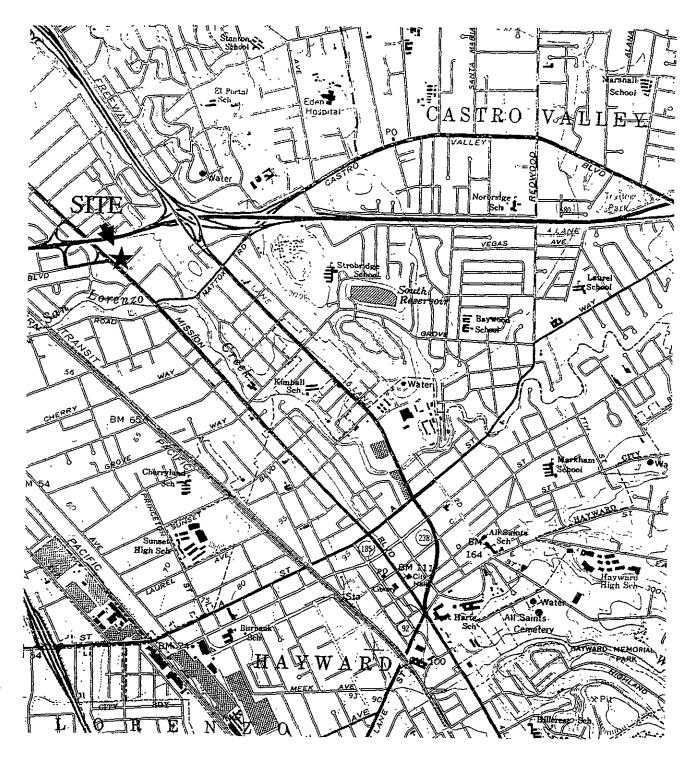
#### 5.0 <u>RECOMMENDATIONS</u>

Blaes Environmental recommends drilling additional soil borings and collecting soil samples at the location of the former waste-oil UST to confirm the presence of oil and grease concentrations of 140 ppm detected in the soil sample collected one foot below the bottom of the over-excavation performed in on June 8, 1990.

#### 6.0 REFERENCES

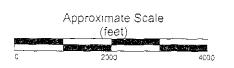
- Blaes Environmental Management, Inc, January 17, 2000, Results of Groundwater Sampling Event Conducted on October 21, 1999, Amerco Real Estate Property located at 19100 19600 Mission Boulevard, Hayward, California.
- Geocon Environmental Consultants, May 10, 1994, Preliminary Site Assessment Report, Amerco Real Estate Property located at 19100 19600 Mission Boulevard, Hayward, California.
- Pinnacle Environmental Technologies, March 18, 1998, Limited Environmental Site Assessment Report, Amerco Real Estate Property located at 19100 19600 Mission Boulevard, Hayward, California.
- U.S. Geological Survey (USGS), Hayward, California Quadrangle, 7.5 Minute Series (topographic): Scale 1:24,000, 1 sheet.

FIGURES



Base Map - USGS 7 5 Minute Quadrangle, Hayward

Reprinted from Pinnacle Environmental's Environmental Site Assessment Report







Amerco Real Estate Company

#### SITE LOCATION MAP

Amerco Property 19100-19600 Mission Blvd. Hayward. California

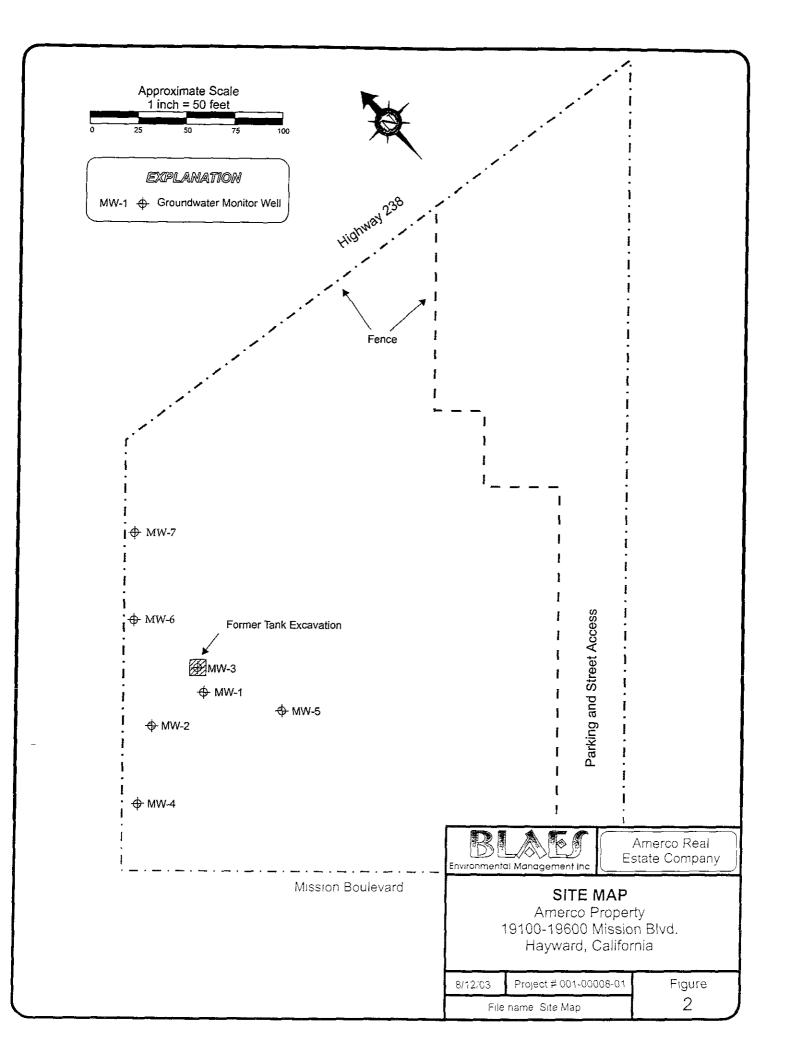
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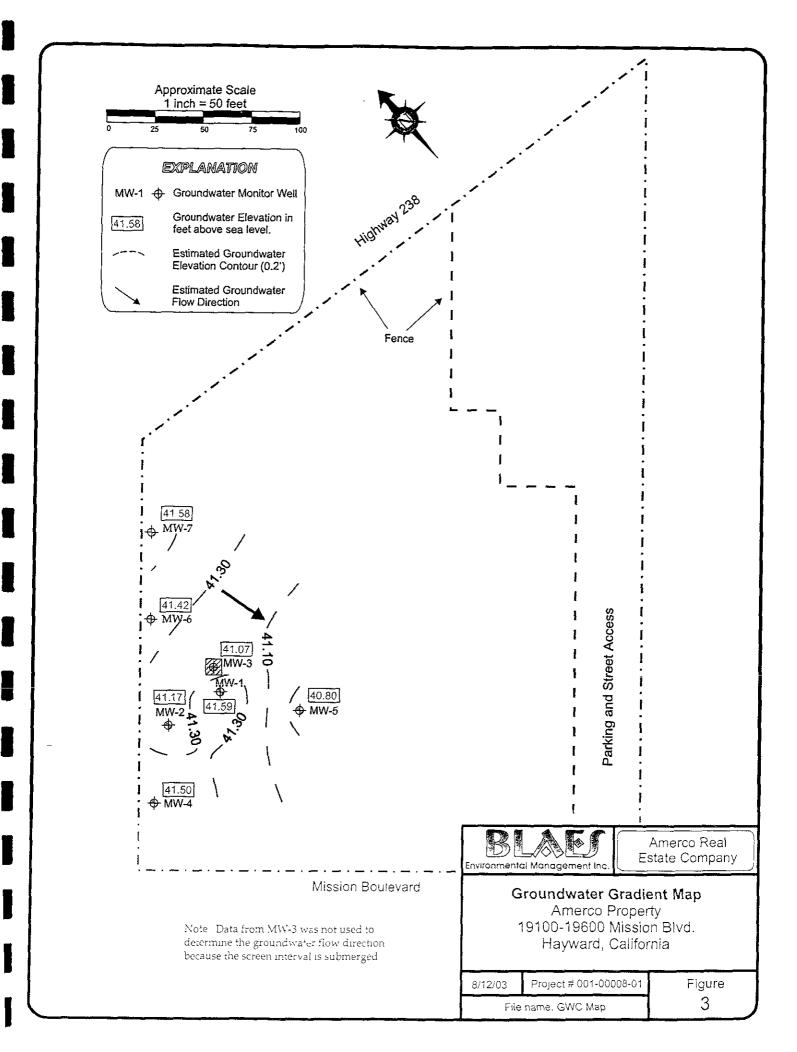
Project # 001-00008-01

Figure

File name. Site Location Map.

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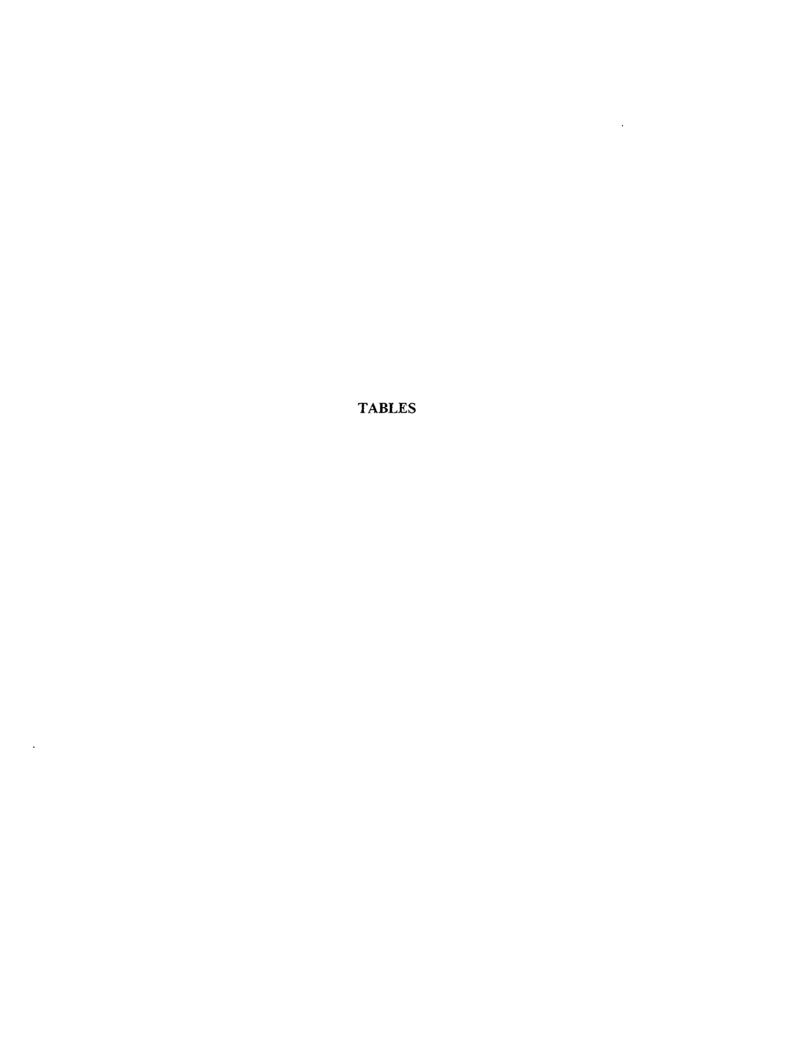


TABLE 1
SUMMARY OF GROUNDWATER MONITORING DATA

Amerco Real Estate Company Property 19100 - 19600 Mission Blvd. Hayward, California

Well	Date	Depth to Water	Groundwater Elevation	D.O.	D.O.	Salinity	Temperature
ID	Date.	(feet)	(feet above MSL)	(%)	(mg/l)	(ppt)	(degree C)
MW-1	10/21/99	23.98	40.23	NA	NA	0.6	19.1
10170	6/3/03	22.62	41.59	24.6	2.26	0.5	19.3
MW-2	10/21/99	24.00	39.72	NA	NA	0.1	18.9
	6/3/03	22.55	41.17	14.0	1.26	0.5	19.7
MW-3	6/3/03	22.65	41.07	27.5	2.53	0.7	19.0
MW-4	6/3/03	22,22	41.50	49.4	4.58	0.4	19.5
MW-5	6/3/03	22,92	40.80	51.6	5.04	0.9	19.4
MW-6	6/3/03	22.30	41.42	40.0	3.71	0.5	18.3
MW-7	6/3/03	22.14	41.58	45.1	4.18	0.4	18.5

Notes D.O. Dissolved Oxygen (YSI 85 D.O. Meter)

NA Not Available

## TABLE 2 SUMMARY OF GROUNDWATER LABORATORY ANALYTICAL RESULTS

Amerco Real Estate Company Property 19100 - 19600 Mission Blvd. Hayward, California

Sample	Date						EPA 82	260B			<del></del> -		EPA 8310
lD di	Date	EPA 8015 Gasoline Range	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	DIPE	ETBE	TAME	MTBE	TBA	Remaining VOC's	PAC's
MW-1	10/21/99	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<5.0	<5.0	<0.5	<50		NA
	6/3/03	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<20	ND	ND
MW-2	10/21/99	290	<0.5	32	26	110	<5.0	<5.0	<5.0	0.6	<50	NA	NA
	6/3/03	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<20	NA	NA
MW-3	6/3/03	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<20	ND	ND
MW-4	6/3/03	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<20	NA	NA
MW-5	6/3/03	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<20	NA	NA
MW-6	6/3/03	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<20	NA	NA
MW-7	6/3/03	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<20	NA	NA

Notes: All results are reported in ug/l (micrograms per liter: parts per billion)

ND: Non Detect, See Laboratory Analytical Report for Detection/Reporting Limits

NA: Not Available

DIPE: Di-isopropyl Ether
ETBE: Ethyl tert-Butyl Ether
TAME: tert-Amyl Methyl Ether

BTEX: Benzene, Toluene, Ethylbenzene, Total Xylenes

MTBE: Methyl tert-butyl Ether

TBA: tert-Butanol

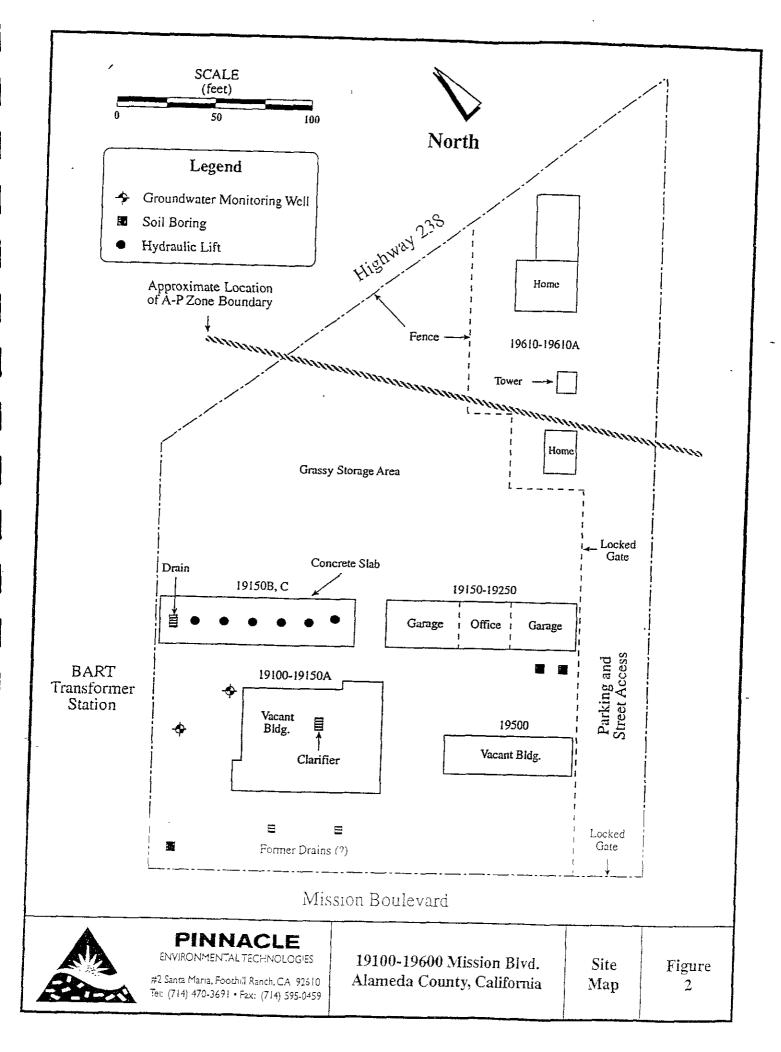
PAC: Polynuclear Aromatic Compounds

Blaes Environmental Management, Inc

#### APPENDIX A

### HISTORIC SITE MAP

(PINNACLE ENVIRONMENTAL)



# APPENDIX B SOIL BORING LOG NOTES

Env Man 1433	LAES ironmental ragement, Ir N. 3rd Avenu enix, AZ 8500	ic. ie			FIELI PLOR BO		RY		-	Project No. COI - GC GC 8-CZ  Client Ufful 767 00  Location 1910 M:570 Bly  Logged By M/G  Permit No Date: 4-23-03 of 1		
Field I	ocation of		1.5 F	BART 614					Drilling Co.: Ca Scade Drill Rig Model: CME - 75 Drilling Method: ILO 110 m 5 ft - Argar Hole Diameter: 8 Drillers Name: TD			
Groun	d Elev.	<sup>½</sup> ⊗	90/	4						Soil Boring Completion: MW-3		
Time	Blows/12 In.	PID (ppm)	Recovery (ft/ft)	Sample I.D.	Depth	Sampled Interval	Well Detail	Soll/Rock Symbol	Graphic Log	Depth to Date 4-23-03 Time 1450  Depth to Date 4-23-03 30  Description		
		-		6						dry, loose. Looks like fill material.		
1420		0.4		5_/· 	5	-				At 7 fact driller hit changement 7-9" clayey Silt, moist, loose.		
1435 	10/12/18	0.72		10	io					8.5-10-Silty lay, Dark Brown, deuse, moist, transity, mod plashing		
(440	8/13/19	0.2		15	15 -					13.5-15 - Silty Clay, Dark Brown, dense, moist, low plasticity.		
(445	243494	ρ. Ι		2.8	20					18.5-20 - Clay, Dack Brown, true Silt; 5/19/14 meist, very deuze, board plusticity.		
1450	26/50/6	0.2		15	- 25					23:5-25 - Clay, Brown, trace 5iH, high platticity, moist, very dense.		
1500	16,39,7%	:=.1		30	30		11.			28.5-30- Clay, Brown, true Silt, Nigh plasticity, moist-wrt, Very dense		
Pr	eparred By:	อักบา/๒)ดูล	BLK plank		Da	te:				Reviewed By: Date:  A/22/2003		

BLAES Environmental Management, Inc. 1433 N. 3rd Avenue Phoenix, AZ 85003	FIELD LOG OF EXPLORATORY SO BORING	Project No. 801-8808-02  Client u Houl 707 00  Location 19100 Mission Alud  Logged By MPG  Permit No. Date: 4/24/03  Boring No.  Boring No.
Field location of boring:	Bart Transi	Drilling Co.: ( ) كَانِّ كَانِّ كَانِّ الْكُلُّ كَانِّ الْكُلِّ كَانِّ الْكُلِّ كَانِّ الْكُلُّلِي كَانِّ الْكُلْلِي كَانِّ الْكُلْلِي كَانِّ الْكُلْلِي كَانِّ الْكُلْلِي كَانِّ الْكُلْلِي كَانِّ الْكُلْلِي كَانِي كَالْكُلْلِي كَانِّ الْكُلْلِي كَانِي كَا
Ground Elev.	40.5 0 MW-4	Soil Boring Completion:
Time Blows/12 in. PID (ppm) Recovery	Sample I.D. Depth Sampled Interval Well Detail	Depth to Date 41/163 23 Depth to Date 41/24/63 Time 0 855 Tome of 40 Description
830 5/7/12 6.2 830 5/7/12 6.2 830 5/7/12 6.2 830 5/7/12 6.2 0855 21/54/6 0.1 0855 23,34,74 0.0 0910 1711, 14 0.1 0920 26,35,79, 0.2 0930 19135, 19 0.1	15 10 10 10 10 10 10 10 10 10 10 10 10 10	0-3- Clay 1 12-4 Brown, moist  mod. plasticity.  3-6- Clayer Silt, moist, dease.  8.5-10- Clayer Silt, moist, dease.  8.5-10- Clayer Silt, moist, dease.  125-15- Silty Clay Brown, mod. plasticity,  dease, moist, No order.  125-15- Silty Clay Brown, dease  185-20- Clay, Dark Brown, dease silt  Slighty moist, very districtly.  20-21.5- Clay, Drown, the Silt, moist, very  same?  13-145- Clay, Brown, the Silt, moist  very dease, high plasticity.  25-16.5- Clay, Brown, trace Silt,  very dease, migh plasticity.  25-28- Bilty Clay, Brown,  tree suc Sand, bour and plasticity.  28.5-30- Clay, Light from  tree suc Silt, moist, dure  med plasticity.

Reviewed By: \_\_\_\_ Date. Preparred By

by BLK,blank Date: 4/22/2003

Env Man 1433	BLAES Environmental Management, Inc. 1433 N. 3rd Avenue Phoenix, AZ 85003  FIELD LOG OF EXPLORATORY SOIL BORING								L	Project No. Client Location Logged By Permit No. Date: 4-24-03 of	No.
Field location of boring:  Bur + Tren										Drilling Co.: Drill Rig Model: Drilling Method: Hole Diameter: Drillers Name:	
Ground	d Elev.	M	w-5	8 15.4	<u> </u>	<del></del>	· · · · · · · · · · · · · · · · · · ·			Soil Boring Completion:  MW - 5	
Time	3lows/12 in.	PID (ppm)	Recovery (ft/ft)	Sample I.D.	Depth	ampled Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Depth to Depth to Date Time Time	
	in i					Samp	≩	S "	ຶ່ນ	DESCRIPTION	
										0-3 = Sevier of asphalt-dirt	
	- <del></del>		   							3-6' - Clayey Sist, loose, moist	
1230.	6-9-14	0.1	-	8.5 - 10.	5					8.5-10 - Filty Clay, Park Brown dense, mist, low platficity.	
					6)					derse, wist, low plakety.	
35	9-11-16	Q , T		13.5-15	15					25-21.5 20-21	_
										21.8-21.5- Chy, Dave Brown trace 5ilt, moist, mod. ph	المحادة
					23					21.5 - 23.0 — Clay , Dave Brown, Maist, high mad. plate trown, dange.	1
275 7	i4 56  i 44 54  17,43,56 5	c. l		20 - 21.5 21.5 - 23 23 - 245						23.6- 14.5 - Clay Dark Brown very de use, high plasticity, most.	-
25	33,50/5	0.2		25-45	25					25.0 - 26.5 - Clay prown, trace Sitt danie, mod-high platfirty, mist set moist	
}-	7-22-37		1-	65-18	-	-				26.5 - 28 Sily Clay, Brown, med playficity, wet, dinge.	
15 2	5,31,39	0.2	-   2	18-30	30					28.5 - 30 - Sitty Clay, Brown, med plastizity, wet, clease,	
				- · · · · · · · · · · · · · · · · · · ·	-   -					,	

Preparred By

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Date:

Reviewed By-

Date:

Envi Man 1433	LAES ironmental agement, Ir N. 3rd Avenu nix, AZ 8500	1C. /e		EXF			RY		-	Project No. 001 - 0000 8 - 02       Boring No.         Client U Haul 707 - 00       Boring No.         Location 19 (00 min) - blul       Sheet 1         Logged By M. G.       Sheet 1         Permit No Date: 4-23 - 03       of 1			
Field le	ocation of			BAR	315			<b></b> -		Drilling Co.: Cascade Dr. 1804 Drill Rig Model: CME-75 Drilling Method: 17016 w Stran Anger Hole Diameter: 8" Drillers Name: 57)			
Ground	i Elev.				17 <sup>'</sup>	& ′ −i	MW -	( 		Soil Boring Completion:  MW - 6			
Time	Blows/12 in.	PID (ppm)	Recovery (ft/ft)	Sample I,D.	Depth	Sampled Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Depth to Depth to Date Time  Depth to Date Date Time  Depth to Date Date Time			
1135	8-17-21 18-23-31	0.2		5° 10° 25°	3 - 4 - 12 - 13 - 14 - 14 - 14 - 14 - 14 - 14 - 14					0-3' Clay, Dark Brown, moist modiate plosticity. No oder  3'-6' Clayofilt, moist, dense.  Hand argued to lofeet.  12-15-8.5-10'-Clay, used plasticity, dense, maist. No oder  13.5-15-5'-Silty Clay, Brown, dense, maist; med. plasticity.  18.5-20'- Clay, Dark Brown, track  Si'lt, slightly moist, very dense.			
115L 1202	15,77,49 28,50/4 18,50/6	<b>0.2 6.1</b> 0,2	3	25 30 40 42	31 - 31 -					23.5 - 25.0 - Clay, brown, trace SiH,  slightly maist, very dease high mad. playboid.  28.5 - 30 - clay ilight Brown, trace  Silt, maist, very dease high playboidy.  33.5 - 35 - Sand, Brown, (f-m grained) trace clay submated, loose.  No playboidy.  28.5 - 40' - Gravelly Sand; Saturated fine gravel, un- a Sand, loose  t2' - Gravelly Sand, saturated fine gravel, un- a Sand, loose.			
	eparred By			<del></del>				!		Pavioused Rus			

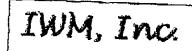
5im c /blaes/admin/blog BLK plank

Reviewed By:

Date:

Env Mar 1433	LAES cironmental pagement, in	1C. /e		EX	FIEL PLOF B		ORY		 L	Project No. Client Location Logged By  Boring No. Sheet
	ocation of		<u>_</u> :					_ 32.	5	Permit NoDate: 4-24-03 ofDrilling Co.: Drill Rig Model: Drilling Method:
Ground Elev.									Hole Diameter: Drillers Name:  Soil Boring Completion:	
Time	Blows/12 in.	PID (ppm)	Recovery (fuft)	Sample 1.D.	Depth	Sampled Interval	Well Detail	Soil/Rock Symbol	Graphic Log	Depth to Depth to Date Time  Description  Depth to Date Date Time
<b>1</b> € 1	9-18-21	0.0		14.5-20	25					6-6 Hand augered Clayer Silt, moist, lows.  8.5-10 Charles, low plasticity No other.  13.5-15- Silty Clay, Dank Brown, west, deale, low plasticity.  18.5-20 Clay, Dark brown, trace Silt, slightly worst, and plasticity, very deape.  23.5-25 Clay, Dark brown, maist, kight plasticity, very deare.  285-30 Silty (lay, Light Brown, wet, low plasticity, deare.
Prep	parred By:				Date					Reviewed By. Date:

# APPENDIX C CERTIFICATE OF DISPOSAL FOR SOIL



INTEGRATED WASTESTREAM MANAGEMENT, INC. 950 AMES AVENUE, MILPITAS, CA 85025 PHONE: 408.942.8955 FAX. 408.942.1499

### CERTIFICATE OF DISPOSAL

I

Address:	U-Haul International 2701 N Central Avenue, Ste. 700	Facility Name. Address:	U-Haul #001
5 4	Phoenix, AZ 85004 Reid L. Riner 602-263-6647	Facility Contact:	Hayward, CA Steven Woodhull, BLAES Environmental 602-728-0707

IWM Job #: \_\_\_\_ 93090-DE Description of Waste: 1) Drum(s) of Non-Hazardous Soil Removal Date: 17 September 2003 Ticket#: \_\_\_\_\_RSVRJ\_170903

Transı	porter Information	Dispos	sal Facility Information
Name: Address:	IWM, Inc. 950 Ames Avenue Milpitas, CA 95035	Name: Address:	Republic Services Vasco Road Landfill 4001 N. Vasco Road
Phone:	(408) 942-8955	Phone:	Livermore, CA 94550 (925) 447-0491

IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

William T DeLon Carellage	
Amhorized Representative (Prof. Name and Signature)	09/17/03
- · · · · · · · · · · · · · · · · · · ·	Date

## APPENDIX D WELL CONSTRUCTION DIAGRAMS

PROJECT NUME PROJECT NAME LOCATION  WELL PERMIT N	Amerco Proper 9100 to 19600 Mission B Hayward, California	lvd.	TOP OF GROUN DATUM	G / WELL NO.  CASING ELEV.  D SURFACE ELEV  LATION DATE	MW-3 64.22 64.54 Mean Sea Lev 4/23/03	el
<del></del>	ffic Rated Vault	E d d e f	EXPLORATION AND TOTAL CONTROL OF TOTAL CASING IN Perforation Perforation Surface Seal many Seal	pth presented  STRUCTION  Sing length  Diameter top of screen Interval on type on size  Completion terial Seal terial	Hollow Stem Au Schedule 40 PVC  20 ft. @ 10- Machine S 0.020 ii concrete gr	30 ft.  2 in.  10 ft.  30 ft.  Slot  nch  1 ft.  rout  5 ft.  rout  2 ft.
Prepared by	a Woodhull		Pack ma Bottom s Seal mat Depth to	ck interval terial eal erial groundwater ound surface	None  None  22  Ital Management, Inc.  Property Mission Blvd	30 ft.

PROJECT NUMBER 001	-0011-01	BORING	G / WELL NO.	MW-4	
<del></del>	co Property		CASING ELEV.	63.76	<del></del>
LOCATION 19100 to 19600 N	Mission Blvd.	GROUN	D SURFACE ELEV	63.97	<del></del>
Hayward, Ca	alifornia	DATUM	,	Mean Sea Lev	el
WELL PERMIT NO. Alameda	Public Works	INSTAL	LATION DATE	4/24/03	
	Public Works	EXPLORAT  a. Total de b. Diamete Drilling r  WELL CON  c. Total cas Material d. Casing I e. Depth to f. Screen I Perforati Perforati Perforati Seal mat i. Seal Seal mat j. Sand Pac Pack ma k. Bottom s Seal mat l. Depth to	TORY BORING  pth  presented on type on size Completion derial Seal derial dek interval terial terial detal detal detal	4/24/03  Hollow Stem Au  Schedule 40 PVC  20 ft. @ 10- Machine S 0.020 in concrete gr bentonite g benton 22 ft. @ 8 to 10-20 sar	30 ft. in. uger  30 ft. 2 in. 10 ft. 30 ft. Slot nch 1 ft. out 5.5 ft. rout 1.5 ft. ite  30 ft. 30 ft.
		ſ	RIAFC -		
— <b>→</b> d <b>→</b> —			BLAES Environmen Well Construc		Appendix
Prepared by S. Woodhull	Date	Aug-03	Amerco I 19100 to 19600 Hayward,	Mission Blvd.	D

Project No. 001-0011-01

File C \b aesifechnical U-Hauli

PROJECT NU	WREP OF	01-0011-01	DODDI		3.6731.6	<del></del>
PROJECT NAI	<del></del>	erco Property	-	G / WELL NO. CASING ELEV.	MW-5 64.50	<del></del>
LOCATION	19100 to 19600	<del></del>	_	OCASING ELEV. ND SURFACE ELEV		<del></del>
	Hayward,		_ OROUI DATUN		Mean Sea Le	·ol
WELL PERMI		la Public Works	_	LLATION DATE	4/24/03	<u> </u>
			- 1110 1211		4/24/03	
	Traffic Rated Vault	g	a. Total do	•		30_ft. 3in.
	þ		Drilling	method	Hollow Stem A	uger
e 			WELL CO	NSTRUCTION		
				sing length		30 ft.
			Materia d Casina		Schedule 40 PVC	
	<b>1</b>		d. Casing			<u>2</u> in.
ı <del>-</del>			-	top of screen		<u>10</u> ft.
ļ			f. Screen		20 ft. @ _10-	
				tion type	Machine	
				ion size	0.020	
			=	Completion		
			Seal ma		concrete g	
			h. Surface			5.5 ft.
			Seal ma	iterial	bentonite o	
		а	i. Seal			1.5 ft.
			Seal ma	terial	bentor	nite
f I			j. Sand Pa	ack interval	22 ft. @ 8 to	30 ft.
	11		Pack ma	aterial .	10-20 sa	nd
1			k. Bottom	seal	<del></del>	0 ft.
			Seal ma	terial	None	<del>'</del>
			l. Depth to	groundwater	<del></del>	 3 11 ft
<b>*</b>	<b>* * * * * * * * * *</b>			ound surface		<del></del>
		•	J			
_	→ d ←			BLAES Environme	ntal Management, Inc.	
				Well Constru	ction Diagram	Append x
Prepared by	S Woodhull	Date	Aug-03	19100 to 1960	Property ) Mission Blyd California	D
- Topaloa by	O Froodings		nug-vo	Project No. 001-0011-01	File Ciblaesitechnical U-	mari,

	001 0011 01			<del></del>	
PROJECT NUMBER PROJECT NAME	001-0011-01	_	WELL NO.	MW-6	<del></del> -
_	Amerco Property to 19600 Mission Blvd.	-	CASING ELEV.	64.50	
<del></del>	ayward, California	- DATUM	O SURFACE ELEV	64.81 Mean Sea Lev	1
<del></del>	<del></del>	_	ATION DATE		rei
		- 11.01710		4/24/03	
e f	g g h	a. Total depth. Diamete Drilling in WELL CON.  c. Total case Material d. Casing Depth to f. Screen In Perforation Perforation Seal material d. Depth to g.	nethod  STRUCTION  ing length  iameter top of screen interval on type on size  Completion erial Seal erial erial erial erial erial erial	4/24/03  Hollow Stem Additional Stem Additiona	42 ft. 3 in. uger  40 ft. 2 in. 31 ft. 40 ft. Slot nch 1 ft. cout 26 ft. rout 2 ft. iite
	₩ + ^ +	_	N. I. S.	·····	
<b>←</b> - d -	<b>→</b> <b>←</b> —	<u> </u>		ntal Management, Inc.	
			Well Construc	ction Diagram	Appendix
Prepared by S Woo	odhull Date	Aug-03	Amerco 19100 to 19600 Hayward,	Mission Blvd	D
			Project No. 001-0011-01	File iC 'blaes technical'U-	าลข1•

PROJECT NUMBER	001-0011-01	BORING	G/WELL NO.	MW-7	
_ <del></del>	Amerco Property	_	CASING ELEV.	63.72	<del></del>
<del></del>	9600 Mission Blvd.		D SURFACE ELEV		<del></del>
Haywa	ard, California	DATUM		Mean Sea Lev	/el
WELL PERMIT NO. Ala	ameda Public Works	<del></del>	LATION DATE	4/24/03	
Traffic Rated Va		a. Total de b. Diamete Drilling de Drilling de Material de Casing le Depth to f. Screen le Perforati Perforati Perforati ge Surface Seal mai. Depth to le perforati de Seal mai. Depth to le perforati de Seal mai.	pth er method  ISTRUCTION  Sing length  Diameter to top of screen interval ion type ion size  Completion terial  Seal terial  terial ck interval iterial iteri	Hollow Stem And Schedule 40 PVC  20 ft. @ 10- Machine Solution of the concrete good benton the good benton 22 ft. @ 8 to 10-20 sate None  22 ft. @ 10-20 sate None	30 ft.  2 in. 10 ft. 30 ft. Slot nch 1 ft. rout 5 ft. grout 2 ft. nite
Prepared by S Woodhu	ull Date	Aug-03		Mission Blvd California File C blaeshechnica' U-	

# APPENDIX E MONITOR WELL SURVEY REPORT

# MW--7 φ-MW-6 ф-MW-3 MW~2 MW 4 -MW-5

SCALE IN FFET

# Monitoring Well Exhibit Prepared for: Blaes Environmental

DESCRIPTION	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV (PVC)	ELEV (BOX)
MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-7	2077093.0 2077100.7 2077104.9 2077073.7 2077054.7 2077139.0 2077161.1	6097636.1 6097585.7 6097641.1 6097571.6 6097656.4 6097634.4 6097653.1	37.6883799 37.6883986 37.6884127 37.6883239 37.6882756 37.6885062 37.6885678	-122.1037315 -122.1039061 -122.1039149 -122.1039535 -122.1036593 -122.1036770	64.21 63.72 64.22 63.76 64.50 63.89 63 72	64.54 64.21 64.54 63.97 64.81 64.25 64.11

BASIS OF COORDINATES AND ELEVATIONS:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING UNIVERSITY OF CALIFORNIA BAY AREA DEFORMATION CORS STATION OBSERVATION FILES AND BASED ON THE CALIFORNIA SPATIAL REFERENCE CENTER DATUM, REFERENCE EPOCH 2000.35.

COORDINATE DATUM IS NAD 83(1986).

DATUM ELLIPSOID IS GRS80.

REFERENCE GEOID IS NGS96.

CORS STATIONS USED WERE TIBB AND DIAB.

VERTICAL DATUM IS ASSUMED NAVD 88 FROM GPS OBSERVATIONS.

U-Haul Property 19100-19600 Mission Blvd. Hayward Alameda County California



1450 Harbor Blvd, Ste. D West Socramento California 45691 (916) 372-8124 tom@morrowsurveying.com Date: 6-19-03 Scale: 1" = 30' Sheet 1 of 1 Revised: Field Book, Mid

Field Book: MW-12 Dwg. No. 0504-001 AZ

#### APPENDIX F

# GROUNDWATER MONITORING AND SAMPLING PROCEDURES

#### GROUNDWATER MONITORING AND SAMPLING PROCEDURES

#### Groundwater Depth Measurements

Groundwater depth measurements were obtained at each groundwater monitoring well using a Heron water level meter. Groundwater depth measurements are recorded from a mark that is typically on the north side of the top of the uncapped PVC monitoring well casing. The groundwater elevation at each well was calculated by subtracting the measured depth to groundwater from the surveyed well head elevation. The well head elevation is established at a designated point on the top of each monitor well casing.

The water level meter is decontaminated prior to arrival on the site and between each groundwater monitoring well measurement. Decontamination procedures include washing the probe with a non-phosphate detergent and tap water followed by rinsing with deionized water.

#### Groundwater Dissolved Oxygen Measurements

Groundwater dissolved oxygen measurements are obtained at each groundwater monitoring well using a YSI-85 dissolved oxygen probe. The probe is decontaminated before and after taking a measurement at a well. Measurements are taken by lowering the probe approximately two to four feet into groundwater. The probe is then slowly raised and lowered through the water within an approximate one-foot interval. The measurement is taken when the reading stabilizes and shows signs of reversal. Several minutes may pass before the measurement stabilizes. The measurement is recorded on the field data sheet along with the depth to groundwater measurements.

#### Groundwater Monitoring Well Purging Procedures

Each groundwater monitoring well is purged using a new disposable Teflon bailer or a Whale In-Line 925, 12-volt D.C. pump. Groundwater purged from each monitor well is temporarily stored in a 55-gallon steel drum pending waste characterization, removal and disposal.

During the purging process in each well, field parameters such as salinity, conductivity, and groundwater temperature are recorded in approximate 4 to 10 gallon intervals. The final stabilized field parameters for each well are recorded on the field data sheets (Appendix G).

#### APPENDIX G

GROUNDWATER MONITORING AND SAMPLING FIELD SHEETS

Well ID		Depth to Product (ft bloc)	Depth to GW (ft btoc)	DO (%)	DO (mg/L)	Cond.	Cond.	Salinity (mS/L)	Temp (deg. C)	Well Diam (inches)	Total Depth (feet)	Calc. Purge Vol. (gal)	Act. Purge Vol. (gal)	Notes
MW-1		· = = ·	22.62	24.6	2.26	983	1101	0.5	19.3	2=	43	10.0		
MW-2	1		22 55	14.6	1.24	833	977	0.5	19.7	<u>ه</u> انا	46	103	10.5	
MW-3			12.65	27.5	2.53	i253	1408	0.7	19,0	2-	30	3.6	5	HHIMMIN
MW-4			12.22	49.4	4.58	747	834	0.4	19.5	2=	30		5	
MW-5	—\		22.92	51.6	5.04	1598	1788	0.9	19.4	2	30	3.8 3.5	5	
MW-6			22 <b>30</b>	40.0	3.71	0.9 m5		0.5	18.3	2.2	40	8.7		
MW-7	1320		22.14	45.1	4.18	755	867	0,4	18.5	2:	30	3,5	10	
		~				875	277	-6						
							<del></del>							
						···				1				
							<del></del>							
											·			<del></del>
				0										
		· ·		-										·
			<del></del> -											
				<del></del>										
Project No	 }	00 00 - 100	8-02 1	Notes:										
Fask No. Client		(454												
Site.		4 Hay 1	الا دوران											
Address Dity, State		Haywar	I, CA											
Dale	´———}	6-3-0												

BLAES Environmental Management, Inc.	7	GROUNDWATER	SAMPLING FO	DRM
Phoenix, Arizona 85003		<del></del>		
602-728-0707	Well No			
Site ID: U Haul Hayward	<b>—</b> Well Lyp	e: 🗷 Manitar	☐ Remedial - \	/E AS
Project No.: 001-0000 - 02	Well Ma	terial: 🗗 PVC	☐ St. Steel	
Recorded By: MPG	Wen Ma	□ Other:		
	WELL F	URGING		
Purge Volume Purge Date:	-3-03	Purge Method		
Casing Diameter (D) in inches:	<u> </u>	Bailer · Type:		
2 Jinch 4 Jinch 6 Jinch Other:		Submersible		Whale
Total Depth of Casing (TD in feet +3		Other:	_	
Water Level Depth (WL in feet BTOC): 22.62	2	Pump Intake S	etting	
Number of Well Volumes (# Vols) to be		Near Bottom	;	ther Mille
🕅 3 🗌 4 🗍 5 🗍 Other:		Depth in feet (BTO		(ile)
Purge Volume Calulation:		Screen interval in l		-
$(43 - 2212) 2^{2}$	2			
$\left(\begin{array}{c} 43 \\ TD \text{ (feet)} \end{array}\right) - \frac{2262}{WL} \times \frac{2^2}{D \text{ (inches)}}$	x	-X 0.0409 = _	10.0	gallons
) U(inches)	# Vols	Cald	ulated Purge Volume	- ! 
Pump Time	Purge Rat		ctual Purge Vo	lume
Start 1430 Stop: 1440 Time 10 mi	↑ Initial	<u> </u>	~ 10.	gallons
ield Parameter Measurements	Final		<del> </del>	
Time Time Lapsed Gallons Cond. Purged (umhos/o		Salinity   Tem	P · A ~ ~	Notes Do
1437 2mm 2 105	,	· · · · · · · · · · · · · · · · · · ·	_ ! \(\nu \) \(\mu_{\sigma} \)	1 Do my/h
1,013	49. (	0.6 9.1	~	1221
1436 6min 6 103			9 25.6	2.37
1438 8min 8 103		<del></del>	0 25.4	12.34
1440 110min: 10.5 1030	<del></del>		9 25.4	2.35
10.5	1167	0.6 18.	9 25.4	2.35
		<del>  </del>		
oservations During Purging (well Condition, Turbidity	Color Odor	1	2.44	1
o o o o o o o o o o o o o o o o o o o	, 00101, 0001,	very cla	t Ne r	dor.
urge Water Storage/Disposal: Drum(s), Number;		Storm Savor	Sanitary Sewer	<del></del>
Other / Comments:			J Samuary Sewer	
	WELL SAN	IPLING		
ampled By: MQC Samp	oling Date:	6-4-03	Sampling Ti	ime: 0930
ampling Method Water	Level Before Sar	— mpling (in feet BTCC	)· —	
Bailer Type _ Hand	☐ Same	as Above		
Supmersible Whale	<del></del>	Туре		
Otner	Gtner	· yce		
impling Distribution Sample Series			- <del>-</del>	
	Analysis	Preservative	Lap	Comments
Sample No Containers, Vol., =	, (iii 4 ) 212			
Mw-1 3 voas	1015,8260		Seguaia	
			Segraia	

BLAES Environmental Management, Inc. 1433 North Third Avenue	GROUNDWATER SAMPLING FORM
Phoenix Arizona 85003	Well No.: Mw - 2
Site ID: U Hawl Hayward	Well Type: ♥ Monitor □ Remedial · VE AS
Project No.: <u>001-6623</u> § - 22	Other:
Recorded By: up6	Well Material: Ø PVC ☐ St. Steel ☐ Other:
1	WELL PURGING
Purge Volume Purge Date: / -	- 3-03 Purge Method
Casing Diameter (D) in inches:  2-inch  4-inch  6-inch  Other:	Bailer - Type:  Submersible Submersible Whate
Total Depth of Casing (TD in feet 46	Other:
Water Level Depth (WL in feet BTOC): 22.5	
Number of Well Volumes (# Vols) to be	There Bar Day 5 Trans Middle
X 3	☐ Near Bottom ☐ Near Top ☐ Other: M; Adle  Depth in feet (BTOC): 3
Purge Volume Calulation	
•	Screen Interval in Feet (BTOC):
$\left(\frac{46}{TD \text{ (feet)}} - \frac{22.55}{WL}\right) \times \frac{6^2}{D \text{ (inches)}}$	$X = \frac{3}{\text{# Vols}} \times 0.0409 = \frac{104}{\text{Calculated Purge Volume}} \text{gallons}$
Pump Time	Purge Rate Actual Purge Volume
Start 1516 Stop: 1650 Time 94	Initial
ield Parameter Measurements	Final gpm
Time Time Lapsed Gallons Cond. 1 Purged (umhos/cm  1614 58 min 50 927  1619 63 min 60 910  1633 77 min 80 910  1645 89 min 90 911  1645 89 min 90 911  1650 94 min 105 907  bservations During Purging (well Condition, Turbidity, urge Water Storage/Disposal: *** Drum(s), Number:	1032 0.5 20.0 17.5 1.58  1025 0.5 19.2 16.7 1.52  1021 0.5 19.4 17.4 1.58  1028 0.5 19.0 17.2 1.58  1027 0.5 19.2 17.0 1.56  1025 0.5 18.9 18.2 1.66  1023 0.5 19.1 16.9 1.56  Color, Odor, Uly cler, we ober
Other / Comments:	
ampled Rus 1, bC	WELL SAMPLING
	ing Date: 6-4-03 Sampling Time: 0950
Α.	evel Before Sampling (in feet BTOC)
Bailer Type: Hand	Same as Above
Submersible	Grab Type
ampling Distribution Sample Series:	
Sample No Containers, Vol. =	Applying
$M\omega$ - 2 3 $UQ$	Analysis Preservative Lab Comments 845,8260 He i Segucia
NAGO CEU	845,8260 He i Segucia
ner Notas	

1433 North Third Avenue Phoenix, Arizona 85003 602-728-0707		
	Well No.: MW-	3
	Well Type: & Monitor	
Site ID: U How I Hayward	☐ Other:	
Project No.: 001 - 00008 - 02	Well Material: RT PVC	
Recorded By:	☐ Other	
	WELL PURGING	
Purge Volume Purge Date: 6	3-03 Purge Method	
Casing Diameter (D) in inches:	☐ Bailer · Type:	
2-inch 4-inch 6-inch Other:	Submersible	Submersible Whale
Total Depth of Casing (TD in feet 30	Other:	
Water Level Depth (WL in feet BTOC): 22.65	Pump Intake :	Setting
Number of Well Volumes (# Vols) to be	<del></del>	Near Top Other:
☑ 3 ☐ 4 ☐ 5 ☐ Other:	Depth in feet (BT(	DC): 28
Purge Volume Calulation:	Screen Interval in	<del></del>
( 30 - 2215) 2		
$\left(\frac{30}{\text{TD (feet)}} - \frac{22.65}{\text{WL}}\right) \times \frac{2}{\text{D (inches)}} \times$	$\times - \times \times$	3.61 gallons
	- <del>-</del>	Iculated Purge Volume
Pump Time	Purge Rate	Actual Purge Volume
Start 1411 Stop: 1417 Time 6-41-		5 gallons
Field Parameter Measurements	Final 1.1 gpm	
Time Time Lapsed Gallons Cond 1	Cond 2   Salinity   Te	
Purged (umhos/cm)	(unmos/cm)	np. Do 70 Notes Do my/L
17/3 2212 1.5 1268	1431 0.7 19	2 26.6 2.44
1414 Juin 3.0, 179	1335 0.7 18.	9 28.5 2.63
1415 4 min 4.0 1131	1284 6.6 13	3.9 28 6 2.64
1717 6un 5.0 1118	1266 0.6 18	
bservations During Purging (well Condition, Turbidity, (	Color, Odor. Very	lear, no oder.
,		1 1000
Users Water Character / Discourt Follows		
urge Water Storage/Disposal: Drum(s), Number:	Storm Sewer	Sanitary Sewer
Other / Comments:	WELL SAMPLING	
ampled By: MPG Sampl	ing Date: 6-4-03	Sampling Time: 0915
<del></del>	evel Berore Sampling (in feet BTC	
Saller-Type Hand		~/
Submersible Whate	Same as Above	
Other.	Grab Type	
ampling Distribution Sample Series	Ctner - Type:	
Sample No Containers, Vo. #	Analysis Preservative	120
Mw-3 3 Voel	805 8760 He i	Lab Comments
		, )eque ia
Mw-3 2 tlitr	8310 -	

BLAES Environmental Management, Inc. 1433 North Third Avenue	GROUNDWATER SAMPLING FORM
Phoenix, Arizona 85003 602-728-0707	Well No.: MW-4
Site ID: U Havi Hayword	Well Type: Monitor 🗆 Remedial - VE AS
Project No. 801 - 600 8 - 62	Other:
Recorded By: MIG	Well Material: PVC
	□ Other:
Burgo Volume	WELL PURGING
	- 3-03 Purge Method
Casing Diameter (D) in inches:  2-inch	Bailer - Type:
Total Depth of Casing (TD in feet 30	Submersible Submersible Whale Other:
Water Level Depth (WL in feet BTOC): 22, 22	Pump Intake Setting
Number of Weil Volumes (# Vols) to be	Near Bottom Near Top Other:
<b>⊠</b> (3	Depth in feet (BTOC): 28
Purge Volume Calulation:	Screen Interval in Feet (BTOC):
$(30 - 311) \qquad 2^{2}$	to
$\frac{\begin{array}{ccccccccccccccccccccccccccccccccccc$	# Vols X 0.0409 = 3.8 gallons
	Purge Rate   Calculated Purge Volume   Actual Purge Volume
+4/11 (447	
	- 1
iola i diameter measurements	Final gpm
Time Time Lapsed Gallons Cond. 1 Purged (umhos/cm)	Cond 2   Salinity Temp. Do 90   Donores
1243 2 15 771	844 0.4 20,5, 55.8 4.96
1244 1 3 min 3.0 1640	710 0.3 19.9 48.7 4.41
1276 5 min 4.0 580	647 0-3 19.6 49.0 4.42
1277 6-11 5.0 555	618 6.3 19.7 40.7 3.71
	olor, Odor, Slightly typical, no odor,
Cleared up during purging	
rge Water Storage/Disposal: Drum(s), Number:	Storm Sewer Sanitary Sewer
Other / Comments:	
	NELL SAMPLING g Date: しーサー 0.3   Sampling Time: 0.32 の
<del></del>	el Before Sampling (in feet BTOC).
Sailer Type Hand	Same as Above
Submersible 🔲 Whale Other	<b>₭</b> Grab - Type
mpling Distribution Sample Series.	Ctner · Type
oambie der es,	Analysis Preservative Lab Comments
Sample No Containers, Vol., =	Analysis Preservative Lab Comments

BLAES Environmental Management, Inc. 1433 North Third Avenue	GROUNDWATER SAMPLING FORM
Phoenic, Arizona 85003 602-723-0707	Well No.: MW-5
	Well Type: ★ Monitor □ Remedial - VE AS
Site ID: U Haal Hayward	□ Other:
Project No.: 601- 20028-62	Well Material: ≥ PVC □ St. Steel
Recorded By: MPG	Other:
	WELL PURGING
Purge Volume Purge Date:	
Casing Diameter (D) in inches:	Bailer · Type:
2-inch  4-inch  6-inch  Other:	Submersible Submersible Whate
Total Depth of Casing (TD in feet 30	□ Other
	92 Pump Intake Setting
Number of Well Volumes (# Vols) to be	
☑ 3 ☐ 4 ☐ 5 ☐ Other:	Near Bottom Near Top Other:
Purge Volume Calulation:	
	Screen Interval in Feet (BTOC):
$\frac{70}{22.12} = \frac{22.12}{2}$	$\begin{array}{c} 2 \\ - X \xrightarrow{\text{\# Vols}} X  0.0409 = \underbrace{3.5}_{\text{Calculated Purge Volume}} \text{ gallons} \end{array}$
TD (feet) WL X D (inches)	- X X 0.0409 = gallons Calculated Purge Volume
Pump Time	Purge Rate Actual Purge Volume
tart 1304 Stop: 1710 Time 6	
ield Parameter Measurements	Finalgpm
Time Time Lapsed Gallons ( Cond.	.1 Cond. 2 Co
Purged (umhos/	/cm) (umhos/cm) Salinity Temp DO % Notes Down IL
1306 2 min 1.5 1664	4 1835 0.4 20.1 54.8 4.99
1208 : 4min 3.0 , 1532	2 1712 0.9 119.4 56.4 5.13
1909 5 m. 4,0: 147	
1310 Comin 5.0 1444	
servations During Purging (well Condition, Turbidit	ty Color Oper Shill Lambil
as oder.	ty, Color, Odor, slightly furbid, cloved up
rge Water Storage/Disposal: 🛣 Drum(s), Number: Other / Comments:	: Storm Sewer Sanitary Sewer
outer / comments.	WELL SAMPLING
mpled By: MPG Sam	ipling Date: 6-4-03 Sampling Time: 0 835
	er Level Before Sampling (in reet BTCC)
Baler Type Hand	
Supmersible Whate	Same as Acove
Other: Whate	Grab - Type  Cther - Type
mpling Distribution Sample Sanes	
OZINDO OZINGS	
Sample No Containers, Vo; =	oot mette
	8015,8260 HC Sepucia
mw-5 3 vsas	To see the see that the see tha
M6/3 9 (84)	

BLAES Env	vironmental Manager	ment, Inc.		GROUNDWA	TER SA	MPLING FORI	M
Phoenix, Arizona 602-728-0707			Well No	) <b>.:</b>	Mw - 1	· c	<del></del>
			1			Remedial - VE	A.C.
Site ID:		Hayward	_	□ Other		remediar - VL	AS
	001- 60		Well Ma	terial: 🔊 P		St. Steel	
Recorded By	r:v	u pG		•	ther:		
			WELL F	URGING			
Purge Volu		Purge Date:	6-3-03	Purge Me	thod		
	ter (D) in inches:			Bailer - T	/pe:		
	4-inch				/	Submersible Wha	ile
	Casing (TD in fee	et <u>+0</u> 3TOC): 22-3		U Other:			
T .	II Volumes (# Voi			Pump Inta	ke Setti	ng	
		:		🛭 Near Botte	om 🗌 Ne	ar Top 🔲 Other	r:
		·		Depth in feet			
Purge Volume				Screen Interv			
40	_ 22.3	2 کا	3			to	<del></del>
TD (feet)	WL.	$\left(\frac{1}{2}\right) \times \frac{2}{0 \text{ (inches)}}$	# Vols	- X 0.0409	) = <u>8</u>	gal	ions
Pump Time	<del></del>		Purge Rat				
	Stop: 1754 Ti				Actua	al Purge Volu	me
Start <u>I / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / </u>	Stop: [ ] ] [ ]	me <u>17 4</u>	Initial			<u>~/0</u>	gallons
Field Param	eter Measure	ements	Final	gpm			
Time	Time Lapsed	Gallons , Cond.	1 Cond 2				f
		Purged (umhos/	وأأراب السوارة	<del>-</del>	Temp.	100 12	Notes Do my/L
1348	2min	_293	1049	105	19.3	29.3	2.69
	Hair.	4 9/2		c.5	15.9	30 2	2.79
1352	6 min	6 918	1038	2.5	19.5	29.6	2.70
	19 min	8 912	1028	6.5	19.3	29.4	2.70
<u> 1359                                     </u>	13 min !	10 913	1037	0.5	19.2	29. ن	2.68
						<del></del>	
bservations Dur	ring Purging (wei	l Condition, Turbidit	y Color Odor	Λ.	ods	slightly	<u> </u>
		, containing furbiant	y, Color, Odor,		0000	- Signay	Turbia.
urge Water Sto	rage/Disposal:	Drum(s), Number		34.4.4.4. C.			
	Other / Comm	nents:	<u> </u>	oronn gewer	[ ] Sai	nitary Sewer	
			WELL SAN	IPLING			
ampled By:	MAG	Sam	pling Date:	6-4-03	[S	Sampling Tim	e: 0855
ampling Me	thod	Water	Level Before Sa	mpling (in feet	втос)		
Bailer - Type' _	Hand		∏ Same	as Above			
Submersicle				- Туре			
Other	<del></del>		Cther	• Typs			
ampling Dis	tribution .	Sample Series					
Sample <sup>h</sup>	Vc	Containers, Vol., #	Analysis	, Preserva		Lap	Comments
MW-6		3 100)	8015.8260		- !	Sequeia	QO OII CITE
					!		
			1				
ner Notes,							

Well No.:   M.W.   7   Well Type:   School   S	BLAES Environmental Management, Inc.	G	ROUNDW	ATER SAI	MPLING FOR	M
Site ID: UHaul Hayuw    Well Type: & Monitor   Remedial - VE AS						<del></del>
Other:   Other:   Well Material:   & PVC   St. Steel   Other:	602-728-0707				<del></del>	<del></del>
Well Material:	Site ID: U Haut Hayward	■ weirrype:			Remedial · VE	AS
WELL PURGING	Project No.: 001-00008-02	Well Mate			St. Stant	<del></del>
WELL PURGING	Recorded By: IN PG	West Mate				
Casing Diameter (D) in Inches:		WELL PL				
Casing Diameter (D) in inches:	Purge Volume Purge Date: (	-3-03	Purge Me	thod	<del></del>	
Total Depth of Casing (TD in feet Water Level Depth (W. In feet BTOC):	Casing Diameter (D) in inches:		Bailer - T	ype:	Cub man fet 140	-1-
Water Level Depth (WL in feet BTOC):   22.14     Pump InTake Setting		_				aie
Number of Well Volumes (# Vols) to be		_				
Sampling Method   Sampling Date:   Sampling Date:   Sampling Method   Sampling Method   Sampling Method   Sampling Method   Sampling Method   Sampling Method   Sampling Date:		_			_•	
Purge Volume Calulation:    Screen Interval in Feet (BTCC):		2	Near Bott	om 🗌 Nea	ar Top 🔲 Othe	r:
12.17						
Pump Time Start 122 Stop: 1231 Time Start 123 Start 1231 Time Start 12					<del></del>	<del></del>
Pump Time Start 122 Stop: 1231 Time Start 123 Start 1231 Time Start 12	$\left(\frac{30}{\text{TD (leet)}} - \frac{22.14}{\text{WL}}\right) \times \frac{2}{\text{D (inches)}}$	XX	X 0.040	9 =	3.9 to _	<del></del>
Start 1325 Stop: 1331 Time						
Field Parameter Measurements  Final	<del></del>			Actua	il Purge volu	<del></del>
Time Time Lapsed   Gallons   Cond 1   Cond.2   Salinity   Temp   Dc 9   Notes   Do 7   L   132.7   Zm:n   1.5   774   879   C.4   18.8   58.3   5.66   13.28   3.47   3.0   756   564   0.4   18.5   44.5   4.12   13.29   4.4   4.0   6.96   79.7   0.4   18.4   39.3   3.67   13.91   6m:n   5.0   6.53   744   0.4   18.5   39.1   3.65	<u> </u>					gallons
1327   2 m. n   1.5   774   8.79   0.4   18.8   98.3   5.66     1328   3 n   3.0   756   564   0.4   18.5   44.5   4.12     1329   4 n   4.0   6.96   79.7   0.4   18.4   39.3   3.67     1331   6 m   5.0   6.5   744   0.4   18.5   39.1   3.65     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5   39.1   3.65     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5   39.1   3.65     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5   39.1   3.65     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5   39.1   3.65     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5   39.1   3.65     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5   39.1   3.65     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5   39.1   3.65     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5   44.5   4.12     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5   44.5     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5     bservations During Purging (well Condition, Turbidity, Color, Odor, Shirld   4.06   18.5     bserv	Field Parameter Measurements	Final	gpm			
13.28	Purged (umhos/cn		Salinity	Temp	Do 70	Notes Do - 1
1328   3 30   756   564   0.4   18.5   44.5   4.12     1329   4 4.0   690   797   0.4   18.4   39.3   3.67     1331   16m - 5.0   653   744   5.4   18.5   39.1   3.65     bservations During Purging (well Condition, Turbidity, Color, Odor, Slightly function of the servations During Purging (well Condition, Turbidity, Color, Odor, Slightly function of the servations During Purging (well Condition, Turbidity, Color, Odor, Slightly function of the servations During Purging (well Condition, Turbidity, Color, Odor, Slightly function of the servations During Purging (well Condition, Turbidity, Color, Odor, Slightly function)   Storm Sewer	1327 2 min 1.5 77	879	C.4	18.8	58.3	
bservations During Purging (well Condition, Turbidity, Color, Odor, Slight 1 turbid 2 39.3 3.65  bservations During Purging (well Condition, Turbidity, Color, Odor, Slight 1 turbid 2 39.5 39.1 3.65  bservations During Purging (well Condition, Turbidity, Color, Odor, Slight 1 turbid 2 39.5 39.1 3.65  bservations During Purging (well Condition, Turbidity, Color, Odor, Slight 1 turbid 2 39.5 39.1 3.65  bservations During Purging (well Condition, Turbidity, Color, Odor, Slight 1 turbid 2 39.5 39.1 3.65  bservations During Purging (well Condition, Turbidity, Color, Odor, Slight 1 turbid 2 39.5 39.1 3.65  bservations During Purging (well Condition, Turbidity, Color, Odor, Slight 1 turbid 2 39.5 39.1 3.65  WELL SAMPLING  ampled By: MP& Sampling Date: & 4-03 Sampling Time: 0.845  ampling Method Water Level Before Sampling (in feet BTOC)  Bailer Type	and the second s		7		44.5	4.12
bservations During Purging (well Condition, Turbidity, Color, Odor, Shipliff turbit as other, Cleared up during surging (well Condition, Turbidity, Color, Odor, Shipliff turbit as other, Cleared up during surging surge Water Storage/Disposal: Comments:    WELL SAMPLING	1329 4 ~i~ 4.0 696	797	0.4	18.4	39.3	<del></del>
bservations During Purging (well Condition, Turbidity, Color, Odor, Shipliff Jurbid Softer, Cleared up during purging (well Condition, Turbidity, Color, Odor, Shipliff Jurbid Softer, Color, Odor, Shipliff Jurbid Softer, Comments:    WELL SAMPLING	1331 lemin 5.0 653	744	n.4	18.5		
urge Water Storage/Disposal: Drum(s), Number: Storm Sewer Sanitary Sewer Other / Comments:  WELL SAMPLING  ampled By: Mpc Sampling Date: & 4-03 Sampling Time: 0845  ampling Method Water Level Before Sampling (in feet BTOC)  Bailer Type						
urge Water Storage/Disposal: Drum(s), Number: Storm Sewer Sanitary Sewer Other / Comments:  WELL SAMPLING  ampled By: Mpc Sampling Date: & 4-03 Sampling Time: 0845  ampling Method Water Level Before Sampling (in feet BTOC)  Bailer Type					<del></del>	
urge Water Storage/Disposal: Drum(s), Number: Storm Sewer Sanitary Sewer Other / Comments:  WELL SAMPLING  ampled By: Mpc Sampling Date: & 4-03 Sampling Time: 0845  ampling Method Water Level Before Sampling (in feet BTOC)  Bailer Type						
urge Water Storage/Disposal: Drum(s), Number: Storm Sewer Sanitary Sewer Other / Comments:  WELL SAMPLING  ampled By: Mpc Sampling Date: & 4-03 Sampling Time: 0845  ampling Method Water Level Before Sampling (in feet BTOC)  Bailer Type	bservations During Purging (well Condition, Turbidity,	Color, Odor	Sticketta			
well Sampling Date:			711.4.	- July	<u>ه د به ۱</u>	/
WELL SAMPLING  ampled By: MP S Sampling Date: Q - 4 - 03 Sampling Time: 0845  ampling Method Water Level Before Sampling (In feet BTOC)  Bailer Type		<del>'')</del>			<del></del>	
WELL SAMPLING  ampled By: MP  Sampling Date: Q - 4 - 03   Sampling Time: 0845  ampling Method   Water Level Before Sampling (In feet BTOC)    Bailer Type	Other / Court a class		orm Sewer	☐ Sar	nitary Sewer	
Sampling Date:   Q - 4-03   Sampling Time:   0845	Other / Comments:					
## Water Level Before Sampling (In feet BTOC)    Bailer Type	ampled By: MD ( Samp			0.3 [5		0011/
Bailer Type				<del></del> :_	ampling lim	ie: 0375
Submersible Whale Other Cype  Other Type  ampling Distribution Sample Series  Sample No Containers Voi # Analysis Preservative Lab Comments						
Other		<del></del>				
Sample No Containers Voi # Analysis Preservative Lab Comments	_					
Sample No Containers Vol # Analysis Preservative Lab Comments		Other	. Abe	<del></del>	<del></del>	
Comments	Combio conca	innhere	2:-	=		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						Comments
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	14-17,0200	147		40010	
		<u>-</u>				
			<del></del>	<del></del>	<del></del>	

#### APPENDIX H

CERTIFICATE OF DISPOSAL FOR PURGED GROUNDWATER

IWM, Inc.

INTEGRATED WASTESTREAM MANAGEMENT, INC. 950 AMES AVENUE, MILPITAS, CA 95035 PHONE: 406.942.8955 FAX: 408.942.1499

# CERTIFICATE OF DISPOSAL

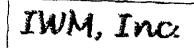
Generator Address:	Name: U-Haul International  2701 N Central Avenue, Ste. 700  Phoenix, AZ 85004	Facility Name: Address:	U-Haul #001 19100 Mission Blvd.
Contact:	Reid L Riner	Facility Contact:	Hayward, CA Steve Woodhull, BLAES Environmental
Phone:	602-263-6647	Phone:	602-728-0707
	IWM Job #:	93328-DW	
	Description of Waste:	4 Drum(s) of	
		Non-Hazardou	s
		Water	
	Removal Date:	17 September 20	003
	Ticket #:	SP170903-MIS	C
Transp	orter Information	Disposal Fa	cility Information
Name:	IWM, Inc.	Name: Sean	ort Refining & Environmental
Address:	950 Ames Avenue		Seaport Blvd
701	Milpitas, CA 95035	Redu	wood City, CA 94063
Phone:	(408) 942-8955	Phone: 650-	364-6158
IWM, TREA	INC. CERTIFIES THAT THE ABOVE ATED AND DISPOSED AT THE DESI	E LISTED NON-HA GNATED FACILIT	ZARDOUS WASTE WILL BE

William T DeLon 09.17/03

Authorized Representative (Print Name and Signature) Date

APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

I



INTEGRATED WASTESTREAM MANAGEMENT, INC. 950 AVES AVENUE MILETTAS, CA 95095 PFCNE: 469.942 8955 FAX: 409.942 1499

# CERTIFICATE OF DISPOSAL

Generator Name

U-Haul International

Address

2701 N Central Avenue, Ste. 700

Phoenix AZ 85004

Contact:

Reid L. Riner

Phone:

602-263-6647

Facility Name:

U-Haul #001

Address:

19100 Mission Blvd

Hayward, CA

Facility Contact

Steven Woodhu'l, BLAES Environmental

Phone

602-728-0707

IWM Job #: \_ \_\_\_ 93328-DW

Description of Waste: 2 Drum(s) of

Non-Hazardous

Mud/Water

Removal Date: 17 September 2003

Ticket #: SP170903-MISC

# Transporter Information

Name

IWM, Inc.

Address:

950 Ames Avenue

Milpitas, CA 95035

Phone:

(408) 942-8955

Name:

Seaport Refining & Environmental

Address:

675 Seaport Blvd

Disposal Facility Information

Redwood City, CA 94063

Phone:

650-364-6158

IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

William T DeLon

Arthorized Representance (Print Name and Signature)

John State Sugar "

09/17/03

Date

#### APPENDIX I

#### JUNE 2003 GROUNDWATER LABORATORY ANALYTICAL REPORT



11 July, 2003

Steve Woodhull BLAES Environmental Management, Inc. 1433 N. Third Ave Phoenix, ARIZONA 85003

RE: U-Haul

Sequoia Work Order: MMF0128

James Hartlet

Enclosed are the results of analyses for samples received by the laboratory on 06/05/03 12:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

James Hartley Project Manager

CA ELAP Certificate #1210



BLAES Environmental Management, Inc.

1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul

Project Number: Hayward Project Manager: Steve Woodhull MMF0128 Reported:

07/11/03 11:59

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-4	MMF0128-01	Water	06/04/03 08:20	06/05/03 12:00
MW-5	MMF0128-02	Water	06/04/03 08:35	06/05/03 12:00
MW-7	MMF0128-03	Water	06/04/03 08:45	06/05/03 12:00
MW-6	MMF0128-04	Water	06/04/03 08:55	06/05/03 12:00
MW-3	MMF0128-05	Water	06/04/03 09:15	06/05/03 12:00
MW-1	MMF0128-06	Water	06/04/03 09:30	06/05/03 12:00
MW-2	MMF0128-07	Water	06/04/03 09:50	06/05/03 12:00



BLAES Environmental Management, Inc.

1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul Project Number: Hayward

Project Manager: Steve Woodhull

MMF0128 Reported: 07/11/03 11:59

	_	Reporting		- <del></del>				<del> </del>	
Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-4 (MMF0128-01) Water	Sampled: 06/04/03 08:20	Received	: 06/05/0	3 12:00					
Ethanol	ND	100	ug/l	1	3F17033	06/17/03	06/18/03	EPA 8260B	
tert-Butyl alcohol	ND	20	**	II.	11	н	li	"	
Methyl tert-butyl ether	ДИ	0.50	te	u	**	n	n	*1	
Di-isopropyl ether	ND	0.50	er	11	11	н	lt.	**	
Ethyl tert-butyl ether	ND	0.50	rr	IJ	11	H	Ü	**	
tert-Amyl methyl ether	ND	0.50	tt	н	tr .	ıı	***	17	
1,2-Dichloroethane	ND	0.50	**		**	11	11	**	
l,2-Dibromoethane (EDB)	ND	0.50	IF	í†	**	п	II .	n	
Benzene	ND	0.50	II	п	**	п	n	**	
<b>Poluene</b>	ND	0.50	u	ч	**	w	n	**	
Ethylbenzene	ND	0.50	rr .	"	**	H	n	tr	
Gasoline Range Organics (C6-C10	)) ND	50	п	h	**	ч	н	11	
Surrogate: 1,2-Dichloroethane-d4		95.4 %	78-	129	"	,,		"	
MW-4 (MMF0128-01RE1) Wate	er_Sampled: 06/04/03 08	:20 Recei	ived: 06/(	05/03 12:00	0				
Kylenes (total)	ND	0.50	ug/l	1	3F20022	06/20/03	06/20/03	EPA 8260B	HT-0
Surrogate: 1,2-Dichloroethane-d4		98.2 %	78-1	129	"	н	"	n	HT-0
MW-5 (MMF0128-02) Water S	Sampled: 06/04/03 08:35	Received:	06/05/03	3 12:00					
Ethanol	ND	100	ug/l	1	3F12006	06/12/03	06/12/03	EPA 8260B	
ert-Butyl alcohol	ND	20	и.	,,	н	II	00/12/05	# #	
Methyl tert-butyl ether	ND	0.50	11	**	n	**	**	**	
Di-isopropyl ether	ND	0.50	n	**	н	u	**	11	
thyl tert-butyl ether	ND	0.50	н	n	II.	11	șt.	н	
ert-Amyl methyl ether	ND	0.50	U	n	u	11	11	н	
,2-Dichloroethane	ND	0.50	**	n	ti.	+r	pt	н	
,2-Dibromoethane (EDB)	ND	0.50	п	н	**	**	н	h	
Senzene	ND	0.50	Ħ	U	"	*1	H	н	
oluene	ND	0.50	11		,,	**	"	н	
thylbenzene	ND	0.50	**	н	**		н	u.	
(ylenes (total)	ND	0.50	"	11	"	,,	11	**	
Sasoline Range Organics (C6-C10)		50	**	"		"	11	19	
urrogate: 1,2-Dichloroethane-d4	<del></del>	104 %	78-I	20	"	<i>"</i>		"	
<u> </u>		20770	/0-1	45					



BLAES Environmental Management, Inc.

1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul Project Number: Hayward

Project Manager: Steve Woodhull

MMF0128 Reported: 07/11/03 11:59

	Sequ	UIA AIIA	nyticai	- Morga	an tin				
Апајуtе	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-7 (MMF0128-03) Water	Sampled: 06/04/03 08:45	Received	: 06/05/0	3 12:00					
Ethanol	ND	100	ug/l	1	3F12006	06/12/03	06/12/03	EPA 8260B	
tert-Butyl alcohol	ND	20	"	**	**	ęt.	11	н	
Methyl tert-butyl ether	ND	0.50	"	n	**	**	11	II.	
Di-isopropyl ether	ND	0.50	*	**	**	*1	IF.	II.	
Ethyl tert-butyl ether	ND	0.50	**	**	11	**	11	II.	
tert-Amyl methyl ether	ND	0.50	**	#	Ħ	u	u	"	
1,2-Dichloroethane	ND	0.50	**	**	11	•	**	**	
1,2-Dibromoethane (EDB)	ND	0.50	**	**	H	11	11	n	
Benzene	ND	0.50	**	**	и	*11	It	tt	
Toluene	ND	0.50	**	**	11	**	11	**	
Ethylbenzene	ND	0.50	**	**	11	**	II.	n	
Xylenes (total)	ND	0.50	#	tr	11	**	11	n	
Gasoline Range Organics (C6-C	10) ND	50	**	**	19	**	и	tt.	
Surrogate: 1,2-Dichloroethane-a	14	108 %	78-	129	"		"	<i>"</i>	
MW-6 (MMF0128-04) Water	Sampled: 06/04/03 08:55	Received:	: 06/05/0:	3 12:00					
Ethanol	ND	100	ug/l	1	3F12006	06/12/03	06/12/03	EPA 8260B	
tert-Butyl alcohol	ND	20	#	14	"	00/12/03	100/12/03	EFA 0200B	
Methyl tert-butyl ether	ND	0.50	**	**	ee	h	**	11	
Di-isopropyl ether	ND	0.50	**	11	(r	n-	11	**	
Ethyl tert-butyl ether	ND	0.50		57	**	11	**	**	
tert-Amyl methyl ether	ND	0.50	**	**	**	11	**	••	
1,2-Dichloroethane	ND	0.50	**	17	tr	п		11	
I,2-Dibromoethane (EDB)	ND	0.50	**	*	H	II.	n	**	
Benzene	ND	0.50	**	11	17		"	,,	
l'oluene	ND	0.50	**	11	n	11	**	**	
Ethylbenzene	ND	0.50	**		H		**	11	
Xylenes (total)	ND	0.50	**	**	17	11	"	••	
Gasoline Range Organics (C6-C1		50	**	**	**	n	10	r	
Surrogate: 1,2-Dichloroethane-d	<del></del>	108 %	78-	129	"	,,	п		
=				_					



BLAES Environmental Management, Inc.

1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul
Project Number: Hayward
Project Manager. Steve Woodhull

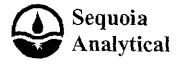
MMF0128 Reported: 07/11/03 11:59

#### Volatile Organic Compounds by EPA Method 8260B Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-3 (MMF0128-05) Water Sa	ampled: 06/04/03 09:15	Received	: 06/05/0	3 12:00	-		<del></del>		
Ethanol	ND	100	ug/l	1	3F12006	06/12/03	06/12/03	EPA 8260B	
tert-Butyl alcohol	ND	20		, II	11	"	*	LI A 6200D	
Methyl tert-butyl ether	ND	0.50		**	1)	**	**	19	
Di-isopropyl ether	ND	0.50	,,	11		**	u	tt	
Ethyl tert-butyl ether	ND	0.50	**	**	н	**	**	п	
tert-Amyl methyl ether	ND	0.50	19	**	**	п	H	**	
1,2-Dichloroethane	ND	0.50		"	**	#1	**	íi .	
1,2-Dibromoethane (EDB)	ND	0.50	"	**	n	t*	**	11	
Benzene	ND	0.50	**	II.	17	11	n n	77	
l'oluene	ND	0.50	н		lt.	,,	••	п	
Ethylbenzene	ND	0.50	**	u.	**	ø	11	,,	
Xylenes (total)	ND	0.50	tr	н	H	11	11	**	
Gasoline Range Organics (C6-C10)	ND	50	n	*	*1	H	**	o	
Surrogate: 1,2-Dichloroethane-d4		109%	78	129	,,	"	"	и	
Benzene	ND	0.50		*	11	29	**	n	
3romobenzene	ND	0.50	**	п	**		u	11	
3romochloromethane	ND	0.50	n	,,		**	n	11	
Bromodichloromethane	ND	0.50	**	н	**		H	If	
Bromoform	ND	0.50		H	lf .	11	11	**	
Bromomethane	ND	1.0	**	**	**	**	**	u	
-Butylbenzene	ND	0.50	n .	11	IF	н	п	12	
ec-Butylbenzene	ND	0.50	**	**	11	H	**	**	
ert-Butylbenzene	ND	0.50	**		11	n	n	11	
Carbon tetrachloride	ND	0.50	**	**	11	**	+2	tt	
Chlorobenzene	ND	0.50	13	U	17	ш	11		
Chloroethane	ND	0.50	**	n	п	**	11	**	
Chloroform	ND	0.50	fr.	Ħ	**	**	"	u	
Chloromethane	ND	0.50	*1	11	ч	и	ti	**	
-Chlorotoluene	ND	0.50	11	17	11	,,	71	n	
-Chlorotoluene	ND	0.50	41	н	**	11	rr	11	
Dibromochloromethane	ND	0.50	**	**		**	"	et .	
,2-Dibromoethane (EDB)	ND	0.50	71	rt .	**	**	**	w	
ibromomethane	ND	0.50	**	**	11	**	11	**	
,2-Dibromo-3-chloropropane	ND	1.0	*1	n	**		**	п	
2-Dichlorobenzene	ND	0.50	1						
3-Dichlorobenzene	ND	0.50					1		
4-Dichlorobenzene	ND	0.50							
ichlorodifluoromethane	ND	0.50							
1-Dichloroethane	ND	0.50							
2-D:enforcethane	ND	0.50							

Sequoia Analytical - Morgan Hili

The results in this report upply to the samples analyzed in accordance with the chain of custod document. Univis otherwise stated results are reported on a verwe gli basis. Instantal report must be reproduced in its entirer.



BLAES Environmental Management, Inc.

1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul

Project Number: Hayward
Project Manager: Steve Woodhull

MMF0128 Reported: 07/11/03 11:59

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (MMF0128-05) Water	Sampled: 06/04/03 09:15	Received	: 06/05/03	12:00					
1,1-Dichloroethene	ND	0.50	ug/l	1	3F12006	06/12/03	06/12/03	EPA 8260B	<del></del>
cis-1,2-Dichloroethene	ND	0.50	11	11	11	11	н	11	
trans-1,2-Dichloroethene	ND	0.50	11	**	**	II .	11	п	
1,2-Dichloropropane	ND	0.50	n	ìı	**	tt	tr	Ħ	
1,3-Dichloropropane	ND	0.50	II	II .	**	"	"	**	
2,2-Dichloropropane	ND	2.0	**	**	ш	11	**	**	
1,1-Dichloropropene	ND	0.50	**	**	ır	II	n n	п	
Ethylbenzene	ND	0.50	**	11	*	11	**	и	
Hexachlorobutadiene	ND	2.0	li .		**	*	**	n	
Isopropylbenzene	ND	0.50	n	31	IF	Ħ	**		
p-Isopropyltoluene	ND	0.50	**	11	**	11	11	н	
Methylene chloride	ND	0.50	**	17	**	н	l#	п	
Naphthalene	ND	5.0	"	11	**	tr	**	п	
n-Propylbenzene	ND	0.50	n	m	n	**	.,	**	
Styrene	ND	0.50	**	**	11	**	*1	#	
1,1,1,2-Tetrachloroethane	ND	0.50	**	**	**	n .	11	II .	
1,1,2,2-Tetrachloroethane	ND	0.50	**	11	**	tt	ij.	п	
Tetrachloroethene	ND	0.50	n	11	**	**	**	**	
Toluene	ND	0.50	Ħ	,,	11	**	**	**	
1,2,3-Trichlorobenzene	ND	0.50	11	19	Ħ	11	н	**	
1,2,4-Trichlorobenzene	ND	0.50	11	11	IF	II.	11	19	
1,1,1-Trichloroethane	ND	0.50	19	17	**	**	11	11	
1,1,2-Trichloroethane	ND	0.50	n	rt tr	**	71	**	tt	
Trichloroethene	ND	0.50	n	tt	11	11	**	**	
Trichlorofluoromethane	ND	0.50	**	**	11	II	11	**	
1,2,3-Trichloropropane	ND	0.50	17	**	tt	lt.		n	
1,2,4-Trimethylbenzene	ND	0.50	19	н	**	**	tt	II	
1,3,5-Trimethylbenzene	ND	0.50	n	u	**	**	**	tr.	
Vinyl chloride	ND	0.50	tt	**	11	**			
Xylenes (total)	ND	0.50	n	**	**	II.	и	11	
Surrogate: Dibromofluoromethan		105 %	73-13	9		"		#	
Surrogate: 1,2-Dichloroethane-d		109%	78-12		#	H	tr.	#	
Surrogate: Toluene-d8		101 %	81-11		#	"	#	*	
Surrogate: 4-Bromofluorobenzen	e	102 %	71-11		Ħ	"	"	и	



BLAES Environmental Management, Inc.

1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul

Project Number: Hayward Project Manager: Steve Woodhull MMF0128 Reported: 07/11/03 11:59

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MMF0128-06) Water S	ampled: 06/04/03 09:30	Received	: 06/05/03	3 12:00	c				
Ethanol	ND	100	ug/I	1	3F12006	06/12/03	06/12/03	EPA 8260B	
tert-Butyl alcohol	ND	20	ч	**	n	tt .	ır	If	
Methyl tert-butyl ether	ND	0.50	Ħ	19	11	17	rr	**	
Di-isopropyl ether	ND	0.50	11	**	IF	**	**	**	
Ethyl tert-butyl ether	ND	0.50	**	**	11	11	"	**	
tert-Amyl methyl ether	ND	0.50	u	er	H	ĮĪ.	**	Ħ	
1,2-Dichloroethane	ND	0.50	"	**	**	11	н	11	
1,2-Dibromoethane (EDB)	ND	0.50	**	**	**	11	**	п	
Benzene	ND	0.50	"	**	**	u	41	н	
Toluene	ND	0.50	Ħ	11	**	n	11	н	
Ethylbenzene	ND	0.50	11	1)	**	Ir .	**	п	
Xylenes (total)	ND	0.50	11	**	**	nt	n	**	
Gasoline Range Organics (C6-C10)	ND	50	**	u	11	tt.	II.	n	
Surrogate: 1,2-Dichloroethane-d4		107%	78-	129				"	
Benzene	ND	0.50	tr	**	**	n	11	п	
Bromobenzene	ИD	0.50	**	H		tt	**	"	
Bromochloromethane	ND	0.50	**	11	**	lf .	п	"	
Bromodichloromethane	ND	0.50	**	11	**	**	п	н	
Bromoform	ND	0.50	**	**	**	) r	U	ıı .	
Bromomethane	ND	1.0	H	11	**	i į	n	"	
n-Butylbenzene	ND	0.50	**	п	**	**	0	u	
sec-Butylbenzene	ND	0.50	19	ų	**	**	"	**	
tert-Butylbenzene	ND	0.50	**	н	77	н	**	11	
Carbon tetrachloride	ND	0.50	H	n	**	rr .	H	ч	
Chlorobenzene	ND	0,50	**	0	11	**	**	n	
Chloroethane	ND	0.50	n		**	H	**	tt	
Chloroform	ND	0.50	11	**	11		**	н	
Chloromethane	ND	0.50	11	n	11	**	**	#	
2-Chlorotoluene	ND	0.50	44	11	**	n	**	et	
l-Chlorotoluene	ND	0.50	11	rt	11	**	**	et	
Dibromochloromethane	ND	0.50	11	H	н	**	11	98	
,2-Dibromoethane (EDB)	ND	0.50	11	"	11	**	#1	**	
Dibromomethane	ND	0.50	11	Ħ	÷t.	**	#1	**	
,2-Dibromo-3-chloropropane	ND	1.0	**	'n	и	H	<b>f</b> 1	11	
.2-Dichlorobenzene	ND	0.50	**		,,		,		
.3-Dichlorobenzene	ИD	0.50				**	i	9	
.4-Dichlorobenzene	ND	0.50			•		i		
Dichlorodifluoromethane	ND	0.50				11			
.1-Dichloroethane	ND	0.50		,	,	**			
.2-Dichloroethane	ND	0.50							



BLAES Environmental Management, Inc.

1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul Project Number: Hayward

Project Manager. Steve Woodhull

MMF0128 Reported: 07/11/03 11:59

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MMF0128-06) Water	Sampled: 06/04/03 09:30	Received	: 06/05/03	12:00				<del></del>	
1,1-Dichloroethene	ND	0.50	ug/I	1	3F12006	06/12/03	06/12/03	EPA 8260B	
cis-1,2-Dichloroethene	ND	0.50	n	п	lf.	**	tt	**	
trans-1,2-Dichloroethene	ND	0.50	**	11	o	11	**	п	
1,2-Dichloropropane	ND	0.50	н	ıt	ir.	tt	**	п	
1,3-Dichloropropane	ND	0.50	4	n	11	n	**		
2,2-Dichloropropane	ND	2.0	"	п	H	r*	18	n	
1,1-Dichloropropene	ND	0.50	**	D	11	rt	n	п	
Ethylbenzene	ND	0.50	**	u	17	**	**	11	
Hexachlorobutadiene	ND	2.0	"	**	"	**	**	II	
Isopropylbenzene	ND	0.50	**	11	**	#	**	n	
p-Isopropyltoluene	ND	0.50	**	**	*	**	ш	rr	
Methylene chloride	ND	0.50	**	**	**	**	п	a	
Naphthalene	ND	5.0	**	**	**	**	**	tt	
n-Propylbenzene	ND	0.50	**	tr	**	**	11	er	
Styrene	ИD	0.50	t)	**	**	*17	n	**	
1,1,1,2-Tetrachloroethane	ND	0.50	**	**	**	11	11	**	
1,1,2,2-Tetrachloroethane	ND	0.50	†f	**	**	**	"	*	
Tetrachloroethene	ИD	0.50	15	)r	39	**	, n	**	
Toluene	ND	0.50	**	**	**	**	11	**	
1,2,3-Trichlorobenzene	ND	0.50	11	11	"	**	н	**	
1,2,4-Trichlorobenzene	ND	0.50	**	19	n	77	ff.	**	
1,1,1-Trichloroethane	ND	0.50	**	**	"	**	11	**	
1,1,2-Trichloroethane	ND	0.50	#	**	**	**	11	**	
Trichloroethene	ND	0.50	*	**	**	**	†I	**	
Trichlorofluoromethane	ND	0.50	***	11	n	**	11	tt	
1,2,3-Trichloropropane	ND	0.50	n	**	H		95	**	
1,2,4-Trimethylbenzene	ND	0.50	"	**	11	**	11	tr .	
1,3,5-Trimethylbenzene	ИD	0.50	tt	**	n	111	71	Ħ	
Vinyl chloride	ND	0.50	"	**	11·	rr	11	11	
Xylenes (total)	ND	0.50	tt	"	"	ir .	**1	II.	
Surrogate: Dibromofluoromethan	e	102 %	73-13	30		ıı	"		
Surrogate: 1,2-Dichloroethane-de	ţ.	107%	78-12		tr	"	51	**	
Surrogate: Toluene-d8		103 %	81-11		"	u	"	ıı.	
Surrogate: 4-Bromofluorobenzene	?	106%	71-11		n	"	"	tł	



BLAES Environmental Management, Inc.

1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul

Project Number: Hayward Project Manager: Steve Woodhull MMF0128 Reported: 07/11/03 11:59

#### Volatile Organic Compounds by EPA Method 8260B Sequoia Analytical - Morgan Hill

Reporting Analyte Result Limit Units Dilution Batch Prepared Analyzed Method Notes MW-2 (MMF0128-07) Water Sampled: 06/04/03 09:50 Received: 06/05/03 12:00 Ethanol 100 ug/l 3F12006 06/12/03 06/12/03 EPA 8260B tert-Butyl alcohol ND 20 Methyl tert-butyl ether ND 0.50 Di-isopropyl ether ND 0.50 Ethyl tert-butyl ether ND 0.50 tert-Amyl methyl ether ND 0.50 1,2-Dichloroethane ND 0.50 1,2-Dibromoethane (EDB) ND 0.50 Benzene ND 0.50 Toluene ND 0.50

Gasoline Range Organics (C6-C10) Surrogate: 1,2-Dichloroethane-d4

Ethylbenzene

Xylenes (total)

113 % 78-129

0.50

0.50

50

ND

ND

ND



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1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul

Project Number: Hayward Project Manager: Steve Woodhull MMF0128 Reported: 07/11/03 11:59

#### Polynuclear Aromatic Compounds by EPA Method 8310 Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Dılution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (MMF0128-05) Water	Sampled: 06/04/03 09:15	Received	: 06/05/03	3 12:00					
Acenaphthene	ND	0.48	ug/l	1	3060183	06/09/03	06/11/03	EPA 8310	
Acenaphthylene	ND	0.95	17	**	11	+1	n	D.	
Anthracene	ND	0.048	**	11	н	11	п	rt	
Benzo (a) anthracene	ND	0.048	**	II	"	11	n	17	
Benzo (b) fluoranthene	ND	0.095	*1	H	11	н	Ħ	н	
Benzo (k) fluoranthene	ND	0.048	tt	**	**	n	11		
Benzo (g,h,i) perylene	ND	0.095	16	н	ti .	**	11	**	
Benzo (a) pyrene	ND	0.048	Ħ	11	п	11	n	**	
Chrysene	ND	0.048	**	11		11	n	**	
Dibenz (a,h) anthracene	ND	0.19	**	11	**	n	**	11	
Fluoranthene	ND	0.095	li .	*	19	**	*1	n .	
Fluorene	ND	0.095	п	н	II	н	h	29	
Indeno (1,2,3-cd) pyrene	ND	0.048	**	п	n	11	ir.	**	
Naphthalene	ND	0.48	**	,,	**	11	**	**	
Phenanthrene	ND	0.048	**	11	1*	H	11	**	
Pyrene	ND	0.048		)†	ıı .	**	**	н	
Surrogate: Carbazole		80 %	58-	108	"	"	,,	"	
Surrogate: Terphenyl-d14		65 %	58-1		n	н .	11	r.	
MW-1 (MMF0128-06) Water	Sampled: 06/04/03 09:30	Received:	06/05/03	12:00					
Acenaphthene	ND	0.48	ug/l	ī	3060183	06/09/03	06/11/03	EPA 8310	
Acenaphthylene	ND	0.95	11	11	n	**	lt.	**	
Anthracene	ND	0.048	11	n	n	11	n	**	
Benzo (a) anthracene	ND	0.048	**	**	**	tr	**	11	
Benzo (b) fluoranthene	ND	0.095	**	***	**	11	**	и	
Benzo (k) fluoranthene	ND	0.048	11	17	11	u.	**	• "	
Benzo (g,h,i) perylene	ND	0.095	н	н	II	H	п	#	
Benzo (a) pyrene	ND	0.048	rr .	Ħ	11	**	**	*	
Chrysene	ND	0.048	17	"	17	11	**	**	
Dibenz (a,h) anthracene	ND	0.19	t#	77	**	n	11	11	
Fluoranthene	ND	0.095	ff	**	"	**	11	ır	
Fluorene	ND	0.095	*1	"	l+	**	u	te	
Indeno (1,2,3-cd) pyrene	ND	0.048	н	п	n	77	H	21	
Naphthalene	ND	0.48	**	w	11	**	#	••	
Phenanthrene	ND	0.48					11		
Pyrene	ND	0 048					11		
Surrogate Carbazole		94 %	58-1	08	"	"	"	,	
Surrogate Terpnem 1-d14		\$3.95	58-1		,	"	n	9	



BLAES Environmental Management, Inc.

1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul

Project Number: Hayward

Project Manager: Steve Woodhull

MMF0128 Reported:

07/11/03 11:59

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3F12006 - EPA 5035										
Blank (3F12006-BLK1)		-		Prepared	& Analyz	ed: 06/12/0	03			
Benzene	ND	0.50	ug/l		<u>-</u>		···			
Ethanol	ND	100	"							
Bromobenzene	ND	0.50	11							
tert-Butyl alcohol	ND	20	11							
Bromochloromethane	ND	0.50	11							
Methyl tert-butyl ether	ND	0.50	**							
Bromodichloromethane	ND	0.50	IF							
Di-isopropyl ether	ND	0.50	II							
Bromoform	ND	0.50	II							
Ethyl tert-butyl ether	ND	0.50	11							
Bromomethane	ND	1.0	н							
tert-Amyl methyl ether	ND	0.50	**							
1,2-Dichloroethane	ND	0.50	**							
n-Butylbenzene	ND	0.50	Ħ							
1,2-Dibromoethane (EDB)	ND	0.50	**							
sec-Butylbenzene	ND	0.50	•							
Benzene	ND	0.50	11							
tert-Butylbenzene	ND	0.50	"							
Carbon tetrachloride	ND	0.50	11							
Toluene	ND	0.50	н							
Chlorobenzene	ND	0.50	н							
Ethylbenzene	ND	0.50	п			· ·				
Chloroethane	ND	0.50	#							
Xylenes (total)	ND	0.50	rr							
Chloroform	ND	0.50	ti							
Chloromethane	ND	0.50	**							
2-Chlorotoluene	ND	0.50	n							
Gasoline Range Organics (C6-C10)	ND	50	"							
4-Chlorotoluene	ND	0.50	"							
Dibromochloromethane	ND	0.50	11							
1,2-Dibromoethane (EDB)	ND	0.50	••							
Dibromomethane	ND	0.50	4							
1.2-Dibromo-3-chloropropana	ND	10								
1 2-Dichlorobenzene	<b>∨</b> D	0.50								
1,3-Dichlorobenzene	ND	0.50								
1.4-Dichlorobenzene	ND	0.50	,							



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1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul

Project Number: Hayward

Project Manager: Steve Woodhull

MMF0128 Reported: 07/11/03 11:59

# Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3F12006 - EPA 5035										
Blank (3F12006-BLK1)				Prepared	& Analyze	ed: 06/12/0	)3			
Dichlorodifluoromethane	ND	0.50	ug/l	_ <del></del>	<del></del>					<del></del>
1,1-Dichloroethane	ND	0.50	**							
1,2-Dichloroethane	ND	0.50	**							
1,1-Dichloroethene	ND	0.50	**							
cis-1,2-Dichloroethene	ND	0.50	••							
trans-1,2-Dichloroethene	ИD	0.50	**							
1,2-Dichloropropane	ND	0.50	**							
1,3-Dichloropropane	ND	0.50	Ħ							
2,2-Dichloropropane	ND	2.0	**							
1,1-Dichloropropene	ND	0.50	u							
Ethylbenzene	ND	0.50	**							
Hexachlorobutadiene	ND	2.0	**							
Isopropylbenzene	ND	0.50	**							
p-Isopropyltoluene	ND	0.50	**							
Methylene chloride	ND	0.50	**							
Naphthalene	ND	5.0	Ħ							
n-Propylbenzene	ND	0.50	*							
Styrene	ND	0.50	n							
1,1,1,2-Tetrachloroethane	ND	0.50	0							
1,1,2,2-Tetrachloroethane	ND	0.50	II.							
l'etrachloroethene	ND	0.50	n							
Foluene	ND	0.50	17							
1,2,3-Trichlorobenzene	ND	0.50	11							
,2,4-Trichlorobenzene	ND	0.50	11							
,1,1-Trichloroethane	ND	0.50	**							
,1,2-Trichloroethane	ND	0.50	#							
richloroethene	ND	0.50	14							
richlorofluoromethane	ND	0.50	н							
,2,3-Trichloropropane	ND	0.50	17							
,2,4-Trimethylbenzene	ND	0.50	h							
,3,5-Trimethylbenzene	ND	0.50	**							
inyl chloride	ND	9 50 9 50								
(ylenės (total)	ND	0.50								
urrogate 1,2-Dichlorosthane-d4	5 19		"	5 00		104	~8-129	<del></del>		
urrogate Dibromofluoromethane	4 67		<i>p</i>	5 00		93 4	73-130			



BLAES Environmental Management, Inc.

1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul
Project Number: Hayward
Project Manager: Steve Woodhull

MMF0128 Reported: 07/11/03 11:59

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3F12006 - EPA 5035										
Blank (3F12006-BLK1)				Prepared.	& Analyze	ed: 06/12/0	)3			
Surrogate: 1,2-Dichloroethane-d4	5.19		ug/l	5.00		104	78-129			
Surrogate: Toluene-d8	4.95		"	5.00		99.0	81-116			
Surrogate: 4-Bromofluorobenzene	4.95		"	5.00		99.0	71-117			
Laboratory Control Sample (3F12006-1			Prepared a	& Analyze	ed: 06/12/0	)3				
Benzene	10.6	0.50	ug/l	10.0		106	78-124		<del>_</del> _	
Methyl tert-butyl ether	9.61	0.50	ij	10.0		96.1	63-137			
Benzene	10.6	0.50	"	10.0		106	78-124			
Toluene	11.2	0.50	78	10.0		112	78-129			
Chlorobenzene	10.9	0.50	11	10.0		109	80-127			
1,1-Dichloroethene	11.8	0.50	19	10.0		118	75-124			
Toluene	11.2	0.50	**	10.0		112	78-129			
Trichloroethene	11.3	0.50	+1	10.0		113	75-133			
Surrogate: 1,2-Dichloroethane-d4	5.16		a a	5.00	<del></del> -	103	78-129			
Surrogate: Dibromofluoromethane	4.96		#	5.00		99.2	73-130			
Surrogate: 1,2-Dichloroethane-d4	5.16		"	5.00		103	78-129			
Surrogate: Toluene-d8	5.00		u	5.00		100	81-116			
Surrogate: 4-Bromofluorobenzene	4.86		"	5.00		97.2	71-117			
Laboratory Control Sample (3F12006-B	S2)			Prepared &	ž Analyze	d- 06/12/0	3			
Benzene	5.70	0.50	ug/l	6.40		89.1	78-124			
Methyl tert-butyl ether	7.46	0.50	11	9.92		75.2	63-137			
Benzene	5.70	0.50	II.	6.40		89.1	78-124			
'oluene	35.5	0.50	**	29.7		120	78-129			
Sasoline Range Organics (C6-C10)	441	50	**	440		100	70-113			
oluene	35.5	0.50	u	29.7		120	78-129			
urrogate: 1,2-Dichloroethane-d4	5.50	<del></del>	<i>"</i>	5,00		110	78-129		<del></del>	
lurrogate: Dibromosluoromethane	5 39		H	5 00		108	73-130			
urrogate 12-Dichloroethane-d4	5 50		,	5 00		110	78-129			
urrogate Toinene-d8	5 17		**	5 00		103	\$1-116			
urrogate 4-Bromofluorobenzene	5 20		11	5 00		104	71-117			



BLAES Environmental Management, Inc.

1433 N. Third Ave Phoenix ARIZONA, 85003 Project V-Haul
Project Number Hayward
Project Manager: Steve Woodhull

MMF0128 Reported: 07/11/03 11:59

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3F12006 - EPA 5035						70.20	Lame		Lillie	Hotes
Matrix Spike (3F12006-MS1)	Sour	rce: MME0	808-04	Prepared	& Analyze	d: 06/12/	03			·····
Benzene	56.2	5.0	ug/l	64.0	ND	87.8	78-124			
Methyl tert-butyl ether	526	5.0	u	99.2	730	NR	63-137			
Benzene	56.2	5.0	н	64.0	ND	87.8	78-124			
Toluene	328	5.0	*	297	ND	110	78-129			
Gasoline Range Organics (C6-C10)	4700	500	17	4400	590	93.4	70-113			
Toluene	328	5.0	11	297	ND	110	78-129			
Surrogate: 1,2-Dichloroethane-d4	5.48		,,	5.00		110	78-129			
Surrogate: Dibromofluoromethane	4.89		u	5.00		97.8	73-130			
Surrogate: 1,2-Dichloroethane-d4	5.48		"	5.00		110	78-129			
Surrogate: Toluene-d8	4.90		"	5.00		98.0	81-116			
Surrogate: 4-Bromofluorobenzene	4.86		*	5.00		97.2	71-117			
Matrix Spike Dup (3F12006-MSD1)	Sour	ce: MME08	808-04	Prepared a	& Analyze	d: 06/12/0	)3			
Benzene	54.3	5.0	ug/l	64,0	ND	84.8	78-124	3.44	12	
Methyl tert-butyl ether	796	5.0	"	99.2	730	66,5	63-137	40.8	13	
Benzene	54.3	5.0	н	64.0	ND	84.8	78-124	3.44	12	
Toluene	344	5.0	"	297	ND	116	78-129	4.76	10	
Gasoline Range Organics (C6-C10)	4670	500	**	4400	590	92.7	70-113	0.640	9	
Coluene	344	5.0	#	297	ND	116	78-129	4.76	10	
Surrogate: 1,2-Dichloroethane-d4	5.18		"	5.00		104	78-129			
Surrogate: Dibromofluoromethane	4.57		μ	5.00		91.4	73-130			
Surrogate: 1,2-Dichloroethane-d4	5.18		**	5.00		104	78-129			
Surrogate: Toluene-d8	5.07		u	5.00		101	81-116			
Surrogate: 4-Bromofluorobenzene	5.03		μ	5.00		101	71-117			
Batch 3F17033 - EPA 5030B P/T										
Blank (3F17033-BLK1)	<del></del>			Prepared &	Analyze	t- 06/17/0	2			
thanol	ND	100	ug T	1 Topatod 6	c z many zec	00/1//0				
ert-Butyl alcohol	ND	20	46 1							0-(
lethyl tert-butyl ether	ND	0.50								0-0
Di-isopropyl other	ND	0.50	.,							(7-1
		2 20								
thyl tert-butyl ether	ND	0.50								



BLAES Environmental Management, Inc.

1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul Project Number. Hayward

Project Manager: Steve Woodhull

MMF0128 Reported: 07/11/03 11:59

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3F17033 - EPA 5030B P/T						_				
Blank (3F17033-BLK1)				Prepared	& Analyz	ed: 06/17/	03			
1,2-Dichloroethane	ND	0.50	ug/l						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<del></del>
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	n							
Toluene	ND	0.50	**							
Ethylbenzene	ND	0.50	ıı.							
Xylenes (total)	ND	0.50	ę.							
Gasoline Range Organics (C6-C10)	ND	50	11							
Surrogate: 1,2-Dichloroethane-d4	5.16		н	5.00		103	78-129			
Laboratory Control Sample (3F17033-E	S1)			Prepared:	06/17/03	Analyzed	l: 06/18/03			
tert-Butyl alcohol	167	20	ug/l	200		83.5				0-0
Methyl tert-butyl ether	9.52	0.50	•	10.0		95.2	63-137			
Benzene	10.1	0.50	**	10.0		101	78-124			
Toluene	10.2	0.50	н	10.0		102	78-129			
Surrogate: 1,2-Dichloroethane-d4	4.80		н	5.00	·	96.0	78-129	7401		***
Laboratory Control Sample (3F17033-B	S2)			Prepared:	06/17/03	Analyzed	: 06/18/03			
Methyl tert-butyl ether	8.65	0.50	ug/l	9.92		87.2	63-137			
Benzene	5.55	0.50	H	6.40		86.7	78-124			
Toluene	32.8	0.50	11	29.7		110	78-129			
Gasoline Range Organics (C6-C10)	446	50	ш	440		101	70-113			
Surrogate: 1,2-Dichloroethane-d4	5.06		"	5.00	<u> </u>	101	78-129	•		
Matrix Spike (3F17033-MS1)	Sor	irce: MMF00	98-08	Prepared:	06/17/03	Analyzed	: 06/18/03			
Methyl tert-butyl ether	440	25	ug/l	496	ND	88.7	63-137	<del>-</del>	<del></del>	- · · · · · · · · · · · · · · · · · · ·
Benzene	870	25	"	320	680	59.4	78-124			QM-07
l'oluene e	1850	25		1489	260	107	78-129			QM-07
Gasoline Range Organics (C6-C10)	55500	2500		22000	44000	52 3	70-113			QM-07
Surrogate 12-Dichloroethane-d4	4 58			5 00		976	78-129			



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1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul Project Number: Hayward

Project Manager: Steve Woodhull

MMF0128 Reported: 07/11/03 11:59

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3F17033 - EPA 5030B P/T					_					
Matrix Spike Dup (3F17033-MSD1)	So	urce: MMF0	098-08	Prepared:	06/17/03	Analyzed	l: 06/18/03	<u>-</u> -		
Methyl tert-butyl ether	458	25	ug/I	496	ND	92.3	63-137	4.01	13	
Benzene	910	25	**	320	680	71.9	78-124	4.49	12	QM-07
Toluene	1940	25	11	1480	260	114	78-129	4.75	10	QM-07
Gasoline Range Organics (C6-C10)	58200	2500	"	22000	44000	64.5	70-113	4.75	9	QM-07
Surrogate: 1,2-Dichloroethane-d4	4.94		"	5.00		98.8	78-129	<del>_</del> ·	<u></u>	
Batch 3F20022 - EPA 5030B P/T										
Blank (3F20022-BLK1)				Prepared .	& Analyze	ed: 06/20/0	03			
Ethanol	ND	100	ug/l				·			
tert-Butyl alcohol	ND	20	11							0-09
Methyl tert-butyl ether	ND	0.50	**							
Di-isopropyl ether	ND	0.50	#1							
Ethyl tert-butyl ether	ND	0 50	TF .							
tert-Amyl methyl ether	ND	0.50	11							
1,2-Dichloroethane	ND	0 50	#							
1,2-Dibromoethane (EDB)	ND	0.50	,,							
Benzene	ND	0.50	11							
Toluene	ND	0.50	**							
Ethylbenzene	ND	0.50	**							
Xylenes (total)	ND	0.50	11							
Gasoline Range Organics (C6-C10)	ND	50	**							
Surrogate: 1,2-Dichloroethane-d4	5.14	·····	#	5.00	<u>-</u>	103	78-129			
Laboratory Control Sample (3F20022-BS1)				Prepared &	k Analyze	d: 06/20/0	3			
Methyl tert-butyl ether	11.6	0.50	ug/I	10.0	<u> </u>	116	63-137			<del></del>
Benzene	10.4	0.50	"	10.0		104	78-124			
Toluene	10.0	0.50	17	10.0		100	78-129			



BLAES Environmental Management, Inc.

1433 N. Third Ave

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Project: U-Haul

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Project Manager: Steve Woodhull

MMF0128 Reported: 07/11/03 11:59

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3F20022 - EPA 5030B P/T										
Laboratory Control Sample (3F20022-BS2	)			Prepared	& Analyz	ed: 06/20/	03			
Methyl tert-butyl ether	9.41	0.50	ug/l	9.92	····································	94.9	63-137			
Benzene	5 40	0.50	н	6.40		84.4	78-124			
Toluene	31.5	0.50	**	29.7		106	78-129			
Gasoline Range Organics (C6-C10)	408	50	**	440		92.7	70-113			
Surrogate: 1,2-Dichloroethane-d4	5.28			5.00		106	78-129			
Matrix Spike (3F20022-MS1)	Source:			Prepared	& Analyz	ed: 06/20/	03			
Methyl tert-butyl ether	464	25	ug/I	496	ND	93.5	63-137			
Benzene	925	25	**	320	710	67.2	78-124			OM-0
Toluene	1730	25	н	1480	250	100	78-129			`
Gasoline Range Organics (C6-C10)	59000	2500	"	22000	41000	81.8	70-113			
Surrogate: 1,2-Dichloroethane-d4	5.23		"	5.00		105	78-129			
Matrix Spike Dup (3F20022-MSD1)	Sou	ırce:		Prepared & Analyzed: 06/20/03						
Methyl tert-butyl ether	486	25	ug/l	496	ND	98.0	63-137	4.63	13	
Benzene	962	25	**	320	710	78.8	78-124	3.92	12	
Toluene	1850	25	R	1480	250	108	78-129	6.70	10	
Gasoline Range Organics (C6-C10)	61000	2500	lt.	22000	41000	90.9	70-113	3.33	9	
Surrogate: 1,2-Dichloroethane-d4	5.29		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5.00		106	78-129			



BLAES Environmental Management, Inc.

1433 N. Third Ave

Phoenix ARIZONA, 85003

Project: U-Haul Project Number: Hayward

Project Manager: Steve Woodhull

MMF0128 Reported: 07/11/03 11:59

#### Polynuclear Aromatic Compounds by EPA Method 8310 - Quality Control Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Lunit	Notes
Batch 3060183 - EPA 3520B Lig Liquid										
Blank (3060183-BLK1)				Prepared:	06/09/03	Analyzed	: 06/11/03			
Acenaphthene	ND	0.50	ug/l	·	· <del></del>			<del>-</del> ,		
Acenaphthylene	ND	1.0	**							
Anthracene	ND	0.050	**							
Benzo (a) anthracene	ND	0.050	21							
Benzo (b) fluoranthene	ND	0.10	н							
Benzo (k) fluoranthene	ND	0.050	Ħ							
Benzo (g,h,i) perylene	ND	0.10	#1							
Benzo (a) pyrene	ND	0.050	н							
Chrysene	ND	0.050	**							
Dibenz (a,h) anthracene	ND	0.20	**							
Fluoranthene	ND	0.10	**							
Fluorene	ND	0.10	u							
ndeno (1,2,3-cd) pyrene	ND	0.050	a							
Naphthalene	ND	0 50								
Phenanthrene	ND	0.050	11							
Pyrene	ND	0.050	ıı.							
Surrogate: Carbazole	0.913		н	1.00	<del></del>	91	58-1 <b>0</b> 8	_		
Surrogate: Terphenyl-d14	1.87		#	2.00		94	58-120			
Laboratory Control Sample (3060183-BS1)				Prepared:	06/09/03	Analyzed:	06/11/03			
Acenaphthene	7.76	0.50	ug/l	10.0		78	35-112			
cenaphthylene	13.6	1.0	"	20.0		68	32-101			
inthracene	0.759	0.050	19	1.00		76	22-111			
Benzo (a) anthracene	0.833	0.050	19	1.00		83	33-127			
Benzo (b) fluoranthene	1.79	0.10	**	2.00		90	31-129			
enzo (k) fluoranthene	0.922	0.050	11	1.00		92	28-130			
lenzo (g,h,i) perylene	1.86	0.10	**	2.00		93	16-140			
enzo (a) pyrene	0.756	0.050	**	1.00		93 76	27-122			
hrysene	0.882	0.050	**	1.00		76 88	30-130			
ubenz (a,h) anthracene	1 77	0 20		2.00		88	10-142			
luoranthene	1 59	0 10		2 00		80	29-115			
luorene	1 45	0 10		2 00						
ideno (1,2,3-cd) pyrene	1 07	0.050		1 00		72	36-108			
aphthalene	6 80	0.50		100		107 68	25-132 44-87			
	0.00	0.30		10.0		60	<del></del>			

Sequoia Analytical - Morgan Hill

The results in this report upper to the samples analyzed in accordance with the chain of custod, document. Unless otherwise stated results are reported on a viet weight basis. This analytical report must be reproduced in its entirety.



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## Polynuclear Aromatic Compounds by EPA Method 8310 - Quality Control Sequoia Analytical - Petaluma

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3060183 - EPA 3520B Liq Liqu	ıid									
Laboratory Control Sample (3060183-BS	1)			Prepared:	06/09/03	Analyzed	l: 06/11/03			
Pyrene	0.947	0.050	ug/l	1.00		95	41-115			=
Surrogate: Carbazole	0.840	<u></u>	н	1.00		84	58-108			
Surrogate: Terphenyl-d14	1.81		"	2.00		90	58-120			
Laboratory Control Sample Dup (3060183	1-BSD1)			Prepared:	06/09/03	Analyzed	: 06/11/03			
Acenaphthene	8.54	0.50	ug/l	10.0		85	35-112	10	40	
Acenaphthylene	14.8	1.0	п -Б.	20.0		74	32-101	8	20	
Anthracene	0.820	0.050		1.00		82	22-111	8	28	
Benzo (a) anthracene	0.818	0.050	n	00.1		82 82	33-127	2	29	
Benzo (b) fluoranthene	1.83	0.10	"	2.00		92	31-129	2	37	
Benzo (k) fluoranthene	0.956	0.050	#	1.00		92 96	28-130	4	30	
Benzo (g,h,i) perylene	1.93	0.10	#	2.00		96	16-140	4	51	
Вепдо (а) рутепе	0.797	0.050		1.00		80	27-122	5	20	
Chrysene	0.885	0.050	U	1.00		88	30-130	0.3	32	
Dibenz (a,h) anthracene	1.85	0.20	H	2.00		92	10-142	4	20	
Fluoranthene	1.67	0.10	<b>5</b> 7	2.00		92 84	29-115	5	39	
Fluorene	1.65	0.10	Ħ	2.00		82	36-108	13	25	
ndeno (1,2,3-cd) рутеле	1.11	0.050	**	1.00		111	25-132	4	35	
Naphthalene	7.40	0.50	tt	10.0		74	44-87	8	33	
Phenanthrene	0.798	0.050	11	1.00		80	29-114	7	<i>33</i> 47	
Pyrene	0.979	0.050	**	1.00		98	41-115	3	30	
Surrogate: Carbazole	0.872		<i>u</i>	1.00		87	58-108			<del> </del>
Surrogate: Terphenyl-d14	1.78		"	2.00		89	58-120			



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#### Notes and Definitions

E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.
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HT-04 This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.

O-09 The result was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria.

QM-07 The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference