CEC WRA
• Certified Environmental Corporation, Inc. •
• Water Resources Associates, Inc. •

FLOOD CONTROL DISTRICT
RECEIVED
OCT 17 '94

	CHENG		P & PM
	DEP		HYDRO
	ADMIN		LMGT
	FINANCE		FILE
	C & O		
	ENGR		

REMARKS

October 14, 1994

Property of
Flood Control District of MC Library
Please Return to
2801 W. Durango
Phoenix, AZ 85009

Mr. Dave Gardner
Maricopa County Flood Control District
2801 West Durango Street
Phoenix, Arizona 85009

SUBJECT: RESULTS OF SITE INVESTIGATION CONDUCTED ADJACENT TO THE OLD CROSS-CUT CANAL IN PHOENIX, ARIZONA

Dear Mr. Gardner:

CEC/WRA is pleased to present the results of our work, which included the drilling and sampling of seven soil borings adjacent to the old Cross-Cut Canal between McDowell and Indian School Roads, in Phoenix, Arizona. In addition, CEC/WRA sampled the four existing groundwater monitoring wells located adjacent to the the Cross-Cut canal within the boundaries listed above. This work was conducted as a follow-up to a previous investigation conducted by CEC/WRA in the study area. The previous work, which consisted of the drilling and sampling of three soil borings, is documented in CEC/WRA's letter report dated August 12, 1994. The subject study area is shown in the figure presented as Attachment I. A plan view of the study area is shown in the figures presented in Attachments II and III.

SOIL BORINGS

CEC/WRA was contracted by the Flood Control District of Maricopa County (FCDMC) to drill and sample nine soil borings adjacent to the Old Cross-Cut Canal between McDowell and Indian School Roads. However due to access limitations, only seven borings could be drilled. The boring locations were approved in the field by a representative (Mr. Dave Gardner) of the FCDMC. This work was conducted to evaluate background soil concentrations of various constituents including petroleum hydrocarbons, volatile organic compounds, and organochlorine pesticides and polychlorinated biphenyls (PCBs). It is our understanding that the results of this work will be utilized by the FCDMC to design and implement a suitable health and safety plan prior to re-construction of the Old Cross-Cut Canal.

Prior to conducting any field activities, CEC/WRA contacted the Blue Stake Center of Arizona to locate public utilities in the vicinity of the study area.

Seven soil borings (B-4 through B-9) were drilled on the west bank of the Old Cross-Cut Canal on August 24 and 25, 1994. The boring locations are shown in the figures presented in Attachments II and III.

Phoenix, AZ • Benicia, CA • Salt Lake City, UT • Denver, CO • Sacramento, CA • Lake Forest, CA • Prescott, AZ

4041 North Central Avenue
Suite 1050
Phoenix, Arizona 85012-3393

Office: (602) 248-8808
FAX: (602) 248-7722
Toll Free: (800) 554-0288

All seven borings were drilled to depths of 30 feet below ground surface (bgs) with a hollow stem auger rig using 3.25-inch diameter (ID) augers. The borings were drilled as close to the canal bank as conditions would allow, so that soil samples could be collected that were as representative as possible of the soil conditions at the base of the canal.

Down-hole drilling equipment was decontaminated prior to its first use and before each subsequent use with a high-pressure steam cleaner. Following removal of the augers, the borings were backfilled with a cement grout. Cuttings removed during the drilling process were placed near each boring for temporary storage. It is our understanding that the cuttings were later removed by the FCDMC and moved to a central storage location provided by the FCDMC.

During drilling and sampling, the CEC/WRA geologist maintained boring logs detailing the soil types encountered, sample intervals, and blows per foot to drive the sampler. The soil boring logs are included in Attachment IV. Soils were classified using the Unified Soil Classification System.

A total of seven soil samples were collected during this investigation. One soil sample was collected from the base of each boring at the depth of 30 feet bgs. Each sample was collected using a decontaminated 2-inch ID split barrelled sampler lined with clean brass tubes. At the selected sample interval, the sampler was lowered inside the augers and driven into relatively undisturbed soil using a pneumatic hammer. The total number of blows to drive the sampler 1 foot into the soil was recorded on the soil boring log (Attachment IV).

After retrieving the sampler from the boring, the lowermost sleeve containing soil was secured. The sleeve ends were sealed using Teflon® tape which were held in place by plastic end caps. Each sleeve was labeled, placed in a sealed plastic bag, and stored on ice for preservation prior to and during transportation to the laboratory. The samples were transported under proper chain-of-custody procedures and delivered to Westech Laboratories (Westech) in Phoenix, Arizona.

Sampling equipment was decontaminated prior to each use. Sampler decontamination consisted of a vigorous wash in detergent solution, a double tap water rinse, and a final rinse in distilled water.

SOIL ANALYTICAL CHEMISTRY PROCEDURES AND RESULTS

Soil samples were submitted to Westech Laboratories in Phoenix, Arizona. Analytical procedures were followed in accordance with EPA standards. The samples were analyzed by the following methods.

Method	Parameters
EPA 8080	Organochlorine Pesticides and PCBs
EPA 8260	Volatile Organics
EPA 8270	Semi-Volatile Organics

Method	Parameters
EPA 8020	BTEX
ADHS BLS-181	Total Petroleum Hydrocarbons (gasoline)
ADHS BLS-191	Total Petroleum Hydrocarbons (diesel)
EPA 6010	Eight Toxic Metals

The laboratory results for six of the seven samples analyzed were below method detection limits for total petroleum hydrocarbons (TPH) and benzene, ethylbenzene, toluene, and xylenes (BTEX). The detection limits were well below the state suggested soil clean-up levels (SSCLs) established for TPH and BTEX in soil. The soil sample collected from Boring B-4 had a TPH concentration (12 mg/kg) that slightly exceeded the method detection limit of 10 mg/kg. The BTEX results for this sample were below method detection limits. The SSCL for TPH in soil is 100 milligrams per kilogram (mg/kg). The TPH and BTEX results are summarized in the table presented in Attachment V.

The results for six of the seven samples analyzed by the EPA Method 8080 for pesticides and PCBs were below method detection limits for all of the parameters. The soil sample collected from Boring B-5 had a detectable concentration (3.3 micrograms per kilogram (ug/kg)) of the compound dieldrin that exceeded the method detection limit. This result was below the ingestion human health-based guidance level (HBGL) of 90 ug/kg established by ADEQ for dieldrin in soil. The remaining results for this sample were below method detection limits for all of the compounds analyzed using the Method 8080.

The results of the samples collected from six of the seven borings were below method detection limits for volatile organic compounds (VOCs) as identified by the EPA Method 8260. A relatively low concentration (290 ug/kg) of one compound (dichloromethane) was detected in the sample collected from Boring B-9. The observed concentration was just above the method detection limit of 250 ug/kg. There currently is no HBGL established by ADEQ for ingesting soil containing dichloromethane.

Six of the seven samples (B-4 through B-9) analyzed by the EPA Method 8720 had detectable concentrations of the compound di-n-butyl phthalate. This compound is often observed at low levels as an artifact of the sample collection process. The highest concentration (41 mg/kg) was detected in the sample collected from Boring B-8. The detected concentration was well below the ingestion HBGL of 12,000 mg/kg established for di-n-butyl phthalate. The results of the analyses for the remaining compounds identified by the EPA Method 8270 in those same samples were below method detection limits. The sample collected from Boring B-10 had results that were below method detection limits for all of the EPA Method 8270 target compounds.

Low concentrations of four separate metals were detected in all seven samples analyzed by the EPA Method 6010ff for total concentrations of eight toxic metals. The metals detected included barium, chromium, lead, and selenium. The detected concentrations were well below soil ingestion HBGLs for the individual metals detected. The laboratory concentrations detected and the HBGLs for each individual metal are summarized in the table presented in Attachment VI.

The laboratory reports for all of the analytical work conducted, including chain-of-custody records and the associated quality control data, are presented in Attachment VII.

GROUNDWATER SAMPLING

CEC/WRA sampled four (W-8, W-13, W-16, and W-21) of the five existing monitor wells located within the study area on August 31, 1994. One of the five wells (W-3) could not be sampled due to a lack of water in the well casing. Prior to the collection of groundwater samples, the static water levels were measured from the top of the casing (TOC) at each well using an electronic well sounding device. The well locations are shown in the figures presented in Attachments II and III.

Each monitor well was purged prior to sampling using a stainless steel submersible pump. Indicator parameters (pH, temperature, and conductivity) were measured during the evacuation process. When stabilization of the above parameters had occurred and at least three well volumes had been removed, groundwater samples were collected. Approximately 25 gallons of groundwater were purged from each well and placed into a separate Department of Transportation (DOT) approved 55-gallon drum.

Groundwater samples were collected from each well using a clean disposable bailer. A sample of groundwater from each well was dispensed from the bottom of the bailer into appropriate sample containers. The sample containers were sealed with Teflon® lined caps, labeled, and then immediately placed into a cooler filled with ice. The samples were transported to Westech under proper chain-of-custody procedures.

The submersible pump and all down-hole tubing were washed between wells using a high pressure steam washer. Water removed during the evacuation process was contained in four DOT 55-gallon drums. The drums were labeled and were moved by the District to a secure facility provided by the FCDMC.

GROUNDWATER ANALYTICAL PROCEDURES AND RESULTS

The groundwater samples were submitted to Westech and were analyzed by the following parameters.

Volatile Organic Compounds

EPA 601
EPA 602

Total Metals

Antimony (Sb)	Arsenic (As)	Barium (Ba)
Beryllium (Be)	Boron (B)	Cadmium (Cd)
Chromium (Cr)	Copper (Cu)	Iron (Fe)
Lead (Pb)	Manganese (Mn)	Mercury (Hg)
Nickel (Ni)	Selenium (Se)	Silicon (Si)
Silver (Ag)	Thallium (Tl)	Zinc (Zn)

Ions		**Characteristics**
Alkalinity	Na^+	pH
Ammonia (NH_3 as N)	SO_4^{2-}	Conductivity
Ca^{2+}	F^-	Total Dissolved Solids
Cl^-	Nitrate (NO_3 as N)	Hardness
Mg^{2+}	Total Phosphorous	Cyanide
K^+		Phenols

The laboratory results for the groundwater sample collected from Monitor Well W-13 were below method detection limits for VOCs as identified by the EPA Methods 601 and 602. Concentrations of chloroform were detected in the samples collected from Monitor Wells W-8, and W-16. The highest concentration (9.3 micrograms per liter (ug/l)) of chloroform was detected in the sample collected from W-8. This result exceeds the ingestion HBGL of 6.0 ug/l established for Chloroform in drinking water.

The sample collected from W-16 also had low concentrations of ethylbenzene, toluene, and xylenes. The detected concentrations (1.4 ug/l, 1.9 ug/l, and 2.7 ug/l, respectively) were well below Aquifer Water Quality Standards (AWQS) established for those compounds in groundwater. The sample collected from W-21 had low concentrations of benzene, ethylbenzene, and xylenes. These results (1.3 ug/l, 5.8 ug/l, and 2.8 ug/l, respectively) were also well below the established AWQS. The AWQS for BTEX are 5 ug/l, 1,000 ug/l, 700 ug/l, and 10,000 ug/l, respectively. The benzene concentration (1.3 ug/l) detected in W-21 exceeded the ingestion HBGL of 1.2 ug/l established for benzene in groundwater. The detected concentrations of toluene, ethylbenzene, and xylenes were well below the ingestion HBGLs established for those parameters. The remaining compounds analyzed for using the EPA Methods 601 and 602 were below method detection limits. The compounds and the concentrations detected are summarized in the table presented in Attachment VIII.

Concentrations of 15 separate metals were detected in all four groundwater samples analyzed for total metals. The metals detected included barium, boron, calcium, chromium, copper, iron, lead, magnesium, manganese, nickel, potassium, selenium, silicon, sodium, and zinc. Ingestion HBGLs were exceeded in five of the metals detected. However, it should be noted that the established ingestion HBGLs for six of the metals analyzed for were lower than the method detection limits. Based on this information, it is inconclusive as to whether the ingestion HBGLs for those compounds were exceeded. A summary of the groundwater total metals results is included in the table presented in Attachment IX.

The laboratory results for the physical characteristics of the groundwater samples and the ion concentrations are not discussed in this section. A summary of these results are included in the table included in Attachment X. The laboratory reports for all of the analytical work conducted at the site are included in Attachment VII.

CONCLUSIONS

Based on the laboratory results of soil and groundwater samples collected during this investigation, low levels of VOCs are present in subsurface soil and groundwater in the subject study area. The concentrations detected in soil were well below state human HBGLs established for ingestion of soil containing those compounds, and also below any applicable SSCLs.

Two VOCs (chloroform and benzene) detected in groundwater had concentrations that exceeded the established ingestion HBGLs. Chloroform was detected at a concentration of 9.3 ug/kg in the groundwater sample collected from Monitor Well W-8, and benzene was detected at a concentration of 1.3 ug/kg in the groundwater sample collected from Monitor Well W-21. The observed chloroform concentration probably relates to an off-site source where chlorination of drinking water or surface water occurs. Chloroform has been consistently detected in wells approximately 0.5 miles upgradient of the subject study area. Chloroform is a direct product of the reaction between chlorine and organic matter in groundwater.

It should also be stated that the detected VOCs including benzene may relate to groundwater contamination emanating from off-site sources. The subject study area is approximately 0.25 miles from the southern boundary of the East Central Phoenix Water Quality Assurance Revolving Fund (WQARF) Study Area. Irrigation wells within the WQARF study area have been reported to be contaminated with VOCs.

Relatively low concentrations of four separate metals were detected in the soil samples collected from the seven borings completed during this investigation. The concentrations were all well below HBGLs established for ingestion of soil containing each individual metal. The observed concentrations are within the range of background levels typically observed in Arizona soils. Furthermore, since there is no suspected source for the observed metals, it is the opinion of CEC/WRA that the concentrations detected are probably representative of background soil conditions.

Five separate metals with concentrations exceeding the established HBGLs were detected in the groundwater samples collected from the monitor wells. The observed concentrations were fairly consistent from well to well and may be representative of background levels for this area. For the purpose of this investigation, the observed concentrations should not cause a problem since the groundwater is not to be consumed.

Based on the results of this limited investigation, it appears that health and safety concerns during the re-construction of the Old Cross-Cut Canal are minimal. However, CEC/WRA recommends that the proposed re-construction work be monitored by qualified personnel and that any suspicious observations be further tested to confirm the results of this limited investigation.

If you have any questions concerning the information provided in this letter report, please call.

Sincerely,

CEC/WRA

Kevin Hebert, P.G.
Manager, UST Programs

Alan C. Thomas
Arizona Operations Manager

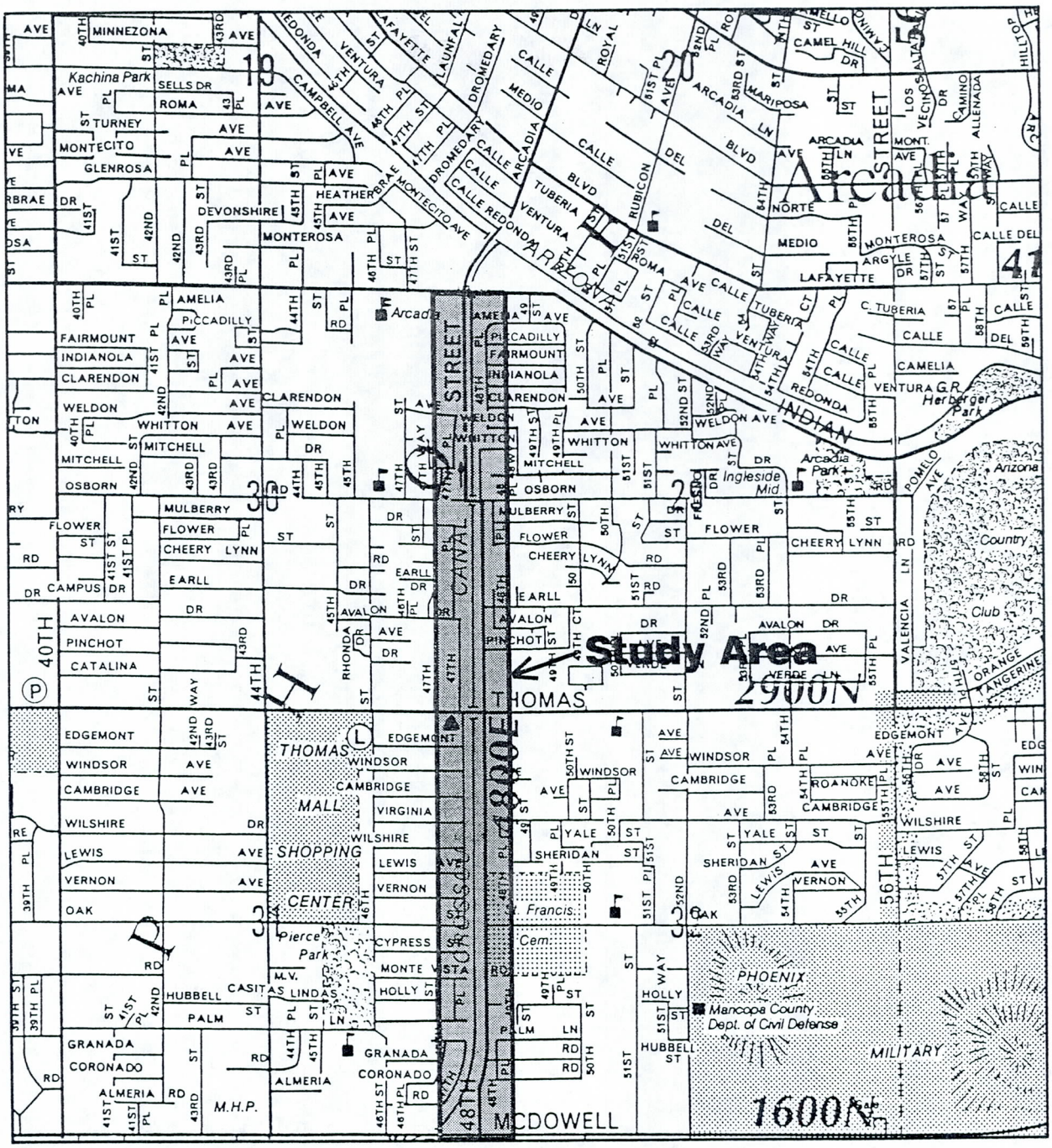
Attachments: Attachment I - Study Area Location Map
Attachment II - Site Plan A
Attachment III - Site Plan B
Attachment IV - Soil Boring Logs
Attachment V - Summary of Soil TPH and BTEX Analytical Results
Attachment VI - Summary of Total Metal Concentrations in Soil Samples
Attachment VII - Laboratory Reports
Attachment VIII - Summary of Detectable Concentrations of VOCs in Groundwater
Attachment IX - Summary of Total Metals in Groundwater
Attachment X - Summary of Physical Characteristics and Ion Concentrations

REGISTERED GEOLOGIST
CERTIFICATE NO.
26388
KEVIN D.
HEBERT
Date Signed 10/14/94
ARIZONA U.S.A.

cc: CEC/WRA File AR390-1696

ATTACHMENT I

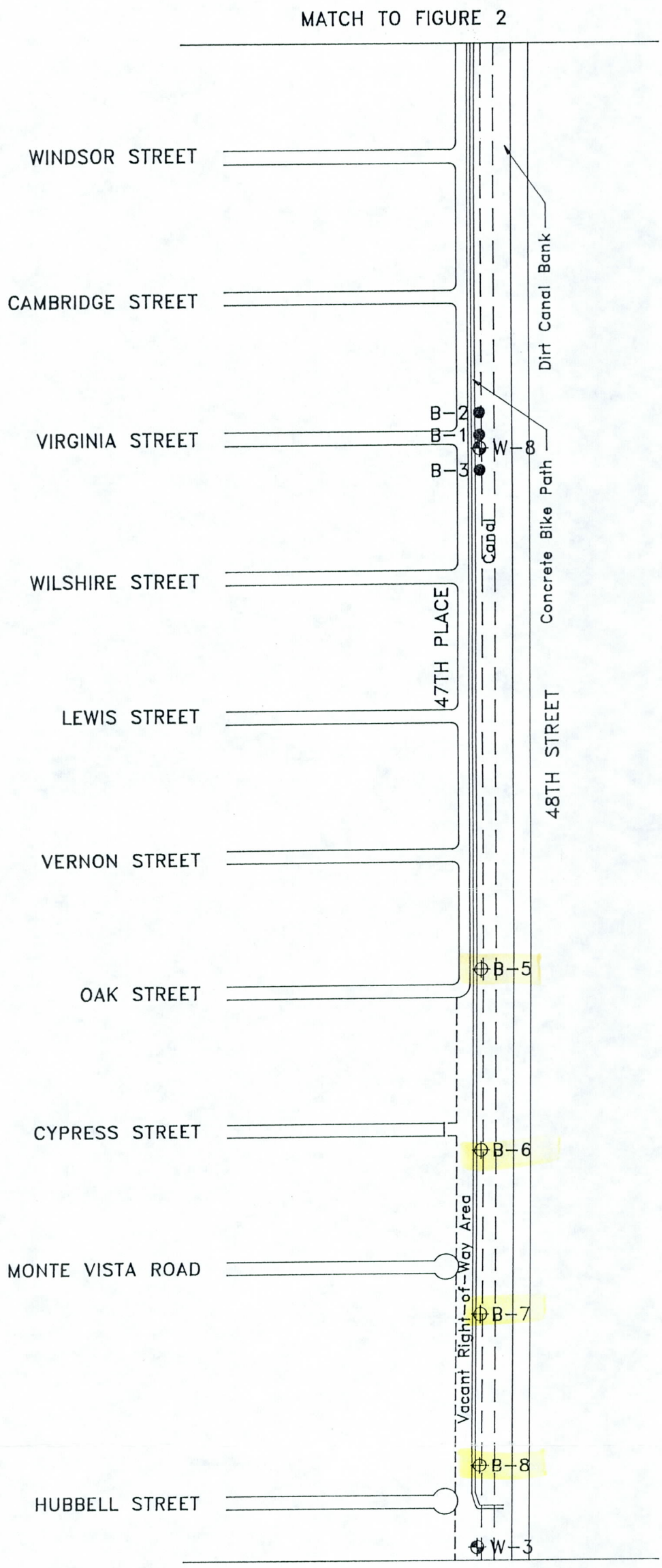
Study Area Location Map



CEC WRA	STUDY AREA LOCATION MAP	FIGURE 1
PROJECT NO. AR390-1696	DRAWN BY K. Andrews	
DATE Oct. 14, 1994	CHECKED BY K. Hebert	

ATTACHMENT II

Site Plan (A)



LEGEND

- ● Previous Soil Boring Locations
- ⊕ Soil Boring Locations
- ⊕ Monitor Well Locations

NORTH

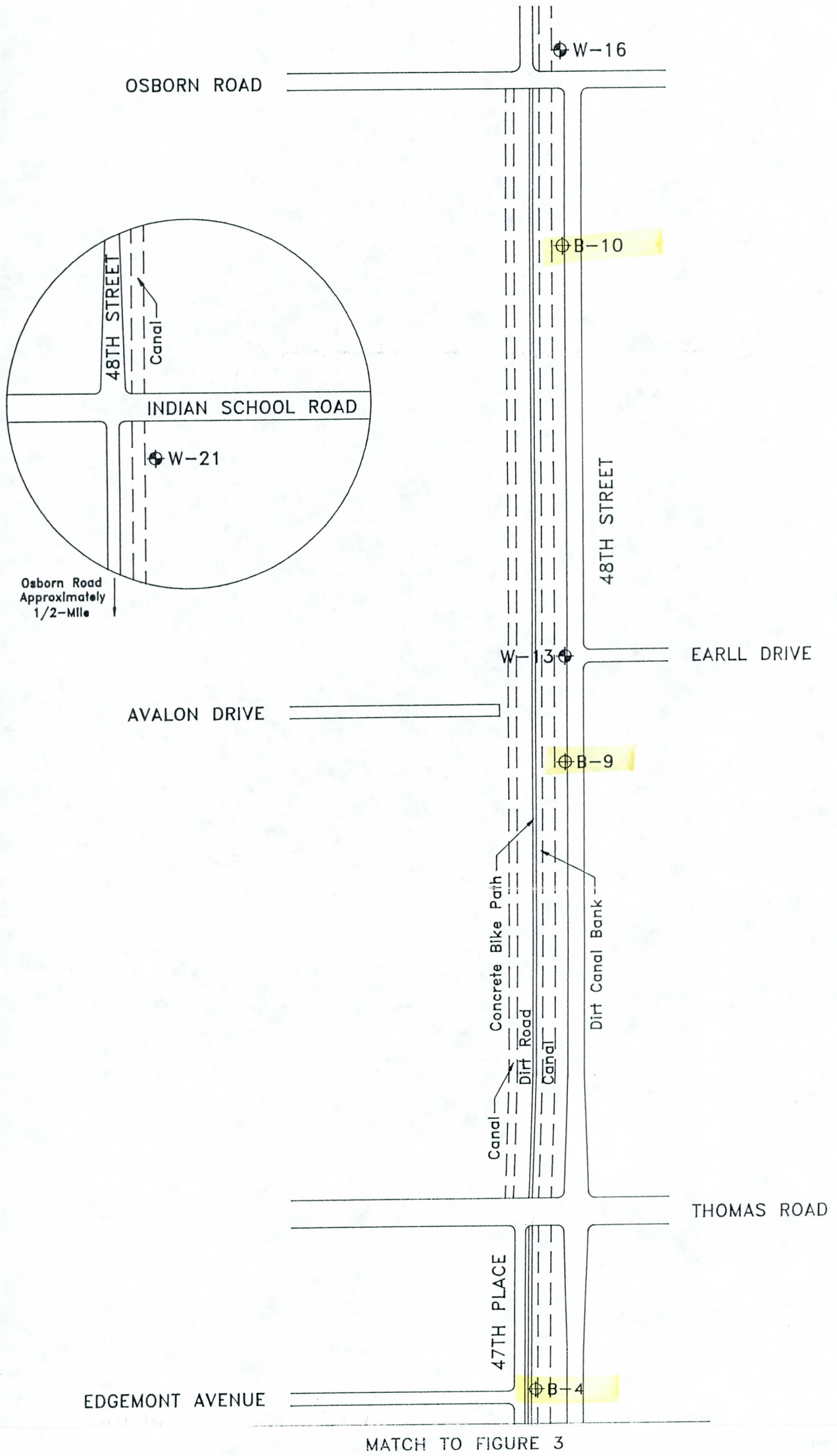
0 300 600 Ft.

CEC/WRA	SITE PLAN (A)
PROJECT NO. AR390-1696 DRAWN BY K. Andrews	
DATE Oct. 13, 1994 CHECKED BY K. Hebert	

FILE NAME: 39016962.DWG

ATTACHMENT III

Site Plan (B)



LEGEND

- ● Previous Soil Boring Locations
- ⊕ Soil Boring Locations
- ⊕ Monitor Well Locations

NORTH

0 300 600 Ft.

CEC/WRA	SITE PLAN (B)
PROJECT NO. AR390-1696 DRAWN BY K. Andrews	
DATE Oct. 13, 1994 CHECKED BY K. Hebert	

FILE NAME: 39016962.DWG

ATTACHMENT IV

Soil Boring Logs

SOIL BORING LOG

WATER RESOURCES ASSOCIATES, INC.

Hydrologists * Hydrogeologists * Engineers * Forensic Hydrologists

BORING NO. B4 SHEET 1 OF 1

PROJECT: MCFCD Cross-Cut Canal	PROJECT NO.: AR390-1696	ELEVATION: 1,200	LOCATION: Cross-Cut Canal and Edgemont
DRILLING AGENCY: Geomechanics Southwest		DRILLING EQUIPMENT: CME-75	
FOREMAN: Bill Romans	DATE STARTED: 08-24-94		DATE FINISHED: 08-24-94
COMPLETION DEPTH: 30 Feet	METHOD OF BACKFILLING OR COMPLETION: With cement		INSPECTOR: Kevin Hebert

FIELD DATA*

TIME	DEPTH (feet)		SPT (blows/foot)	SOIL DESCRIPTION	(PID) FIELD READING (Parts per million)
	-- 0 --				
	-- 5 --		NS	CLAYEY SILT (ML) red, well sorted, with few coarse grained sand, very low plasticity	
	-- 10 --		NS	GRAVELLY SILT (GM) tan, well rounded coarse gravel, no plasticity	
				Water encountered at 13 feet	
	-- 15 --		NS	GRAVELLY CLAY (GC) tan, fine to medium grained angular gravel	
	-- 20 --		NS	GRAVELLY CLAY (GC) same as above	
	-- 25 --		NS	GRAVELLY SAND (SP)	
0820	-- 30 --	■	13-14-17 (31b/f)	SILTY CLAY (CL) tan to reddish brown, with angular fine to coarse gravel and with silt and fine sand pockets, moist, medium plasticity, no odor **Boring Terminated at 30 feet**	NM
	-- 35 --				
	-- 40 --				
	-- 45 --				
	-- 50 --				

*** EXPLANATION**

NS=Not Sampled / NM= Not Measured

□ Standard Penetration Test 140 lb. Hammer - 30" fall

■ Undisturbed Driven Sample (S&H Brass Rings)

SOIL BORING LOG

WATER RESOURCES ASSOCIATES, INC.

Hydrologists * Hydrogeologists * Engineers * Forensic Hydrologists

BORING NO. B5 SHEET 1 OF 1

PROJECT: MCFCD Cross-Cut Canal	PROJECT NO.: AR390-1696	ELEVATION: 1,200	LOCATION: Cross-Cut Canal and Oak Street
DRILLING AGENCY: Geomechanics Southwest		DRILLING EQUIPMENT: CME-75	
FOREMAN: Bill Romans	DATE STARTED: 08-24-94		DATE FINISHED: 08-24-94
COMPLETION DEPTH: 30 Feet	METHOD OF BACKFILLING OR COMPLETION: With cement		INSPECTOR: Kevin Hebert

FIELD DATA*

TIME	DEPTH (feet)		SPT (blows/foot)	SOIL DESCRIPTION	(PID) FIELD READING (Parts per million)
	0				
	5		NS	CLAYEY SILT (ML) red, well sorted, with few fine gravel, low moisture, very low plasticity	
	10		NS	GRAVELLY SILT (GM) light tan, well rounded coarse gravel, low moisture, no plasticity, no odor	
	15		NS	GRAVELLY CLAY (GC) tan, with some very fine sand, fine to medium grained angular gravel, no plasticity	
	20		NS	Note: Groundwater encountered between 10 and 20 feet	
	25		NS		
1000	30	■	14-10-11 (21b/f)	GRAVELY CLAY (GC) reddish brown, with some fine sand, poorly sorted fine to coarse grained angular gravel, wet, low plasticity, no odor **Boring Terminated at 30 feet**	NM
	35				
	40				
	45				
	50				

*** EXPLANATION**

NS=Not Sampled / NM= Not Measured

□ Standard Penetration Test 140 lb. Hammer - 30" fall

■ Undisturbed Driven Sample (S&H Brass Rings)

SOIL BORING LOG

WATER RESOURCES ASSOCIATES, INC.

Hydrologists * Hydrogeologists * Engineers * Forensic Hydrologists

BORING NO. B6 SHEET 1 OF 1

PROJECT: MCFCD Cross-Cut Canal	PROJECT NO.: AR390-1696	ELEVATION: 1,200	LOCATION: Cross-Cut Canal and Cypress Street
DRILLING AGENCY: Geomechanics Southwest		DRILLING EQUIPMENT: CME-75	
FOREMAN: Bill Romans	DATE STARTED: 08-24-94		DATE FINISHED: 08-24-94
COMPLETION DEPTH: 30 Feet	METHOD OF BACKFILLING OR COMPLETION: With cement		INSPECTOR: Kevin Hebert

FIELD DATA*

TIME	DEPTH (feet)		SPT (blows/foot)	SOIL DESCRIPTION	(PID) FIELD READING (Parts per million)
	-- 0 --				
1210	-- 5 --		NS	CLAYEY SILT (ML) reddish brown, well sorted, with fine angular gravel, slightly moist, low plasticity	
1215	-- 10 --		NS	GRAVELLY SILT (ML) same as above	
1220	-- 15 --		NS	GRAVELLY CLAY (GC) tan, well rounded medium to coarse gravel, low moisture, low plasticity	
1225	-- 20 --		NS	GRAVELLY CLAY (GC) same as above	
	-- 25 --		NS		
				Water encountered at 28 feet	
1250	-- 30 --	■	7-8-12 (20b/f)	SILTY CLAY (CL) tan, with medium to coarse grained angular gravel, wet, medium plasticity **Boring Terminated at 30 feet**	NM
	-- 35 --				
	-- 40 --				
	-- 45 --				
	-- 50 --				

*** EXPLANATION**

NS=Not Sampled / NM= Not Measured

☐ Standard Penetration Test 140 lb. Hammer - 30" fall

■ Undisturbed Driven Sample (S&H Brass Rings)

SOIL BORING LOG

WATER RESOURCES ASSOCIATES, INC.
Hydrologists * Hydrogeologists * Engineers * Forensic Hydrologists

BORING NO. B7 SHEET 1 OF 1

PROJECT: MCFCD Cross-Cut Canal	PROJECT NO.: AR390-1696	ELEVATION: 1,200	LOCATION: Cross-Cut Canal and Monte Vista
DRILLING AGENCY: Geomechanics Southwest		DRILLING EQUIPMENT: CME-75	
FOREMAN: Bill Romans	DATE STARTED: 08-24-94		DATE FINISHED: 08-24-94
COMPLETION DEPTH: 30 Feet	METHOD OF BACKFILLING OR COMPLETION: With cement		INSPECTOR: Kevin Hebert

FIELD DATA*

TIME	DEPTH (feet)		SPT (blows/foot)	SOIL DESCRIPTION	(PID) FIELD READING (Parts per million)
	-- 0 --				
	-- 5 --		NS	CLAYEY SILT (ML) tan, with medium to coarse grained angular gravel, low moisture, low plasticity	
	-- 10 --		NS	CLAYEY SILT (ML) same as above	
	-- 15 --		NS	SILTY CLAY (CL) tan, low plasticity	
	-- 20 --		NS	SILTY CLAY (CL) same as above	
	-- 25 --		NS	Water at 25 feet	
1415	-- 30 --	■	14-22-23 (45b/f)	SILTY CLAY (CL) tan with medium to coarse angular gravel, and with some fine sand, wet, medium plasticity **Boring Terminated at 30 feet**	NM
	-- 35 --				
	-- 40 --				
	-- 45 --				
	-- 50 --				

*** EXPLANATION**

NS=Not Sampled / NM= Not Measured

□ Standard Penetration Test 140 lb. Hammer - 30" fall

■ Undisturbed Driven Sample (S&H Brass Rings)

SOIL BORING LOG

WATER RESOURCES ASSOCIATES, INC.

Hydrologists * Hydrogeologists * Engineers * Forensic Hydrologists

BORING NO. B8 SHEET 1 OF 1

PROJECT: MCFCD Cross-Cut Canal	PROJECT NO.: AR390-1696	ELEVATION: 1,200	LOCATION: Cross-Cut Canal and Hubble Street
DRILLING AGENCY: Geomechanics Southwest		DRILLING EQUIPMENT: CME-75	
FOREMAN: Bill Romans	DATE STARTED: 08-25-94		DATE FINISHED: 08-25-94
COMPLETION DEPTH: 30 Feet	METHOD OF BACKFILLING OR COMPLETION: With cement		INSPECTOR: Kevin Hebert

FIELD DATA*

TIME	DEPTH (feet)		SPT (blows/foot)	SOIL DESCRIPTION	(PID) FIELD READING (Parts per million)
	0				
	5		NS	CLAYEY SILT (ML) tan to red, well sorted, very low plasticity	
	10		NS	CLAYEY SILT (GM) same as above except with few well rounded gravel	
	15		NS		
	20		NS	CLAYEY SILT (ML) tan, well sorted, with fine well rounded gravel and some very fine sand, low moisture, low plasticity	
	25		NS		
0730	30	■	13-18-50/5" (68b/11")	SILTY CLAY (CL) tan to reddish brown, with few large angular gravel and with silt and fine sand pockets, moist, medium plasticity **Boring Terminated at 30 feet**	NM
	35			Note: No water encountered	
	40				
	45				
	50				

*** EXPLANATION**

NS=Not Sampled / NM= Not Measured

□ Standard Penetration Test 140 lb. Hammer - 30" fall

■ Undisturbed Driven Sample (S&H Brass Rings)

SOIL BORING LOG

WATER RESOURCES ASSOCIATES, INC.
Hydrologists * Hydrogeologists * Engineers * Forensic Hydrologists

BORING NO. B9 SHEET 1 OF 1

PROJECT: MCFCD Cross-Cut Canal	PROJECT NO.: AR390-1696	ELEVATION: 1,200	LOCATION: Cross-Cut Canal and Avalon
DRILLING AGENCY: Geomechanics Southwest		DRILLING EQUIPMENT: CME-75	
FOREMAN: Bill Romans	DATE STARTED: 08-25-94		DATE FINISHED: 08-25-94
COMPLETION DEPTH: 30 Feet	METHOD OF BACKFILLING OR COMPLETION: With cement		INSPECTOR: Kevin Hebert

FIELD DATA*

TIME	DEPTH (feet)		SPT (blows/foot)	SOIL DESCRIPTION	(PID) FIELD READING (Parts per million)
	-- 0 --				
	-- 5 --		NS		
	-- 10 --		NS	VERY SILTY CLAY (CL) reddish brown, with medium grained well rounded gravel, moist, low plasticity	
	-- 15 --		NS	Driller notes groundwater at 13 feet	
	-- 20 --		NS	Note: Soil very wet below 20 feet	
	-- 25 --		NS		
1000	-- 30 --	■	28-43-50/5" (93b/11")	SILTY CLAY (CL) reddish brown, with coarse angular sand, wet, low to medium plasticity **Boring Terminated at 30 feet**	NM
	-- 35 --			Note: No water encountered	
	-- 40 --				
	-- 45 --				
	-- 50 --				

*** EXPLANATION**

NS=Not Sampled / NM= Not Measured

□ Standard Penetration Test 140 lb. Hammer - 30" fall

■ Undisturbed Driven Sample (S&H Brass Rings)

SOIL BORING LOG

WATER RESOURCES ASSOCIATES, INC.

Hydrologists * Hydrogeologists * Engineers * Forensic Hydrologists

BORING NO. B10 SHEET 1 OF 1

PROJECT: MCFCD Cross-Cut Canal	PROJECT NO.: AR390-1696	ELEVATION: 1,200	LOCATION: Cross-cut Canal and Osborn Road
DRILLING AGENCY: Geomechanics Southwest		DRILLING EQUIPMENT: CME-75	
FOREMAN: Bill Romans	DATE STARTED: 08-24-94		DATE FINISHED: 08-24-94
COMPLETION DEPTH: 30 Feet	METHOD OF BACKFILLING OR COMPLETION: With cement		INSPECTOR: Kevin Hebert

FIELD DATA*

TIME	DEPTH (feet)		SPT (blows/foot)	SOIL DESCRIPTION	(PID) FIELD READING (Parts per million)
	-- 0 --				
	-- 5 --		NS	SANDY SILT (ML) reddish brown, fine to medium grained angular sand with few sub-rounded gravel, with some clay, slightly moist, very low plasticity	
	-- 10 --		NS	CLAYEY SILT (ML) tan to reddish brown, with fine to coarse sub-angular sand and with sub-rounded gravel, slightly moist, low plasticity	
	-- 15 --		NS	VERY SILTY CLAY (CL) tan, with few medium grained gravel, moist, low plasticity	
	-- 20 --		NS	SILTY CLAY (CL) tan, with few coarse angular sand, moist, medium plasticity	
	-- 25 --		NS	VERY SILTY CLAY (CL) same as above, except with less clay	
1117	-- 30 --	■	13-43-50/5" (93b/11")	SILTY CLAY (CL) reddish brown, with few angular coarse sand and gravel, moist, medium to high plasticity **Boring Terminated at 30 feet**	NM
	-- 35 --				
	-- 40 --				
	-- 45 --				
	-- 50 --				

*** EXPLANATION**

NS=Not Sampled / NM= Not Measured

□ Standard Penetration Test 140 lb. Hammer - 30" fall

■ Undisturbed Driven Sample (S&H Brass Rings)

ATTACHMENT V

Summary of Soil TPH and BTEX Analytical Results

ATTACHMENT V
SUMMARY OF SOIL TPH AND BTEX ANALYTICAL RESULTS

Sample ID	Depth (ft)	Date Sampled	418.1/ BLS-181	BLS-191	EPA Method 8020			
			TPH (mg/kg)	TPH (mg/kg)	Benzene (ug/kg)	Toluene (ug/kg)	Ethylbenzene (ug/kg)	Xylenes (ug/kg)
B-4 30	30	8/24/94	12	<20	<10	<10	<10	<3
B-5 30	30	8/24/94	<10	<20	<10	<10	<10	<3
B-6 30	30	8/24/94	<10	<20	<10	<10	<10	<3
B-7 30	30	8/24/94	<10	<20	<10	<10	<10	<3
B-8 30	30	8/25/94	<10	<20	<10	<10	<10	<3
B-9 30	30	8/25/94	<10	<20	<10	<10	<10	<3
B-10 30	30	8/25/94	<10	<20	<10	<10	<10	<3
Suggested Soil Clean-Up Levels			100	100	0.13	200	68	44

mg/kg = milligrams per kilogram
ug/kg = micrograms per kilogram

ATTACHMENT VI

Summary of Total Metal Concentrations in Soil Samples

ATTACHMENT VI
SUMMARY OF TOTAL METAL CONCENTRATIONS IN SOIL SAMPLES

SAMPLE IDENTIFICATION								
Sample	**B-4 30**	**B-5 30**	**B-6 30**	**B-7 30**	**B-8 30**	**B-9 30**	**B-10 30**	**Health-Based Guidance Level**
Date Sampled	**8-24-94**	**8-24-94**	**8-24-94**	**8-24-94**	**8-25-94**	**8-25-94**	**8-25-94**	
Arsenic	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	840
Barium	21	16	190	51	23	36	29	33,000
Cadmium	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	58
Chromium	16	6.9	8.7	8.6	12	7.6	16	1,700
Lead	5.4	5.7	5.4	4.5	2.7	3.7	4.0	84
Mercury	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	35
Selenium	41	32	34	26	31	37	25	840
Silver	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	840

units = milligram/kilogram (mg/kg)

ATTACHMENT VII

Laboratory Reports

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415975
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 1 OF 1

RECEIVED
OCT 0 6 1994
WATER RESOURCES ASSOCIATES INC.

CLIENT SAMPLE ID : B-8 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: --

Inorganic Chemistry - Total Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	<2.5	mg/Kg	2.5	09-06-94
Total Barium .....:	23.	mg/Kg	2.5	09-06-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-06-94
Total Chromium .....:	12.	mg/Kg	2.5	09-06-94
Total Lead .....:	2.7	mg/Kg	2.5	09-06-94
Total Mercury .....:	<0.25	mg/Kg	0.25	09-06-94
Total Selenium .....:	31.	mg/Kg	2.5	09-06-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-06-94

(1) Copy to Client

M. Engel
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415975
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-8 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: W. ABER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 08-31-94
ANALYSIS DATE .: 09-14-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<8.0	ug/Kg	8.0
Aldrin	<2.5	ug/Kg	2.5
alpha-BHC	<2.0	ug/Kg	2.0
beta-BHC	<4.0	ug/Kg	4.0
delta-BHC	<6.0	ug/Kg	6.0
Chlordane	<9.0	ug/Kg	9.0
Dieldrin	<1.2	ug/Kg	1.2
Endosulfan I	<9.0	ug/Kg	9.0
Endosulfan II	<2.5	ug/Kg	2.5
Endosulfan sulfate	<40.	ug/Kg	40.
Endrin	<4.0	ug/Kg	4.0
Endrin aldehyde	<15.	ug/Kg	15.
Heptachlor	<2.0	ug/Kg	2.0
Heptachlor Epoxide	<55.	ug/Kg	55.
Lindane	<2.5	ug/Kg	2.5
Methoxychlor	<110.	ug/Kg	110.
Toxaphene	<150.	ug/Kg	150.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<1000.	ug/Kg	1000.
PCB 1232	<250.	ug/Kg	250.
PCB 1242	<250.	ug/Kg	250.
PCB 1248	<200.	ug/Kg	200.
PCB 1254	<200.	ug/Kg	200.
PCB 1260	<200.	ug/Kg	200.

(2) Copies to Client

M. Gruff
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415975
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 2 OF 2

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
Dibutylchlorendate .....:	91.0	10-200
2,4,5,6-Tetrachloro-m-xylene .....:	60.0	10-200

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415975
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-8 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: W. MCCANN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 09-09-94
ANALYSIS DATE .: 09-10-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
Tetrachloroethene (PCE) .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<100.	ug/Kg	100.
Bromochloromethane .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<100.	ug/Kg	100.
Bromomethane .....:	<100.	ug/Kg	100.

(2) Copies to Client

M. Emell
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415975
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<100.	ug/Kg	100.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<100.	ug/Kg	100.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<250.	ug/Kg	250.
Dibromomethane	<100.	ug/Kg	100.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<250.	ug/Kg	250.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<50.	ug/Kg	50.
Isopropylbenzene	<50.	ug/Kg	50.
m-Xylene	<50.	ug/Kg	50.
Naphthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
p-Xylene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<250.	ug/Kg	250.
Vinyl chloride	<250.	ug/Kg	250.

Surrogate Information -

	Percent Recovery	Range
4-Bromofluorobenzene	89.0	74-121
1,2-Dichloroethane-D4	98.0	70-121
Toluene-D8	110.0	81-117

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415975
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: AGN
PAGE : 1 OF 4

CLIENT SAMPLE ID : B-8 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: S.KARA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 09-20-94

REMARKS -

RECOVERY FOR PHENOL-d5 OUTSIDE THE ACCEPTABLE RANGE DUE TO SAMPLE MATRIX EFFECTS.

Semi-Volatiles by Gas Chromatography/ Mass Spectrometry

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Phenol	<20.	mg/Kg	20.
Bis(2-Chloroethyl)ether	<20.	mg/Kg	20.
2-Chlorophenol	<20.	mg/Kg	20.
1,3-Dichlorobenzene	<20.	mg/Kg	20.
1,4-Dichlorobenzene	<20.	mg/Kg	20.
1,2-Dichlorobenzene	<20.	mg/Kg	20.
2-Methylphenol	<20.	mg/Kg	20.
Bis(2-chloroisopropyl)ether	<20.	mg/Kg	20.
4-Methylphenol	<20.	mg/Kg	20.
N-Nitroso-di-n-propylamine	<20.	mg/Kg	20.
Hexachloroethane	<20.	mg/Kg	20.
Nitrobenzene	<20.	mg/Kg	20.
Isophorone	<20.	mg/Kg	20.
2-Nitrophenol	<20.	mg/Kg	20.
2,4 Dimethylphenol	<20.	mg/Kg	20.
Bis(2-Chloroethoxy) methane	<20.	mg/Kg	20.
2,4-Dichlorophenol	<20.	mg/Kg	20.
1,2,4-Trichlorobenzene	<20.	mg/Kg	20.
Napthalene	<20.	mg/Kg	20.
4-Chloroaniline	<40.	mg/Kg	40.
Hexachlorobutadiene	<20.	mg/Kg	20.
4-Chloro-3-methylphenol	<30.	mg/Kg	30.
2-Methylnaphthalene	<20.	mg/Kg	20.
Hexachlorocyclopentadiene	<20.	mg/Kg	20.
2,4,6-Trichlorophenol	<20.	mg/Kg	20.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415975
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: AGN

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
2,4,5-Trichlorophenol	<20.	mg/Kg	20.
2-Chloronaphthalene	<20.	mg/Kg	20.
2-Nitroaniline	<30.	mg/Kg	30.
Dimethyl Phthalate	<20.	mg/Kg	20.
Acenaphthylene	<20.	mg/Kg	20.
3-Nitroaniline	<40.	mg/Kg	40.
Acenaphthene	<20.	mg/Kg	20.
2,4-Dinitrophenol	<20.	mg/Kg	20.
4-Nitrophenol	<30.	mg/Kg	30.
Dibenzofuran	<20.	mg/Kg	20.
2,4-Dinitrotoluene	<20.	mg/Kg	20.
2,6-Dinitrotoluene	<20.	mg/Kg	20.
Diethyl Phthalate	<20.	mg/Kg	20.
4-Chlorophenyl phenyl ether	<20.	mg/Kg	20.
Fluorene	<20.	mg/Kg	20.
4-Nitroaniline	<40.	mg/Kg	40.
2-Methyl-4,6-dinitrophenol	<30.	mg/Kg	30.
N-Nitrosodiphenylamine	<20.	mg/Kg	20.
4-Bromophenyl phenyl ether	<20.	mg/Kg	20.
Hexachlorobenzene	<20.	mg/Kg	20.
Pentachlorophenol	<30.	mg/Kg	30.
2,6-Dichlorophenol	<20.	mg/Kg	20.
N-Nitrosodibutylamine	<20.	mg/Kg	20.
N-Nitrosodimethylamine	<20.	mg/Kg	20.
Phenanthrene	<20.	mg/Kg	20.
Anthracene	<20.	mg/Kg	20.
Di-n-Butyl Phthalate	41.	mg/Kg	20.
Fluoranthene	<20.	mg/Kg	20.
Pyrene	<20.	mg/Kg	20.
Butyl Benzyl Phthalate	<20.	mg/Kg	20.
3,3'-Dichlorobenzidine	<30.	mg/Kg	30.
Benzo(a)anthracene	<20.	mg/Kg	20.
Bis(2-ethylhexyl) Phthalate	<20.	mg/Kg	20.
Chrysene	<20.	mg/Kg	20.
Di-n-Octyl Phthalate	<20.	mg/Kg	20.
Benzo(b)fluoranthene	<66.	mg/Kg	66.
Benzo(k)fluoranthene	<20.	mg/Kg	20.
Benzo(a)pyrene	<20.	mg/Kg	20.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415975
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: AGN

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Indeno(1,2,3-cd)pyrene	<20.	mg/Kg	20.
Dibenz(a,h)anthracene	<20.	mg/Kg	20.
Benzo(ghi)perylene	<20.	mg/Kg	20.
alpha-BHC	<20.	mg/Kg	20.
beta-BHC	<20.	mg/Kg	20.
delta-BHC	<20.	mg/Kg	20.
gamma-BHC (Lindane)	<20.	mg/Kg	20.
Aldrin	<20.	mg/Kg	20.
Heptachlor	<20.	mg/Kg	20.
Heptachlor Epoxide	<20.	mg/Kg	20.
Endosulfan I	<20.	mg/Kg	20.
4,4'-DDE	<20.	mg/Kg	20.
Dieldrin	<20.	mg/Kg	20.
Endrin	<20.	mg/Kg	20.
4,4'-DDD	<20.	mg/Kg	20.
Endosulfan II	<20.	mg/Kg	20.
4,4'-DDT	<20.	mg/Kg	20.
Endrin Aldehyde	<20.	mg/Kg	20.
Endosulfan Sulfate	<20.	mg/Kg	20.
Methoxychlor	<20.	mg/Kg	20.
Toxaphene	<50.	mg/Kg	50.
Chlordanes (alpha + gamma)	<20.	mg/Kg	20.
PCB 1016	<50.	mg/Kg	50.
PCB 1221	<50.	mg/Kg	50.
PCB 1232	<50.	mg/Kg	50.
PCB 1242	<50.	mg/Kg	50.
PCB 1248	<50.	mg/Kg	50.
PCB 1254	<50.	mg/Kg	50.
PCB 1260	<50.	mg/Kg	50.
Endrin ketone	<20.	mg/Kg	20.
Endosulfan II	<20.	mg/Kg	20.
Benzoic acid	<330.	mg/Kg	330.
Benzidine	<40.	mg/Kg	40.
1-Chloronaphthalene	<20.	mg/Kg	20.
Dibenz(a,j)acridine	<20.	mg/Kg	20.
7,12-Dimethylbenzo(a)anthracene	<66.	mg/Kg	66.
a,a Dimethylphenethylamine	<50.	mg/Kg	50.
Diphenylamine	<20.	mg/Kg	20.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415975
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: AEN

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
1,2-Diphenylhydrazine	<30.	mg/Kg	30.
Ethyl Methanesulfonate	<130.	mg/Kg	130.
3-Methylcholanthrene	<66.	mg/Kg	66.
Methylmethansulfonate	<66.	mg/Kg	66.
N-Nitrosopiperidine	<40.	mg/Kg	40.
1-Naphthylamine	<66.	mg/Kg	66.
2-Naphthylamine	<20.	mg/Kg	20.
2-Picoline	<50.	mg/Kg	50.
Pentachlorobenzene	<66.	mg/Kg	66.
Pentachloronitrobenzene	<130.	mg/Kg	130.
Phenacetin	<130.	mg/Kg	130.
Pronamide	<66.	mg/Kg	66.
1,2,4,5-Tetrachlorobenzene	<66.	mg/Kg	66.
2,3,4,6-Tetrachlorophenol	<20.	mg/Kg	20.
Aniline	<50.	mg/Kg	50.
Acetophenone	<40.	mg/Kg	40.
Benzyl alcohol	<130.	mg/Kg	130.
Dimethylaminoazobenzene	<66.	mg/Kg	66.

Surrogate Information -

	Percent Recovery	Range
2-Fluorophenol	41.5	25-121
Phenol-d5	18.0	24-113
2,4,6-Tribromophenol	55.0	19-122
2-Fluorobiphenyl	89.0	30-115
Nitrobenzene-d5	61.0	23-120
4-Terphenyl-d14	102.0	18-137

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415975
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: ymac
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-8 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: S. KUTA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 09-01-94
ANALYSIS DATE .: 09-02-94

Method 8020 - Aromatic Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<10.	ug/Kg	10.
Toluene	<10.	ug/Kg	10.
Ethylbenzene	<10.	ug/Kg	10.
Total Xylenes	<3.0	ug/Kg	3.0

Surrogate Information -

	Percent Recovery	Range
a,a,a -Trifluorotoluene (8020) ...:	98.0	80-120

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415975
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mic
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-8 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 08-30-94
ANALYSIS DATE .: 08-30-94

BLS 191/Modified 8015
Total Petroleum Fuel Hydrocarbons (C10 - C22)

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Total Petroleum Fuel Hydrocarbons :	<20.	mg/Kg	20.

Surrogate Information -

	Percent Recovery	Range
o-Terphenyl .....:	100.0	80-120

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415975
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-8 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 08-30-94
ANALYSIS DATE .: 08-30-94

BLS 181/Modified 418.1 - Total Petroleum Fuel Hydrocarbons

DATA TABLE

Parameter	Result	Unit	Detection Limit
Total Petroleum Hydrocarbons .....:	<10.	mg/Kg	10.

(2) Copies to Client

M. Graff
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415976
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mae
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-9 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: --

Inorganic Chemistry - Total Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	<2.5	mg/Kg	2.5	09-06-94
Total Barium .....:	36.	mg/Kg	2.5	09-06-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-06-94
Total Chromium .....:	7.6	mg/Kg	2.5	09-06-94
Total Lead .....:	3.7	mg/Kg	2.5	09-06-94
Total Mercury .....:	<0.25	mg/Kg	0.25	09-06-94
Total Selenium .....:	37.	mg/Kg	2.5	09-06-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-06-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415976
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: Umac
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-9 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: W. ABER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 08-31-94
ANALYSIS DATE .: 09-14-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<8.0	ug/Kg	8.0
Aldrin	<2.5	ug/Kg	2.5
alpha-BHC	<2.0	ug/Kg	2.0
beta-BHC	<4.0	ug/Kg	4.0
delta-BHC	<6.0	ug/Kg	6.0
Chlordane	<9.0	ug/Kg	9.0
Dieldrin	<1.2	ug/Kg	1.2
Endosulfan I	<9.0	ug/Kg	9.0
Endosulfan II	<2.5	ug/Kg	2.5
Endosulfan sulfate	<40.	ug/Kg	40.
Endrin	<4.0	ug/Kg	4.0
Endrin aldehyde	<15.	ug/Kg	15.
Heptachlor	<2.0	ug/Kg	2.0
Heptachlor Epoxide	<55.	ug/Kg	55.
Lindane	<2.5	ug/Kg	2.5
Methoxychlor	<110.	ug/Kg	110.
Toxaphene	<150.	ug/Kg	150.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<1000.	ug/Kg	1000.
PCB 1232	<250.	ug/Kg	250.
PCB 1242	<250.	ug/Kg	250.
PCB 1248	<200.	ug/Kg	200.
PCB 1254	<200.	ug/Kg	200.
PCB 1260	<200.	ug/Kg	200.

(2) Copies to Client

M. Gruff
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415976
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 2 OF 2

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
Dibutylchlorendate	105.2	10-200
2,4,5,6-Tetrachloro-m-xylene	73.8	10-200

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415976
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mai
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-9 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: W. MCCANN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 09-09-94
ANALYSIS DATE .: 09-10-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
Tetrachloroethene (PCE) .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<100.	ug/Kg	100.
Bromochloromethane .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<100.	ug/Kg	100.
Bromomethane .....:	<100.	ug/Kg	100.

(2) Copies to Client

M. Crisfil
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415976
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: Uma

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<100.	ug/Kg	100.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<100.	ug/Kg	100.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<250.	ug/Kg	250.
Dibromomethane	<100.	ug/Kg	100.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	290.	ug/Kg	250.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<50.	ug/Kg	50.
Isopropylbenzene	<50.	ug/Kg	50.
m-Xylene	<50.	ug/Kg	50.
Naphthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
p-Xylene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<250.	ug/Kg	250.
Vinyl chloride	<250.	ug/Kg	250.

Surrogate Information -

	Percent Recovery	Range
4-Bromofluorobenzene	89.0	74-121
1,2-Dichloroethane-D4	98.0	70-121
Toluene-D8	110.0	81-117

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415976
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 1 OF 4

CLIENT SAMPLE ID : B-9 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: S.KARA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 09-20-94

Semi-Volatiles by Gas Chromatography/ Mass Spectrometry

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<2000.	ug/Kg	2000.
Bis(2-Chloroethyl)ether	<2000.	ug/Kg	2000.
2-Chlorophenol	<2000.	ug/Kg	2000.
1,3-Dichlorobenzene	<2000.	ug/Kg	2000.
1,4-Dichlorobenzene	<2000.	ug/Kg	2000.
1,2-Dichlorobenzene	<2000.	ug/Kg	2000.
2-Methylphenol	<2000.	ug/Kg	2000.
Bis(2-chloroisopropyl)ether	<2000.	ug/Kg	2000.
4-Methylphenol	<2000.	ug/Kg	2000.
N-Nitroso-di-n-propylamine	<2000.	ug/Kg	2000.
Hexachloroethane	<2000.	ug/Kg	2000.
Nitrobenzene	<2000.	ug/Kg	2000.
Isophorone	<2000.	ug/Kg	2000.
2-Nitrophenol	<2000.	ug/Kg	2000.
2,4 Dimethylphenol	<2000.	ug/Kg	2000.
Bis(2-Chloroethoxy) methane	<2000.	ug/Kg	2000.
2,4-Dichlorophenol	<2000.	ug/Kg	2000.
1,2,4-Trichlorobenzene	<2000.	ug/Kg	2000.
Napthalene	<2000.	ug/Kg	2000.
4-Chloroaniline	<4000.	ug/Kg	4000.
Hexachlorobutadiene	<2000.	ug/Kg	2000.
4-Chloro-3-methylphenol	<3000.	ug/Kg	3000.
2-Methylnaphthalene	<2000.	ug/Kg	2000.
Hexachlorocyclopentadiene	<2000.	ug/Kg	2000.
2,4,6-Trichlorophenol	<2000.	ug/Kg	2000.
2,4,5-Trichlorophenol	<2000.	ug/Kg	2000.
2-Chloronaphthalene	<2000.	ug/Kg	2000.
2-Nitroaniline	<3000.	ug/Kg	3000.
Dimethyl Phthalate	<2000.	ug/Kg	2000.
Acenaphthylene	<2000.	ug/Kg	2000.

(2) Copies to Client

M. Graff
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415976
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<4000.	ug/Kg	4000.
Acenaphthene	<2000.	ug/Kg	2000.
2,4-Dinitrophenol	<2000.	ug/Kg	2000.
4-Nitrophenol	<3000.	ug/Kg	3000.
Dibenzofuran	<2000.	ug/Kg	2000.
2,4-Dinitrotoluene	<2000.	ug/Kg	2000.
2,6-Dinitrotoluene	<2000.	ug/Kg	2000.
Diethyl Phthalate	<2000.	ug/Kg	2000.
4-Chlorophenyl phenyl ether	<2000.	ug/Kg	2000.
Fluorene	<2000.	ug/Kg	2000.
4-Nitroaniline	<4000.	ug/Kg	4000.
2-Methyl-4,6-dinitrophenol	<3000.	ug/Kg	3000.
N-Nitrosodiphenylamine	<2000.	ug/Kg	2000.
4-Bromophenyl phenyl ether	<2000.	ug/Kg	2000.
Hexachlorobenzene	<2000.	ug/Kg	2000.
Pentachlorophenol	<3000.	ug/Kg	3000.
2,6-Dichlorophenol	<2000.	ug/Kg	2000.
N-Nitrosodibutylamine	<2000.	ug/Kg	2000.
N-Nitrosodimethylamine	<2000.	ug/Kg	2000.
Phenanthrene	<2000.	ug/Kg	2000.
Anthracene	<2000.	ug/Kg	2000.
Di-n-Butyl Phthalate	8400.	ug/Kg	2000.
Fluoranthene	<2000.	ug/Kg	2000.
Pyrene	<2000.	ug/Kg	2000.
Butyl Benzyl Phthalate	<2000.	ug/Kg	2000.
3,3'-Dichlorobenzidine	<3000.	ug/Kg	3000.
Benzo(a)anthracene	<2000.	ug/Kg	2000.
Bis(2-ethylhexyl) Phthalate	<2000.	ug/Kg	2000.
Chrysene	<2000.	ug/Kg	2000.
Di-n-Octyl Phthalate	<2000.	ug/Kg	2000.
Benzo(b)fluoranthene	<6600.	ug/Kg	6600.
Benzo(k)fluoranthene	<2000.	ug/Kg	2000.
Benzo(a)pyrene	<2000.	ug/Kg	2000.
Indeno(1,2,3-cd)pyrene	<2000.	ug/Kg	2000.
Dibenz(a,h)anthracene	<2000.	ug/Kg	2000.
Benzo(ghi)perylene	<2000.	ug/Kg	2000.
alpha-BHC	<2000.	ug/Kg	2000.
beta-BHC	<2000.	ug/Kg	2000.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415976
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: Lmac

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
delta-BHC	<2000.	ug/Kg	2000.
gamma-BHC (Lindane)	<2000.	ug/Kg	2000.
Aldrin	<2000.	ug/Kg	2000.
Heptachlor	<2000.	ug/Kg	2000.
Heptachlor Epoxide	<2000.	ug/Kg	2000.
Endosulfan I	<2000.	ug/Kg	2000.
4,4'-DDE	<2000.	ug/Kg	2000.
Dieldrin	<2000.	ug/Kg	2000.
Endrin	<2000.	ug/Kg	2000.
4,4'-DDD	<2000.	ug/Kg	2000.
Endosulfan II	<2000.	ug/Kg	2000.
4,4'-DDT	<2000.	ug/Kg	2000.
Endrin Aldehyde	<2000.	ug/Kg	2000.
Endosulfan Sulfate	<2000.	ug/Kg	2000.
Methoxychlor	<2000.	ug/Kg	2000.
Toxaphene	<5000.	ug/Kg	5000.
Chlordanes (alpha + gamma)	<2000.	ug/Kg	2000.
PCB 1016	<5000.	ug/Kg	5000.
PCB 1221	<5000.	ug/Kg	5000.
PCB 1232	<5000.	ug/Kg	5000.
PCB 1242	<5000.	ug/Kg	5000.
PCB 1248	<5000.	ug/Kg	5000.
PCB 1254	<5000.	ug/Kg	5000.
PCB 1260	<5000.	ug/Kg	5000.
Endrin ketone	<2000.	ug/Kg	2000.
Endosulfan II	<2000.	ug/Kg	2000.
Benzoic acid	<33000.	ug/Kg	33000.
Benzidine	<4000.	ug/Kg	4000.
1-Chloronaphthalene	<2000.	ug/Kg	2000.
Dibenz(a,j)acridine	<2000.	ug/Kg	2000.
7,12-Dimethylbenzo(a)anthracene	<6600.	ug/Kg	6600.
a,a Dimethylphenethylamine	<5000.	ug/Kg	5000.
Diphenylamine	<2000.	ug/Kg	2000.
1,2-Diphenylhydrazine	<3000.	ug/Kg	3000.
Ethyl Methanesulfonate	<13000.	ug/Kg	13000.
3-Methylcholanthrene	<6600.	ug/Kg	6600.
Methylmethansulfonate	<6600.	ug/Kg	6600.
N-Nitrosopiperidine	<4000.	ug/Kg	4000.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415976
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: uac
PAGE : 4 OF 4

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
1-Naphthylamine	<6600.	ug/Kg	6600.
2-Naphthylamine	<2000.	ug/Kg	2000.
2-Picoline	<5000.	ug/Kg	5000.
Pentachlorobenzene	<6600.	ug/Kg	6600.
Pentachloronitrobenzene	<13000.	ug/Kg	13000.
Phenacetin	<13000.	ug/Kg	13000.
Pronamide	<6600.	ug/Kg	6600.
1,2,4,5-Tetrachlorobenzene	<6600.	ug/Kg	6600.
2,3,4,6-Tetrachlorophenol	<2000.	ug/Kg	2000.
Aniline	<5000.	ug/Kg	5000.
Acetophenone	<4000.	ug/Kg	4000.
Benzyl alcohol	<13000.	ug/Kg	13000.
Dimethylaminoazobenzene	<6600.	ug/Kg	6600.

Surrogate Information -

	Percent Recovery	Range
2-Fluorophenol	63.0	25-121
Phenol-d5	65.0	24-113
2,4,6-Tribromophenol	82.5	19-122
2-Fluorobiphenyl	75.0	30-115
Nitrobenzene-d5	71.0	23-120
4-Terphenyl-d14	78.0	18-137

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415976
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: cmac
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-9 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: S. KUTA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 09-01-94
ANALYSIS DATE .: 09-02-94

Method 8020 - Aromatic Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<10.	ug/Kg	10.
Toluene	<10.	ug/Kg	10.
Ethylbenzene	<10.	ug/Kg	10.
Total Xylenes	<3.0	ug/Kg	3.0

Surrogate Information -

	Percent Recovery	Range
a,a,a -Trifluorotoluene (8020) ...:	98.0	80-120

(2) Copies to Client

M. Ensott
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415976
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-9 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 08-30-94

BLS 191/Modified 8015
Total Petroleum Fuel Hydrocarbons (C10 - C22)

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Total Petroleum Fuel Hydrocarbons :	<20.	mg/Kg	20.

Surrogate Information -

	Percent Recovery	Range
o-Terphenyl .....:	100.0	80-120

(2) Copies to Client

M. Gugl
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415976
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: AGN
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-9 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 08-30-94
ANALYSIS DATE .: 08-30-94

BLS 181/Modified 418.1 - Total Petroleum Fuel Hydrocarbons

DATA TABLE

Parameter	Result	Unit	Detection Limit
Total Petroleum Hydrocarbons .....:	<10.	mg/Kg	10.

(2) Copies to Client

M. Gusta
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415977
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mae
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-10 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: --

Inorganic Chemistry - Total Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	<2.5	mg/Kg	2.5	09-06-94
Total Barium .....:	29.	mg/Kg	2.5	09-06-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	09-06-94
Total Chromium .....:	16.	mg/Kg	2.5	09-06-94
Total Lead .....:	4.0	mg/Kg	2.5	09-06-94
Total Mercury .....:	<0.25	mg/Kg	0.25	09-06-94
Total Selenium .....:	25.	mg/Kg	2.5	09-06-94
Total Silver .....:	<2.5	mg/Kg	2.5	09-06-94

(1) Copy to Client

M. Gnadt
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415977
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: MAC
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-10 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: W. ABER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 08-31-94
ANALYSIS DATE .: 09-14-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<8.0	ug/Kg	8.0
Aldrin	<2.5	ug/Kg	2.5
alpha-BHC	<2.0	ug/Kg	2.0
beta-BHC	<4.0	ug/Kg	4.0
delta-BHC	<6.0	ug/Kg	6.0
Chlordane	<9.0	ug/Kg	9.0
Dieldrin	<1.2	ug/Kg	1.2
Endosulfan I	<9.0	ug/Kg	9.0
Endosulfan II	<2.5	ug/Kg	2.5
Endosulfan sulfate	<40.	ug/Kg	40.
Endrin	<4.0	ug/Kg	4.0
Endrin aldehyde	<15.	ug/Kg	15.
Heptachlor	<2.0	ug/Kg	2.0
Heptachlor Epoxide	<55.	ug/Kg	55.
Lindane	<2.5	ug/Kg	2.5
Methoxychlor	<110.	ug/Kg	110.
Toxaphene	<150.	ug/Kg	150.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<1000.	ug/Kg	1000.
PCB 1232	<250.	ug/Kg	250.
PCB 1242	<250.	ug/Kg	250.
PCB 1248	<200.	ug/Kg	200.
PCB 1254	<200.	ug/Kg	200.
PCB 1260	<200.	ug/Kg	200.

(2) Copies to Client

M. Ensdt
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415977
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mae
PAGE : 2 OF 2

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
Dibutylchlorendate ..... :	107.2	10-200
2,4,5,6-Tetrachloro-m-xylene ..... :	72.4	10-200

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415977
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: Mae
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-10 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: W. MCCANN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 09-09-94
ANALYSIS DATE .: 09-10-94

Method 8260 - Volatile Organics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane	<50.	ug/Kg	50.
1,1,1-Trichloroethane	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane	<50.	ug/Kg	50.
Tetrachloroethene (PCE)	<50.	ug/Kg	50.
1,1,2-Trichloroethane	<50.	ug/Kg	50.
1,1-Dichloroethane	<50.	ug/Kg	50.
1,1-Dichloroethene	<50.	ug/Kg	50.
1,1-Dichloropropene	<50.	ug/Kg	50.
1,2-Dibromoethane	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene	<50.	ug/Kg	50.
1,2,3-Trichloropropane	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene	<50.	ug/Kg	50.
1,2-Dichlorobenzene	<50.	ug/Kg	50.
1,2-Dichloroethane	<50.	ug/Kg	50.
1,2-Dichloropropane	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene	<50.	ug/Kg	50.
1,3-Dichlorobenzene	<50.	ug/Kg	50.
1,3-Dichloropropane	<50.	ug/Kg	50.
1,4-Dichlorobenzene	<50.	ug/Kg	50.
2,2-Dichloropropane	<50.	ug/Kg	50.
2-Chlorotoluene	<50.	ug/Kg	50.
4-Chlorotoluene	<50.	ug/Kg	50.
4-Isopropyltoluene	<50.	ug/Kg	50.
Benzene	<50.	ug/Kg	50.
Bromobenzene	<100.	ug/Kg	100.
Bromochloromethane	<50.	ug/Kg	50.
Bromodichloromethane	<50.	ug/Kg	50.
Bromoform	<100.	ug/Kg	100.
Bromomethane	<100.	ug/Kg	100.

(2) Copies to Client

M. Ewell
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415977
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<100.	ug/Kg	100.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<100.	ug/Kg	100.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<250.	ug/Kg	250.
Dibromomethane	<100.	ug/Kg	100.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<250.	ug/Kg	250.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<50.	ug/Kg	50.
Isopropylbenzene	<50.	ug/Kg	50.
m-Xylene	<50.	ug/Kg	50.
Naphthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
p-Xylene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<250.	ug/Kg	250.
Vinyl chloride	<250.	ug/Kg	250.

Surrogate Information -

	Percent Recovery	Range
4-Bromofluorobenzene	89.0	74-121
1,2-Dichloroethane-D4	100.0	70-121
Toluene-D8	110.0	81-117

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415977
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mae
PAGE : 1 OF 4

CLIENT SAMPLE ID : B-10 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: S.KARA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 09-20-94

Semi-Volatiles by Gas Chromatography/ Mass Spectrometry

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<2000.	ug/Kg	2000.
Bis(2-Chloroethyl)ether	<2000.	ug/Kg	2000.
2-Chlorophenol	<2000.	ug/Kg	2000.
1,3-Dichlorobenzene	<2000.	ug/Kg	2000.
1,4-Dichlorobenzene	<2000.	ug/Kg	2000.
1,2-Dichlorobenzene	<2000.	ug/Kg	2000.
2-Methylphenol	<2000.	ug/Kg	2000.
Bis(2-chloroisopropyl)ether	<2000.	ug/Kg	2000.
4-Methylphenol	<2000.	ug/Kg	2000.
N-Nitroso-di-n-propylamine	<2000.	ug/Kg	2000.
Hexachloroethane	<2000.	ug/Kg	2000.
Nitrobenzene	<2000.	ug/Kg	2000.
Isophorone	<2000.	ug/Kg	2000.
2-Nitrophenol	<2000.	ug/Kg	2000.
2,4 Dimethylphenol	<2000.	ug/Kg	2000.
Bis(2-Chloroethoxy) methane	<2000.	ug/Kg	2000.
2,4-Dichlorophenol	<2000.	ug/Kg	2000.
1,2,4-Trichlorobenzene	<2000.	ug/Kg	2000.
Napthalene	<2000.	ug/Kg	2000.
4-Chloroaniline	<4000.	ug/Kg	4000.
Hexachlorobutadiene	<2000.	ug/Kg	2000.
4-Chloro-3-methylphenol	<3000.	ug/Kg	3000.
2-Methylnaphthalene	<2000.	ug/Kg	2000.
Hexachlorocyclopentadiene	<2000.	ug/Kg	2000.
2,4,6-Trichlorophenol	<2000.	ug/Kg	2000.
2,4,5-Trichlorophenol	<2000.	ug/Kg	2000.
2-Chloronaphthalene	<2000.	ug/Kg	2000.
2-Nitroaniline	<3000.	ug/Kg	3000.
Dimethyl Phthalate	<2000.	ug/Kg	2000.
Acenaphthylene	<2000.	ug/Kg	2000.

(2) Copies to Client

M. Enell
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415977
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<4000.	ug/Kg	4000.
Acenaphthene	<2000.	ug/Kg	2000.
2,4-Dinitrophenol	<2000.	ug/Kg	2000.
4-Nitrophenol	<3000.	ug/Kg	3000.
Dibenzofuran	<2000.	ug/Kg	2000.
2,4-Dinitrotoluene	<2000.	ug/Kg	2000.
2,6-Dinitrotoluene	<2000.	ug/Kg	2000.
Diethyl Phthalate	<2000.	ug/Kg	2000.
4-Chlorophenyl phenyl ether	<2000.	ug/Kg	2000.
Fluorene	<2000.	ug/Kg	2000.
4-Nitroaniline	<4000.	ug/Kg	4000.
2-Methyl-4,6-dinitrophenol	<3000.	ug/Kg	3000.
N-Nitrosodiphenylamine	<2000.	ug/Kg	2000.
4-Bromophenyl phenyl ether	<2000.	ug/Kg	2000.
Hexachlorobenzene	<2000.	ug/Kg	2000.
Pentachlorophenol	<3000.	ug/Kg	3000.
2,6-Dichlorophenol	<2000.	ug/Kg	2000.
N-Nitrosodibutylamine	<2000.	ug/Kg	2000.
N-Nitrosodimethylamine	<2000.	ug/Kg	2000.
Phenanthrene	<2000.	ug/Kg	2000.
Anthracene	<2000.	ug/Kg	2000.
Di-n-Butyl Phthalate	<2000.	ug/Kg	2000.
Fluoranthene	<2000.	ug/Kg	2000.
Pyrene	<2000.	ug/Kg	2000.
Butyl Benzyl Phthalate	<2000.	ug/Kg	2000.
3,3'-Dichlorobenzidine	<3000.	ug/Kg	3000.
Benzo(a)anthracene	<2000.	ug/Kg	2000.
Bis(2-ethylhexyl) Phthalate	<2000.	ug/Kg	2000.
Chrysene	<2000.	ug/Kg	2000.
Di-n-Octyl Phthalate	<2000.	ug/Kg	2000.
Benzo(b)fluoranthene	<6600.	ug/Kg	6600.
Benzo(k)fluoranthene	<2000.	ug/Kg	2000.
Benzo(a)pyrene	<2000.	ug/Kg	2000.
Indeno(1,2,3-cd)pyrene	<2000.	ug/Kg	2000.
Dibenz(a,h)anthracene	<2000.	ug/Kg	2000.
Benzo(ghi)perylene	<2000.	ug/Kg	2000.
alpha-BHC	<2000.	ug/Kg	2000.
beta-BHC	<2000.	ug/Kg	2000.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415977
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
delta-BHC	<2000.	ug/Kg	2000.
gamma-BHC (Lindane)	<2000.	ug/Kg	2000.
Aldrin	<2000.	ug/Kg	2000.
Heptachlor	<2000.	ug/Kg	2000.
Heptachlor Epoxide	<2000.	ug/Kg	2000.
Endosulfan I	<2000.	ug/Kg	2000.
4,4'-DDE	<2000.	ug/Kg	2000.
Dieldrin	<2000.	ug/Kg	2000.
Endrin	<2000.	ug/Kg	2000.
4,4'-DDD	<2000.	ug/Kg	2000.
Endosulfan II	<2000.	ug/Kg	2000.
4,4'-DDT	<2000.	ug/Kg	2000.
Endrin Aldehyde	<2000.	ug/Kg	2000.
Endosulfan Sulfate	<2000.	ug/Kg	2000.
Methoxychlor	<2000.	ug/Kg	2000.
Toxaphene	<5000.	ug/Kg	5000.
Chlordanes (alpha + gamma)	<2000.	ug/Kg	2000.
PCB 1016	<5000.	ug/Kg	5000.
PCB 1221	<5000.	ug/Kg	5000.
PCB 1232	<5000.	ug/Kg	5000.
PCB 1242	<5000.	ug/Kg	5000.
PCB 1248	<5000.	ug/Kg	5000.
PCB 1254	<5000.	ug/Kg	5000.
PCB 1260	<5000.	ug/Kg	5000.
Endrin ketone	<2000.	ug/Kg	2000.
Endosulfan II	<2000.	ug/Kg	2000.
Benzoic acid	<33000.	ug/Kg	33000.
Benzidine	<4000.	ug/Kg	4000.
1-Chloronaphthalene	<2000.	ug/Kg	2000.
Dibenz(a,j)acridine	<2000.	ug/Kg	2000.
7,12-Dimethylbenzo(a)anthracene	<6600.	ug/Kg	6600.
a,a Dimethylphenethylamine	<5000.	ug/Kg	5000.
Diphenylamine	<2000.	ug/Kg	2000.
1,2-Diphenylhydrazine	<3000.	ug/Kg	3000.
Ethyl Methanesulfonate	<13000.	ug/Kg	13000.
3-Methylcholanthrene	<6600.	ug/Kg	6600.
Methylmethansulfonate	<6600.	ug/Kg	6600.
N-Nitrosopiperidine	<4000.	ug/Kg	4000.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415977
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
1-Naphthylamine	<6600.	ug/Kg	6600.
2-Naphthylamine	<2000.	ug/Kg	2000.
2-Picoline	<5000.	ug/Kg	5000.
Pentachlorobenzene	<6600.	ug/Kg	6600.
Pentachloronitrobenzene	<13000.	ug/Kg	13000.
Phenacetin	<13000.	ug/Kg	13000.
Pronamide	<6600.	ug/Kg	6600.
1,2,4,5-Tetrachlorobenzene	<6600.	ug/Kg	6600.
2,3,4,6-Tetrachlorophenol	<2000.	ug/Kg	2000.
Aniline	<5000.	ug/Kg	5000.
Acetophenone	<4000.	ug/Kg	4000.
Benzyl alcohol	<13000.	ug/Kg	13000.
Dimethylaminoazobenzene	<6600.	ug/Kg	6600.

Surrogate Information -

	Percent Recovery	Range
2-Fluorophenol	55.0	25-121
Phenol-d5	61.5	24-113
2,4,6-Tribromophenol	82.0	19-122
2-Fluorobiphenyl	75.0	30-115
Nitrobenzene-d5	62.0	23-120
4-Terphenyl-d14	81.0	18-137

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415977
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-10 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: S. KUTA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 09-01-94
ANALYSIS DATE .: 09-02-94

Method 8020 - Aromatic Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<10.	ug/Kg	10.
Toluene	<10.	ug/Kg	10.
Ethylbenzene	<10.	ug/Kg	10.
Total Xylenes	<3.0	ug/Kg	3.0

Surrogate Information -

	Percent Recovery	Range
a,a,a -Trifluorotoluene (8020) ...:	99.0	80-120

(2) Copies to Client

M. Gnadt
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415977
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mcc
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-10 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 08-30-94

BLS 191/Modified 8015
Total Petroleum Fuel Hydrocarbons (C10 - C22)

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Total Petroleum Fuel Hydrocarbons :	<20.	mg/Kg	20.

Surrogate Information -

	Percent Recovery	Range
o-Terphenyl .....:	100.0	80-120

(2) Copies to Client

M. Cuadi
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVID GARDNER
PROJECT: MCFCD CROSS-CUT CANAL
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415977
INVOICE NO.: 22143617
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-10 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: MCFCD CROSS-CUT CANAL
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1617
SAMPLE DATE ...: 08-25-94
SUBMITTAL DATE : 08-25-94
EXTRACTION DATE: 08-30-94
ANALYSIS DATE .: 08-30-94

BLS 181/Modified 418.1 - Total Petroleum Fuel Hydrocarbons

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Total Petroleum Hydrocarbons .....:	<10.	mg/Kg	10.

(2) Copies to Client

M. Gudd
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 115-083094-1
REFERENCE NOTEBOOK : WW191
REFERENCE PAGE ....: 73

INSTRUMENT : Beckman Acculab IR-TPHC
ANALYZED BY : A. JAIN
ANALYZED ON : 08-30-94

TEST DESCRIPTION ..: BLS 181/Modified 418.1 - Total Petroleum Fuel Hydrocarbons

SAMPLES IN THIS RUN: 9415806 9415807 9415808 9415809 9415975 9415976 9415977 9416031 9416032 9416092

CALIBRATION CHECK -

PARAMETER	UNIT	TRUE VALUE	FOUND VALUE	%RECOVERY
Total Petroleum Hydrocarbons	mg/L	100.	101.	101.0
Total Petroleum Hydrocarbons	mg/L	100.	109.	109.0

SPIKES -

SAMPLE NUMBER	PARAMETER	UNIT	SAMPLE RESULT	SPIKE CONC.	SAMPLE+SPIKE DUP1/DUP2	%REC	RPD
9415975	Total Petroleum Hydrocarbons	mg/Kg	<10.	100.	1) 109.	109.0	
					2) 109.	109.0	0.

METHOD BLANKS -

PARAMETER	UNIT	RESULT
Total Petroleum Hydrocarbons	mg/Kg	<10.

NOTE -

1) NC: Not Calculable because result is < 5 times the MDL

2) NP: Not Practical because sample result is 4 times or more greater than spike added.

3) Percent Recovery is:

$$\frac{\text{Sample+Spike Result - Sample Result}}{\text{Spike Amount}} \times 100$$

4) Relative Percent Difference (RPD) is:

$$\frac{\text{Sample Result - Replicate Result}}{(\text{Sample Result + Replicate Result})/2} \times 100$$

WESTECH
LABORATORIES
INC.
QUALITY ASSURANCE OFFICER
A. Nicholo
DATE: 10/5/94

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 103-083094-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Hewlett Packard GC with Dual FID
ANALYZED BY : A. JAIN
ANALYZED ON : 08-30-94

TEST DESCRIPTION ..: BLS 191/Mod. 8015 - Total Petroleum Fuel Hydrocarbons C10-22

SAMPLES IN THIS RUN: 9415218 9415220 9415223 9415225 9415228 9415230 9415233 9415235 9415806 9415807 9415808 9415809 9415975 9415976 9415977

CALIBRATION CHECK -

PARAMETER	UNIT	TRUE VALUE	FOUND VALUE	%RECOVERY
Total Petroleum Fuel Hydrocarbons	mg/L	100.	88.	88.0
Total Petroleum Fuel Hydrocarbons	mg/L	100.	90.	90.0
Total Petroleum Fuel Hydrocarbons	mg/L	100.	81.	81.0

SPIKES -

SAMPLE NUMBER	PARAMETER	UNIT	SAMPLE RESULT	SPIKE CONC.	SAMPLE+SPIKE DUP1/DUP2		%REC	RPD
9415230	Total Petroleum Fuel Hydroca	mg/Kg	<20.	100.	1)	93	93.0	
					2)	92.	92.0	1.
9415975	Total Petroleum Fuel Hydroca	mg/Kg	<20.	100.	1)	82.	82.0	
					2)	84.	84.0	2.

METHOD BLANKS -

PARAMETER	UNIT	RESULT
Total Petroleum Fuel Hydrocarbons	mg/L	<2.0

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 103-083094-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Hewlett Packard GC with Dual FID
ANALYZED BY : A. JAIN
ANALYZED ON : 08-30-94

NOTE -

1) NC: Not Calculable because result is < 5 times the MDL

2) NP: Not Practical because sample result is 4 times or more greater than spike added.

3) Percent Recovery is:

$$\frac{\text{Sample+Spike Result - Sample Result}}{\text{Spike Amount}} \times 100$$

4) Relative Percent Difference (RPD) is:

$$\frac{\text{Sample Result - Replicate Result}}{(\text{Sample Result + Replicate Result})/2} \times 100$$

WESTECH
LABORATORIES
INC.
QUALITY ASSURANCE OFFICER
A. Nichols
DATE: 10/5/94

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 106-090294-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Hewlett Packard GC w/ PID & FID
ANALYZED BY : S. KUTA
ANALYZED ON : 09-02-94

TEST DESCRIPTION ..: Method 8020 - Aromatic Volatiles

SAMPLES IN THIS RUN: 9415417 9415857 9415975 9415976 9415977 9416066 9416067
9416068 9416093 9416095 9416436 9416437 9416438 9416439

CALIBRATION CHECK -

PARAMETER	UNIT	TRUE VALUE	FOUND VALUE	%RECOVERY
Ethylbenzene	ug/L	10.	11.	110.0
Toluene	ug/L	10.	11.	110.0
Total Xylenes	ug/L	30.	31.	103.3
Benzene	ug/L	10.	10.	100.0
Ethylbenzene	ug/L	10.	11.	110.0
Toluene	ug/L	10.	10.	100.0
Total Xylenes	ug/L	30.	31.	103.3
Benzene	ug/L	10.	10.	100.0
Ethylbenzene	ug/L	10.	11.	110.0
Toluene	ug/L	10.	11.	110.0
Total Xylenes	ug/L	30.	34.	113.3
Benzene	ug/L	10.	11.	110.0

SPIKES -

SAMPLE NUMBER	PARAMETER	UNIT	SAMPLE RESULT	SPIKE CONC.	SAMPLE+SPIKE DUP1/DUP2		%REC	RPD
9415977	Ethylbenzene	ug/Kg	<10.	10.	1)	10.	100.0	
					2)	10.	100.0	0.
9415977	Toluene	ug/Kg	<10.	10.	1)	10.	100.0	
					2)	9.9	99.0	1.
9415977	Total Xylenes	ug/Kg	<3.0	30.	1)	30.	100.0	
					2)	30.	100.0	0.
9415977	Benzene	ug/Kg	<10.	10.	1)	9.7	97.0	
					2)	9.4	94.0	3.
9416093	Ethylbenzene	ug/Kg	<10.	10.	1)	10.	100.0	
					2)	9.9	99.0	1.
9416093	Toluene	ug/Kg	<10.	10.	1)	9.7	97.0	
					2)	9.6	96.0	1.
9416093	Total Xylenes	ug/Kg	<3.0	30.	1)	30.	100.0	
					2)	29.	96.7	3.
9416093	Benzene	ug/Kg	<10.	10.	1)	9.1	91.0	
					2)	8.9	89.0	2.

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 106-090294-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Hewlett Packard GC w/ PID & FID
ANALYZED BY : S. KUTA
ANALYZED ON : 09-02-94

METHOD BLANKS -

PARAMETER	UNIT	RESULT
Benzene	ug/L	<1.0
Toluene	ug/L	<1.0
Ethylbenzene	ug/L	<1.0
Total Xylenes	ug/L	<0.3

NOTE -

1) NC: Not Calculable because result is < 5 times the MDL

2) NP: Not Practical because sample result is 4 times or more greater than spike added.

3) Percent Recovery is:

$$\frac{\text{Sample+Spike Result - Sample Result}}{\text{Spike Amount}} \times 100$$

4) Relative Percent Difference (RPD) is:

$$\frac{\text{Sample Result - Replicate Result}}{(\text{Sample Result + Replicate Result})/2} \times 100$$

WESTECH
LABORATORIES
INC.
QUALITY ASSURANCE OFFICER
A. Pickel
DATE: 10/5/94

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416396
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mae
PAGE : 1 OF 1

RECEIVED
OCT 06 1994
WATER RESOURCES ASSOCIATES INC.

CLIENT SAMPLE ID : W-8
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: --

Inorganic Chemistry - Total Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Antimony	<0.05	mg/L	0.05	09-03-94
Total Arsenic	<0.05	mg/L	0.05	09-03-94
Total Barium	0.53	mg/L	0.05	09-03-94
Total Beryllium	<0.05	mg/L	0.05	09-03-94
Total Boron	0.26	mg/L	0.10	09-03-94
Total Cadmium	<0.04	mg/L	0.04	09-03-94
Total Calcium	410.	mg/L	0.05	09-03-94
Total Chromium	0.08	mg/L	0.05	09-03-94
Total Copper	0.06	mg/L	0.05	09-03-94
Total Iron	44.	mg/L	0.05	09-03-94
Total Lead	0.06	mg/L	0.05	09-03-94
Total Magnesium	49.	mg/L	0.10	09-03-94
Total Manganese	0.97	mg/L	0.05	09-03-94
Total Mercury	<0.001	mg/L	0.001	09-12-94
Total Nickel	0.07	mg/L	0.05	09-03-94
Total Potassium	12.	mg/L	1.0	09-10-94
Total Selenium	0.29	mg/L	0.05	09-03-94
Total Silicon	8.7	mg/L	0.10	09-15-94
Total Silver	<0.05	mg/L	0.05	09-03-94
Total Sodium	62.	mg/L	0.05	09-03-94
Total Thallium	<0.10	mg/L	0.10	09-03-94
Total Zinc	0.29	mg/L	0.05	09-03-94

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416396
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mae
PAGE : 1 OF 1

CLIENT SAMPLE ID : W-8
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: --

Inorganic Chemistry - Non-Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Alkalinity, Total	160.	mg/L	2.0	09-02-94
Ammonia Nitrogen	<0.1	mg/L	0.1	09-09-94
Chloride	74.	mg/L	1.0	09-03-94
Cyanide, Total(Distillation)	<0.01	mg/L	0.01	09-14-94
Electrical Conductivity	580.	umhos/cm	0.5	09-06-94
Fluoride	6.3	mg/L	0.10	09-12-94
Hardness/Total (as CaCO3)	1200.	mg/L	0.53	09-15-94
Nitrate Nitrogen	<0.50	mg/L	0.50	09-01-94
pH	8.02	S.U.	1.00	08-31-94
Phenol, Total	<0.01	mg/L	0.01	09-13-94
Phosphorus, Total	2.3	mg/L	0.10	09-08-94
Sulfate	42.	mg/L	5.0	09-03-94
Total Dissolved Solids	340.	mg/L	5.	09-02-94

(1) Copy to Client

M. Gudit
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416396
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mec
PAGE : 1 OF 2

CLIENT SAMPLE ID : W-8
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: D. HENZLER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: 09-15-94
ANALYSIS DATE .: 09-15-94

Method 601 - Purgeable Halocarbons

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1-Trichloroethane .....:	<0.5	ug/L	0.5
1,1,2,2-Tetrachloroethane .....:	<0.5	ug/L	0.5
Tetrachloroethene .....:	<0.5	ug/L	0.5
1,1,2-Trichloroethane .....:	<0.5	ug/L	0.5
1,1-Dichloroethane .....:	<0.5	ug/L	0.5
1,1-Dichloroethene .....:	<0.5	ug/L	0.5
1,2-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,2-Dichloroethane .....:	<0.5	ug/L	0.5
1,2-Dichloropropane .....:	<0.5	ug/L	0.5
1,3-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,4-Dichlorobenzene .....:	<1.0	ug/L	1.0
Bromodichloromethane .....:	<1.0	ug/L	1.0
Bromoform .....:	<1.0	ug/L	1.0
Bromomethane .....:	<1.0	ug/L	1.0
Carbon tetrachloride .....:	<0.5	ug/L	0.5
Chlorobenzene .....:	<1.0	ug/L	1.0
Chloroethane .....:	<1.0	ug/L	1.0
Chloroform .....:	9.3	ug/L	0.5
Chloromethane .....:	<1.0	ug/L	1.0
cis 1,3-Dichloropropene .....:	<0.5	ug/L	0.5
Dibromochloromethane .....:	<1.0	ug/L	1.0
Dibromomethane .....:	<1.0	ug/L	1.0
Dichlorodifluoromethane .....:	<1.0	ug/L	1.0
Dichloromethane .....:	<5.0	ug/L	5.0
trans 1,2-Dichloroethene .....:	<1.0	ug/L	1.0
trans 1,3-Dichloropropene .....:	<1.0	ug/L	1.0
Trichloroethene(TCE) .....:	<0.5	ug/L	0.5
Trichlorofluoromethane .....:	<1.0	ug/L	1.0
Vinyl chloride .....:	<2.0	ug/L	2.0
2-Chloroethylvinyl ether .....:	<2.0	ug/L	2.0

(1) Copy to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416396
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mre

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Surrogate Information -			
	Percent Recovery	Range	
2-Chloro-m-Xylene (ECLD)	96.0	75-120	

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416396
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mae
PAGE : 1 OF 1

CLIENT SAMPLE ID : W-8
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: D. HENZLER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: 09-15-94
ANALYSIS DATE .: 09-15-94

Method 602 - Purgeable Aromatics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,2-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,3-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,4-Dichlorobenzene .....:	<1.0	ug/L	1.0
Benzene .....:	<1.0	ug/L	1.0
Chlorobenzene .....:	<1.0	ug/L	1.0
Ethylbenzene .....:	<1.0	ug/L	1.0
Toluene .....:	<1.0	ug/L	1.0
Total Xylenes .....:	<0.5	ug/L	0.5

Surrogate Information -

	Percent Recovery	Range
2-Chloro-m-Xylene(PID) .....:	91.0	75-120

(1) Copy to Client

M. Engel
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416397
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mae
PAGE : 1 OF 1

CLIENT SAMPLE ID : W-13
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: --

Inorganic Chemistry - Total Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Antimony	<0.10	mg/L	0.10	09-03-94
Total Arsenic	<0.05	mg/L	0.05	09-03-94
Total Barium	0.12	mg/L	0.05	09-03-94
Total Beryllium	<0.05	mg/L	0.05	09-03-94
Total Boron	1.8	mg/L	0.10	09-03-94
Total Cadmium	<0.04	mg/L	0.04	09-03-94
Total Calcium	46.	mg/L	0.05	09-03-94
Total Chromium	<0.05	mg/L	0.05	09-03-94
Total Copper	<0.05	mg/L	0.05	09-03-94
Total Iron	2.4	mg/L	0.05	09-03-94
Total Lead	<0.05	mg/L	0.05	09-03-94
Total Magnesium	25.	mg/L	0.10	09-03-94
Total Manganese	0.08	mg/L	0.05	09-03-94
Total Mercury	<0.001	mg/L	0.001	09-12-94
Total Nickel	<0.05	mg/L	0.05	09-03-94
Total Potassium	2.4	mg/L	1.0	09-10-94
Total Selenium	<0.05	mg/L	0.05	09-03-94
Total Silicon	11.	mg/L	0.10	09-15-94
Total Silver	<0.05	mg/L	0.05	09-03-94
Total Sodium	200.	mg/L	0.05	09-03-94
Total Thallium	<0.10	mg/L	0.10	09-03-94
Total Zinc	0.10	mg/L	0.05	09-03-94

(1) Copy to Client

M. Gaffi
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416397
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mre
PAGE : 1 OF 1

CLIENT SAMPLE ID : W-13
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: --

Inorganic Chemistry - Non-Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Alkalinity, Total ..... :	300.	mg/L	2.0	09-02-94
Ammonia Nitrogen ..... :	<0.1	mg/L	0.1	09-09-94
Chloride ..... :	210.	mg/L	1.0	09-03-94
Cyanide, Total(Distillation) ..... :	<0.01	mg/L	0.01	09-14-94
Electrical Conductivity ..... :	1400.	umhos/cm	0.5	09-06-94
Fluoride ..... :	6.01	mg/L	0.10	09-12-94
Hardness/Total (as CaCO3) ..... :	220.	mg/L	0.53	09-15-94
Nitrate Nitrogen ..... :	3.0	mg/L	0.50	09-01-94
pH ..... :	7.96	S.U.	1.00	08-31-94
Phenol, Total ..... :	<0.01	mg/L	0.01	09-13-94
Phosphorus, Total ..... :	0.10	mg/L	0.10	09-08-94
Sulfate ..... :	100.	mg/L	5.0	09-03-94
Total Dissolved Solids ..... :	740.	mg/L	5.	09-02-94

(1) Copy to Client

M. Gudi
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416397
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mre
PAGE : 1 OF 2

CLIENT SAMPLE ID : W-13
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: D. HENZLER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: 09-15-94
ANALYSIS DATE .: 09-15-94

Method 601 - Purgeable Halocarbons

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1-Trichloroethane .....:	<0.5	ug/L	0.5
1,1,2,2-Tetrachloroethane .....:	<0.5	ug/L	0.5
Tetrachloroethene .....:	<0.5	ug/L	0.5
1,1,2-Trichloroethane .....:	<0.5	ug/L	0.5
1,1-Dichloroethane .....:	<0.5	ug/L	0.5
1,1-Dichloroethene .....:	<0.5	ug/L	0.5
1,2-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,2-Dichloroethane .....:	<0.5	ug/L	0.5
1,2-Dichloropropane .....:	<0.5	ug/L	0.5
1,3-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,4-Dichlorobenzene .....:	<1.0	ug/L	1.0
Bromodichloromethane .....:	<1.0	ug/L	1.0
Bromoform .....:	<1.0	ug/L	1.0
Bromomethane .....:	<1.0	ug/L	1.0
Carbon tetrachloride .....:	<0.5	ug/L	0.5
Chlorobenzene .....:	<1.0	ug/L	1.0
Chloroethane .....:	<1.0	ug/L	1.0
Chloroform .....:	<0.5	ug/L	0.5
Chloromethane .....:	<1.0	ug/L	1.0
cis 1,3-Dichloropropene .....:	<0.5	ug/L	0.5
Dibromochloromethane .....:	<1.0	ug/L	1.0
Dibromomethane .....:	<1.0	ug/L	1.0
Dichlorodifluoromethane .....:	<1.0	ug/L	1.0
Dichloromethane .....:	<5.0	ug/L	5.0
trans 1,2-Dichloroethene .....:	<1.0	ug/L	1.0
trans 1,3-Dichloropropene .....:	<1.0	ug/L	1.0
Trichloroethene(TCE) .....:	<0.5	ug/L	0.5
Trichlorofluoromethane .....:	<1.0	ug/L	1.0
Vinyl chloride .....:	<2.0	ug/L	2.0
2-Chloroethylvinyl ether .....:	<2.0	ug/L	2.0

(1) Copy to Client

M. Engel
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416397
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: Mac
PAGE : 2 OF 2

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit

Surrogate Information -

	Percent Recovery	Range
2-Chloro-m-Xylene (ECLD) .....:	93.0	75-120

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416397
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: Mae
PAGE : 1 OF 1

CLIENT SAMPLE ID : W-13
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: D. HENZLER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: 09-15-94
ANALYSIS DATE .: 09-15-94

Method 602 - Purgeable Aromatics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,2-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,3-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,4-Dichlorobenzene .....:	<1.0	ug/L	1.0
Benzene .....:	<1.0	ug/L	1.0
Chlorobenzene .....:	<1.0	ug/L	1.0
Ethylbenzene .....:	<1.0	ug/L	1.0
Toluene .....:	<1.0	ug/L	1.0
Total Xylenes .....:	<0.5	ug/L	0.5

Surrogate Information -

	Percent Recovery	Range
2-Chloro-m-Xylene(PID) .....:	91.0	75-120

(1) Copy to Client

M. Gudit
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416398
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: Mie
PAGE : 1 OF 1

CLIENT SAMPLE ID : W-16
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: --

Inorganic Chemistry - Total Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Antimony	<0.05	mg/L	0.05	09-03-94
Total Arsenic	<0.05	mg/L	0.05	09-03-94
Total Barium	0.60	mg/L	0.05	09-03-94
Total Beryllium	<0.05	mg/L	0.05	09-03-94
Total Boron	3.4	mg/L	0.10	09-03-94
Total Cadmium	<0.04	mg/L	0.04	09-03-94
Total Calcium	330.	mg/L	0.05	09-03-94
Total Chromium	0.08	mg/L	0.05	09-03-94
Total Copper	0.08	mg/L	0.05	09-03-94
Total Iron	51.	mg/L	0.05	09-03-94
Total Lead	0.05	mg/L	0.05	09-03-94
Total Magnesium	65.	mg/L	0.10	09-03-94
Total Manganese	1.4	mg/L	0.05	09-03-94
Total Mercury	<0.001	mg/L	0.001	09-12-94
Total Nickel	0.08	mg/L	0.05	09-03-94
Total Potassium	16.	mg/L	1.0	09-10-94
Total Selenium	0.37	mg/L	0.05	09-03-94
Total Silicon	12.	mg/L	0.10	09-15-94
Total Silver	<0.05	mg/L	0.05	09-03-94
Total Sodium	330.	mg/L	0.05	09-03-94
Total Thallium	<0.10	mg/L	0.10	09-03-94
Total Zinc	0.29	mg/L	0.05	09-03-94

(2) Copies to Client

M. Gudi
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416398
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mae
PAGE : 1 OF 1

CLIENT SAMPLE ID : W-16
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: --

Inorganic Chemistry - Non-Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Alkalinity, Total	400.	mg/L	2.0	09-02-94
Ammonia Nitrogen	<0.1	mg/L	0.1	09-09-94
Chloride	270.	mg/L	1.0	09-03-94
Cyanide, Total(Distillation) .....:	<0.01	mg/L	0.01	09-14-94
Electrical Conductivity .....:	1800.	umhos/cm	0.5	09-06-94
Fluoride .....:	12.	mg/L	0.10	09-14-94
Hardness/Total (as CaCO3) .....:	1100.	mg/L	0.53	09-15-94
Nitrate Nitrogen .....:	1.7	mg/L	0.50	09-01-94
pH .....:	8.15	S.U.	1.00	08-31-94
Phenol, Total .....:	<0.01	mg/L	0.01	09-13-94
Phosphorus, Total .....:	1.4	mg/L	0.10	09-08-94
Sulfate .....:	120.	mg/L	5.0	09-03-94
Total Dissolved Solids .....:	1100.	mg/L	5.	09-02-94

(2) Copies to Client

M. Engel
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416398
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: Mac
PAGE : 1 OF 2

CLIENT SAMPLE ID : W-16
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: D. HENZLER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: 09-15-94
ANALYSIS DATE .: 09-15-94

Method 601 - Purgeable Halocarbons

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1-Trichloroethane .....:	<0.5	ug/L	0.5
1,1,2,2-Tetrachloroethane .....:	<0.5	ug/L	0.5
Tetrachloroethene .....:	<0.5	ug/L	0.5
1,1,2-Trichloroethane .....:	<0.5	ug/L	0.5
1,1-Dichloroethane .....:	<0.5	ug/L	0.5
1,1-Dichloroethene .....:	<0.5	ug/L	0.5
1,2-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,2-Dichloroethane .....:	<0.5	ug/L	0.5
1,2-Dichloropropane .....:	<0.5	ug/L	0.5
1,3-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,4-Dichlorobenzene .....:	<1.0	ug/L	1.0
Bromodichloromethane .....:	<1.0	ug/L	1.0
Bromoform .....:	<1.0	ug/L	1.0
Bromomethane .....:	<1.0	ug/L	1.0
Carbon tetrachloride .....:	<0.5	ug/L	0.5
Chlorobenzene .....:	<1.0	ug/L	1.0
Chloroethane .....:	<1.0	ug/L	1.0
Chloroform .....:	0.65	ug/L	0.5
Chloromethane .....:	<1.0	ug/L	1.0
cis 1,3-Dichloropropene .....:	<0.5	ug/L	0.5
Dibromochloromethane .....:	<1.0	ug/L	1.0
Dibromomethane .....:	<1.0	ug/L	1.0
Dichlorodifluoromethane .....:	<1.0	ug/L	1.0
Dichloromethane .....:	<5.0	ug/L	5.0
trans 1,2-Dichloroethene .....:	<1.0	ug/L	1.0
trans 1,3-Dichloropropene .....:	<1.0	ug/L	1.0
Trichloroethene(TCE) .....:	<0.5	ug/L	0.5
Trichlorofluoromethane .....:	<1.0	ug/L	1.0
Vinyl chloride .....:	<2.0	ug/L	2.0
2-Chloroethylvinyl ether .....:	<2.0	ug/L	2.0

(1) Copy to Client

M. Ensdl
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416398
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mae
PAGE : 2 OF 2

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit

Surrogate Information -

	Percent Recovery	Range
2-Chloro-m-Xylene (ECLD) .....:	99.0	75-120

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416398
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: Ymac
PAGE : 1 OF 1

CLIENT SAMPLE ID : W-16
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: D. HENZLER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: 09-15-94
ANALYSIS DATE .: 09-15-94

Method 602 - Purgeable Aromatics

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,2-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,3-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,4-Dichlorobenzene .....:	<1.0	ug/L	1.0
Benzene .....:	<1.0	ug/L	1.0
Chlorobenzene .....:	<1.0	ug/L	1.0
Ethylbenzene .....:	1.4	ug/L	1.0
Toluene .....:	1.9	ug/L	1.0
Total Xylenes .....:	2.7	ug/L	0.5

Surrogate Information -

	Percent Recovery	Range
2-Chloro-m-Xylene(PID) .....:	87.0	75-120

(2) Copies to Client

M. Engel
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416399
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mae
PAGE : 1 OF 1

CLIENT SAMPLE ID : W-21
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: --

Inorganic Chemistry - Total Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Antimony	<0.05	mg/L	0.05	09-03-94
Total Arsenic	<0.05	mg/L	0.05	09-03-94
Total Barium	0.25	mg/L	0.05	09-03-94
Total Beryllium	<0.05	mg/L	0.05	09-03-94
Total Boron	0.43	mg/L	0.10	09-03-94
Total Cadmium	<0.04	mg/L	0.04	09-03-94
Total Calcium	68.	mg/L	0.05	09-03-94
Total Chromium	0.14	mg/L	0.05	09-03-94
Total Copper	<0.05	mg/L	0.05	09-03-94
Total Iron	14.	mg/L	0.05	09-03-94
Total Lead	<0.05	mg/L	0.05	09-03-94
Total Magnesium	46.	mg/L	0.10	09-03-94
Total Manganese	0.64	mg/L	0.05	09-03-94
Total Mercury	<0.001	mg/L	0.001	09-12-94
Total Nickel	0.12	mg/L	0.05	09-03-94
Total Potassium	5.6	mg/L	1.0	09-10-94
Total Selenium	0.11	mg/L	0.05	09-03-94
Total Silicon	23.	mg/L	0.10	09-15-94
Total Silver	<0.05	mg/L	0.05	09-03-94
Total Sodium	110.	mg/L	0.05	09-03-94
Total Thallium	<0.10	mg/L	0.10	09-03-94
Total Zinc	0.14	mg/L	0.05	09-03-94

(2) Copies to Client

M. Engel
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416399
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 1 OF 1

CLIENT SAMPLE ID : W-21
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: --

Inorganic Chemistry - Non-Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Alkalinity, Total	260.	mg/L	2.0	09-02-94
Ammonia Nitrogen	<0.1	mg/L	0.1	09-09-94
Chloride	140.	mg/L	1.0	09-03-94
Cyanide, Total(Distillation)	<0.01	mg/L	0.01	09-14-94
Electrical Conductivity	1100.	umhos/cm	0.5	09-06-94
Fluoride	3.0	mg/L	0.10	09-12-94
Hardness/Total (as CaCO3)	360.	mg/L	0.53	09-15-94
Nitrate Nitrogen	2.2	mg/L	0.50	09-01-94
pH	7.62	S.U.	1.00	08-31-94
Phenol, Total	<0.01	mg/L	0.01	09-13-94
Phosphorus, Total	2.6	mg/L	0.10	09-08-94
Sulfate	64.	mg/L	5.0	09-03-94
Total Dissolved Solids	640.	mg/L	5.	09-02-94

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416399
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 1 OF 2

CLIENT SAMPLE ID : W-21
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: D. HENZLER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: 09-15-94
ANALYSIS DATE .: 09-15-94

Method 601 - Purgeable Halocarbons

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1-Trichloroethane	<0.5	ug/L	0.5
1,1,2,2-Tetrachloroethane	<0.5	ug/L	0.5
Tetrachloroethene	<0.5	ug/L	0.5
1,1,2-Trichloroethane	<0.5	ug/L	0.5
1,1-Dichloroethane	<0.5	ug/L	0.5
1,1-Dichloroethene	<0.5	ug/L	0.5
1,2-Dichlorobenzene	<1.0	ug/L	1.0
1,2-Dichloroethane	<0.5	ug/L	0.5
1,2-Dichloropropane	<0.5	ug/L	0.5
1,3-Dichlorobenzene	<1.0	ug/L	1.0
1,4-Dichlorobenzene	<1.0	ug/L	1.0
Bromodichloromethane	<1.0	ug/L	1.0
Bromoform	<1.0	ug/L	1.0
Bromomethane	<1.0	ug/L	1.0
Carbon tetrachloride	<0.5	ug/L	0.5
Chlorobenzene	<1.0	ug/L	1.0
Chloroethane	<1.0	ug/L	1.0
Chloroform	<0.5	ug/L	0.5
Chloromethane	<1.0	ug/L	1.0
cis 1,3-Dichloropropene	<0.5	ug/L	0.5
Dibromochloromethane	<1.0	ug/L	1.0
Dibromomethane	<1.0	ug/L	1.0
Dichlorodifluoromethane	<1.0	ug/L	1.0
Dichloromethane	<5.0	ug/L	5.0
trans 1,2-Dichloroethene	<1.0	ug/L	1.0
trans 1,3-Dichloropropene	<1.0	ug/L	1.0
Trichloroethene(TCE)	<0.5	ug/L	0.5
Trichlorofluoromethane	<1.0	ug/L	1.0
Vinyl chloride	<2.0	ug/L	2.0
2-Chloroethylvinyl ether	<2.0	ug/L	2.0

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416399
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mie

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Surrogate Information -			
	Percent Recovery	Range	
2-Chloro-m-Xylene (ECLD)	97.0	75-120	

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416399
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 1 OF 1

CLIENT SAMPLE ID : W-21
SAMPLE TYPE .....: WATER
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: D. HENZLER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: 09-15-94
ANALYSIS DATE .: 09-15-94

Method 602 - Purgeable Aromatics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,2-Dichlorobenzene	<1.0	ug/L	1.0
1,3-Dichlorobenzene	<1.0	ug/L	1.0
1,4-Dichlorobenzene	<1.0	ug/L	1.0
Benzene	1.3	ug/L	1.0
Chlorobenzene	<1.0	ug/L	1.0
Ethylbenzene	5.8	ug/L	1.0
Toluene	2.8	ug/L	1.0
Total Xylenes	<0.5	ug/L	0.5

Surrogate Information -

	Percent Recovery	Range
2-Chloro-m-Xylene(PID)	89.0	75-120

(2) Copies to Client

M. Gudil
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416400
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mal
PAGE : 1 OF 2

CLIENT SAMPLE ID : TRAVEL BLANK
SAMPLE TYPE .....: WATER
SAMPLED BY .....: WL/PERSONNEL
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: WESTECH LABS
ANALYST .....: D. HENZLER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: 09-15-94
ANALYSIS DATE .: 09-15-94

Method 601 - Purgeable Halocarbons

DATA TABLE

Parameter	Result	Unit	Detection Limit
1,1,1-Trichloroethane	<0.5	ug/L	0.5
1,1,2,2-Tetrachloroethane	<0.5	ug/L	0.5
Tetrachloroethene	<0.5	ug/L	0.5
1,1,2-Trichloroethane	<0.5	ug/L	0.5
1,1-Dichloroethane	<0.5	ug/L	0.5
1,1-Dichloroethene	<0.5	ug/L	0.5
1,2-Dichlorobenzene	<1.0	ug/L	1.0
1,2-Dichloroethane	<0.5	ug/L	0.5
1,2-Dichloropropane	<0.5	ug/L	0.5
1,3-Dichlorobenzene	<1.0	ug/L	1.0
1,4-Dichlorobenzene	<1.0	ug/L	1.0
Bromodichloromethane	<1.0	ug/L	1.0
Bromoform	<1.0	ug/L	1.0
Bromomethane	<1.0	ug/L	1.0
Carbon tetrachloride	<0.5	ug/L	0.5
Chlorobenzene	<1.0	ug/L	1.0
Chloroethane	<1.0	ug/L	1.0
Chloroform	<0.5	ug/L	0.5
Chloromethane	<1.0	ug/L	1.0
cis 1,3-Dichloropropene	<0.5	ug/L	0.5
Dibromochloromethane	<1.0	ug/L	1.0
Dibromomethane	<1.0	ug/L	1.0
Dichlorodifluoromethane	<1.0	ug/L	1.0
Dichloromethane	<5.0	ug/L	5.0
trans 1,2-Dichloroethene	<1.0	ug/L	1.0
trans 1,3-Dichloropropene	<1.0	ug/L	1.0
Trichloroethene(TCE)	<0.5	ug/L	0.5
Trichlorofluoromethane	<1.0	ug/L	1.0
Vinyl chloride	<2.0	ug/L	2.0
2-Chloroethylvinyl ether	<2.0	ug/L	2.0

(1) Copy to Client

M. Engel
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416400
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mre
PAGE : 2 OF 2

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Surrogate Information -			
		Percent Recovery	Range
2-Chloro-m-Xylene (ECLD)	:	95.0	75-120

(1) Copy to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9416400
INVOICE NO.: 22143706
REPORT DATE: 09-29-94
REVIEWED BY: mac
PAGE : 1 OF 1

CLIENT SAMPLE ID : TRAVEL BLANK
SAMPLE TYPE .....: WATER
SAMPLED BY .....: WL/PERSONNEL
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: WESTECH LABS
ANALYST .....: D. HENZLER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR-390-1696
SAMPLE DATE ...: 08-31-94
SUBMITTAL DATE : 08-31-94
EXTRACTION DATE: 09-15-94
ANALYSIS DATE .: 09-15-94

Method 602 - Purgeable Aromatics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,2-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,3-Dichlorobenzene .....:	<1.0	ug/L	1.0
1,4-Dichlorobenzene .....:	<1.0	ug/L	1.0
Benzene .....:	<1.0	ug/L	1.0
Chlorobenzene .....:	<1.0	ug/L	1.0
Ethylbenzene .....:	<1.0	ug/L	1.0
Toluene .....:	<1.0	ug/L	1.0
Total Xylenes .....:	<0.5	ug/L	0.5

Surrogate Information -

	Percent Recovery	Range
2-Chloro-m-Xylene(PID) .....:	91.0	75-120

(2) Copies to Client

M. Engel
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

RECEIVED
OCT 07 1994
WATER RESOURCES ASSOCIATES INC.

SAMPLE NO. : 9415806
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-4 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: --

Inorganic Chemistry - Total Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	<2.5	mg/Kg	2.5	08-31-94
Total Barium .....:	21.	mg/Kg	2.5	09-02-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	08-31-94
Total Chromium .....:	16.	mg/Kg	2.5	08-31-94
Total Lead .....:	5.4	mg/Kg	2.5	08-31-94
Total Mercury .....:	<0.25	mg/Kg	0.25	09-06-94
Total Selenium .....:	41.	mg/Kg	2.5	08-31-94
Total Silver .....:	<2.5	mg/Kg	2.5	08-31-94

(1) Copy to Client

M. Cruff
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415806
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-4 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-30-94
ANALYSIS DATE .: 08-30-94

BLS 181/Modified 418.1 - Total Petroleum Fuel Hydrocarbons

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Total Petroleum Hydrocarbons .....:	12.	mg/Kg	10.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415806
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: Bu
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-4 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-30-94
ANALYSIS DATE .: 08-30-94

BLS 191/Modified 8015
Total Petroleum Fuel Hydrocarbons (C10 - C22)

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Total Petroleum Fuel Hydrocarbons :	<20.	mg/Kg	20.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415806
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-4 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: S. KUTA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 08-29-94

Method 8020 - Aromatic Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<10.	ug/Kg	10.
Toluene	<10.	ug/Kg	10.
Ethylbenzene	<10.	ug/Kg	10.
Total Xylenes	<3.0	ug/Kg	3.0

Surrogate Information -

	Percent Recovery	Range
a,a,a -Trifluorotoluene (8020) ...:	99.0	80-120

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415806
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-4 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: W. ABER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-31-94
ANALYSIS DATE .: 09-14-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<8.0	ug/Kg	8.0
Aldrin	<2.5	ug/Kg	2.5
alpha-BHC	<2.0	ug/Kg	2.0
beta-BHC	<4.0	ug/Kg	4.0
delta-BHC	<6.0	ug/Kg	6.0
Chlordane	<9.0	ug/Kg	9.0
Dieldrin	<1.2	ug/Kg	1.2
Endosulfan I	<9.0	ug/Kg	9.0
Endosulfan II	<2.5	ug/Kg	2.5
Endosulfan sulfate	<40.	ug/Kg	40.
Endrin	<4.0	ug/Kg	4.0
Endrin aldehyde	<15.	ug/Kg	15.
Heptachlor	<2.0	ug/Kg	2.0
Heptachlor Epoxide	<55.	ug/Kg	55.
Lindane	<2.5	ug/Kg	2.5
Methoxychlor	<110.	ug/Kg	110.
Toxaphene	<150.	ug/Kg	150.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<1000.	ug/Kg	1000.
PCB 1232	<250.	ug/Kg	250.
PCB 1242	<250.	ug/Kg	250.
PCB 1248	<200.	ug/Kg	200.
PCB 1254	<200.	ug/Kg	200.
PCB 1260	<200.	ug/Kg	200.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415806
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
Dibutylchlorendate	101.6	10-200
2,4,5,6-Tetrachloro-m-xylene	67.2	10-200

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415806
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: Dsu
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-4 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: W. MCCANN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 09-09-94
ANALYSIS DATE .: 09-10-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
Tetrachloroethene (PCE) .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<100.	ug/Kg	100.
Bromochloromethane .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<100.	ug/Kg	100.
Bromomethane .....:	<100.	ug/Kg	100.

(2) Copies to Client

M. Engel
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415806
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<100.	ug/Kg	100.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<100.	ug/Kg	100.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<250.	ug/Kg	250.
Dibromomethane	<100.	ug/Kg	100.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<250.	ug/Kg	250.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<50.	ug/Kg	50.
Isopropylbenzene	<50.	ug/Kg	50.
m-Xylene	<50.	ug/Kg	50.
Naphthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
p-Xylene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<250.	ug/Kg	250.
Vinyl chloride	<250.	ug/Kg	250.

Surrogate Information -

	Percent Recovery	Range
4-Bromofluorobenzene	92.0	74-121
1,2-Dichloroethane-D4	96.0	70-121
Toluene-D8	110.0	81-117

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415806
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 4

CLIENT SAMPLE ID : B-4 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: S.KARA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 09-20-94

Semi-Volatiles by Gas Chromatography/ Mass Spectrometry

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Phenol	<2000.	ug/Kg	2000.
Bis(2-Chloroethyl)ether	<2000.	ug/Kg	2000.
2-Chlorophenol	<2000.	ug/Kg	2000.
1,3-Dichlorobenzene	<2000.	ug/Kg	2000.
1,4-Dichlorobenzene	<2000.	ug/Kg	2000.
1,2-Dichlorobenzene	<2000.	ug/Kg	2000.
2-Methylphenol	<2000.	ug/Kg	2000.
Bis(2-chloroisopropyl)ether	<2000.	ug/Kg	2000.
4-Methylphenol	<2000.	ug/Kg	2000.
N-Nitroso-di-n-propylamine	<2000.	ug/Kg	2000.
Hexachloroethane	<2000.	ug/Kg	2000.
Nitrobenzene	<2000.	ug/Kg	2000.
Isophorone	<2000.	ug/Kg	2000.
2-Nitrophenol	<2000.	ug/Kg	2000.
2,4 Dimethylphenol	<2000.	ug/Kg	2000.
Bis(2-Chloroethoxy) methane	<2000.	ug/Kg	2000.
2,4-Dichlorophenol	<2000.	ug/Kg	2000.
1,2,4-Trichlorobenzene	<2000.	ug/Kg	2000.
Napthalene	<2000.	ug/Kg	2000.
4-Chloroaniline	<4000.	ug/Kg	4000.
Hexachlorobutadiene	<2000.	ug/Kg	2000.
4-Chloro-3-methylphenol	<3000.	ug/Kg	3000.
2-Methylnaphthalene	<2000.	ug/Kg	2000.
Hexachlorocyclopentadiene	<2000.	ug/Kg	2000.
2,4,6-Trichlorophenol	<2000.	ug/Kg	2000.
2,4,5-Trichlorophenol	<2000.	ug/Kg	2000.
2-Chloronaphthalene	<2000.	ug/Kg	2000.
2-Nitroaniline	<3000.	ug/Kg	3000.
Dimethyl Phthalate	<2000.	ug/Kg	2000.
Acenaphthylene	<2000.	ug/Kg	2000.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415806
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<4000.	ug/Kg	4000.
Acenaphthene	<2000.	ug/Kg	2000.
2,4-Dinitrophenol	<2000.	ug/Kg	2000.
4-Nitrophenol	<3000.	ug/Kg	3000.
Dibenzofuran	<2000.	ug/Kg	2000.
2,4-Dinitrotoluene	<2000.	ug/Kg	2000.
2,6-Dinitrotoluene	<2000.	ug/Kg	2000.
Diethyl Phthalate	<2000.	ug/Kg	2000.
4-Chlorophenyl phenyl ether	<2000.	ug/Kg	2000.
Fluorene	<2000.	ug/Kg	2000.
4-Nitroaniline	<4000.	ug/Kg	4000.
2-Methyl-4,6-dinitrophenol	<3000.	ug/Kg	3000.
N-Nitrosodiphenylamine	<2000.	ug/Kg	2000.
4-Bromophenyl phenyl ether	<2000.	ug/Kg	2000.
Hexachlorobenzene	<2000.	ug/Kg	2000.
Pentachlorophenol	<3000.	ug/Kg	3000.
2,6-Dichlorophenol	<2000.	ug/Kg	2000.
N-Nitrosodibutylamine	<2000.	ug/Kg	2000.
N-Nitrosodimethylamine	<2000.	ug/Kg	2000.
Phenanthrene	<2000.	ug/Kg	2000.
Anthracene	<2000.	ug/Kg	2000.
Di-n-Butyl Phthalate	6000.	ug/Kg	2000.
Fluoranthene	<2000.	ug/Kg	2000.
Pyrene	<2000.	ug/Kg	2000.
Butyl Benzyl Phthalate	<2000.	ug/Kg	2000.
3,3'-Dichlorobenzidine	<3000.	ug/Kg	3000.
Benzo(a)anthracene	<2000.	ug/Kg	2000.
Bis(2-ethylhexyl) Phthalate	<2000.	ug/Kg	2000.
Chrysene	<2000.	ug/Kg	2000.
Di-n-Octyl Phthalate	<2000.	ug/Kg	2000.
Benzo(b)fluoranthene	<6600.	ug/Kg	6600.
Benzo(k)fluoranthene	<2000.	ug/Kg	2000.
Benzo(a)pyrene	<2000.	ug/Kg	2000.
Indeno(1,2,3-cd)pyrene	<2000.	ug/Kg	2000.
Dibenz(a,h)anthracene	<2000.	ug/Kg	2000.
Benzo(ghi)perylene	<2000.	ug/Kg	2000.
alpha-BHC	<2000.	ug/Kg	2000.
beta-BHC	<2000.	ug/Kg	2000.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415806
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
delta-BHC	<2000.	ug/Kg	2000.
gamma-BHC (Lindane)	<2000.	ug/Kg	2000.
Aldrin	<2000.	ug/Kg	2000.
Heptachlor	<2000.	ug/Kg	2000.
Heptachlor Epoxide	<2000.	ug/Kg	2000.
Endosulfan I	<2000.	ug/Kg	2000.
4,4'-DDE	<2000.	ug/Kg	2000.
Dieldrin	<2000.	ug/Kg	2000.
Endrin	<2000.	ug/Kg	2000.
4,4'-DDD	<2000.	ug/Kg	2000.
Endosulfan II	<2000.	ug/Kg	2000.
4,4'-DDT	<2000.	ug/Kg	2000.
Endrin Aldehyde	<2000.	ug/Kg	2000.
Endosulfan Sulfate	<2000.	ug/Kg	2000.
Methoxychlor	<2000.	ug/Kg	2000.
Toxaphene	<5000.	ug/Kg	5000.
Chlordanes (alpha + gamma)	<2000.	ug/Kg	2000.
PCB 1016	<5000.	ug/Kg	5000.
PCB 1221	<5000.	ug/Kg	5000.
PCB 1232	<5000.	ug/Kg	5000.
PCB 1242	<5000.	ug/Kg	5000.
PCB 1248	<5000.	ug/Kg	5000.
PCB 1254	<5000.	ug/Kg	5000.
PCB 1260	<5000.	ug/Kg	5000.
Endrin ketone	<2000.	ug/Kg	2000.
Endosulfan II	<2000.	ug/Kg	2000.
Benzoic acid	<33000.	ug/Kg	33000.
Benzidine	<4000.	ug/Kg	4000.
1-Chloronaphthalene	<2000.	ug/Kg	2000.
Dibenz(a,j)acridine	<2000.	ug/Kg	2000.
7,12-Dimethylbenzo(a)anthracene	<6600.	ug/Kg	6600.
a,a Dimethylphenethylamine	<5000.	ug/Kg	5000.
Diphenylamine	<2000.	ug/Kg	2000.
1,2-Diphenylhydrazine	<3000.	ug/Kg	3000.
Ethyl Methanesulfonate	<13000.	ug/Kg	13000.
3-Methylcholanthrene	<6600.	ug/Kg	6600.
Methylmethansulfonate	<6600.	ug/Kg	6600.
N-Nitrosopiperidine	<4000.	ug/Kg	4000.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415806
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
1-Naphthylamine	<6600.	ug/Kg	6600.
2-Naphthylamine	<2000.	ug/Kg	2000.
2-Picoline	<5000.	ug/Kg	5000.
Pentachlorobenzene	<6600.	ug/Kg	6600.
Pentachloronitrobenzene	<13000.	ug/Kg	13000.
Phenacetin	<13000.	ug/Kg	13000.
Pronamide	<6600.	ug/Kg	6600.
1,2,4,5-Tetrachlorobenzene	<6600.	ug/Kg	6600.
2,3,4,6-Tetrachlorophenol	<2000.	ug/Kg	2000.
Aniline	<5000.	ug/Kg	5000.
Acetophenone	<4000.	ug/Kg	4000.
Benzyl alcohol	<13000.	ug/Kg	13000.
Dimethylaminoazobenzene	<6600.	ug/Kg	6600.

Surrogate Information -

	Percent Recovery	Range
2-Fluorophenol	75.0	25-121
Phenol-d5	73.5	24-113
2,4,6-Tribromophenol	76.5	19-122
2-Fluorobiphenyl	59.0	30-115
Nitrobenzene-d5	82.0	23-120
4-Terphenyl-d14	81.0	18-137

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415807
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-5 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: --

Inorganic Chemistry - Total Metals

D A T A T A B L E

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	<2.5	mg/Kg	2.5	08-31-94
Total Barium .....:	16.	mg/Kg	2.5	09-02-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	08-31-94
Total Chromium .....:	6.9	mg/Kg	2.5	08-31-94
Total Lead .....:	5.7	mg/Kg	2.5	08-31-94
Total Mercury .....:	<0.25	mg/Kg	0.25	09-06-94
Total Selenium .....:	32.	mg/Kg	2.5	08-31-94
Total Silver .....:	<2.5	mg/Kg	2.5	08-31-94

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415807
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-5 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-30-94
ANALYSIS DATE .: 08-30-94

BLS 181/Modified 418.1 - Total Petroleum Fuel Hydrocarbons

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Total Petroleum Hydrocarbons .....:	<10.	mg/Kg	10.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415807
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-5 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 08-30-94

BLS 191/Modified 8015
Total Petroleum Fuel Hydrocarbons (C10 - C22)

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Total Petroleum Fuel Hydrocarbons :	<20.	mg/Kg	20.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415807
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: BJ
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-5 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: S. KUTA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 08-29-94

Method 8020 - Aromatic Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene .....:	<10.	ug/Kg	10.
Toluene .....:	<10.	ug/Kg	10.
Ethylbenzene .....:	<10.	ug/Kg	10.
Total Xylenes .....:	<3.0	ug/Kg	3.0

Surrogate Information -

	Percent Recovery	Range
a,a,a -Trifluorotoluene (8020) ...:	100.0	80-120

(2) Copies to Client

M. Enoff
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415807
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-5 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: W. ABER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-31-94
ANALYSIS DATE .: 09-14-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<8.0	ug/Kg	8.0
Aldrin	<2.5	ug/Kg	2.5
alpha-BHC	<2.0	ug/Kg	2.0
beta-BHC	<4.0	ug/Kg	4.0
delta-BHC	<6.0	ug/Kg	6.0
Chlordane	<9.0	ug/Kg	9.0
Dieldrin	3.3	ug/Kg	1.2
Endosulfan I	<9.0	ug/Kg	9.0
Endosulfan II	<2.5	ug/Kg	2.5
Endosulfan sulfate	<40.	ug/Kg	40.
Endrin	<4.0	ug/Kg	4.0
Endrin aldehyde	<15.	ug/Kg	15.
Heptachlor	<2.0	ug/Kg	2.0
Heptachlor Epoxide	<55.	ug/Kg	55.
Lindane	<2.5	ug/Kg	2.5
Methoxychlor	<110.	ug/Kg	110.
Toxaphene	<150.	ug/Kg	150.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<1000.	ug/Kg	1000.
PCB 1232	<250.	ug/Kg	250.
PCB 1242	<250.	ug/Kg	250.
PCB 1248	<200.	ug/Kg	200.
PCB 1254	<200.	ug/Kg	200.
PCB 1260	<200.	ug/Kg	200.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415807
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]
PAGE : 2 OF 2

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
Dibutylchlorendate .....:	99.8	10-200
2,4,5,6-Tetrachloro-m-xylene .....:	68.4	10-200

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415807
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-5 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: W. MCCANN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 09-09-94
ANALYSIS DATE .: 09-10-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
Tetrachloroethene (PCE) .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<100.	ug/Kg	100.
Bromochloromethane .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<100.	ug/Kg	100.
Bromomethane .....:	<100.	ug/Kg	100.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415807
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: Bu

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<100.	ug/Kg	100.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<100.	ug/Kg	100.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<250.	ug/Kg	250.
Dibromomethane	<100.	ug/Kg	100.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<250.	ug/Kg	250.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<50.	ug/Kg	50.
Isopropylbenzene	<50.	ug/Kg	50.
m-Xylene	<50.	ug/Kg	50.
Naphthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
p-Xylene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<250.	ug/Kg	250.
Vinyl chloride	<250.	ug/Kg	250.

Surrogate Information -

	Percent Recovery	Range
4-Bromofluorobenzene	92.0	74-121
1,2-Dichloroethane-D4	96.0	70-121
Toluene-D8	110.0	81-117

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415807
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 4

CLIENT SAMPLE ID : B-5 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: S.KARA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 09-20-94

Semi-Volatiles by Gas Chromatography/ Mass Spectrometry

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<2000.	ug/Kg	2000.
Bis(2-Chloroethyl)ether	<2000.	ug/Kg	2000.
2-Chlorophenol	<2000.	ug/Kg	2000.
1,3-Dichlorobenzene	<2000.	ug/Kg	2000.
1,4-Dichlorobenzene	<2000.	ug/Kg	2000.
1,2-Dichlorobenzene	<2000.	ug/Kg	2000.
2-Methylphenol	<2000.	ug/Kg	2000.
Bis(2-chloroisopropyl)ether	<2000.	ug/Kg	2000.
4-Methylphenol	<2000.	ug/Kg	2000.
N-Nitroso-di-n-propylamine	<2000.	ug/Kg	2000.
Hexachloroethane	<2000.	ug/Kg	2000.
Nitrobenzene	<2000.	ug/Kg	2000.
Isophorone	<2000.	ug/Kg	2000.
2-Nitrophenol	<2000.	ug/Kg	2000.
2,4 Dimethylphenol	<2000.	ug/Kg	2000.
Bis(2-Chloroethoxy) methane	<2000.	ug/Kg	2000.
2,4-Dichlorophenol	<2000.	ug/Kg	2000.
1,2,4-Trichlorobenzene	<2000.	ug/Kg	2000.
Napthalene	<2000.	ug/Kg	2000.
4-Chloroaniline	<4000.	ug/Kg	4000.
Hexachlorobutadiene	<2000.	ug/Kg	2000.
4-Chloro-3-methylphenol	<3000.	ug/Kg	3000.
2-Methylnaphthalene	<2000.	ug/Kg	2000.
Hexachlorocyclopentadiene	<2000.	ug/Kg	2000.
2,4,6-Trichlorophenol	<2000.	ug/Kg	2000.
2,4,5-Trichlorophenol	<2000.	ug/Kg	2000.
2-Chloronaphthalene	<2000.	ug/Kg	2000.
2-Nitroaniline	<3000.	ug/Kg	3000.
Dimethyl Phthalate	<2000.	ug/Kg	2000.
Acenaphthylene	<2000.	ug/Kg	2000.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415807
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<4000.	ug/Kg	4000.
Acenaphthene	<2000.	ug/Kg	2000.
2,4-Dinitrophenol	<2000.	ug/Kg	2000.
4-Nitrophenol	<3000.	ug/Kg	3000.
Dibenzofuran	<2000.	ug/Kg	2000.
2,4-Dinitrotoluene	<2000.	ug/Kg	2000.
2,6-Dinitrotoluene	<2000.	ug/Kg	2000.
Diethyl Phthalate	<2000.	ug/Kg	2000.
4-Chlorophenyl phenyl ether	<2000.	ug/Kg	2000.
Fluorene	<2000.	ug/Kg	2000.
4-Nitroaniline	<4000.	ug/Kg	4000.
2-Methyl-4,6-dinitrophenol	<3000.	ug/Kg	3000.
N-Nitrosodiphenylamine	<2000.	ug/Kg	2000.
4-Bromophenyl phenyl ether	<2000.	ug/Kg	2000.
Hexachlorobenzene	<2000.	ug/Kg	2000.
Pentachlorophenol	<3000.	ug/Kg	3000.
2,6-Dichlorophenol	<2000.	ug/Kg	2000.
N-Nitrosodibutylamine	<2000.	ug/Kg	2000.
N-Nitrosodimethylamine	<2000.	ug/Kg	2000.
Phenanthrene	<2000.	ug/Kg	2000.
Anthracene	<2000.	ug/Kg	2000.
Di-n-Butyl Phthalate	2200.	ug/Kg	2000.
Fluoranthene	<2000.	ug/Kg	2000.
Pyrene	<2000.	ug/Kg	2000.
Butyl Benzyl Phthalate	<2000.	ug/Kg	2000.
3,3'-Dichlorobenzidine	<3000.	ug/Kg	3000.
Benzo(a)anthracene	<2000.	ug/Kg	2000.
Bis(2-ethylhexyl) Phthalate	<2000.	ug/Kg	2000.
Chrysene	<2000.	ug/Kg	2000.
Di-n-Octyl Phthalate	<2000.	ug/Kg	2000.
Benzo(b)fluoranthene	<6600.	ug/Kg	6600.
Benzo(k)fluoranthene	<2000.	ug/Kg	2000.
Benzo(a)pyrene	<2000.	ug/Kg	2000.
Indeno(1,2,3-cd)pyrene	<2000.	ug/Kg	2000.
Dibenz(a,h)anthracene	<2000.	ug/Kg	2000.
Benzo(ghi)perylene	<2000.	ug/Kg	2000.
alpha-BHC	<2000.	ug/Kg	2000.
beta-BHC	<2000.	ug/Kg	2000.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415807
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
delta-BHC	<2000.	ug/Kg	2000.
gamma-BHC (Lindane)	<2000.	ug/Kg	2000.
Aldrin	<2000.	ug/Kg	2000.
Heptachlor	<2000.	ug/Kg	2000.
Heptachlor Epoxide	<2000.	ug/Kg	2000.
Endosulfan I	<2000.	ug/Kg	2000.
4,4'-DDE	<2000.	ug/Kg	2000.
Dieldrin	<2000.	ug/Kg	2000.
Endrin	<2000.	ug/Kg	2000.
4,4'-DDD	<2000.	ug/Kg	2000.
Endosulfan II	<2000.	ug/Kg	2000.
4,4'-DDT	<2000.	ug/Kg	2000.
Endrin Aldehyde	<2000.	ug/Kg	2000.
Endosulfan Sulfate	<2000.	ug/Kg	2000.
Methoxychlor	<2000.	ug/Kg	2000.
Toxaphene	<5000.	ug/Kg	5000.
Chlordanes (alpha + gamma)	<2000.	ug/Kg	2000.
PCB 1016	<5000.	ug/Kg	5000.
PCB 1221	<5000.	ug/Kg	5000.
PCB 1232	<5000.	ug/Kg	5000.
PCB 1242	<5000.	ug/Kg	5000.
PCB 1248	<5000.	ug/Kg	5000.
PCB 1254	<5000.	ug/Kg	5000.
PCB 1260	<5000.	ug/Kg	5000.
Endrin ketone	<2000.	ug/Kg	2000.
Endosulfan II	<2000.	ug/Kg	2000.
Benzoic acid	<33000.	ug/Kg	33000.
Benzidine	<4000.	ug/Kg	4000.
1-Chloronaphthalene	<2000.	ug/Kg	2000.
Dibenz(a,j)acridine	<2000.	ug/Kg	2000.
7,12-Dimethylbenzo(a)anthracene	<6600.	ug/Kg	6600.
a,a Dimethylphenethylamine	<5000.	ug/Kg	5000.
Diphenylamine	<2000.	ug/Kg	2000.
1,2-Diphenylhydrazine	<3000.	ug/Kg	3000.
Ethyl Methanesulfonate	<13000.	ug/Kg	13000.
3-Methylcholanthrene	<6600.	ug/Kg	6600.
Methylmethansulfonate	<6600.	ug/Kg	6600.
N-Nitrosopiperidine	<4000.	ug/Kg	4000.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415807
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
1-Naphthylamine	<6600.	ug/Kg	6600.
2-Naphthylamine	<2000.	ug/Kg	2000.
2-Picoline	<5000.	ug/Kg	5000.
Pentachlorobenzene	<6600.	ug/Kg	6600.
Pentachloronitrobenzene	<13000.	ug/Kg	13000.
Phenacetin	<13000.	ug/Kg	13000.
Pronamide	<6600.	ug/Kg	6600.
1,2,4,5-Tetrachlorobenzene	<6600.	ug/Kg	6600.
2,3,4,6-Tetrachlorophenol	<2000.	ug/Kg	2000.
Aniline	<5000.	ug/Kg	5000.
Acetophenone	<4000.	ug/Kg	4000.
Benzyl alcohol	<13000.	ug/Kg	13000.
Dimethylaminoazobenzene	<6600.	ug/Kg	6600.

Surrogate Information -

	Percent Recovery	Range
2-Fluorophenol	83.5	25-121
Phenol-d5	81.5	24-113
2,4,6-Tribromophenol	90.0	19-122
2-Fluorobiphenyl	76.0	30-115
Nitrobenzene-d5	68.0	23-120
4-Terphenyl-d14	85.0	18-137

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415808
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: DSh
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-6 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: --

Inorganic Chemistry - Total Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	<2.5	mg/Kg	2.5	08-31-94
Total Barium .....:	190.	mg/Kg	2.5	09-02-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	08-31-94
Total Chromium .....:	8.7	mg/Kg	2.5	08-31-94
Total Lead .....:	5.4	mg/Kg	2.5	08-31-94
Total Mercury .....:	<0.25	mg/Kg	0.25	09-06-94
Total Selenium .....:	34.	mg/Kg	2.5	08-31-94
Total Silver .....:	<2.5	mg/Kg	2.5	08-31-94

(2) Copies to Client

M. Gudi
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415808
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-6 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-30-94
ANALYSIS DATE .: 08-30-94

BLS 181/Modified 418.1 - Total Petroleum Fuel Hydrocarbons

DATA TABLE

Parameter	Result	Unit	Detection Limit
Total Petroleum Hydrocarbons .....:	<10.	mg/Kg	10.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415808
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-6 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 08-30-94

BLS 191/Modified 8015
Total Petroleum Fuel Hydrocarbons (C10 - C22)

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Total Petroleum Fuel Hydrocarbons :	<20.	mg/Kg	20.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415808
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-6 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: S. KUTA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 08-29-94

Method 8020 - Aromatic Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<10.	ug/Kg	10.
Toluene	<10.	ug/Kg	10.
Ethylbenzene	<10.	ug/Kg	10.
Total Xylenes	<3.0	ug/Kg	3.0

Surrogate Information -

	Percent Recovery	Range
a,a,a -Trifluorotoluene (8020) ...:	93.0	80-120

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415808
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-6 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: W. ABER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-31-94
ANALYSIS DATE .: 09-14-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<8.0	ug/Kg	8.0
Aldrin	<2.5	ug/Kg	2.5
alpha-BHC	<2.0	ug/Kg	2.0
beta-BHC	<4.0	ug/Kg	4.0
delta-BHC	<6.0	ug/Kg	6.0
Chlordane	<9.0	ug/Kg	9.0
Dieldrin	<1.2	ug/Kg	1.2
Endosulfan I	<9.0	ug/Kg	9.0
Endosulfan II	<2.5	ug/Kg	2.5
Endosulfan sulfate	<40.	ug/Kg	40.
Endrin	<4.0	ug/Kg	4.0
Endrin aldehyde	<15.	ug/Kg	15.
Heptachlor	<2.0	ug/Kg	2.0
Heptachlor Epoxide	<55.	ug/Kg	55.
Lindane	<2.5	ug/Kg	2.5
Methoxychlor	<110.	ug/Kg	110.
Toxaphene	<150.	ug/Kg	150.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<1000.	ug/Kg	1000.
PCB 1232	<250.	ug/Kg	250.
PCB 1242	<250.	ug/Kg	250.
PCB 1248	<200.	ug/Kg	200.
PCB 1254	<200.	ug/Kg	200.
PCB 1260	<200.	ug/Kg	200.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415808
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
Dibutylchlorendate ..... :	91.0	10-200
2,4,5,6-Tetrachloro-m-xylene ..... :	63.8	10-200

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415808
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: Bm
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-6 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: W. MCCANN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 09-09-94
ANALYSIS DATE .: 09-10-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
1,1,1-Trichloroethane .....:	<50.	ug/Kg	50.
1,1,2,2-Tetrachloroethane .....:	<50.	ug/Kg	50.
Tetrachloroethene (PCE) .....:	<50.	ug/Kg	50.
1,1,2-Trichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethane .....:	<50.	ug/Kg	50.
1,1-Dichloroethene .....:	<50.	ug/Kg	50.
1,1-Dichloropropene .....:	<50.	ug/Kg	50.
1,2-Dibromoethane .....:	<50.	ug/Kg	50.
1,2,3-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,3-Trichloropropane .....:	<50.	ug/Kg	50.
1,2,4-Trichlorobenzene .....:	<50.	ug/Kg	50.
1,2,4-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,2-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,2-Dichloroethane .....:	<50.	ug/Kg	50.
1,2-Dichloropropane .....:	<50.	ug/Kg	50.
1,3,5-Trimethylbenzene .....:	<50.	ug/Kg	50.
1,3-Dichlorobenzene .....:	<50.	ug/Kg	50.
1,3-Dichloropropane .....:	<50.	ug/Kg	50.
1,4-Dichlorobenzene .....:	<50.	ug/Kg	50.
2,2-Dichloropropane .....:	<50.	ug/Kg	50.
2-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Chlorotoluene .....:	<50.	ug/Kg	50.
4-Isopropyltoluene .....:	<50.	ug/Kg	50.
Benzene .....:	<50.	ug/Kg	50.
Bromobenzene .....:	<100.	ug/Kg	100.
Bromochloromethane .....:	<50.	ug/Kg	50.
Bromodichloromethane .....:	<50.	ug/Kg	50.
Bromoform .....:	<100.	ug/Kg	100.
Bromomethane .....:	<100.	ug/Kg	100.

(2) Copies to Client

M. Engel
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415808
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
Carbon tetrachloride	<50.	ug/Kg	50.
Chlorobenzene	<50.	ug/Kg	50.
Chloroethane	<100.	ug/Kg	100.
Chloroform	<50.	ug/Kg	50.
Chloromethane	<100.	ug/Kg	100.
cis 1,2-Dichloroethene	<50.	ug/Kg	50.
Dibromochloromethane	<50.	ug/Kg	50.
Dibromochloropropane	<250.	ug/Kg	250.
Dibromomethane	<100.	ug/Kg	100.
Dichlorodifluoromethane	<250.	ug/Kg	250.
Dichloromethane	<250.	ug/Kg	250.
Ethylbenzene	<50.	ug/Kg	50.
Hexachlorobutadiene	<50.	ug/Kg	50.
Isopropylbenzene	<50.	ug/Kg	50.
m-Xylene	<50.	ug/Kg	50.
Naphthalene	<50.	ug/Kg	50.
n-Butylbenzene	<50.	ug/Kg	50.
o-Xylene	<50.	ug/Kg	50.
Propylbenzene	<50.	ug/Kg	50.
p-Xylene	<50.	ug/Kg	50.
sec-Butylbenzene	<50.	ug/Kg	50.
Styrene	<50.	ug/Kg	50.
tert-Butylbenzene	<50.	ug/Kg	50.
Toluene	<50.	ug/Kg	50.
trans 1,2-Dichloroethene	<50.	ug/Kg	50.
Trichloroethene	<50.	ug/Kg	50.
Trichlorofluoromethane	<250.	ug/Kg	250.
Vinyl chloride	<250.	ug/Kg	250.

Surrogate Information -

	Percent Recovery	Range
4-Bromofluorobenzene	89.0	74-121
1,2-Dichloroethane-D4	98.0	70-121
Toluene-D8	100.0	81-117

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415808
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]
PAGE : 1 OF 4

CLIENT SAMPLE ID : B-6 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: S.KARA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 09-20-94

Semi-Volatiles by Gas Chromatography/ Mass Spectrometry

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<2000.	ug/Kg	2000.
Bis(2-Chloroethyl)ether	<2000.	ug/Kg	2000.
2-Chlorophenol	<2000.	ug/Kg	2000.
1,3-Dichlorobenzene	<2000.	ug/Kg	2000.
1,4-Dichlorobenzene	<2000.	ug/Kg	2000.
1,2-Dichlorobenzene	<2000.	ug/Kg	2000.
2-Methylphenol	<2000.	ug/Kg	2000.
Bis(2-chloroisopropyl)ether	<2000.	ug/Kg	2000.
4-Methylphenol	<2000.	ug/Kg	2000.
N-Nitroso-di-n-propylamine	<2000.	ug/Kg	2000.
Hexachloroethane	<2000.	ug/Kg	2000.
Nitrobenzene	<2000.	ug/Kg	2000.
Isophorone	<2000.	ug/Kg	2000.
2-Nitrophenol	<2000.	ug/Kg	2000.
2,4 Dimethylphenol	<2000.	ug/Kg	2000.
Bis(2-Chloroethoxy) methane	<2000.	ug/Kg	2000.
2,4-Dichlorophenol	<2000.	ug/Kg	2000.
1,2,4-Trichlorobenzene	<2000.	ug/Kg	2000.
Napthalene	<2000.	ug/Kg	2000.
4-Chloroaniline	<4000.	ug/Kg	4000.
Hexachlorobutadiene	<2000.	ug/Kg	2000.
4-Chloro-3-methylphenol	<3000.	ug/Kg	3000.
2-Methylnaphthalene	<2000.	ug/Kg	2000.
Hexachlorocyclopentadiene	<2000.	ug/Kg	2000.
2,4,6-Trichlorophenol	<2000.	ug/Kg	2000.
2,4,5-Trichlorophenol	<2000.	ug/Kg	2000.
2-Chloronaphthalene	<2000.	ug/Kg	2000.
2-Nitroaniline	<3000.	ug/Kg	3000.
Dimethyl Phthalate	<2000.	ug/Kg	2000.
Acenaphthylene	<2000.	ug/Kg	2000.

(2) Copies to Client

M. Engel
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415808
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<4000.	ug/Kg	4000.
Acenaphthene	<2000.	ug/Kg	2000.
2,4-Dinitrophenol	<2000.	ug/Kg	2000.
4-Nitrophenol	<3000.	ug/Kg	3000.
Dibenzofuran	<2000.	ug/Kg	2000.
2,4-Dinitrotoluene	<2000.	ug/Kg	2000.
2,6-Dinitrotoluene	<2000.	ug/Kg	2000.
Diethyl Phthalate	<2000.	ug/Kg	2000.
4-Chlorophenyl phenyl ether	<2000.	ug/Kg	2000.
Fluorene	<2000.	ug/Kg	2000.
4-Nitroaniline	<4000.	ug/Kg	4000.
2-Methyl-4,6-dinitrophenol	<3000.	ug/Kg	3000.
N-Nitrosodiphenylamine	<2000.	ug/Kg	2000.
4-Bromophenyl phenyl ether	<2000.	ug/Kg	2000.
Hexachlorobenzene	<2000.	ug/Kg	2000.
Pentachlorophenol	<3000.	ug/Kg	3000.
2,6-Dichlorophenol	<2000.	ug/Kg	2000.
N-Nitrosodibutylamine	<2000.	ug/Kg	2000.
N-Nitrosodimethylamine	<2000.	ug/Kg	2000.
Phenanthrene	<2000.	ug/Kg	2000.
Anthracene	<2000.	ug/Kg	2000.
Di-n-Butyl Phthalate	6200.	ug/Kg	2000.
Fluoranthene	<2000.	ug/Kg	2000.
Pyrene	<2000.	ug/Kg	2000.
Butyl Benzyl Phthalate	<2000.	ug/Kg	2000.
3,3'-Dichlorobenzidine	<3000.	ug/Kg	3000.
Benzo(a)anthracene	<2000.	ug/Kg	2000.
Bis(2-ethylhexyl) Phthalate	<2000.	ug/Kg	2000.
Chrysene	<2000.	ug/Kg	2000.
Di-n-Octyl Phthalate	<2000.	ug/Kg	2000.
Benzo(b)fluoranthene	<6600.	ug/Kg	6600.
Benzo(k)fluoranthene	<2000.	ug/Kg	2000.
Benzo(a)pyrene	<2000.	ug/Kg	2000.
Indeno(1,2,3-cd)pyrene	<2000.	ug/Kg	2000.
Dibenz(a,h)anthracene	<2000.	ug/Kg	2000.
Benzo(ghi)perylene	<2000.	ug/Kg	2000.
alpha-BHC	<2000.	ug/Kg	2000.
beta-BHC	<2000.	ug/Kg	2000.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415808
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
delta-BHC	<2000.	ug/Kg	2000.
gamma-BHC (Lindane)	<2000.	ug/Kg	2000.
Aldrin	<2000.	ug/Kg	2000.
Heptachlor	<2000.	ug/Kg	2000.
Heptachlor Epoxide	<2000.	ug/Kg	2000.
Endosulfan I	<2000.	ug/Kg	2000.
4,4'-DDE	<2000.	ug/Kg	2000.
Dieldrin	<2000.	ug/Kg	2000.
Endrin	<2000.	ug/Kg	2000.
4,4'-DDD	<2000.	ug/Kg	2000.
Endosulfan II	<2000.	ug/Kg	2000.
4,4'-DDT	<2000.	ug/Kg	2000.
Endrin Aldehyde	<2000.	ug/Kg	2000.
Endosulfan Sulfate	<2000.	ug/Kg	2000.
Methoxychlor	<2000.	ug/Kg	2000.
Toxaphene	<5000.	ug/Kg	5000.
Chlordanes (alpha + gamma)	<2000.	ug/Kg	2000.
PCB 1016	<5000.	ug/Kg	5000.
PCB 1221	<5000.	ug/Kg	5000.
PCB 1232	<5000.	ug/Kg	5000.
PCB 1242	<5000.	ug/Kg	5000.
PCB 1248	<5000.	ug/Kg	5000.
PCB 1254	<5000.	ug/Kg	5000.
PCB 1260	<5000.	ug/Kg	5000.
Endrin ketone	<2000.	ug/Kg	2000.
Endosulfan II	<2000.	ug/Kg	2000.
Benzoic acid	<33000.	ug/Kg	33000.
Benzidine	<4000.	ug/Kg	4000.
1-Chloronaphthalene	<2000.	ug/Kg	2000.
Dibenz(a,j)acridine	<2000.	ug/Kg	2000.
7,12-Dimethylbenzo(a)anthracene	<6600.	ug/Kg	6600.
a,a Dimethylphenethylamine	<5000.	ug/Kg	5000.
Diphenylamine	<2000.	ug/Kg	2000.
1,2-Diphenylhydrazine	<3000.	ug/Kg	3000.
Ethyl Methanesulfonate	<13000.	ug/Kg	13000.
3-Methylcholanthrene	<6600.	ug/Kg	6600.
Methylmethansulfonate	<6600.	ug/Kg	6600.
N-Nitrosopiperidine	<4000.	ug/Kg	4000.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415808
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
1-Naphthylamine	<6600.	ug/Kg	6600.
2-Naphthylamine	<2000.	ug/Kg	2000.
2-Picoline	<5000.	ug/Kg	5000.
Pentachlorobenzene	<6600.	ug/Kg	6600.
Pentachloronitrobenzene	<13000.	ug/Kg	13000.
Phenacetin	<13000.	ug/Kg	13000.
Pronamide	<6600.	ug/Kg	6600.
1,2,4,5-Tetrachlorobenzene	<6600.	ug/Kg	6600.
2,3,4,6-Tetrachlorophenol	<2000.	ug/Kg	2000.
Aniline	<5000.	ug/Kg	5000.
Acetophenone	<4000.	ug/Kg	4000.
Benzyl alcohol	<13000.	ug/Kg	13000.
Dimethylaminoazobenzene	<6600.	ug/Kg	6600.

Surrogate Information -

	Percent Recovery	Range
2-Fluorophenol	67.0	25-121
Phenol-d5	68.5	24-113
2,4,6-Tribromophenol	76.0	19-122
2-Fluorobiphenyl	71.0	30-115
Nitrobenzene-d5	72.0	23-120
4-Terphenyl-d14	81.0	18-137

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415809
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-7 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: --

Inorganic Chemistry - Total Metals

DATA TABLE

Parameter	Result	Unit	Detection Limit	Analysis Date
Total Arsenic .....:	<2.5	mg/Kg	2.5	08-31-94
Total Barium .....:	51.	mg/Kg	2.5	09-02-94
Total Cadmium .....:	<2.5	mg/Kg	2.5	08-31-94
Total Chromium .....:	8.6	mg/Kg	2.5	08-31-94
Total Lead .....:	4.5	mg/Kg	2.5	08-31-94
Total Mercury .....:	<0.25	mg/Kg	0.25	09-06-94
Total Selenium .....:	26.	mg/Kg	2.5	08-31-94
Total Silver .....:	<2.5	mg/Kg	2.5	08-31-94

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415809
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: ALN
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-7 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-30-94
ANALYSIS DATE .: 08-30-94

BLS 181/Modified 418.1 - Total Petroleum Fuel Hydrocarbons

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Total Petroleum Hydrocarbons .....:	<10.	mg/Kg	10.

(2) Copies to Client

M. Gnell
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415809
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-7 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: A. JAIN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 08-30-94

BLS 191/Modified 8015
Total Petroleum Fuel Hydrocarbons (C10 - C22)

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Total Petroleum Fuel Hydrocarbons :	<20.	mg/Kg	20.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415809
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]
PAGE : 1 OF 1

CLIENT SAMPLE ID : B-7 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: S. KUTA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 08-29-94

Method 8020 - Aromatic Volatiles

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
Benzene	<10.	ug/Kg	10.
Toluene	<10.	ug/Kg	10.
Ethylbenzene	<10.	ug/Kg	10.
Total Xylenes	<3.0	ug/Kg	3.0

Surrogate Information -

	Percent Recovery	Range
a,a,a -Trifluorotoluene (8020) ...:	96.0	80-120

(2) Copies to Client

M. Grubb
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415809
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-7 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: W. ABER

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-31-94
ANALYSIS DATE .: 09-14-94

Method 8080 - Pesticides & PCB'S

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
4,4'-DDD	<2.0	ug/Kg	2.0
4,4'-DDE	<2.0	ug/Kg	2.0
4,4'-DDT	<8.0	ug/Kg	8.0
Aldrin	<2.5	ug/Kg	2.5
alpha-BHC	<2.0	ug/Kg	2.0
beta-BHC	<4.0	ug/Kg	4.0
delta-BHC	<6.0	ug/Kg	6.0
Chlordane	<9.0	ug/Kg	9.0
Dieldrin	<1.2	ug/Kg	1.2
Endosulfan I	<9.0	ug/Kg	9.0
Endosulfan II	<2.5	ug/Kg	2.5
Endosulfan sulfate	<40.	ug/Kg	40.
Endrin	<4.0	ug/Kg	4.0
Endrin aldehyde	<15.	ug/Kg	15.
Heptachlor	<2.0	ug/Kg	2.0
Heptachlor Epoxide	<55.	ug/Kg	55.
Lindane	<2.5	ug/Kg	2.5
Methoxychlor	<110.	ug/Kg	110.
Toxaphene	<150.	ug/Kg	150.
PCB 1016	<100.	ug/Kg	100.
PCB 1221	<1000.	ug/Kg	1000.
PCB 1232	<250.	ug/Kg	250.
PCB 1242	<250.	ug/Kg	250.
PCB 1248	<200.	ug/Kg	200.
PCB 1254	<200.	ug/Kg	200.
PCB 1260	<200.	ug/Kg	200.

(2) Copies to Client

M. Gudi
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415809
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: DJ
PAGE : 2 OF 2

D A T A T A B L E (Cont.)

Surrogate Information -

	Percent Recovery	Range
Dibutylchlorendate .....:	101.2	10-200
2,4,5,6-Tetrachloro-m-xylene .....:	72.0	10-200

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415809
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]
PAGE : 1 OF 2

CLIENT SAMPLE ID : B-7 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: W. MCCANN

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 09-08-94
ANALYSIS DATE .: 09-08-94

Method 8260 - Volatile Organics

D A T A T A B L E

Parameter	Result	Unit	Detection Limit
1,1,1,2-Tetrachloroethane .....:	<100.	ug/Kg	100.
1,1,1-Trichloroethane .....:	<100.	ug/Kg	100.
1,1,2,2-Tetrachloroethane .....:	<100.	ug/Kg	100.
Tetrachloroethene (PCE) .....:	<100.	ug/Kg	100.
1,1,2-Trichloroethane .....:	<100.	ug/Kg	100.
1,1-Dichloroethane .....:	<100.	ug/Kg	100.
1,1-Dichloroethene .....:	<100.	ug/Kg	100.
1,1-Dichloropropene .....:	<100.	ug/Kg	100.
1,2-Dibromoethane .....:	<100.	ug/Kg	100.
1,2,3-Trichlorobenzene .....:	<100.	ug/Kg	100.
1,2,3-Trichloropropane .....:	<100.	ug/Kg	100.
1,2,4-Trichlorobenzene .....:	<100.	ug/Kg	100.
1,2,4-Trimethylbenzene .....:	<100.	ug/Kg	100.
1,2-Dichlorobenzene .....:	<100.	ug/Kg	100.
1,2-Dichloroethane .....:	<100.	ug/Kg	100.
1,2-Dichloropropane .....:	<100.	ug/Kg	100.
1,3,5-Trimethylbenzene .....:	<100.	ug/Kg	100.
1,3-Dichlorobenzene .....:	<100.	ug/Kg	100.
1,3-Dichloropropane .....:	<100.	ug/Kg	100.
1,4-Dichlorobenzene .....:	<100.	ug/Kg	100.
2,2-Dichloropropane .....:	<100.	ug/Kg	100.
2-Chlorotoluene .....:	<100.	ug/Kg	100.
4-Chlorotoluene .....:	<100.	ug/Kg	100.
4-Isopropyltoluene .....:	<100.	ug/Kg	100.
Benzene .....:	<100.	ug/Kg	100.
Bromobenzene .....:	<200.	ug/Kg	200.
Bromochloromethane .....:	<100.	ug/Kg	100.
Bromodichloromethane .....:	<100.	ug/Kg	100.
Bromoform .....:	<200.	ug/Kg	200.
Bromomethane .....:	<200.	ug/Kg	200.

(2) Copies to Client

M. Gr[illegible]
Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415809
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]
PAGE : 2 OF 2

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
Carbon tetrachloride	<100.	ug/Kg	100.
Chlorobenzene	<100.	ug/Kg	100.
Chloroethane	<200.	ug/Kg	200.
Chloroform	<100.	ug/Kg	100.
Chloromethane	<200.	ug/Kg	200.
cis 1,2-Dichloroethene	<100.	ug/Kg	100.
Dibromochloromethane	<100.	ug/Kg	100.
Dibromochloropropane	<500.	ug/Kg	500.
Dibromomethane	<200.	ug/Kg	200.
Dichlorodifluoromethane	<500.	ug/Kg	500.
Dichloromethane	<500.	ug/Kg	500.
Ethylbenzene	<100.	ug/Kg	100.
Hexachlorobutadiene	<100.	ug/Kg	100.
Isopropylbenzene	<100.	ug/Kg	100.
m-Xylene	<100.	ug/Kg	100.
Naphthalene	<100.	ug/Kg	100.
n-Butylbenzene	<100.	ug/Kg	100.
o-Xylene	<100.	ug/Kg	100.
Propylbenzene	<100.	ug/Kg	100.
p-Xylene	<100.	ug/Kg	100.
sec-Butylbenzene	<100.	ug/Kg	100.
Styrene	<100.	ug/Kg	100.
tert-Butylbenzene	<100.	ug/Kg	100.
Toluene	<100.	ug/Kg	100.
trans 1,2-Dichloroethene	<100.	ug/Kg	100.
Trichloroethene	<100.	ug/Kg	100.
Trichlorofluoromethane	<500.	ug/Kg	500.
Vinyl chloride	<500.	ug/Kg	500.

Surrogate Information -	Percent Recovery	Range
4-Bromofluorobenzene	100.0	74-121
1,2-Dichloroethane-D4	92.0	70-121
Toluene-D8	110.0	81-117

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415809
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:
PAGE : 1 OF 4

CLIENT SAMPLE ID : B-7 30'
SAMPLE TYPE .....: SOIL
SAMPLED BY .....: K. HEBERT
SUBMITTED BY ....: K. HEBERT
SAMPLE SOURCE ...: --
ANALYST .....: S.KARA

AUTHORIZED BY : D. GARDNER
CLIENT P.O. : AR390-1617
SAMPLE DATE ...: 08-24-94
SUBMITTAL DATE : 08-24-94
EXTRACTION DATE: 08-29-94
ANALYSIS DATE .: 09-20-94

Semi-Volatiles by Gas Chromatography/ Mass Spectrometry

DATA TABLE

Parameter	Result	Unit	Detection Limit
Phenol	<2000.	ug/Kg	2000.
Bis(2-Chloroethyl)ether	<2000.	ug/Kg	2000.
2-Chlorophenol	<2000.	ug/Kg	2000.
1,3-Dichlorobenzene	<2000.	ug/Kg	2000.
1,4-Dichlorobenzene	<2000.	ug/Kg	2000.
1,2-Dichlorobenzene	<2000.	ug/Kg	2000.
2-Methylphenol	<2000.	ug/Kg	2000.
Bis(2-chloroisopropyl)ether	<2000.	ug/Kg	2000.
4-Methylphenol	<2000.	ug/Kg	2000.
N-Nitroso-di-n-propylamine	<2000.	ug/Kg	2000.
Hexachloroethane	<2000.	ug/Kg	2000.
Nitrobenzene	<2000.	ug/Kg	2000.
Isophorone	<2000.	ug/Kg	2000.
2-Nitrophenol	<2000.	ug/Kg	2000.
2,4 Dimethylphenol	<2000.	ug/Kg	2000.
Bis(2-Chloroethoxy) methane	<2000.	ug/Kg	2000.
2,4-Dichlorophenol	<2000.	ug/Kg	2000.
1,2,4-Trichlorobenzene	<2000.	ug/Kg	2000.
Napthalene	<2000.	ug/Kg	2000.
4-Chloroaniline	<4000.	ug/Kg	4000.
Hexachlorobutadiene	<2000.	ug/Kg	2000.
4-Chloro-3-methylphenol	<3000.	ug/Kg	3000.
2-Methylnaphthalene	<2000.	ug/Kg	2000.
Hexachlorocyclopentadiene	<2000.	ug/Kg	2000.
2,4,6-Trichlorophenol	<2000.	ug/Kg	2000.
2,4,5-Trichlorophenol	<2000.	ug/Kg	2000.
2-Chloronaphthalene	<2000.	ug/Kg	2000.
2-Nitroaniline	<3000.	ug/Kg	3000.
Dimethyl Phthalate	<2000.	ug/Kg	2000.
Acenaphthylene	<2000.	ug/Kg	2000.

(2) Copies to Client

Managing Director

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415809
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: [illegible]

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
3-Nitroaniline	<4000.	ug/Kg	4000.
Acenaphthene	<2000.	ug/Kg	2000.
2,4-Dinitrophenol	<2000.	ug/Kg	2000.
4-Nitrophenol	<3000.	ug/Kg	3000.
Dibenzofuran	<2000.	ug/Kg	2000.
2,4-Dinitrotoluene	<2000.	ug/Kg	2000.
2,6-Dinitrotoluene	<2000.	ug/Kg	2000.
Diethyl Phthalate	<2000.	ug/Kg	2000.
4-Chlorophenyl phenyl ether	<2000.	ug/Kg	2000.
Fluorene	<2000.	ug/Kg	2000.
4-Nitroaniline	<4000.	ug/Kg	4000.
2-Methyl-4,6-dinitrophenol	<3000.	ug/Kg	3000.
N-Nitrosodiphenylamine	<2000.	ug/Kg	2000.
4-Bromophenyl phenyl ether	<2000.	ug/Kg	2000.
Hexachlorobenzene	<2000.	ug/Kg	2000.
Pentachlorophenol	<3000.	ug/Kg	3000.
2,6-Dichlorophenol	<2000.	ug/Kg	2000.
N-Nitrosodibutylamine	<2000.	ug/Kg	2000.
N-Nitrosodimethylamine	<2000.	ug/Kg	2000.
Phenanthrene	<2000.	ug/Kg	2000.
Anthracene	<2000.	ug/Kg	2000.
Di-n-Butyl Phthalate	5900.	ug/Kg	2000.
Fluoranthene	<2000.	ug/Kg	2000.
Pyrene	<2000.	ug/Kg	2000.
Butyl Benzyl Phthalate	<2000.	ug/Kg	2000.
3,3'-Dichlorobenzidine	<3000.	ug/Kg	3000.
Benzo(a)anthracene	<2000.	ug/Kg	2000.
Bis(2-ethylhexyl) Phthalate	<2000.	ug/Kg	2000.
Chrysene	<2000.	ug/Kg	2000.
Di-n-Octyl Phthalate	<2000.	ug/Kg	2000.
Benzo(b)fluoranthene	<6600.	ug/Kg	6600.
Benzo(k)fluoranthene	<2000.	ug/Kg	2000.
Benzo(a)pyrene	<2000.	ug/Kg	2000.
Indeno(1,2,3-cd)pyrene	<2000.	ug/Kg	2000.
Dibenz(a,h)anthracene	<2000.	ug/Kg	2000.
Benzo(ghi)perylene	<2000.	ug/Kg	2000.
alpha-BHC	<2000.	ug/Kg	2000.
beta-BHC	<2000.	ug/Kg	2000.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415809
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY: Bc

D A T A T A B L E (Cont.)

Parameter	Result	Unit	Detection Limit
delta-BHC	<2000.	ug/Kg	2000.
gamma-BHC (Lindane)	<2000.	ug/Kg	2000.
Aldrin	<2000.	ug/Kg	2000.
Heptachlor	<2000.	ug/Kg	2000.
Heptachlor Epoxide	<2000.	ug/Kg	2000.
Endosulfan I	<2000.	ug/Kg	2000.
4,4'-DDE	<2000.	ug/Kg	2000.
Dieldrin	<2000.	ug/Kg	2000.
Endrin	<2000.	ug/Kg	2000.
4,4'-DDD	<2000.	ug/Kg	2000.
Endosulfan II	<2000.	ug/Kg	2000.
4,4'-DDT	<2000.	ug/Kg	2000.
Endrin Aldehyde	<2000.	ug/Kg	2000.
Endosulfan Sulfate	<2000.	ug/Kg	2000.
Methoxychlor	<2000.	ug/Kg	2000.
Toxaphene	<5000.	ug/Kg	5000.
Chlordanes (alpha + gamma)	<2000.	ug/Kg	2000.
PCB 1016	<5000.	ug/Kg	5000.
PCB 1221	<5000.	ug/Kg	5000.
PCB 1232	<5000.	ug/Kg	5000.
PCB 1242	<5000.	ug/Kg	5000.
PCB 1248	<5000.	ug/Kg	5000.
PCB 1254	<5000.	ug/Kg	5000.
PCB 1260	<5000.	ug/Kg	5000.
Endrin ketone	<2000.	ug/Kg	2000.
Endosulfan II	<2000.	ug/Kg	2000.
Benzoic acid	<33000.	ug/Kg	33000.
Benzidine	<4000.	ug/Kg	4000.
1-Chloronaphthalene	<2000.	ug/Kg	2000.
Dibenz(a,j)acridine	<2000.	ug/Kg	2000.
7,12-Dimethylbenzo(a)anthracene	<6600.	ug/Kg	6600.
a,a Dimethylphenethylamine	<5000.	ug/Kg	5000.
Diphenylamine	<2000.	ug/Kg	2000.
1,2-Diphenylhydrazine	<3000.	ug/Kg	3000.
Ethyl Methanesulfonate	<13000.	ug/Kg	13000.
3-Methylcholanthrene	<6600.	ug/Kg	6600.
Methylmethansulfonate	<6600.	ug/Kg	6600.
N-Nitrosopiperidine	<4000.	ug/Kg	4000.

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

CLIENT MARICOPA FLOOD CONTROL DISTRICT
ATTN: DAVE GARDNER
PROJECT: MCFCD CROSS-CUT
2801 WEST DURANGO STREET
PHOENIX, AZ 85009

SAMPLE NO. : 9415809
INVOICE NO.: 22143580
REPORT DATE: 09-30-94
REVIEWED BY:

DATA TABLE (Cont.)

Parameter	Result	Unit	Detection Limit
1-Naphthylamine	<6600.	ug/Kg	6600.
2-Naphthylamine	<2000.	ug/Kg	2000.
2-Picoline	<5000.	ug/Kg	5000.
Pentachlorobenzene	<6600.	ug/Kg	6600.
Pentachloronitrobenzene	<13000.	ug/Kg	13000.
Phenacetin	<13000.	ug/Kg	13000.
Pronamide	<6600.	ug/Kg	6600.
1,2,4,5-Tetrachlorobenzene	<6600.	ug/Kg	6600.
2,3,4,6-Tetrachlorophenol	<2000.	ug/Kg	2000.
Aniline	<5000.	ug/Kg	5000.
Acetophenone	<4000.	ug/Kg	4000.
Benzyl alcohol	<13000.	ug/Kg	13000.
Dimethylaminoazobenzene	<6600.	ug/Kg	6600.

Surrogate Information -

	Percent Recovery	Range
2-Fluorophenol	69.0	25-121
Phenol-d5	68.5	24-113
2,4,6-Tribromophenol	77.0	19-122
2-Fluorobiphenyl	78.0	30-115
Nitrobenzene-d5	75.0	23-120
4-Terphenyl-d14	93.0	18-137

(2) Copies to Client

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 115-083094-1
REFERENCE NOTEBOOK : WW191
REFERENCE PAGE ....: 73

INSTRUMENT : Beckman Acculab IR-TPHC
ANALYZED BY : A. JAIN
ANALYZED ON : 08-30-94

TEST DESCRIPTION ..: BLS 181/Modified 418.1 - Total Petroleum Fuel Hydrocarbons

SAMPLES IN THIS RUN: 9415806 9415807 9415808 9415809 9415975 9415976 9415977 9416031 9416032 9416092

CALIBRATION CHECK -

PARAMETER	UNIT	TRUE VALUE	FOUND VALUE	%RECOVERY
Total Petroleum Hydrocarbons	mg/L	100.	101.	101.0
Total Petroleum Hydrocarbons	mg/L	100.	109.	109.0

SPIKES -

SAMPLE NUMBER	PARAMETER	UNIT	SAMPLE RESULT	SPIKE CONC.	SAMPLE+SPIKE DUP1/DUP2	%REC	RPD
9415975	Total Petroleum Hydrocarbons	mg/Kg	<10.	100.	1) 109.	109.0	
					2) 109.	109.0	0.

METHOD BLANKS -

PARAMETER	UNIT	RESULT
Total Petroleum Hydrocarbons	mg/Kg	<10.

NOTE -

1) NC: Not Calculable because result is < 5 times the MDL

2) NP: Not Practical because sample result is 4 times or more greater than spike added.

3) Percent Recovery is:

$$\frac{\text{Sample+Spike Result} - \text{Sample Result}}{\text{Spike Amount}} \times 100$$

4) Relative Percent Difference (RPD) is:

$$\frac{\text{Sample Result} - \text{Replicate Result}}{(\text{Sample Result} + \text{Replicate Result})/2} \times 100$$

WESTECH
LABORATORIES
INC.
QUALITY ASSURANCE OFFICER
A. Nichols
DATE: 10/5/94

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 103-083094-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Hewlett Packard GC with Dual FID
ANALYZED BY : A. JAIN
ANALYZED ON : 08-30-94

TEST DESCRIPTION ..: BLS 191/Mod. 8015 - Total Petroleum Fuel Hydrocarbons C10-22

SAMPLES IN THIS RUN: 9415218 9415220 9415223 9415225 9415228 9415230 9415233 9415235 9415806 9415807 9415808 9415809 9415975 9415976 9415977

CALIBRATION CHECK -

PARAMETER	UNIT	TRUE VALUE	FOUND VALUE	%RECOVERY
Total Petroleum Fuel Hydrocarbons	mg/L	100.	88.	88.0
Total Petroleum Fuel Hydrocarbons	mg/L	100.	90.	90.0
Total Petroleum Fuel Hydrocarbons	mg/L	100.	81.	81.0

SPIKES -

SAMPLE NUMBER	PARAMETER	UNIT	SAMPLE RESULT	SPIKE CONC.	SAMPLE+SPIKE DUP1/DUP2		%REC	RPD
9415230	Total Petroleum Fuel Hydroca	mg/Kg	<20.	100.	1)	93	93.0	
					2)	92.	92.0	1.
9415975	Total Petroleum Fuel Hydroca	mg/Kg	<20.	100.	1)	82.	82.0	
					2)	84.	84.0	2.

METHOD BLANKS -

PARAMETER	UNIT	RESULT
Total Petroleum Fuel Hydrocarbons	mg/L	<2.0

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 103-083094-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Hewlett Packard GC with Dual FID
ANALYZED BY : A. JAIN
ANALYZED ON : 08-30-94

NOTE -

1) NC: Not Calculable because result is < 5 times the MDL

2) NP: Not Practical because sample result is 4 times or more greater than spike added.

3) Percent Recovery is:

$$\frac{\text{Sample+Spike Result} - \text{Sample Result}}{\text{Spike Amount}} \times 100$$

4) Relative Percent Difference (RPD) is:

$$\frac{\text{Sample Result} - \text{Replicate Result}}{(\text{Sample Result} + \text{Replicate Result})/2} \times 100$$

WESTECH
LABORATORIES
INC.
QUALITY ASSURANCE OFFICER
A. Nichols
DATE: 10/5/94

Westech Laboratories Inc.
The Quality People
Since 1955

3737 East Broadway Road
Phoenix, Arizona 85040-2966
(602) 437-1080 • fax 437-8706

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 107-082994-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Hewlett Packard GC w/ PID & FID
ANALYZED BY : S. KUTA
ANALYZED ON : 08-29-94

TEST DESCRIPTION ..: Method 8020 - Aromatic Volatiles

SAMPLES IN THIS RUN: 9415413 9415416 9415418 9415534 9415535 9415536 9415695
9415696 9415697 9415698 9415699 9415700 9415701 9415702
9415806 9415807 9415808 9415809 9415852 9415854 9415855
9416031 9416032

CALIBRATION CHECK -

PARAMETER	UNIT	TRUE VALUE	FOUND VALUE	%RECOVERY
Ethylbenzene	ug/L	10.	8.7	87.0
Toluene	ug/L	10.	9.1	91.0
Total Xylenes	ug/L	30.	27.	90.0
Benzene	ug/L	10.	10.	100.0
Ethylbenzene	ug/L	10.	8.1	81.0
Toluene	ug/L	10.	8.4	84.0
Total Xylenes	ug/L	30.	25.	83.3
Benzene	ug/L	10.	11.	110.0
Ethylbenzene	ug/L	10.	8.7	87.0
Toluene	ug/L	10.	9.2	92.0
Total Xylenes	ug/L	30.	27.	90.0
Benzene	ug/L	10.	8.8	88.0

SPIKES -

SAMPLE NUMBER	PARAMETER	UNIT	SAMPLE RESULT	SPIKE CONC.	SAMPLE+SPIKE DUP1/DUP2		%REC	RPD
9415806	Ethylbenzene	ug/Kg	<10.	10.	1)	11.	110.0	
					2)	9.6	96.0	13.
9415806	Toluene	ug/Kg	<10.	10.	1)	11.	110.0	
					2)	10.	100.0	9.
9415806	Total Xylenes	ug/Kg	<3.0	30.	1)	33.	110.0	
					2)	30.	100.0	9.
9415806	Benzene	ug/Kg	<10.	10.	1)	11.	110.0	
					2)	9.6	96.0	13.
9415854	Ethylbenzene	ug/Kg	<10.	10.	1)	8.4	84.0	
					2)	8.2	82.0	2.
9415854	Toluene	ug/Kg	<10.	10.	1)	8.5	85.0	
					2)	8.4	84.0	1.
9415854	Total Xylenes	ug/Kg	<3.0	30.	1)	26.	86.7	
					2)	25.	83.3	4.
9415854	Benzene	ug/Kg	<10.	10.	1)	8.1	81.0	
					2)	8.0	80.0	1.
9415695	Ethylbenzene	ug/L	<1.0	40.	1)	32.	80.0	
					2)	32.	80.0	0.
9415695	Toluene	ug/L	5.4	40.	1)	40.	86.5	

QUALITY CONTROL REPORT

QC IDENTIFIER .....: 107-082994-1
REFERENCE NOTEBOOK :
REFERENCE PAGE ....:

INSTRUMENT : Hewlett Packard GC w/ PID &
ANALYZED BY : S. KUTA
ANALYZED ON : 08-29-94

SPIKES -

SAMPLE NUMBER	PARAMETER	UNIT	SAMPLE RESULT	SPIKE CONC.	SAMPLE+SPIKE DUP1/DUP2
9415695	Total Xylenes	ug/L	<0.3	120.	2) 40. 1) 99. 2) 98.
9415695	Benzene	ug/L	<1.0	40.	1) 33. 2) 32.

METHOD BLANKS -

PARAMETER	UNIT	RESULT
Benzene	ug/L	<1.0
Toluene	ug/L	<1.0
Ethylbenzene	ug/L	<1.0
Total Xylenes	ug/L	<0.3

NOTE -

1) NC: Not Calculable because result is < 5 times the MDL

2) NP: Not Practical because sample result is 4 times or more greate than spike added.

3) Percent Recovery is:

$$\frac{\text{Sample+Spike Result} - \text{Sample Result}}{\text{Spike Amount}} \times 100$$

4) Relative Percent Difference (RPD) is:

$$\frac{\text{Sample Result} - \text{Replicate Result}}{(\text{Sample Result} + \text{Replicate Result})/2} \times 100$$

WESTECH
LABORATOR
INC.
QUALITY AS

DATE:

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 E. Broadway Rd. • AZ 85040 • 602-437-1080 • fax 437-8706
Flagstaff • 2400 E. Huntington Dr. • AZ 86004 • 602-774-2312 • fax 774-6469
El Paso • 10737 Gateway West #100 • TX 79935 • 915-592-3591 • fax 592-3594

CHAIN OF CUSTODY RECORD

CLIENT: CEC/WRA	ADDRESS: 4041 N. CENTRAL AVE. Ste 1050 PHOENIX AZ 85012
TELEPHONE: (602) 248-8808	PROJECT: MCFCD CROSS-CUT / JOB/P.O. NO.: AR-390-1617

• REFER TO FEE SCHEDULE FOR ANALYSES SELECTION •

SAMPLER (SIGNATURE): Kevin Hebert
SAMPLER (PLEASE PRINT): KEVIN HEBERT

SAMPLE TYPE CODES: S – SOIL; O – OIL; T – TRAVEL BLANK; W – WATER; G – SLUDGE; F – FIELD BLANK; X – OTHER (SPECIFY)

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	COMPOSITE	GRAB	SAMPLE TYPE	NUMBER OF CONTAINERS	HOLD	8080 PST	8260	8270	8020 (BTEX)	BLS-181	BLS-199	6010 - 8 RCRA	Allen Thomas	pH	Cu	Blast Ash	COMMENTS	LABORATORY IDENTIFICATION
B-4 30'	8-24-94	0820			X	S	1		X	X	X	X	X	X	X						9415806
B-5 30'	"	1000			X	S	1		X	X	X	X	X	X	X						807
B-6 30'	"	1250			X	S	2		X	X	X	X	X	X	X						808
B-7 30'	"	1415			X	S	2		X	X	X	X	X	X	X						809

RUD

RELINQUISHED BY (SIGNATURE)	PRINT NAME	DATE / TIME	RECEIVED BY (SIGNATURE)	PRINT NAME
Kevin Hebert	KEVIN HEBERT	8-24-94/1502	Rebecca Dixon	R. DIXON

REMARKS: BILL DIRECT TO MCFCD

SAMPLE PROCESS TURNAROUND TIME: ☐ 10 BUSINESS DAYS ☐ OTHER (SPECIFY)

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 E. Broadway Rd. • AZ 85040 • 602-437-1080 • fax 437-8706
Flagstaff • 2400 E. Huntington Dr. • AZ 86004 • 602-774-2312 • fax 774-6469
El Paso • 10737 Gateway West #100 • TX 79935 • 915-592-3591 • fax 592-3594

CHAIN OF CUSTODY RECORD

CLIENT	ADDRESS	
CEC/WRA	4041 N. CENTRAL AVE Ste 1050	
	PHOENIX AZ 85012	
TELEPHONE (602) 248-8808	PROJECT MCFCD CROSS-CUT CANAL	JOB/P.O. NO. AR-390-1617

• REFER TO FEE SCHEDULE FOR ANALYSES SELECTION •

SAMPLER (SIGNATURE): Kevin Hebert
SAMPLER (PLEASE PRINT): KEVIN HEBERT

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	COMPOSITE	GRAB	SAMPLE TYPE	NUMBER OF CONTAINERS	HOLD	8080 + PCB	8260	8270	8020 (BTEX)	BLS-181	BLS-191	6010 (8 RCRA)				COMMENTS	LABORATORY IDENTIFICATION
B-8 30'	08-25-94	0730			X	S	1		X	X	X	X	X	X	X					9415975
B-9 30'	"	1006			X	S	2		X	X	X	X	X	X	X					" 5976
B-10 30'	"	1117			X	S	2		X	X	X	X	X	X	X					" 5977

SAMPLE TYPE CODES: S – SOIL, O – OIL, T – TRAVEL BLANK, W – WATER, G – SLUDGE, F – FIELD BLANK, X – OTHER (SPECIFY)

RELINQUISHED BY (SIGNATURE)	PRINT NAME	DATE / TIME	RECEIVED BY (SIGNATURE)	PRINT NAME
Kevin Hebert	KEVIN HEBERT	08-25-94 / 1455	[illegible]	Lucky Dittman

REMARKS: BILL DIRECT TO MCFCD

SAMPLE PROCESS TURNAROUND TIME: ☒ 10 BUSINESS DAYS ☐ OTHER (SPECIFY)

Westech Laboratories Inc.
The Quality People
Since 1955

Phoenix • 3737 East Broadway Road • AZ 85040 • (602) 437-1080
Flagstaff • 2400 East Huntington Drive • AZ 86004 • (602) 774-2312
El Paso • 10737 Gateway West, No. 100 • TX 79935 • (915) 592-3591

CHAIN OF CUSTODY RECORD

Page 1 of 1

CLIENT: CDM/WPA	ADDRESS: 4041 N. CENTRAL AVE STE 1050 PHOENIX AZ 85012
CONTACT PERSON: KEVIN HEBERT	
TELEPHONE: (602) 248-8808	PROJECT: MCFCD CROSS-UP — JOB / P.O. NO.: AG-390-1696
FAX: (602) 248-9722	WESTECH QUOTE / CONTRACT NO.

• SEE FEE SCHEDULE •

SAMPLER (SIGNATURE): Kevin Hebert
(PRINT NAME): KEVIN HEBERT

SAMPLE TYPE CODES: S - SOIL, O - OIL, G - SLUDGE, D - DRINKING WATER, W - WASTEWATER, T - TRAVEL BLANK, F - FIELD BLANK, X - OTHER (SPECIFY): BW

SAMPLE/COOLER TEMPERATURE: Cool

SAMPLE IDENTIFICATION	DATE	TIME	SAMPLE LOCATION	NO. CONTAINERS	COMPOSITE	GRAB	SAMPLE TYPE	Unpreserved	HNO_3	NaOH	H_2SO_4	HCl	(Do Not Analyze) HOLD	601/602	TOALS (SEE LIST)	TOTAL METALS (SEE LIST)	pH & NO_3	CONDUCTIVITY	TDS	PAC's/BTEX	CYANIDE	PHENOLS	COMMENTS	LABORATORY IDENTIFICATION
W-28	8/31			7		X	X							X	X	X	X	X	X	X	X	X		9416396
W-B	↓			7			X							X	X	X	X	X	X	X	X	X		9416397
W-416				7			X							X	X	X	X	X	X	X	X	X		" 6398
W-821				7			X							X	X	X	X	X	X	X	X	X		" 6399
TRAVEL BLANK				1			T																	" 6400

Changed to Kevin Hebert Changed to Kevin Hebert

RELINQUISHED BY (SIGNATURE)	PRINT NAME	RECEIVED BY (SIGNATURE)	PRINT NAME	DATE / TIME
Kevin Hebert	KEVIN HEBERT	[signature]	W J Dittman	8-31-94 1445

REMARKS

☐ Fax Results ☐ Special Detection Limits / Requirements

SAMPLE PROCESS TURNAROUND TIME:
☐ Standard ☐ Other (specify)

ATTACHMENT VIII

Summary of Detectable Concentrations of VOCs in Groundwater

ATTACHMENT VIII
SUMMARY OF DETECTABLE CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER

Monitor Well	Date Sampled	EPA Method 601	EPA Method 602			
		Chloroform (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)
W-3	NS	---	---	---	---	---
W-8	8-31-94	9.3	<1.0	<1.0	<1.0	<0.5
W-13	8-31-94	<0.5	<1.0	<1.0	<1.0	<0.5
W-16	8-31-94	0.65	<1.0	1.9	1.4	2.7
W-21	8-31-94	<0.5	1.3	2.8	5.8	<0.5
Aquifer Water Quality Standard		NA	5	1,000	700	10,000
Health-Based Guidance Level		5.7	1.2	1,400	700	14,000

NS = Not Sampled
NA = Not Applicable
ug/l = micrograms per liter

ATTACHMENT IX

Summary of Total Metals in Groundwater

ATTACHMENT IX
SUMMARY OF TOTAL METALS IN GROUNDWATER

Well ID	W-3	W-8	W-13	W-16	W-21	Health-Based Guidance Levels
Date Sampled	NS	8-31-94	8-31-94	8-31-94	8-31-94	8-31-94
Antimony	NS	<0.05	<0.10	<0.05	<0.05	0.0028
Arsenic	NS	<0.05	<0.05	<0.05	<0.05	0.05
Barium	NS	0.53	0.12	0.60	0.25	2.0
Beryllium	NS	<0.05	<0.05	<0.05	<0.05	0.000008
Boron	NS	0.26	1.8	3.4	0.43	0.63
Cadmium	NS	<0.04	<0.04	<0.04	<0.04	0.0035
Calcium	NS	410	46	330	68	NL
Chromium	NS	0.08	<0.05	0.08	0.14	0.1
Copper	NS	0.06	<0.05	0.08	<0.05	1.3
Iron	NS	44	2.4	51	14	NL
Lead	NS	0.06	<0.05	0.05	<0.05	0.005
Magnesium	NS	49	25	65	46	NL
Manganese	NS	0.97	0.08	1.4	0.64	0.7
Mercury	NS	<0.001	<0.001	<0.001	<0.001	0.0021
Nickel	NS	0.07	<0.05	0.08	0.12	0.14
Potassium	NS	12	2.4	16	5.6	NL
Selenium	NS	0.29	<0.05	0.37	0.11	0.05
Silicon	NS	8.7	11	12	23	NL
Silver	NS	<0.05	<0.05	<0.05	<0.05	0.05
Sodium	NS	62	<200	330	110	NL
Thallium	NS	<0.10	<0.10	<0.10	<0.10	0.00049
Zinc	NS	0.29	0.10	0.29	0.14	1.4

NS = Not Sampled
NL = Not Listed
Units = milligrams per liter (mg/l)

ATTACHMENT X

Summary of Physical Characterization and Ion Concentrations

ATTACHMENT X
SUMMARY OF PHYSICAL CHARACTERISTICS AND ION CONCENTRATIONS

Well ID	W-3	W-8	W-13	W-16	W-21	Units
Date Sampled	NS	8-31-94	8-31-94	8-31-94	8-31-94	
Alkalinity	NS	160	300	400	260	mg/l
Ammonia Nitrogen	NS	<0.1	<0.1	<0.1	<0.1	mg/l
Chloride	NS	74	210	270	140	mg/l
Cyanide	NS	<0.01	<0.01	<0.01	<0.01	mg/l
Electrical Conductivity	NS	580	1,400	1,800	1100	umhos/cm
Fluoride	NS	6.3	6.01	12	3.0	mg/l
Hardness	NS	1,200	220	1,100	360	mg/l
Nitrate Nitrogen	NS	<0.50	3.0	1.7	2.2	mg/l
pH	NS	8.02	7.96	8.15	7.62	S.U.
Phenol	NS	<0.01	<0.01	<0.01	<0.01	mg/l
Phosphorous	NS	2.3	0.10	1.4	2.6	mg/l
Sulfate	NS	42	100	120	64	mg/l
Total Dissolved Solids	NS	340	740	1,100	640	mg/l