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REMEDIAL INVESTIGATION
McKESSON CORPORATION PROPERTY
9005 SORENSEN AVENUE
SANTA FE SPRINGS, CALIFORNIA

HLA Project No. 11136-168

Prepared for

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VOLUME III

APPENDICES

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J PHYSICAL PROPERTIES TEST RESULTS - SOIL
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EXECUTIVE SUMMARY

This report presents the results of Harding Lawson Associates' (HLA) Remedial Investigation (RI) conducted at McKesson Corporation's (McKesson) former chemical facility located at 9005 Sorensen Avenue, Santa Fe Springs, California. HLA conducted this work on behalf of McKesson in accordance with Consent Order 89/90-007, issued by the California Department of Health Services (DHS), now the California Environmental Protection Agency - Department of Toxic Substances Control (DTSC). HLA's work was conducted in compliance with the DTSC guidelines and the U.S. Environmental Protection Agency's (EPA), October 1988, "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA." Methods implemented during the RI are described in HLA's workplan entitled "Workplan (Revision 3), Remedial Investigation and Feasibility Study, McKesson Corporation Property, 9005 Sorensen Avenue, Santa Fe Springs, California," (Workplan), dated April 25, 1991.

The facility is located at 9005 Sorensen Avenue, in the City of Santa Fe Springs, Los Angeles County, California. The site is fenced; occupies approximately 4.3 acres in an industrialized area; and is bounded on the east by Sorensen Avenue, on the south by Fontaine Trucking Equipment Company, on the west by a small agricultural field owned by Liquid Air Corporation, and on the north by a Southern Pacific Railroad easement and Angeles Chemical Company (Angeles); a bulk chemical repackaging facility.

McKesson Chemical Company, a former division of McKesson, operated a bulk chemical repackaging facility at the site from 1976 to 1986. During this period of operation, the facility was organized into four areas for the purpose of chemical packaging:

- A solvent repack area,
- A corrosive repack area,
- A hydrogen peroxide repack area, and
- A Freon blending area.

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Forty-four aboveground storage tanks (now demolished) were situated onsite within the four areas of operations. The tanks were contained within 2- to 3-foot-high concrete containment berms and separated by internal dike walls. Twenty-three underground storage tanks (USTs) are presently onsite and predominately located adjacent to the former aboveground solvent tank storage area. Railroad spurs are located along the northern and western boundaries of the site. Loading platforms and underground distribution lines were associated with the offloading of chemicals delivered via the railroad spurs. A drum storage area was used onsite for the storage of hazardous waste.

In September 1985, the DTSC issued a Resource Conservation and Recovery Act (RCRA) Part B Hazardous Waste Facility Permit for the drum-storage area. This area has since been closed under RCRA regulations. The final RCRA closure report was submitted to the DTSC on February 5, 1990 (HLA, 1990a). On June 28, 1990, the DTSC acknowledged that the storage-drum area was officially closed.

At the request of the DTSC, McKesson Environmental Services (MES) conducted three subsurface investigations at the facility during its period of operation. Two studies were undertaken in the aboveground solvent-storage area, and one study was conducted in the corrosive-storage area. Chlorinated solvents were detected in both the soil and groundwater in the aboveground solvent-storage area in these investigations. The corrosive storage area was investigated for USEPA extraction procedure (EP) Toxic compounds; none were detected.

The purpose of the RI was to assess the nature and extent of chemicals of concern in air, soil, surface water, and groundwater associated with the former operations at the McKesson site.

The RI included the monitoring of ambient meteorological conditions and air quality, drilling of soil borings, drilling and installation of groundwater monitoring wells, cone penetrometer testing (CPT)/HydroPunch groundwater sampling, the collection and analysis of surface and subsurface soil samples, and the collection and analysis of surface water and groundwater samples. All field work and physical testing of soil samples was performed by HLA

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geologists, engineers, and technicians under the direct oversight of a registered geologist and/or professional engineer. Analytical testing of air, soil, and water samples was performed by a state-certified laboratory.

HLA's investigation of surface and subsurface soil and vadose zone conditions at the McKesson site was conducted in two phases. The first phase of the investigation was conducted from June to August 1990. Thirty-one soil borings were drilled and sampled during the first phase. Samples were also collected from four surface locations. Following review of the data collected during the first phase of the investigation, a second phase soil and vadose zone investigation was conducted in January and February of 1991, during which an additional ten soil borings were drilled and sampled.

Soil samples collected from borings drilled in the first phase of the investigation in the UST area, the aboveground storage tank area, and the Freon-blending area were analyzed for volatile and semivolatile organic compounds, glycols, and petroleum hydrocarbons. Based on the results from the first-phase borings, the samples collected from the three additional borings in the aboveground solvent-storage area were only analyzed for volatile organic compounds.

Soil samples collected in the corrosive and hydrogen peroxide bermed storage area were only analyzed for pH and selected ions and metals, with the exception of the two samples that were additionally analyzed for volatile and semivolatile organics, glycols, and petroleum hydrocarbons.

The groundwater investigation program consisted of the installation, monitoring, and sampling of a total of 18 onsite groundwater monitoring wells. Two wells were installed in a discontinuous perched-water zone encountered at two locations within the site. Twelve wells were installed in the upper portion of the underlying aquifer zone. Four additional wells were installed in the aquifer, two at an intermediate depth, and two at the bottom of the aquifer, to assess vertical hydraulic and chemical distribution characteristics. The monitoring well program was augmented by the collection of water samples using a

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HydroPunch sampling device. HydroPunch samples were collected at five onsite locations and twelve offsite locations.

Onsite groundwater monitoring wells were monitored for depth to groundwater 14 times during the period from June 1990 through April 1991. During the same period, three rounds of groundwater sampling were conducted. Samples collected in the first round of sampling conducted in August 1990 were analyzed using the following EPA methods:

- EPA Method 8240 - Volatile organic compounds,
- EPA Method 8270 - Semi-volatile compounds,
- EPA Method 8015 modified - Glycols,
- EPA Method 418.1 - Petroleum hydrocarbons,
- EPA Method 150.1 - pH,
- EPA Method 9050 - Conductivity,
- EPA Method 160.1 - Total dissolved solids,
- EPA Method 9036 - Sulfate,
- EPA Method 425.1 - Surfactants, and
- EPA Method 300.0/6010 - General minerals, selected metals.

Groundwater samples collected during subsequent sampling rounds were analyzed for volatile organics using EPA Method 8240 with selected samples being analyzed for general minerals and Ph. Hydropunch groundwater samples collected from onsite and offsite locations were analyzed for volatile organics using EPA Method 8240.

Impacts to vadose zone soils and groundwater by chlorinated hydrocarbon compounds were identified in this investigation. The predominant compounds detected in both the soil and groundwater are 1,1,1-trichloroethane (1,1,1-TCA), tetrachloroethene (PCE), trichloroethene (TCE), and methylene chloride (dichloromethane [DCM]). Elevated concentrations of these compounds detected in the soil appear to be limited in their areal extent to the immediate vicinity, including and surrounding the aboveground solvent storage area. Minor impacts to the soil were identified along the subsurface distribution lines connecting the northern railroad spur to the UST area. No significant impacts to vadose zone soils or groundwater

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were identified as resulting from activities associated with the storage, handling, or processing of corrosives, hydrogen peroxides, or glycols.

Two groundwater plumes exhibiting elevated concentrations of VOCs were identified during this investigation. An onsite plume, characterized by elevated concentrations of chlorinated hydrocarbons, including 1,1,1-TCA, PCE, TCE, 1,1-dichloroethene (1,1-DCE), and DCM was detected. Maximum concentrations of the major compounds comprising the onsite plume were detected in groundwater samples collected immediately downgradient of the aboveground solvent-storage area. Elevated concentrations extend offsite both downgradient and upgradient of the McKesson site. Even though a significant reduction of the concentration of compounds is observed perpendicular to the plume axis, the lateral extent of the plume has not been completely assessed. Vertically, the elevated concentration of compounds appear to be restricted to the upper part of the aquifer. No observations were made that would indicate elevated concentrations of dissolved organics or non-aqueous phase liquid solvents exist at depth within the aquifer.

An offsite plume, characterized by elevated concentrations of MEK, MIBK, and BTEX, in addition to concentrations of chlorinated hydrocarbons, was identified to the north (upgradient) and west (cross-gradient) of the McKesson site. This offsite plume extends downgradient from the Angeles site, which appears to be a possible source. Based on the compounds detected in the soil and the groundwater at the Angeles site during a preliminary investigation conducted in 1990 by SCS Engineers and the distribution of compounds detected in the groundwater upgradient of the McKesson site, the Angeles site appears to have contributed to the onsite plume identified at the McKesson site.

The observed distribution of compounds in the vadose zone soils appears to result from two transport processes. Within and in the vicinity of the aboveground solvent-storage area, the observed distribution is most probably the result of vertical migration of liquid-phase solvents through the vadose zone accompanied with lateral spreading along zones of high permeability contrasts. Away from the solvent storage tank area and at depths of 40 to 45 feet bgs, the detected concentrations of volatile organics appear to be the result of volatilization of dissolved compounds present in the groundwater.

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The observed plume configuration and aquifer test parameters indicated that the transport of chemical compounds in the groundwater is dominated by advection in a downgradient direction. Lateral to the plume axis, transport appears to be dependent primarily on diffusion. Diffusion also appears to control the distribution of compounds observed in the intermediate and deep zones of the aquifer.

A baseline risk assessment conducted by McLaren/ChemRisk concluded that under current conditions, the concentrations of the selected chemicals of concern detected in the site soils do not pose a significant noncancer risk or a significant increased cancer risk to future onsite residential or occupational populations. Risks to offsite populations were not quantitatively assessed. Site-related health risks associated with the chemicals detected in groundwater were not possible to assess because the relative contributions of probable onsite and offsite sources have not been established. The relationship between health effects and groundwater exposure irrespective of onsite versus offsite contribution of chemicals of concern was used to set cleanup levels for groundwater and soil.

Data collected as part of this investigation are sufficient to completely assess the extent of the groundwater plume identified onsite. However, offsite investigation of groundwater conditions is required to assess the downgradient, upgradient, and lateral extent of the plume. Assessment of soil and groundwater conditions upgradient of the McKesson site, including the Angeles site, is necessary to determine the magnitude of offsite contributions to the plumes identified both on and offsite.

The following activities are recommended to complete the remedial investigation of the McKesson site:

- Upon removal of the USTs, collection and analysis of soil samples from beneath the tanks.
- Analyses of soil samples collected during the tank removal activities should be evaluated.
- A report presenting the results of the UST removals and incorporating data generated during this investigation should be prepared as an addendum to the RI Report.

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These activities would complete the assessment of vadose zone soils onsite .

A workplan for the downgradient investigation of the groundwater plume detected onsite should be prepared. The scope of work associated with the downgradient investigation should be designed to monitor and assess the downgradient and lateral extent of the onsite plume.

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APPENDIX I

APPENDIX I
ANALYTICAL RESULTS - AIR

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Table I1. Summary of Wind Direction and Wind Speed Data

	DATE: 4/27/90		DATE: 4/28/90		DATE: 4/29/90		DATE: 4/30/90		DATE: 5/1/90		DATE: 5/2/90	
TIME	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS
0			SSE	3	SSE	4	SE	2	ESE	3	ESE	4
100			SE	3	SSE	5	WSW	2	ESE	3	SE	3
200			SE	4	SSE	5	SW	2	E	2	E	2
300			SW	3	SE	5	SW	3	ENE	1	E	3
400			SW	3	SE	5	S	3	NNW	1	E	3
500			SSW	3	SE	4	SSE	3	NW	1	E	3
600			SSW	2	SE	4	ESE	2	NNE	1	E	3
700			S	1	SE	4	E	4	ESE	2	ESE	3
800			SE	2	SE	4	ESE	8	SE	3	ESE	5
900			SE	3	SSE	4	SE	9	SE	3	SE	4
1000			SE	3	SSE	4	SE	9	S	4	SE	3
1100			S	3	SSE	6	SE	8	SSW	5	SSE	4
1200			SW	3	SSW	6	SE	6	SW	5	SSW	6
1300			SW	4	SSW	7	SE	5	SSW	6	SSW	7
1400			SSW	5	SSW	8	ESE	5	SSW	6	S	6
1500			SSW	6	SSW	7	SSE	4	WSW	8	SSW	6
1600	SSW	5	SSW	5	SW	7	SW	5	WSW	8	SSW	5
1700	WSW	5	WSW	6	SW	6	SSW	4	WSW	8	S	5
1800	SSW	4	WSW	5	SSW	6	SSW	3	WSW	7	S	5
1900	SSE	4	W	4	S	6	SW	4	WSW	5	S	6
2000	SE	5	SSE	4	SSE	5	SSW	4	WSW	3	SSE	5
2100	SSE	4	S	4	SSE	4	SW	3	SW	2	SSE	4
2200	SSE	4	SSE	4	SSE	2	SW	2	SSE	3	SE	4
2300	SE	4	SE	4	SE	2	SSE	2	ESE	4	SE	4

Note:

WD = wind direction
WS = wind speed (miles per hour)
N = north, W = west, S = south, E = east

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Table I1. Summary of Wind Direction and Wind Speed Data (continued)

	DATE: 5/3/90		DATE: 5/4/90		DATE: 5/5/90		DATE: 5/6/90		DATE: 5/7/90		DATE: 5/8/90	
TIME	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS
0	SE	4	WNW	2	ENE	1	ESE	2	SE	3	ESE	5
100	ESE	3	NW	2	ESE	1	ENE	1	SE	5	ESE	5
200	ESE	2	NW	2	SE	1	NW	1	ESE	3	ESE	4
300	SSE	2	NW	1	ENE	1	ENE	1	ESE	2	ESE	4
400	SW	2	WNW	1	NNW	1	NNE	1	ESE	2	E	4
500	SSE	2	WNW	2	NE	1	ENE	1	ESE	2	E	4
600	ESE	2	WNW	2	ENE	2	NNW	1	SE	2	ESE	4
700	NNE	2	WNW	2	NNW	2	NNE	1	ESE	3	ESE	3
800	NNW	3	NW	2	NW	2	WSW	1	ESE	4	ESE	3
900	W	3	NNW	3	NW	3	SW	2	SE	4	SSE	4
1000	WSW	3	NW	4	WSW	3	S	3	SSE	5	SSE	4
1100	WSW	3	W	3	W	4	SSW	3	SSE	6	S	4
1200	WSW	4	SW	4	W	4	SW	4	S	6	SSE	4
1300	SW	6	WSW	5	W	6	SW	6	SSW	6	SSW	5
1400	WSW	7	WSW	7	WSW	9	WSW	7	SSW	6	S	5
1500	WSW	7	W	8	WSW	9	WSW	7	SSE	6	SSW	5
1600	WSW	6	W	7	WSW	7	WSW	6	S	6	SSW	5
1700	W	5	W	6	WNW	5	WSW	6	SSE	6	SSW	6
1800	WSW	5	WSW	4	W	5	WSW	5	S	6	SSE	5
1900	WSW	4	SW	2	W	3	WSW	3	S	5	SSE	4
2000	W	4	WSW	1	WSW	2	SW	3	S	4	WSW	4
2100	WSW	3	SSE	2	WSW	2	WSW	2	S	4	W	3
2200	SW	2	SW	1	WNW	1	SSW	2	SE	4	WNW	2
2300	WSW	2	SSE	1	SSE	1	SSW	2	SE	5	SE	3

Note:

WD = wind direction
WS = wind speed (miles per hour)
N = north, W = west, S = south, E = east

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Table I1. Summary of Wind Direction and Wind Speed Data (continued)

	DATE: 5/9/90		DATE: 5/10/90		DATE: 5/11/90		DATE: 5/12/90		DATE: 5/13/90		DATE: 5/14/90	
TIME	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS	WD	WS
0	SE	4	WNW	2	WSW	3	ESE	2	WSW	1	S	3
100	ESE	3	W	2	WSW	3	E	1	SSW	2	S	4
200	ENE	2	WNW	2	WSW	3	E	3	ESE	2	SSE	4
300	ESE	2	WNW	3	WSW	2	ESE	3	ESE	2	SE	4
400	ENE	2	WSW	3	WSW	3	E	3	E	1	SSE	2
500	SE	2	WSW	3	SW	3	E	2	NE	1	SSE	2
600	SE	3	WSW	4	WSW	2	E	2	NNW	2	S	2
700	SE	2	WSW	5	WSW	2	E	2	NNW	2	SSE	3
800	SE	2	WSW	5	W	2	E	2	NW	3	SSE	4
900	SE	3	WSW	6	WSW	3	SSE	2	NNW	2	ENE	3
1000	SSE	3	WSW	6	S	4	SSE	3	SW	2	NNE	2
1100	SSW	3	WSW	6	SSW	4	NNW	3	NNE	3	WNW	2
1200	SSE	5	SW	5	SSW	5	W	3	S	4	SSE	3
1300	WSW	6	SW	6	SSW	5	WSW	5	S	4	SSW	4
1400	WSW	6	SW	6	SSW	6	SSW	5	SW	4	WSW	6
1500	WSW	6	WSW	6	SSW	6	WSW	6	SW	5	WSW	6
1600	WSW	7	WSW	7	S	5	WSW	5	WSW	7	WSW	6
1700	WSW	6	WSW	6	S	5	W	5	WSW	7	WSW	7
1800	WSW	6	WSW	7	SSE	5	WSW	6	WSW	6	WSW	6
1900	WSW	5	WSW	6	S	5	W	5	WSW	5	WSW	5
2000	WSW	5	WSW	5	SSW	4	W	4	WSW	4	WSW	5
2100	WSW	4	WSW	5	SSE	3	WSW	3	W	3	WSW	4
2200	W	3	WSW	4	SSE	3	WSW	2	W	3	WSW	3
2300	W	3	SW	3	ESE	2	WSW	2	SW	2	SW	3

Note:

WD = wind direction
WS = wind speed (miles per hour)
N = north, W = west, S = south, E = east

MCK0002970

Table I1. Summary of Wind Direction and Wind Speed Data (continued)

	DATE: 5/15/90		DATE: 5/16/90		DATE: 5/17/90		DATE: 5/18/90	
TIME	WD	WS	WD	WS	WD	WS	WD	WS
0	SW	2	NNW	2	W	3	N	2
100	WSW	3	N	3	WNW	1	NNW	2
200	WSW	2	S	2	W	2	NNW	2
300	W	2	ENE	2	SW	2	NW	1
400	W	3	WNW	2	SE	2	WNW	1
500	WNW	3	NNW	1	NE	2	NNW	2
600	NW	2	ENE	1	NNE	2	NNW	1
700	NNW	2	ESE	2	NNE	2	SE	2
800	N	2	SE	2	SSE	2	SE	3
900	WSW	3	ESE	2	W	3	ESE	4
1000	W	4	ESE	2	W	3	SSE	5
1100	SW	4	SW	3	WSW	3		
1200	SSW	5	SW	3	WSW	4		
1300	SSW	5	W	4	SW	5		
1400	SSW	5	WSW	9	WSW	7		
1500	S	6	WSW	8	WSW	6		
1600	SW	5	WSW	6	WSW	7		
1700	WSW	6	WSW	5	WSW	6		
1800	WSW	5	WSW	5	WSW	6		
1900	WSW	4	W	4	WSW	5		
2000	WSW	4	W	3	WSW	4		
2100	WSW	3	W	4	WSW	3		
2200	WSW	2	W	4	WSW	2		
2300	WSW	1	WNW	3	WSW	2		

Note:

WD = wind direction
WS = wind speed (miles per hour)
N = north, W = west, S = south, E = east

MCK0002971

3.4.3

Analytical Technologies, Inc.
Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D. 005274

May 22, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite #100
Tustin, California 92680

Project Name: McKesson-Santa Fe Springs

Project No.: 17333,155.11

Attention: David Melita

On May 17, 1990, Analytical Technologies, Inc. received two air samples for analysis. One sample was analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of this analysis and the quality control data are enclosed.

Carolyn A. Sites
GC/MS Supervisor

CAS:da

Richard M. Amano
Laboratory Manager

AnalyticalTechnologies,Inc.

ATI I.D. 005274

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON-SANTA FE SPRINGS

PROJECT NO.: 17333,155.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
VOLATILE ORGANICS	GC/MS	EPA 8240

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,155.11
PROJECT NAME : McKESSON-SANTA FE SPRINGS
ATI I.D. : 005274

DATE RECEIVED : 05/17/90
REPORT DATE : 05/22/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	McKESSON SITE 1,24-HR	AIR	05/17/90
02	McKESSON SITE 2,24-HR	AIR	05/17/90

----- TOTALS -----

MATRIX	# SAMPLES
AIR	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00527402

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 05/17/90
PROJECT #	: 17333,155.11	DATE RECEIVED	: 05/17/90
PROJECT NAME	: McKESSON-SANTA FE SPRINGS	DATE EXTRACTED	: N/A
CLIENT I.D.	: McKESSON SITE 2,24-HR	DATE ANALYZED	: 05/18/90
SAMPLE MATRIX	: AIR	UNITS	: PPB (V/V)
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<240
BROMOMETHANE	<130
VINYL CHLORIDE	<20
CHLOROETHANE	<20
METHYLENE CHLORIDE	<70
ACETONE	<420
CARBON DISULFIDE	<20
1,1-DICHLOROETHENE	<10
1,1-DICHLOROETHANE	<10
1,2-DICHLORETHENE (TOTAL)	<10
CHLOROFORM	<10
1,2-DICHLOROETHANE	<10
2-BUTANONE (MEK)	<420
1,1,1-TRICHLOROETHANE	<10
CARBON TETRACHLORIDE	<10
VINYL ACETATE	<140
BROMODICHLOROMETHANE	<10
1,1,2,2-TETRACHLOROETHANE	<10
1,2-DICHLOROPROPANE	<10
TRANS-1,3-DICHLOROPROPENE	<10
TRICHLOROETHENE	<10
DIBROMOCHLOROMETHANE	<10
1,1,2-TRICHLORETHANE	<10
BENZENE	<10
CIS-1,3-DICHLOROPROPENE	<10
2-CHLOROETHYLVINYLETHER	<110
BROMOFORM	<50
2-HEXANONE (MBK)	<120
4-METHYL-2-PENTANONE (MIBK)	<120
TETRACHLOROETHENE	<10
TOLUENE	<10
CHLOROBENZENE	<10
ETHYL BENZENE	<10
STYRENE	<10
TOTAL XYLENES	<10

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	112
BFB (%)	93
TOLUENE-D8 (%)	98

MCK0002975

Analytical Technologies

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00527402

MATRIX : AIR

UNITS : PPB (V/V)

COMPOUNDS	RESULTS
NONE DETECTED	N/A

AnalyticalTechnologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 005274
PROJECT #	: 17333,155.11	DATE EXTRACTED	: N/A
PROJECT NAME	: McKESSON-SANTA FE SPRINGS	DATE ANALYZED	: 05/18/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: PPB (V/V)
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<240
BROMOMETHANE	<130
VINYL CHLORIDE	<20
CHLOROETHANE	<20
METHYLENE CHLORIDE	<70
ACETONE	<420
CARBON DISULFIDE	<20
1,1-DICHLOROETHENE	<10
1,1-DICHLOROETHANE	<10
1,2-DICHLORETHENE (TOTAL)	<10
CHLOROFORM	<10
1,2-DICHLOROETHANE	<10
2-BUTANONE (MEK)	<420
1,1,1-TRICHLOROETHANE	<10
CARBON TETRACHLORIDE	<10
VINYL ACETATE	<140
BROMODICHLOROMETHANE	<10
1,1,2,2-TETRACHLOROETHANE	<10
1,2-DICHLOROPROPANE	<10
TRANS-1,3-DICHLOROPROPENE	<10
TRICHLOROETHENE	<10
DIBROMOCHLOROMETHANE	<10
1,1,2-TRICHLORETHANE	<10
BENZENE	<10
CIS-1,3-DICHLOROPROPENE	<10
2-CHLOROETHYLVINYLETHER	<110
BROMOFORM	<50
2-HEXANONE (MBK)	<120
4-METHYL-2-PENTANONE (MIBK)	<120
TETRACHLOROETHENE	<10
TOLUENE	<10
CHLOROBENZENE	<10
ETHYL BENZENE	<10
STYRENE	<10
TOTAL XYLENES	<10

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	112
BFB (%)	93
TOLUENE-D8 (%)	98

MCK0002977

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 005274

UNITS : PPB (V/V)

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0002978

Analytical**Technologies**, Inc.

QUALITY CONTROL DATA

ATI I.D. : 005274

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,155.11
PROJECT NAME : McKESSON-SANTA FE SPRINGS
REF I.D. : 00527402

DATE EXTRACTED : N/A
DATE ANALYZED : 05/18/90
SAMPLE MATRIX : AIR
UNITS : PPB (V/V)

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<10	52.5	45	86	48	91	6
TRICHLOROETHENE	<10	52.4	48	92	50	95	4
CHLOROBENZENE	<10	57.0	54	95	56	98	4
TOLUENE	<10	69.7	67	96	67	96	0
BENZENE	<10	76.0	70	92	71	93	1

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0002979

Hardin[illegible]son Associates
15621 R[illegible] Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

CHAIN OF CUS[illegible]DY FORM

Lab: ATI

Samplers: David Melita

Job Number: 17333/155.11

Name/Location: McKesson - Santa Fe Springs

Project Manager: David Melita

Recorder: David Melita
(Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	Air	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	1g/T-Sorbd	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	Priority Pllnt. Metals	Benzene/Toluene/Xylene	Total Petrol. Hydrocarb.
6					X				X				90	05	17	1045	McKesson Site 1, 24-hr			X				
6					X				X				90	05	17	1101	McKesson Site 2, 24-hr			X				

005274

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK002980				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
David Melita	L. A. Ward	5/16/90 4:15
L. A. Ward	Bob DeBay	5/17/90 1700
Bob DeBay	[illegible]	5/17/90 6:55 PM
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME

DISPATCHED BY: (Signature) DATE/TIME

RECEIVED FOR LAB BY: (Signature) DATE/TIME

METHOD OF SHIPMENT

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

343 C00335

Analytical Technologies, Inc. Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D. 005305

May 22, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite #100
Tustin, California 92680

Project Name: McKesson-Santa Fe Springs

Project No.: 17333,155.11

Attention: David Melita

On May 18, 1990, Analytical Technologies, Inc. received two air samples for analysis. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of this analysis and the quality control data are enclosed.

Carolyn A. Sites
GC/MS Supervisor

Richard M. Amano
Laboratory Manager

CAS:da

Analytical Technologies, Inc.

ATI I.D. 005305

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON-SANTA FE SPRINGS

PROJECT NO.: 17333,155.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
VOLATILE ORGANICS	GC/MS	EPA 8240

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,155.11
PROJECT NAME : McKESSON-SANTA FE SPRINGS
ATI I.D. : 005305

DATE RECEIVED : 05/18/90
REPORT DATE : 05/22/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	McKESSON SITE 3,8-HOUR	AIR	05/18/90
02	McKESSON SITE 4,8-HOUR	AIR	05/18/90

----- TOTALS -----

MATRIX	# SAMPLES
AIR	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00530501

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 05/18/90
PROJECT #	: 17333,155.11	DATE RECEIVED	: 05/18/90
PROJECT NAME	: McKESSON-SANTA FE SPRINGS	DATE EXTRACTED	: N/A
CLIENT I.D.	: McKESSON SITE 3,8-HOUR	DATE ANALYZED	: 05/20/90
SAMPLE MATRIX	: AIR	UNITS	: PPB (V/V)
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<240
BROMOMETHANE	<130
VINYL CHLORIDE	<20
CHLOROETHANE	<20
METHYLENE CHLORIDE	<70
ACETONE	<420
CARBON DISULFIDE	<20
1,1-DICHLOROETHENE	<10
1,1-DICHLOROETHANE	<10
1,2-DICHLORETHENE (TOTAL)	<10
CHLOROFORM	<10
1,2-DICHLOROETHANE	<10
-BUTANONE (MEK)	<420
,1,1-TRICHLOROETHANE	<10
CARBON TETRACHLORIDE	<10
VINYL ACETATE	<140
BROMODICHLOROMETHANE	<10
1,1,2,2-TETRACHLOROETHANE	<10
1,2-DICHLOROPROPANE	<10
TRANS-1,3-DICHLOROPROPENE	<10
TRICHLOROETHENE	<10
DIBROMOCHLOROMETHANE	<10
1,1,2-TRICHLORETHANE	<10
BENZENE	<10
CIS-1,3-DICHLOROPROPENE	<10
2-CHLOROETHYLVINYLETHER	<110
BROMOFORM	<50
2-HEXANONE (MBK)	<120
4-METHYL-2-PENTANONE (MIBK)	<120
TETRACHLOROETHENE	<10
TOLUENE	<10
CHLOROBENZENE	<10
ETHYL BENZENE	<10
STYRENE	<10
TOTAL XYLENES	<10

SURROGATE PERCENT RECOVERIES

,2-DICHLOROETHANE-D4 (%)	103
BFB (%)	96
TOLUENE-D8 (%)	101

MCK0002984

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00530501

MATRIX : AIR

UNITS : PPB (V/V)

COMPOUNDS	RESULTS
NONE DETECTED	N/A

AnalyticalTechnologies, Inc.

GCMS - RESULTS

ATI I.D. : 00530502

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 05/18/90
PROJECT #	: 17333,155.11	DATE RECEIVED	: 05/18/90
PROJECT NAME	: McKESSON-SANTA FE SPRINGS	DATE EXTRACTED	: N/A
CLIENT I.D.	: McKESSON SITE 4,8-HOUR	DATE ANALYZED	: 05/20/90
SAMPLE MATRIX	: AIR	UNITS	: PPB (V/V)
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<240
BROMOMETHANE	<130
VINYL CHLORIDE	<20
CHLOROETHANE	<20
METHYLENE CHLORIDE	<70
ACETONE	<420
CARBON DISULFIDE	<20
1,1-DICHLOROETHENE	<10
1,1-DICHLOROETHANE	<10
1,2-DICHLORETHENE (TOTAL)	<10
CHLOROFORM	<10
1,2-DICHLOROETHANE	<10
-BUTANONE (MEK)	<420
,1,1-TRICHLOROETHANE	<10
CARBON TETRACHLORIDE	<10
VINYL ACETATE	<140
BROMODICHLOROMETHANE	<10
1,1,2,2-TETRACHLOROETHANE	<10
1,2-DICHLOROPROPANE	<10
TRANS-1,3-DICHLOROPROPENE	<10
TRICHLOROETHENE	<10
DIBROMOCHLOROMETHANE	<10
1,1,2-TRICHLORETHANE	<10
BENZENE	<10
CIS-1,3-DICHLOROPROPENE	<10
2-CHLOROETHYLVINYLETHER	<110
BROMOFORM	<50
2-HEXANONE (MBK)	<120
4-METHYL-2-PENTANONE (MIBK)	<120
TETRACHLOROETHENE	<10
TOLUENE	<10
CHLOROBENZENE	<10
ETHYL BENZENE	<10
STYRENE	<10
TOTAL XYLENES	<10

SURROGATE PERCENT RECOVERIES

,2-DICHLOROETHANE-D4 (%)	101
BFB (%)	100
TOLUENE-D8 (%)	101

MCK0002986

Analytical Technologies Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00530502

MATRIX : AIR

UNITS : PPB (V/V)

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

		ATI I.D.	: 005305
CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: N/A
PROJECT #	: 17333,155.11	DATE ANALYZED	: 05/20/90
PROJECT NAME	: McKESSON-SANTA FE SPRINGS	UNITS	: PPB (V/V)
CLIENT I.D.	: REAGENT BLANK	DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<240
BROMOMETHANE	<130
VINYL CHLORIDE	<20
CHLOROETHANE	<20
METHYLENE CHLORIDE	<70
ACETONE	<420
CARBON DISULFIDE	<20
1,1-DICHLOROETHENE	<10
1,1-DICHLOROETHANE	<10
1,2-DICHLORETHENE (TOTAL)	<10
CHLOROFORM	<10
1,2-DICHLOROETHANE	<10
2-BUTANONE (MEK)	<420
1,1,1-TRICHLOROETHANE	<10
CARBON TETRACHLORIDE	<10
VINYL ACETATE	<140
BROMODICHLOROMETHANE	<10
1,1,2,2-TETRACHLOROETHANE	<10
1,2-DICHLOROPROPANE	<10
TRANS-1,3-DICHLOROPROPENE	<10
TRICHLOROETHENE	<10
DIBROMOCHLOROMETHANE	<10
1,1,2-TRICHLORETHANE	<10
BENZENE	<10
CIS-1,3-DICHLOROPROPENE	<10
2-CHLOROETHYLVINYLETHER	<110
BROMOFORM	<50
2-HEXANONE (MBK)	<120
4-METHYL-2-PENTANONE (MIBK)	<120
TETRACHLOROETHENE	<10
TOLUENE	<10
CHLOROBENZENE	<10
ETHYL BENZENE	<10
STYRENE	<10
TOTAL XYLENES	<10

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	103
BFB (%)	96
TOLUENE-D8 (%)	102

MCK0002988

AnalyticalTechnologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 005305

UNITS : PPB (V/V)

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 005305

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,155.11
PROJECT NAME : McKESSON-SANTA FE SPRINGS
REF I.D. : 00527402

DATE EXTRACTED : N/A
DATE ANALYZED : 05/18/90
SAMPLE MATRIX : AIR
UNITS : PPB (V/V)

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<10	52.5	45	86	48	91	6
TRICHLOROETHENE	<10	52.4	48	92	50	95	4
CHLOROBENZENE	<10	57.0	54	95	56	98	4
TOLUENE	<10	69.7	67	96	67	96	0
BENZENE	<10	76.0	70	92	71	93	1

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0002990

HLA
ing Lawson Associates
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Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

005305

CHAIN OF CUSTODY FORM

Lab: A.T.L.

Job Number: 17333.155.11

Name/Location: Mckesson - Santa Fe Springs

Project Manager: David Melita

Samplers: David Melita

Recorder: David Melita (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	Air	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	1 Light Sealed	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES
61					X				X				90	05	18	0700	Mckesson Site 3, 8-hour
61					X				X				90	05	18	0700	Mckesson Site 4, 8-hour

ANALYSIS REQUESTED

EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	Priority Pllnt. Metals	Benzene/Toluene/Xylene	Total Petrol. Hydrocarb.
		X				
		X				

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK002991				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) David Melita	RECEIVED BY: (Signature) T.J. Ward	DATE/TIME 1522 5-18-90
RELINQUISHED BY: (Signature) T. Anderson Bailey	RECEIVED BY: (Signature) Bob DeBay	DATE/TIME 5/18/90 1520
RELINQUISHED BY: (Signature) Bob DeBay	RECEIVED BY: (Signature) Marian Van Deusen	DATE/TIME 5/18/
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
METHOD OF SHIPMENT		

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

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000336

Analytical Technologies, Inc. Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D. 005389

May 30, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite #100
Tustin, California 92680

Project Name: McKesson-Santa Fe Springs

Project No.: 17333,155.11

Attention: David Melita

On May 24, 1990, Analytical Technologies, Inc. received one air sample for analysis. The sample was analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The result of this analysis and the quality control data are enclosed.

Carolyn A. Sites
GC/MS Supervisor

CAS:nm

Richard M. Amano
Laboratory Manager

Analytical Technologies, Inc.

ATI I.D. 005389

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON-SANTA FE SPRINGS

PROJECT NO.: 17333,155.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
VOLATILE ORGANICS	GC/MS	EPA 8240

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,155.11
PROJECT NAME : McKESSON-SANTA FE SPRINGS
ATI I.D. : 005389

DATE RECEIVED : 05/24/90
REPORT DATE : 05/30/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	SITE 1 24-HR SAMPLE	AIR	05/24/90

----- TOTALS -----

MATRIX	# SAMPLES
AIR	1

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00538901

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 05/24/90
PROJECT #	: 17333,155.11	DATE RECEIVED	: 05/24/90
PROJECT NAME	: McKESSON-SANTA FE SPRINGS	DATE EXTRACTED	: N/A
CLIENT I.D.	: SITE 1 24-HR SAMPLE	DATE ANALYZED	: 05/25/90
SAMPLE MATRIX	: AIR	UNITS	: PPB (V/V)
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<240
BROMOMETHANE	<130
VINYL CHLORIDE	<20
CHLOROETHANE	<20
METHYLENE CHLORIDE	<70
ACETONE	<420
CARBON DISULFIDE	<20
1,1-DICHLOROETHENE	<10
1,1-DICHLOROETHANE	<10
1,2-DICHLORETHENE (TOTAL)	<10
CHLOROFORM	<10
1,2-DICHLOROETHANE	<10
BUTANONE (MEK)	<420
,1,1-TRICHLOROETHANE	<10
CARBON TETRACHLORIDE	<10
VINYL ACETATE	<140
BROMODICHLOROMETHANE	<10
1,1,2,2-TETRACHLOROETHANE	<10
1,2-DICHLOROPROPANE	<10
TRANS-1,3-DICHLOROPROPENE	<10
TRICHLOROETHENE	<10
DIBROMOCHLOROMETHANE	<10
1,1,2-TRICHLORETHANE	<10
BENZENE	<10
CIS-1,3-DICHLOROPROPENE	<10
2-CHLOROETHYLVINYLETHER	<110
BROMOFORM	<50
2-HEXANONE (MBK)	<120
4-METHYL-2-PENTANONE (MIBK)	<120
TETRACHLOROETHENE	<10
TOLUENE	<10
CHLOROBENZENE	<10
ETHYL BENZENE	<10
STYRENE	<10
TOTAL XYLENES	<10

SURROGATE PERCENT RECOVERIES

,2-DICHLOROETHANE-D4 (%)	99
BFB (%)	106
TOLUENE-D8 (%)	106

MCK0002995

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

ST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00538901

MATRIX : AIR

UNITS : PPB (V/V)

COMPOUNDS	RESULTS
NONE DETECTED	N/A

AnalyticalTechnologies,Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 005389
PROJECT #	: 17333,155.11	DATE EXTRACTED	: N/A
PROJECT NAME	: McKESSON-SANTA FE SPRINGS	DATE ANALYZED	: 05/25/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: PPB (V/V)
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<240
BROMOMETHANE	<130
VINYL CHLORIDE	<20
CHLOROETHANE	<20
METHYLENE CHLORIDE	<70
ACETONE	<420
CARBON DISULFIDE	<20
1,1-DICHLOROETHENE	<10
1,1-DICHLOROETHANE	<10
1,2-DICHLORETHENE (TOTAL)	<10
CHLOROFORM	<10
1,2-DICHLOROETHANE	<10
2-BUTANONE (MEK)	<420
1,1,1-TRICHLOROETHANE	<10
CARBON TETRACHLORIDE	<10
VINYL ACETATE	<140
BROMODICHLOROMETHANE	<10
1,1,2,2-TETRACHLOROETHANE	<10
1,2-DICHLOROPROPANE	<10
TRANS-1,3-DICHLOROPROPENE	<10
TRICHLOROETHENE	<10
DIBROMOCHLOROMETHANE	<10
1,1,2-TRICHLORETHANE	<10
BENZENE	<10
CIS-1,3-DICHLOROPROPENE	<10
2-CHLOROETHYLVINYLETHER	<110
BROMOFORM	<50
2-HEXANONE (MBK)	<120
4-METHYL-2-PENTANONE (MIBK)	<120
TETRACHLOROETHENE	<10
TOLUENE	<10
CHLOROBENZENE	<10
ETHYL BENZENE	<10
STYRENE	<10
TOTAL XYLENES	<10

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	99
BFB (%)	105
TOLUENE-D8 (%)	106

MCK0002997

AnalyticalTechnologies,Inc. GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN ATI I.D. : 005389

UNITS : PPB (V/V)

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 005389

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,155.11
PROJECT NAME : McKESSON-SANTA FE SPRINGS
REF I.D. : 00527402

DATE EXTRACTED : N/A
DATE ANALYZED : 05/18/90
SAMPLE MATRIX : AIR
UNITS : PPB (V/V)

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<10	52.5	45	86	48	91	6
TRICHLOROETHENE	<10	52.4	48	92	50	95	4
CHLOROBENZENE	<10	57.0	54	95	56	98	4
TOLUENE	<10	69.7	67	96	67	96	0
BENZENE	<10	76.0	70	92	71	93	1

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0002999

Harding [illegible]son Associates
15621 Re[illegible] Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

005 30

CHAIN OF CUS[illegible]DY FORM

Lab: A.T.I.

Job Number: 17333.153.11
Name/Location: McKesson - Santa Fe Springs
Project Manager: David Melita

Samplers: David Melita

Recorder: _____ (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	All	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	Light Solid	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	Priority Pllnt. Metals	Benzene/Toluene/Xylene	Total Petrol. Hydrocarb.
05					X				1			005	90	05	24		Site 1 24-hr. sample			X				

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK000300[illegible]				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) David Melita	RECEIVED BY: (Signature) K. J. Ward	DATE/TIME 3-24-90 15:20
RELINQUISHED BY: (Signature) K. J. Ward	RECEIVED BY: (Signature) Bob DeBay	DATE/TIME 3/24/90 17[illegible]
RELINQUISHED BY: (Signature) Bob DeBay	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature) Jonathan Tondo	DATE/TIME 3/24/90 1900hrs
METHOD OF SHIPMENT		

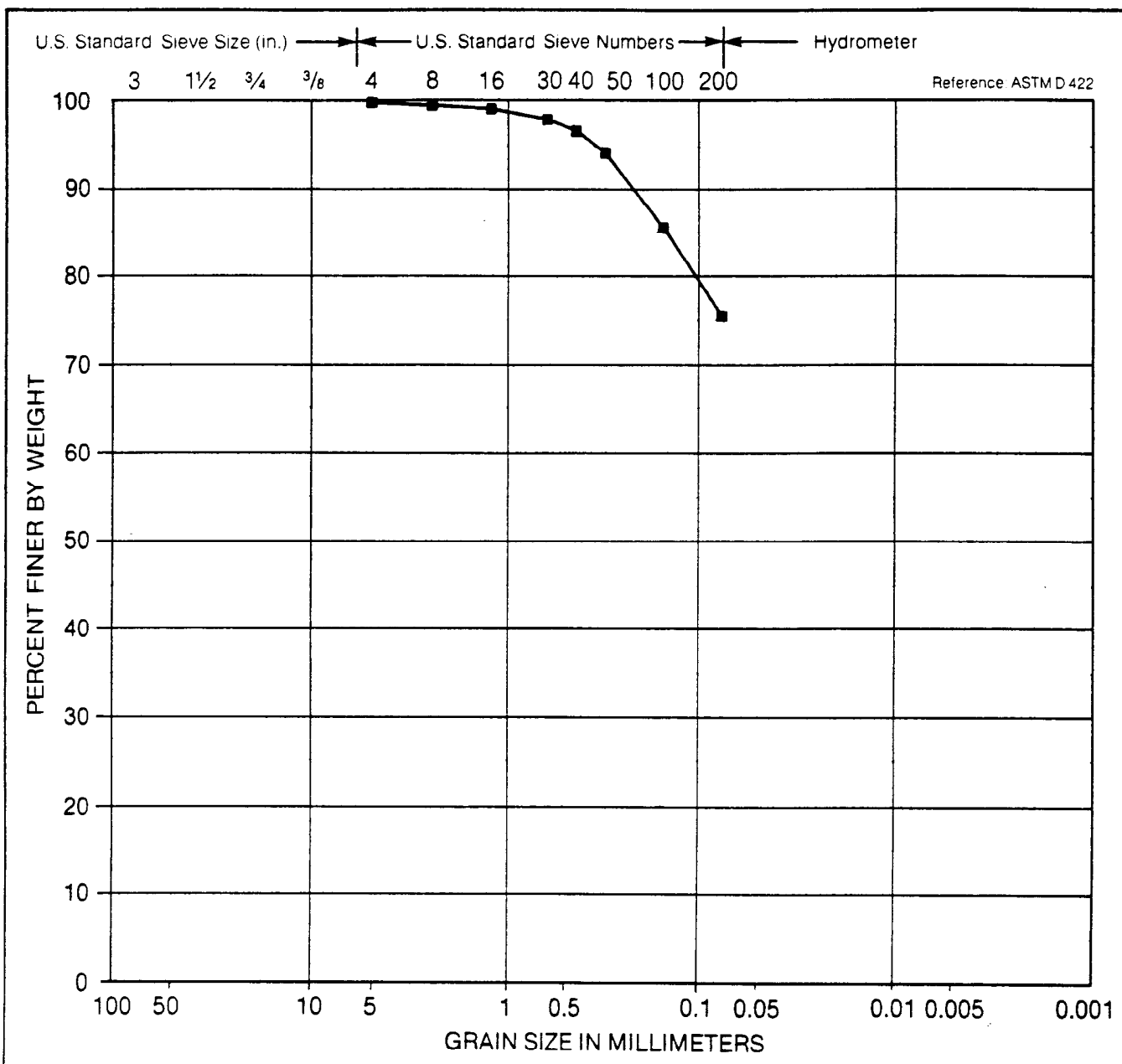
Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

APPENDIX J
PHYSICAL PROPERTIES TEST RESULTS - SOIL

MCK0003001

Printed on Recycled Paper.



COBBLES	GRAVEL		SAND			SILT OR CLAY
	CCARSE	FINE	COARSE	MEDIUM	FINE	

Symbol	Sample Source	Classification
■	MW-02 @ 41.5 FT	BROWN LEAN CLAY W/SAND (CL)

MCK0003002

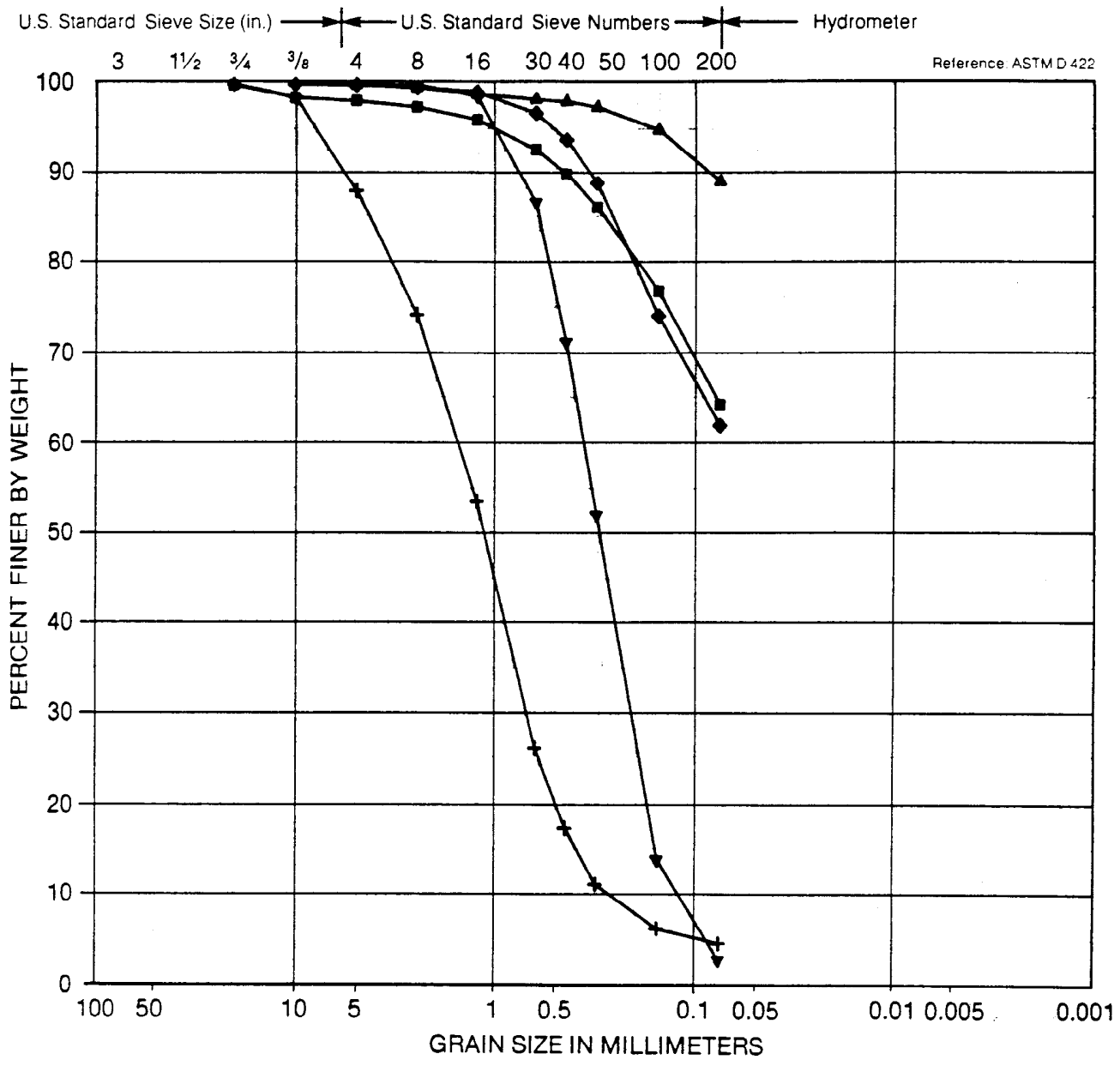
Harding Lawson Associates
Engineers, Geologists
& Geophysicists

Particle Size Analysis

McKesson Corporation Property
Santa Fe Springs, California

PLATE **J1**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAL	6/92		



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Symbol	Sample Source	Classification
■	SB-02 @ 0.5 FT	BROWN SANDY LEAN CLAY (CL)
▲	SB-02 @ 30.5 FT	BROWN SILT (ML)
▼	SB-04 @ 55.5 FT	BROWN SAND (SP)
◆	SB-10 @ 36.0 FT	BROWN SANDY SILT (ML)
+	SB-11 @ 20.5 FT	BROWN SAND W/SILT (SW-SM)

MCK0003003

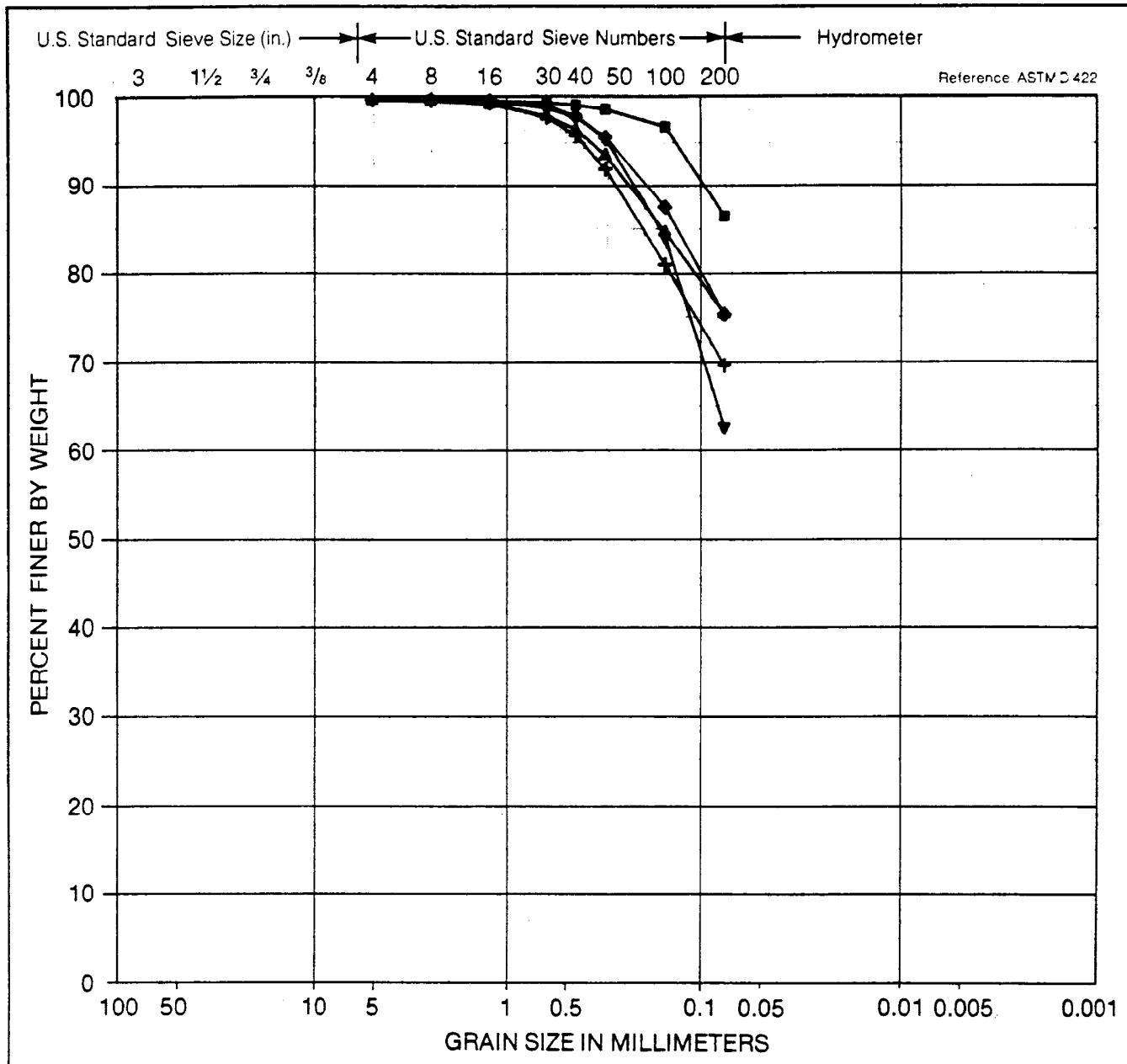
Harding Lawson Associates
Engineers, Geologists & Geophysicists

Particle Size Analysis

McKesson Corporation Property
Santa Fe Springs, California

PLATE **J2**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAL	6/92		



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Symbol	Sample Source	Classification
■	SB-11 @ 25.5 FT	BROWN SILT (ML)
▲	SB-11 @ 40.5 FT	BROWN SILT W/SAND (ML)
▼	SB-12 @ 25.0 FT	BROWN SANDY LEAN CLAY (CL)
◆	SB-12 @ 30.0 FT	BROWN LEAN CLAY W/SAND (CL)
+	SB-13 @ 35.5 FT	SILT W/SAND (ML)

MCK0003004

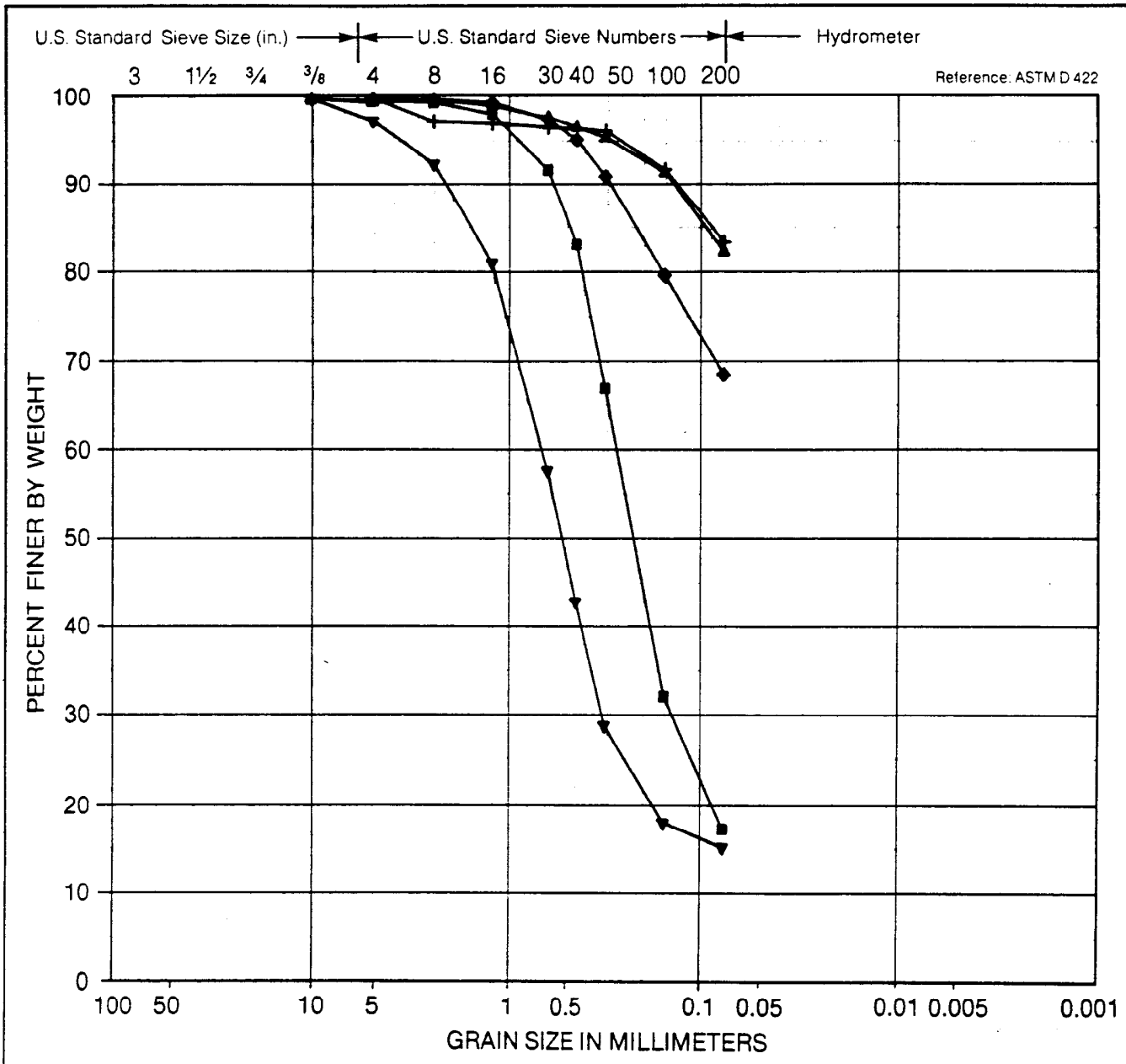
Harding Lawson Associates
Engineers, Geologists
& Geophysicists

Particle Size Analysis

McKesson Corporation Property
Santa Fe Springs, California

PLATE
J3

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Symbol	Sample Source	Classification
■	SB-13 @ 56.0 FT	BROWN SILTY SAND (SM)
▲	SB-14 @ 5.5 FT	BROWN LEAN CLAY W/SAND (CL)
▼	SB-14 @ 15.5 FT	BROWN SILTY SAND (SM)
◆	SB-14 @ 35.5 FT	BROWN SANDY SILT (ML)
+	SB-19 @ 30.5 FT	BROWN SILT W/SAND (ML)

MCK0003005

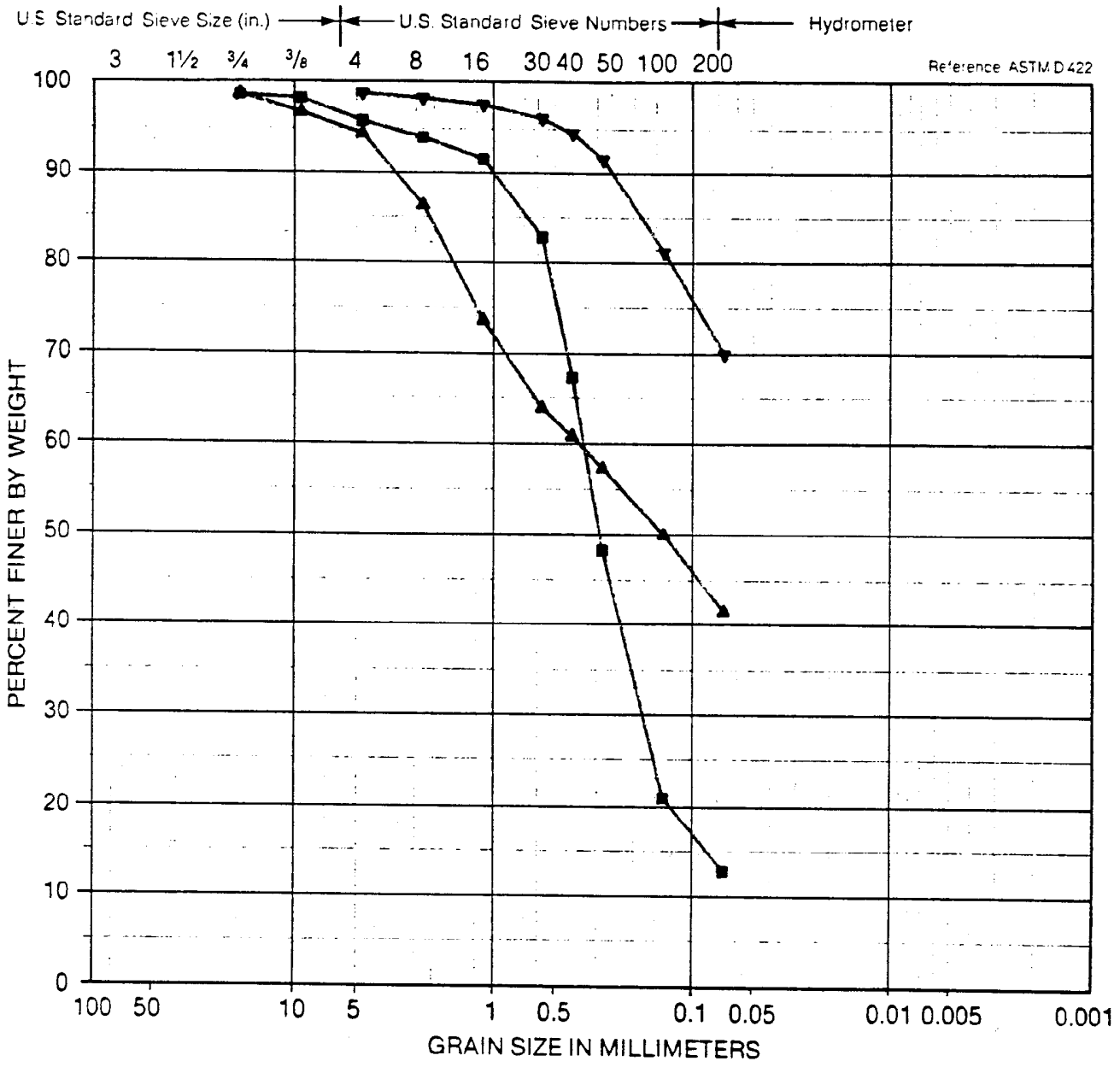
Harding Lawson Associates
Engineers Geologists
& Geophysicists

Particle Size Analysis

McKesson Corporation Property
Santa Fe Springs, California

PLATE
J4

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Symbol	Sample Source	Classification
■	MK-SB-09 @ 20.5 FT	BROWN SILTY SAND (SM)
▲	MK-SB-09 @ 25.5 FT	BROWN CLAYEY SAND (SC)
▼	MK-SB-09 @ 36.0 FT	BROWN LEAN CLAY W/SAND (CL)

MCK0003006

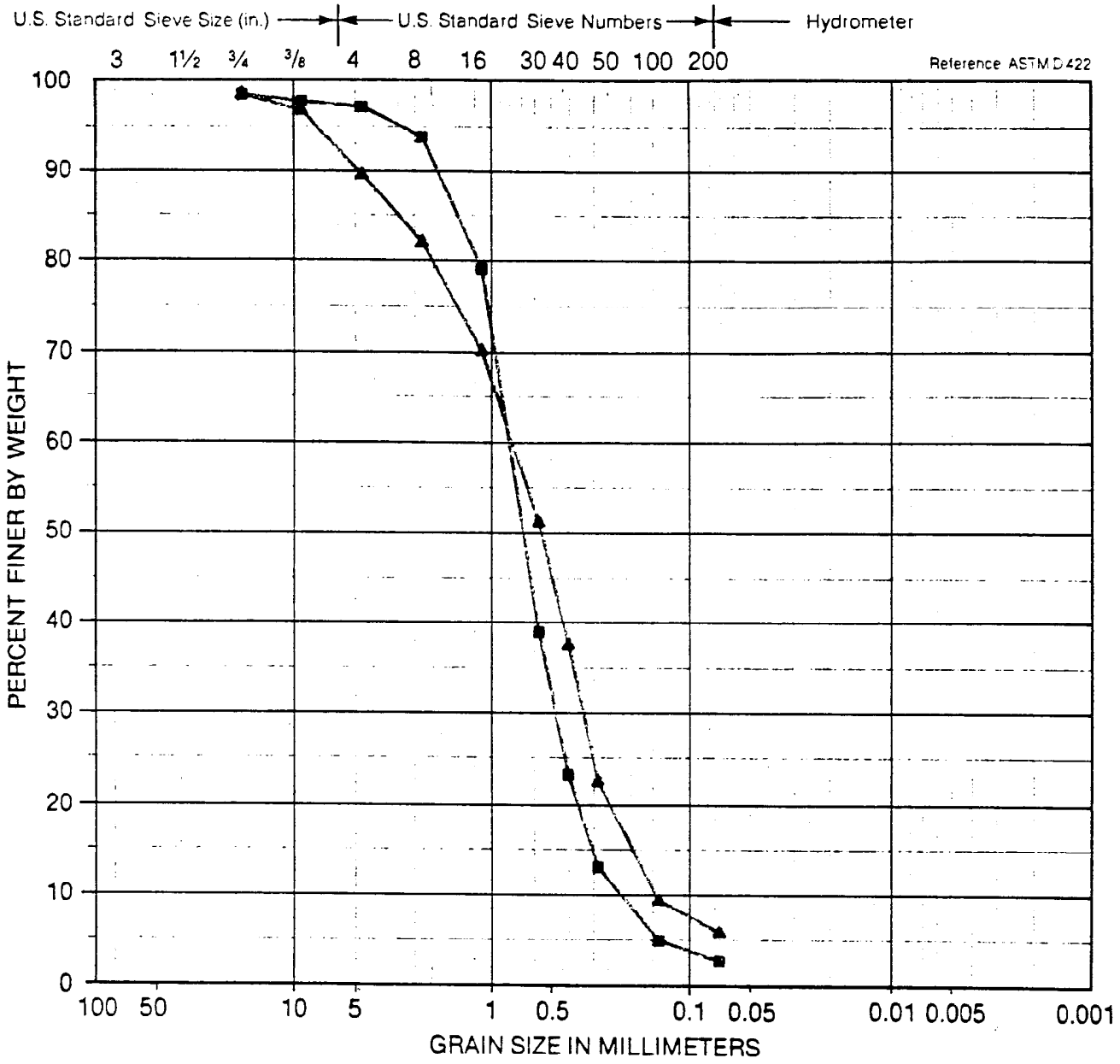
Harding Lawson Associates
Engineers, Geologists & Geophysicists

Particle Size Analysis

McKesson Corporation Property
Santa Fe Springs, California

PLATE **J5**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Symbol	Sample Source	Classification
■	MK-SB-19 @ 20.5 FT	BROWN SAND (SP)
▲	MK-SB-12 @ 15.5 FT	BROWN SAND W/SILT (SW-SM)

MCK0003007

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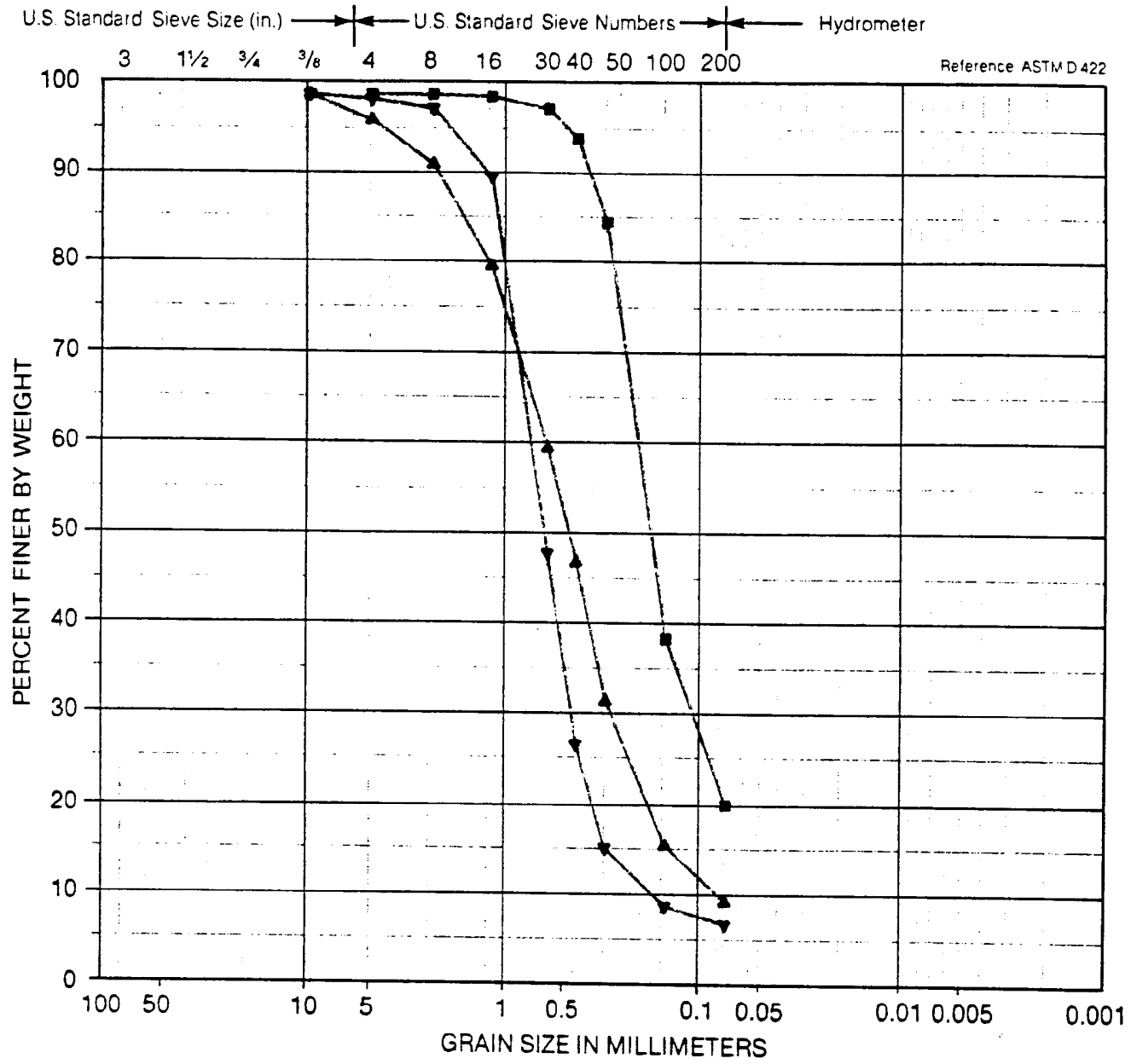
Engineers, Geologists
& Geophysicists

Particle Size Analysis

McKesson Corporation Property
Santa Fe Springs, California

PLATE **J6**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAL	4/92		



Symbol	Sample Source	Classification
■	MK-SB-13 @ 45.5 FT	BROWN SILTY SAND (SM)
▲	MK-SB-13 @ 15.5 FT	BROWN SAND W/SILT (SW-SM)
▼	MK-SB-13 @ 20.5 FT	BROWN SAND W/SILT (SP-SM)

MCK0003008

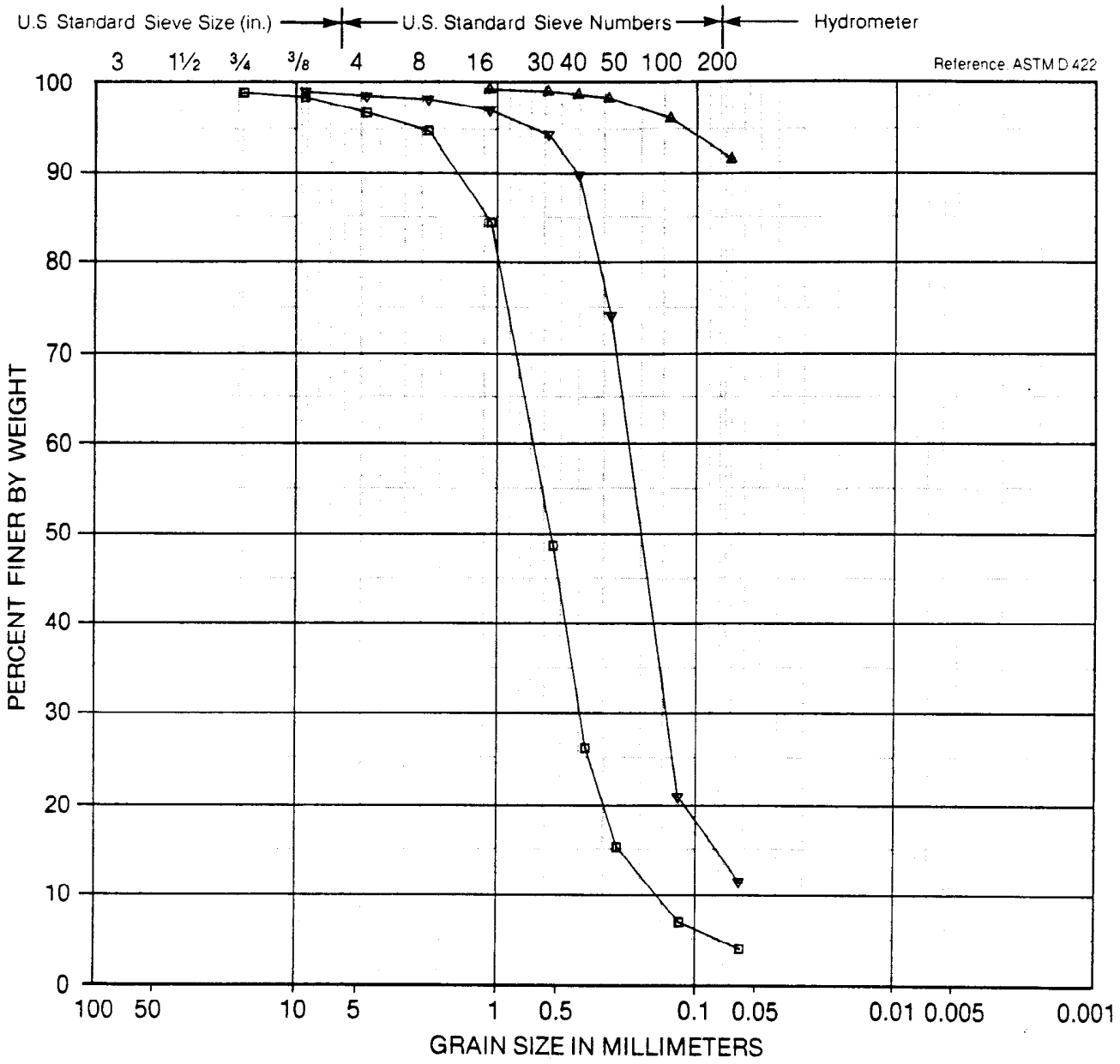
Harding Lawson Associates
Engineers, Geologists & Geophysicists

Particle Size Analysis

McKesson Corporation Property
Santa Fe Springs, California

PLATE
J7

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TMK	6/92		



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Symbol	Sample Source	Classification
■	MK SB-6 @ 25.5 FT	BROWN SAND W/SILT (SP-SM)
▲	MK SB-6 @ 30.5 FT	BROWN SILT (ML)
▼	MK SB-15 @ 20.5 FT	BROWN SILTY SAND (SM)

MCK0003009

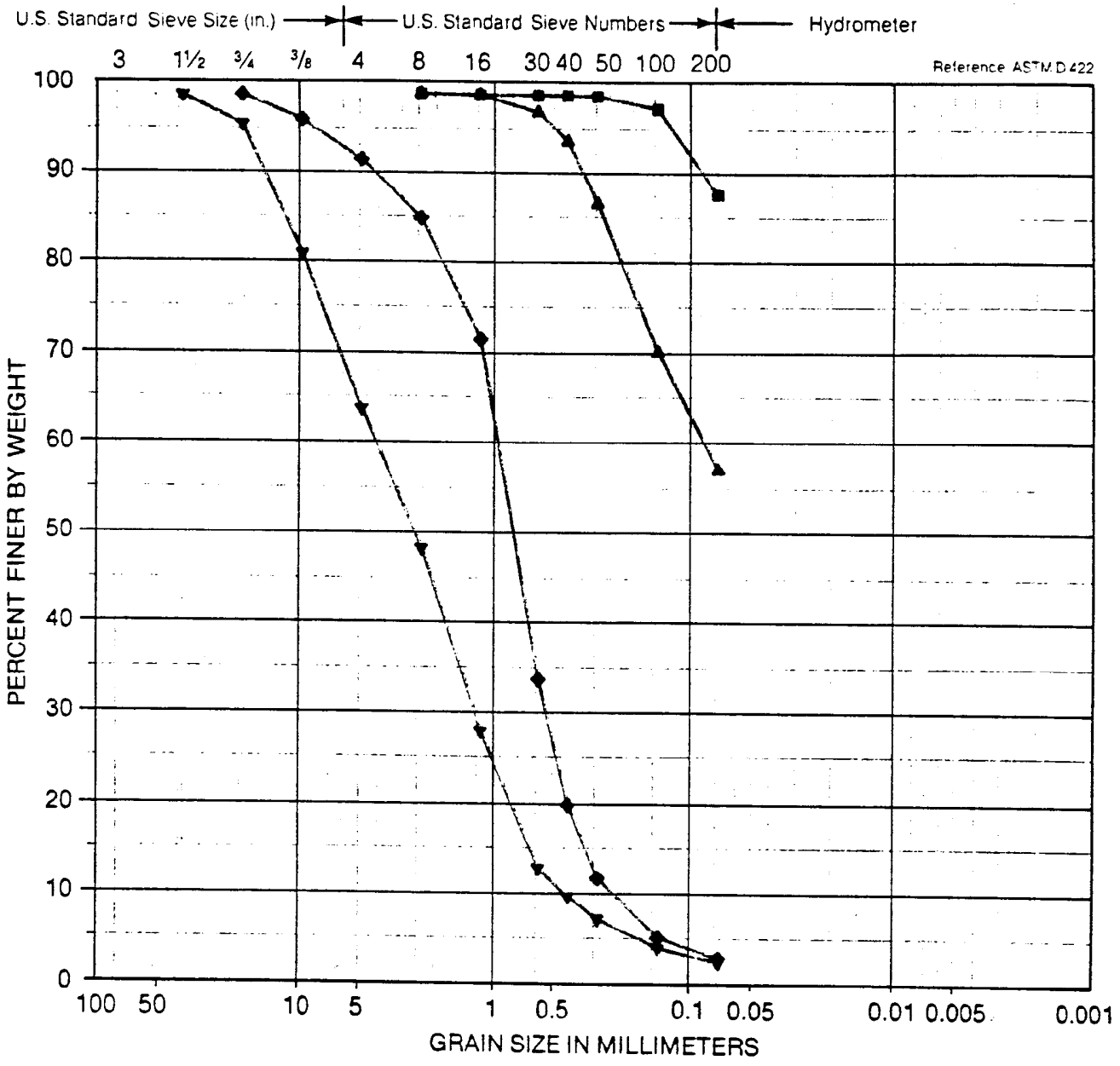
Harding Lawson Associates
Engineers, Geologists & Geophysicists

Particle Size Analysis

McKesson Corporation Property
Santa Fe Springs, California

PLATE **J8**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	THK	6/92		



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Symbol	Sample Source	Classification
■	MK-SB-15 @ 30.5 FT	BROWN LEAN CLAY (CL)
▲	MK-SB-15 @ 40.5 FT	BROWN SANDY SILT (ML)
▼	MK-SB-16 @ 15.5 FT	BROWN SAND W/GRAVEL (SW)
◆	MK-SB-16 @ 20.5 FT	BROWN SAND (SP)

MCK0003010

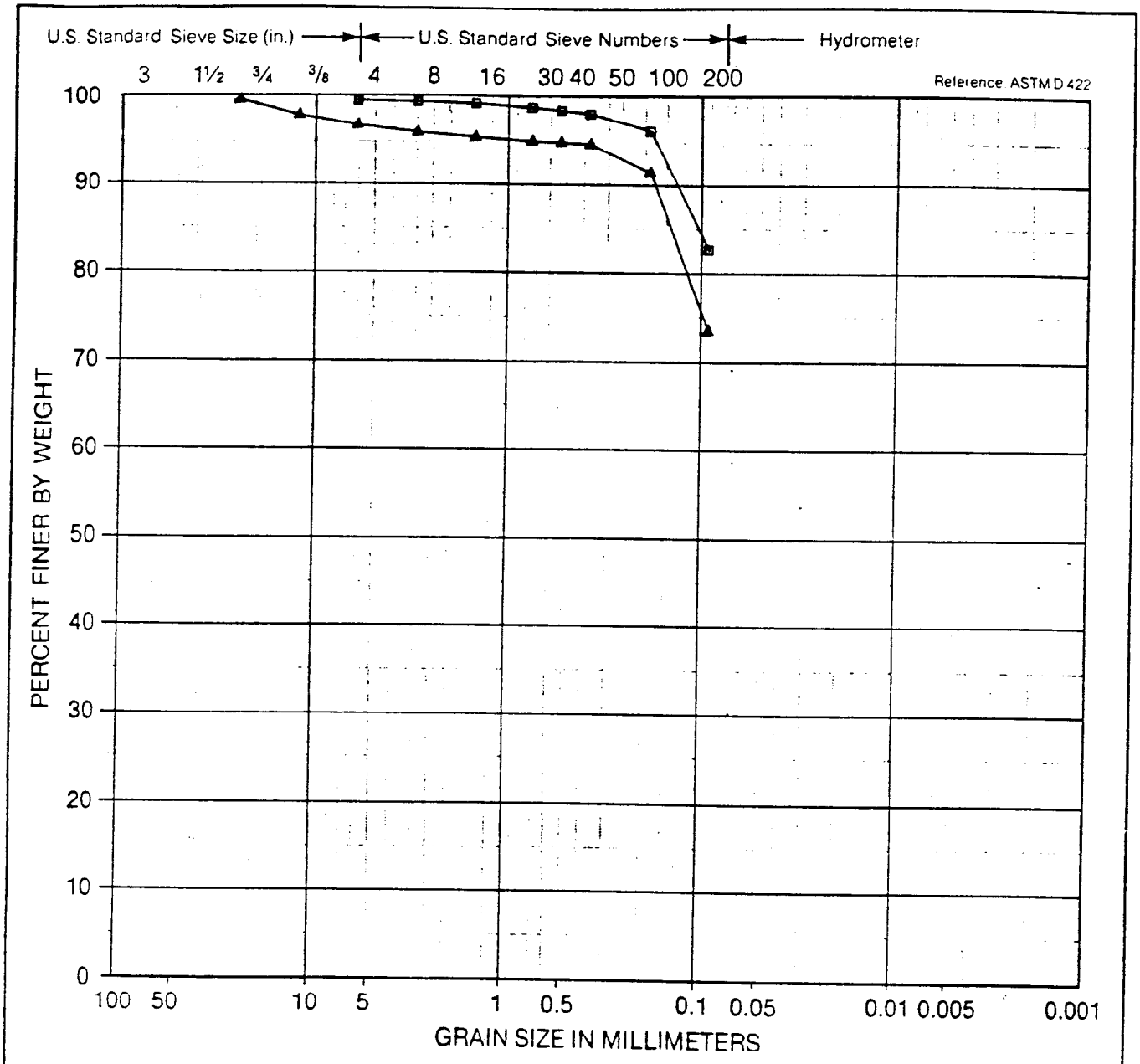
Harding Lawson Associates
Engineers, Geologists & Geophysicists

Particle Size Analysis

McKesson Corporation Property
Santa Fe Springs, California

PLATE **J9**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Symbol	Sample Source	Classification
■	MK-SB-17A @ 117.5 FT	BROWN SILT W/SAND (ML)
▲	MK-SB-17A @ 124.0 FT	BROWN SILT W/SAND (ML)

MCK0003011

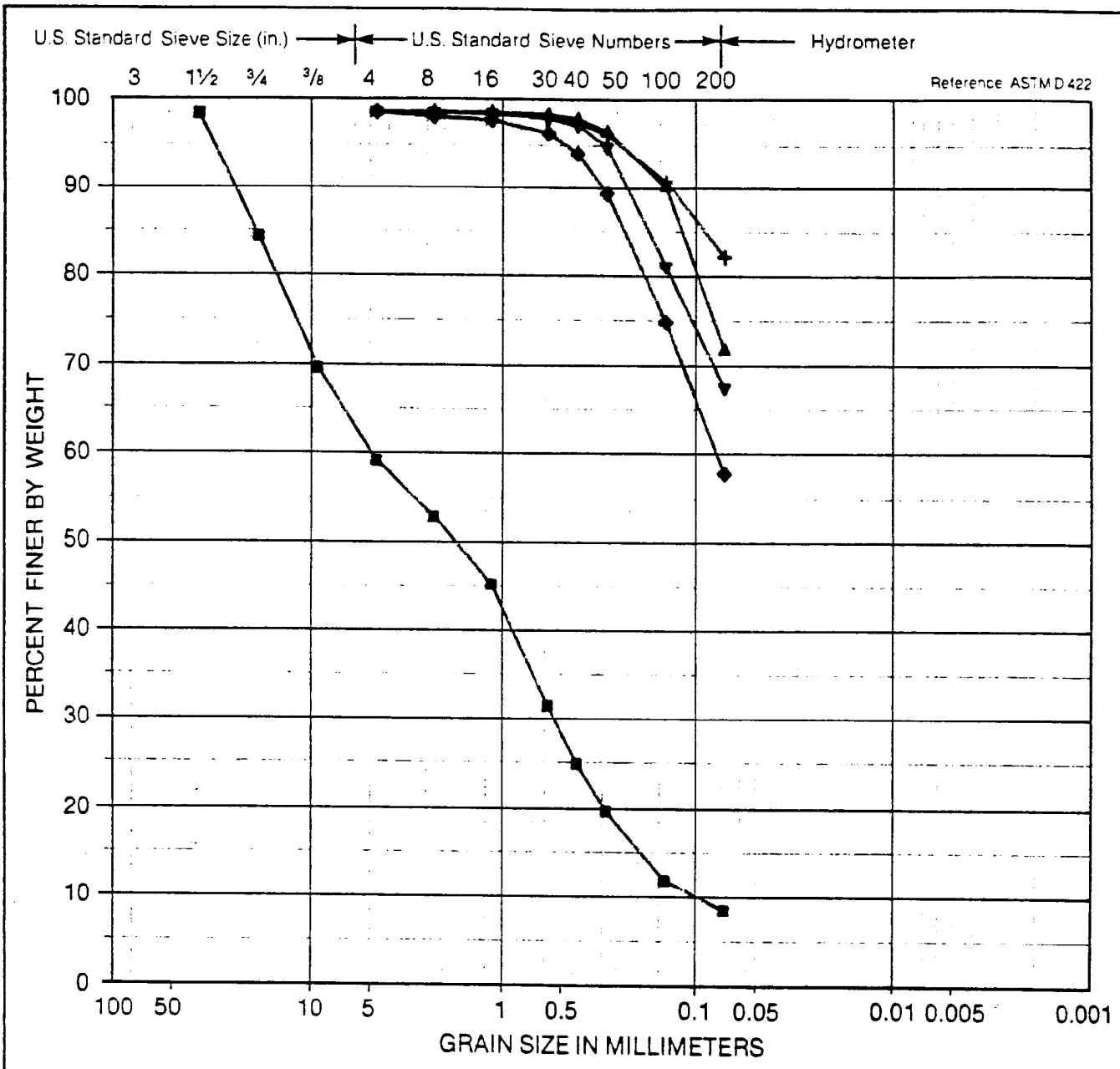
Harding Lawson Associates
Engineers Geologists
& Geophysicists

Particle Size Analysis

McKesson Corporation Property
Santa Fe Springs, California

PLATE
J10

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



COBBLES	GRAVEL		SAND			SILT OR CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

Symbol	Sample Source	Classification
■	MK-SB-32 @ 20.5 FT	BROWN SAND W/SILT AND GRAVEL (SP-SM)
▲	MK-SB-32 @ 25.5 FT	BROWN SILT W/SAND (ML)
▼	MK-SB-32 @ 30.5 FT	BROWN SANDY SILT (ML)
◆	MK-SB-32 @ 35.5 FT	BROWN SANDY SILT (ML)
+	MK-SB-32 @ 40.5 FT	BROWN LEAN CLAY W/SAND (CL)

MCK0003012

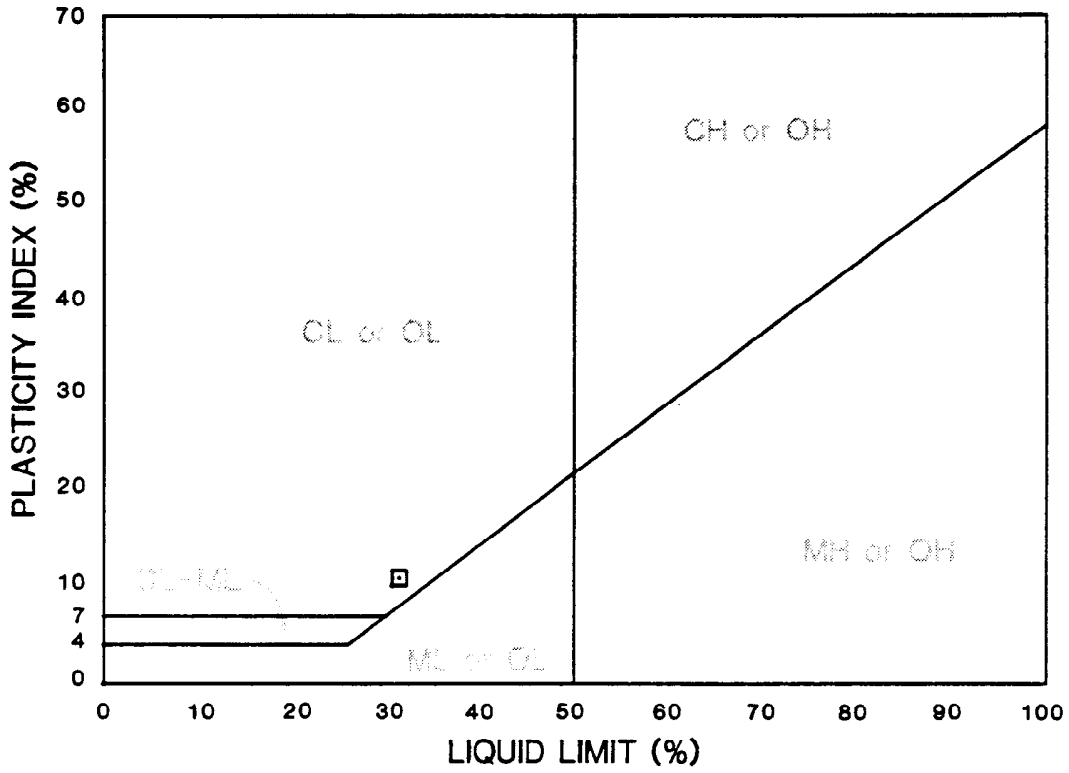
Harding Lawson Associates
Engineers Geologists
& Geophysicists

Particle Size Analysis

McKesson Corporation Property
Santa Fe Springs, California

PLATE
J11

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



Reference: ASTM D-4318

SYMBOL	BORING NUMBER	DEPTH (feet)	CLASSIFICATION	LL (%)	PL (%)	PI (%)	MOISTURE CONTENT (%)
⊡	MW-02	41.5	BROWN LEAN CLAY W/SAND (CL)	31	20	11	18.4

MCK0003013

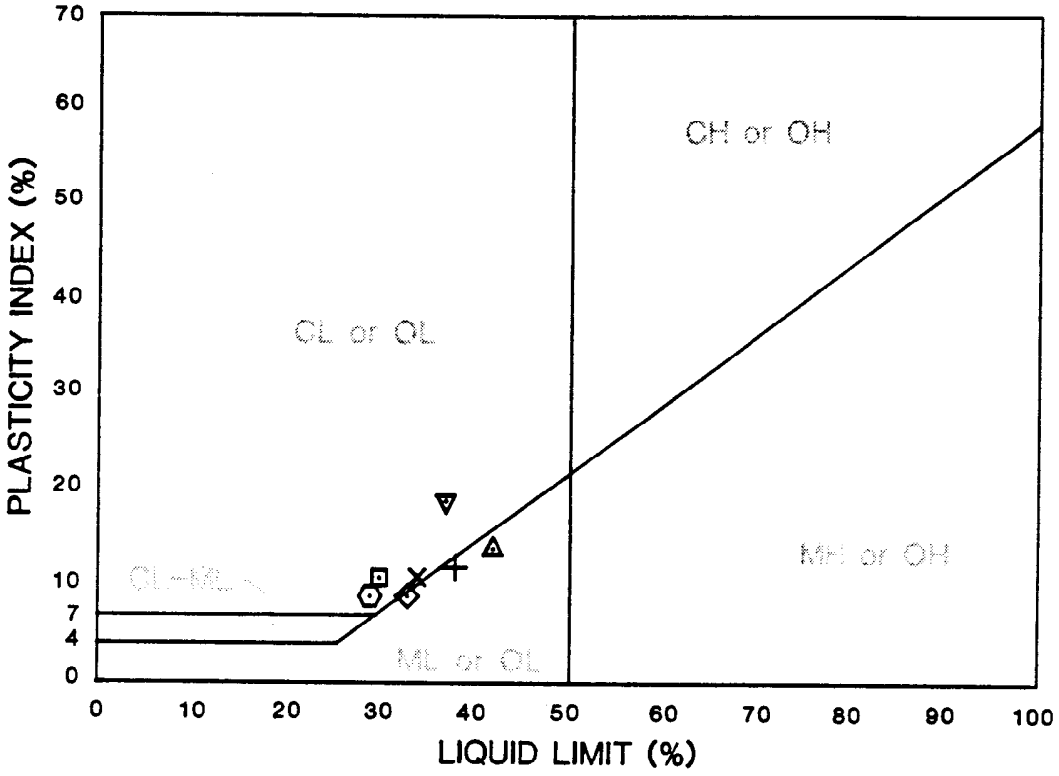
Harding Lawson Associates
Engineers Geologists
& Geophysicists

Plasticity Chart

McKesson Corporation Property
Santa Fe Springs, California

PLATE
J12

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



Reference: ASTM D-4318

SYMBOL	BORING NUMBER	DEPTH (feet)	CLASSIFICATION	LL (%)	PL (%)	PI (%)	MOISTURE CONTENT (%)
⊡	SB-02	0.5	BROWN SANDY LEAN CLAY (CL)	30	19	11	10.6
△	SB-02	30.5	BROWN SILT (ML)	42	28	14	27.3
▽	SB-10	36.0	BROWN SANDY LEAN CLAY (CL)	37	18	19	14.6
◇	SB-11	25.5	BROWN SILT (ML)	33	24	9	21.5
+	SB-11	40.5	BROWN SILT W/SAND (ML)	38	26	12	22.1
⬡	SB-12	25.0	BROWN SANDY LEAN CLAY (CL)	29	20	9	14.3
×	SB-12	30.0	BROWN LEAN CLAY W/SAND (CL)	34	23	11	23.2

MCK0003014

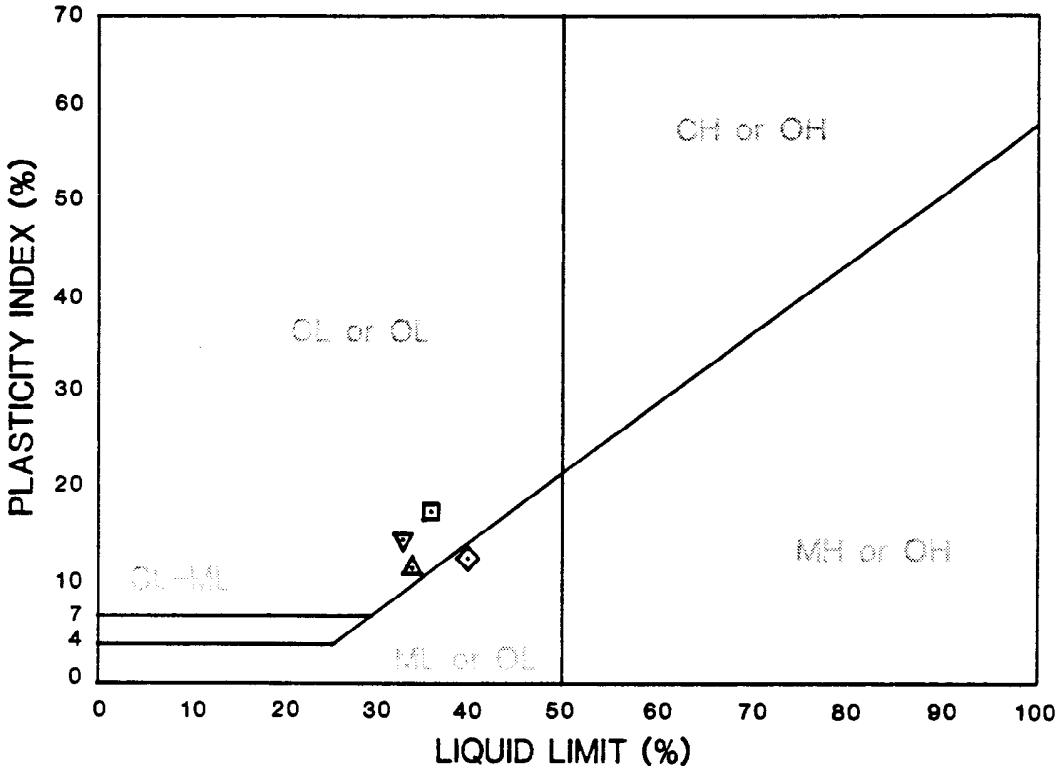
Harding Lawson Associates
Engineers, Geologists & Geophysicists

Plasticity Chart

McKesson Corporation Property
Santa Fe Springs, California

J13

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAC	6/92		



Reference: ASTM D-4318

SYMBOL	BORING NUMBER	DEPTH (feet)	CLASSIFICATION	LL (%)	PL (%)	PI (%)	MOISTURE CONTENT (%)
⊡	SB-13	35.5	BROWN LEAN CLAY W/SAND (CL)	36	18	18	16.7
△	SB-14	5.5	BROWN LEAN CLAY W/SAND (CL)	34	22	12	20.6
▽	SB-14	35.5	BROWN SANDY LEAN CLAY (CL)	33	18	15	13.9
◇	SB-19	30.5	BROWN SILT (ML)	40	27	13	27.5

MCK0003015

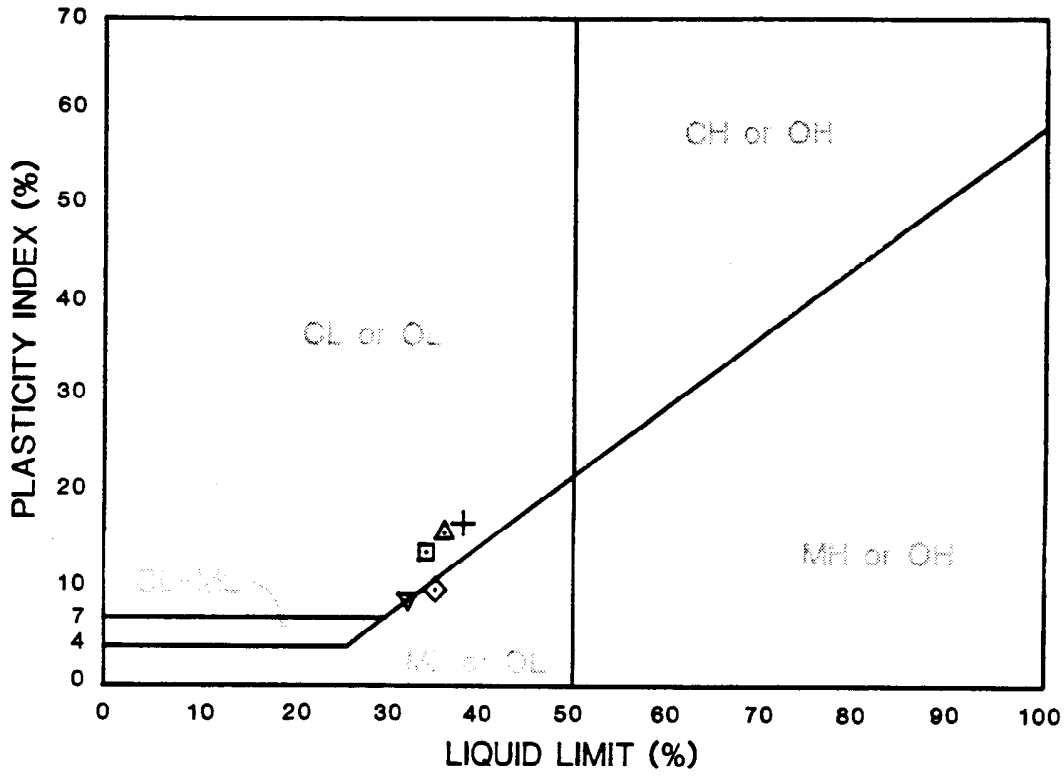
Harding Lawson Associates
Engineers Geologists
& Geophysicists

Plasticity Chart

McKesson Corporation Property
Santa Fe Springs, California

PLATE
J14

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



Reference: ASTM D-4318

SYMBOL	BORING NUMBER	DEPTH (feet)	CLASSIFICATION	LL (%)	PL (%)	PI (%)	MOISTURE CONTENT (%)
⊡	MK-SB -09	25.5	BROWN CLAYEY SAND (SC)	34	20	14	12.3
△	MK-SB -09	36.0	BROWN LEAN CLAY W/SAND (CL)	36	20	16	16.9
▽	MK-SB -15	30.5	BROWN LEAN CLAY (CL)	32	23	9	25.5
◇	MK-SB -32	25.5	BROWN SILT W/SAND (ML)	35	25	10	19.4
+	MK-SB -32	40.5	BROWN LEAN CLAY W/SAND (CL)	38	21	17	19.3

MCK0003016

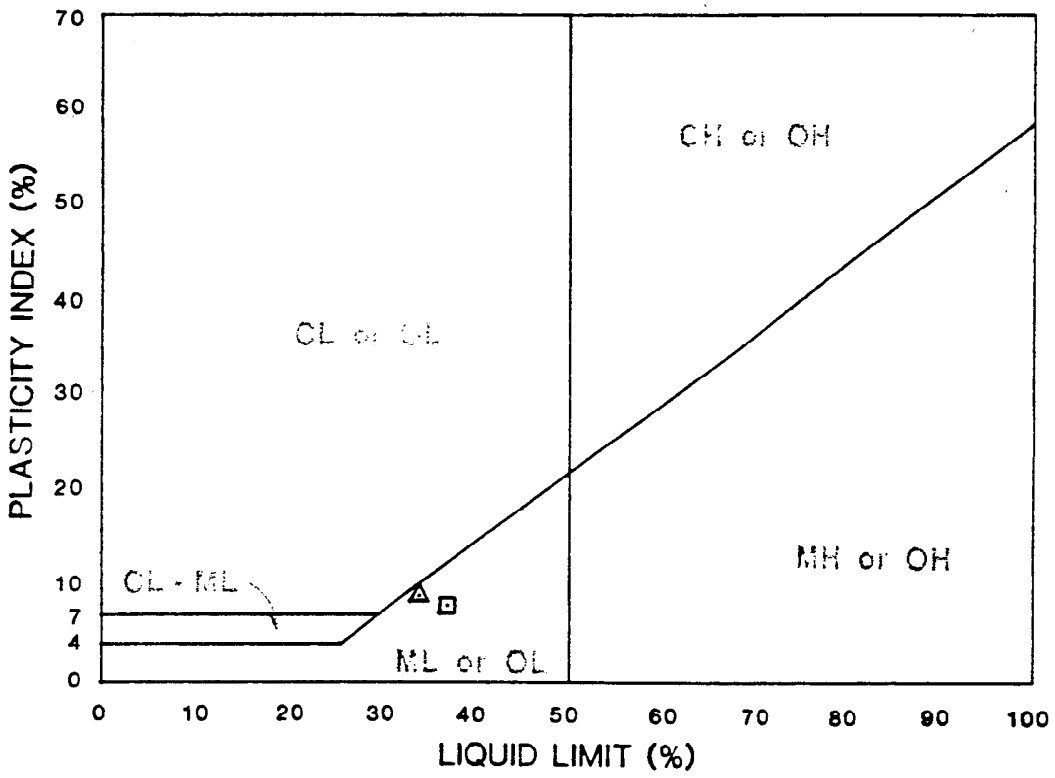
Harding Lawson Associates
Engineers, Geologists & Geophysicists

Plasticity Chart

McKesson Corporation Property
Santa Fe Springs, California

PLATE
J15

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



Reference: ASTM D-4318

SYMBOL	BORING NUMBER	DEPTH (feet)	CLASSIFICATION	LL (%)	PL (%)	PI (%)	MOISTURE CONTENT (%)
⊡	MKSB-17A	124.0	BROWN SILT W/SAND (ML)	37	29	8	29.0
△	MKSB-17A	117.5	BROWN SILT W/SAND (ML)	34	25	9	27.2

MCK0003017

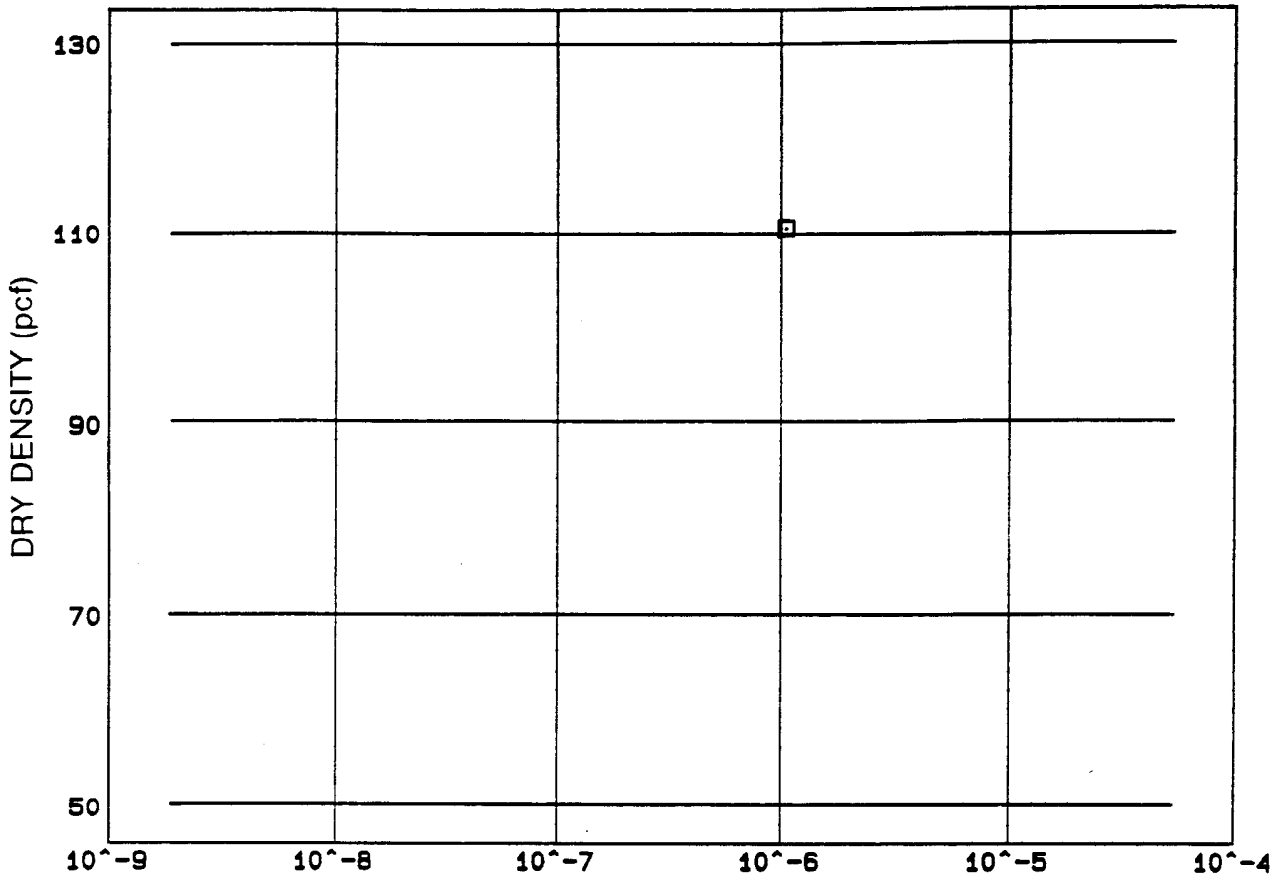
Harding Lawson Associates
Engineering and Environmental Services

Plasticity Chart

McKesson Corporation Property
Santa Fe Springs, California

PLATE
J16

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



PHYSICAL CONDITIONS		TEST NO A ⊡	B	C
INITIAL	Diameter (in)	2.39		
	Height (in)	2.00		
	Water Content (%)	18.4		
	Dry Density (pcf)	107		
	Void Ratio	0.583		
	Saturation (%)	86		
FINAL	Consolidation Pressure (psf)	576		
	Water Content (%)	19.7		
	Dry Density (pcf)	111		
	Void Ratio	0.535		
	Saturation (%)	100		
Permeability At 20°C (cm/sec)		1.02 E-6		
Sample Source: ⊡ MW-02 @ 41.5 FT				
Classification: ⊡ BROWN LEAN CLAY W/SAND CL				

TEST TYPE: FALLING HEAD

SATURATION METHOD: BACK PRESSURE

MCK0003018

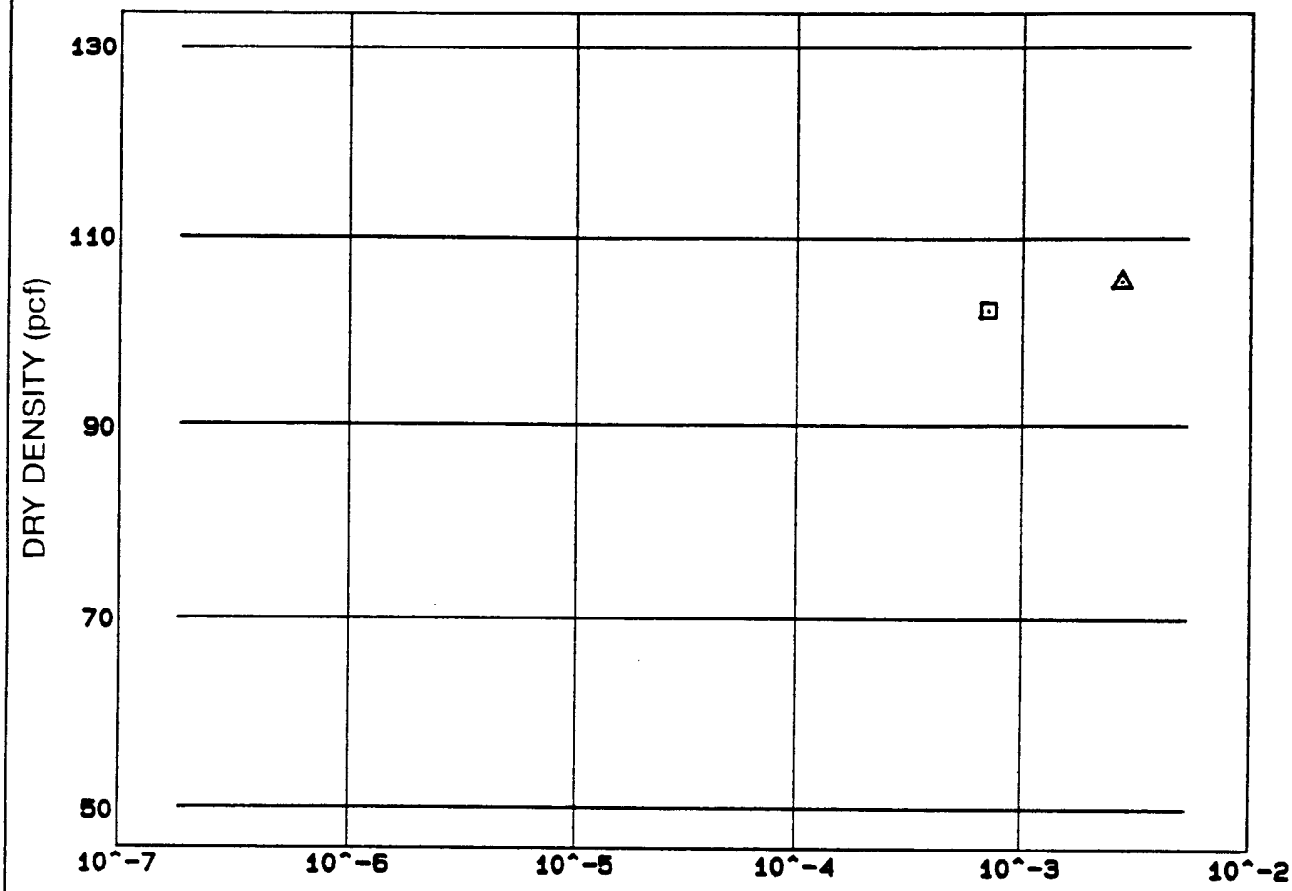
Harding Lawson Associates
Engineers Geologists
& Geophysicists

Permeability Test Report

McKesson Corporation Property
Santa Fe Springs, California

PLATE
J17

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



PHYSICAL CONDITIONS		TEST NO A ⊡	TEST NO B △	TEST NO C
INITIAL	Diameter (in)	2.43	2.43	
	Height (in)	2.00	3.20	
	Water Content (%)	22.4	21.2	
	Dry Density (pcf)	102	106	
	Void Ratio	0.663	0.597	
	Saturation (%)	92	96	
FINAL	Consolidation Pressure (psf)	576	576	
	Water Content (%)	24.0	22.1	
	Dry Density (pcf)	103	106	
	Void Ratio	0.652	0.600	
	Saturation (%)	100	100	
Permeability At 20°C (cm/sec)		6.68 E-4	2.59 E-3	
Sample Source: ⊡ SB-13 @ 56.0 FT △ SB-04 @ 55.5 FT				
Classification: ⊡ BROWN SILTY SAND (SM) △ BROWN SAND (SP)				

TEST TYPE: **FALLING HEAD**

SATURATION METHOD: **BACK PRESSURE**

MCK0003019

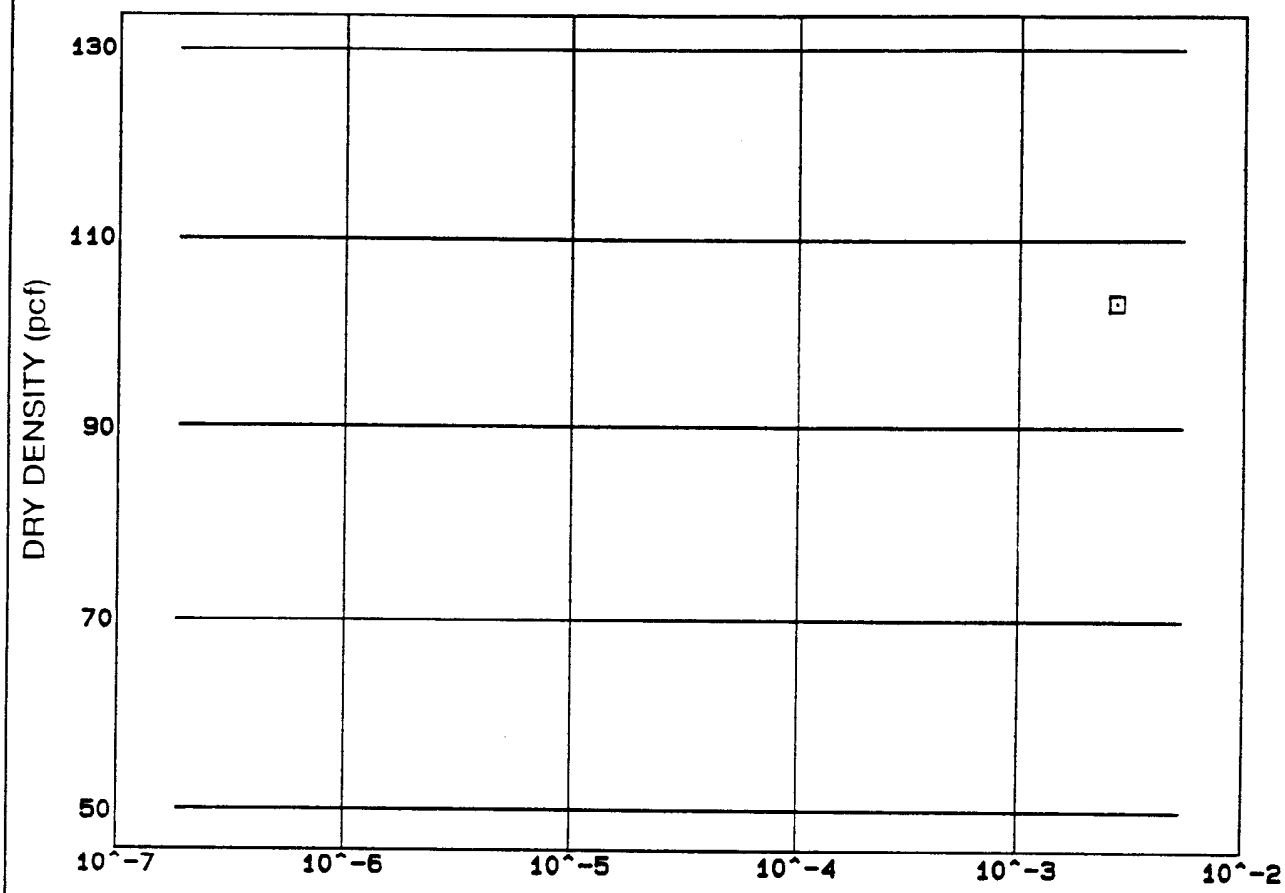
Harding Lawson Associates
Engineers Geologists & Geophysicists

Permeability Test Report

McKesson Corporation Property
Santa Fe Springs, California

PLATE **J18**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



COEFFICIENT OF PERMEABILITY (K) AT 20 °C (cm/sec)

PHYSICAL CONDITIONS		TEST NO A ⊡	B	C
INITIAL	Diameter (in)	2.43		
	Height (in)	2.00		
	Water Content (%)	9.4		
	Dry Density (pcf)	101		
	Void Ratio	0.653		
	Saturation (%)	38		
FINAL	Consolidation Pressure (psf)	576		
	Water Content (%)	23.0		
	Dry Density (pcf)	104		
	Void Ratio	0.616		
	Saturation (%)	100		
Permeability At 20°C (cm/sec)		2.54 E-3		

Sample Source: ⊡ MK-SB-6 @ 25.5 FT

Classification: ⊡ BROWN SAND W/SILT (SP-SM)

TEST TYPE: FALLING HEAD

SATURATION METHOD: BACK PRESSURE

MCK0003020

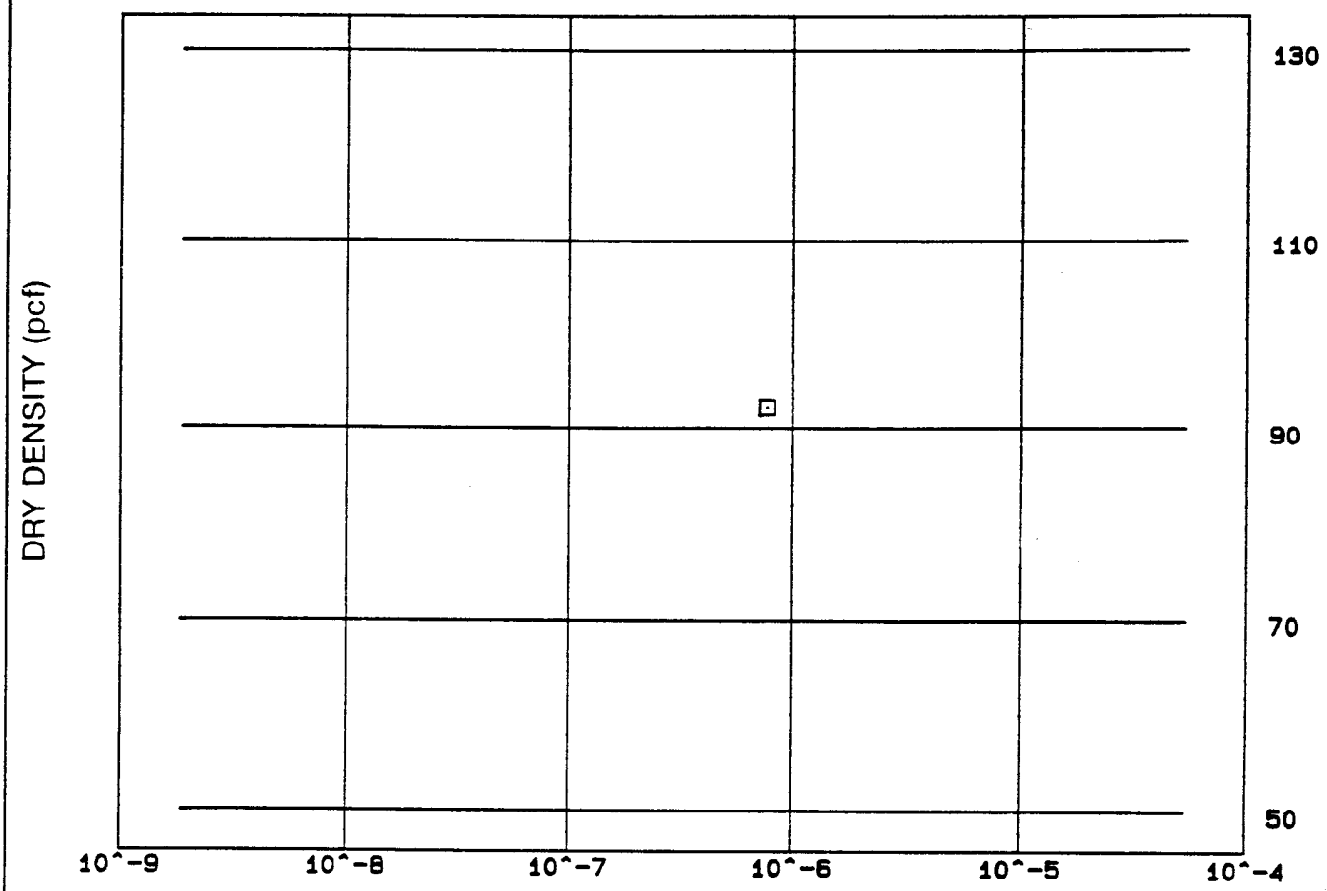
Harding Lawson Associates
Engineers Geologists & Geophysicists

Permeability Test Report

McKesson Corporation Property
Santa Fe Springs, California

PLATE **J19**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TMK	6/92		



PHYSICAL CONDITIONS		TEST NO A ⊡	B	C
INITIAL	Diameter (in)	2.43		
	Height (in)	2.00		
	Water Content (%)	28.8		
	Dry Density (pcf)	94		
	Void Ratio	0.807		
	Saturation (%)	97		
FINAL	Consolidation Pressure (psf)	576		
	Water Content (%)	30.7		
	Dry Density (pcf)	92		
	Void Ratio	0.836		
	Saturation (%)	100		
Permeability At 20°C (cm/sec)		7.30 E-7		
Sample Source: ⊡ MK-SB-6 @ 30.5 FT				
Classification: ⊡ BROWN SILT (ML)				

TEST TYPE: **FALLING HEAD**

SATURATION METHOD: **BACK PRESSURE**

MCK0003021

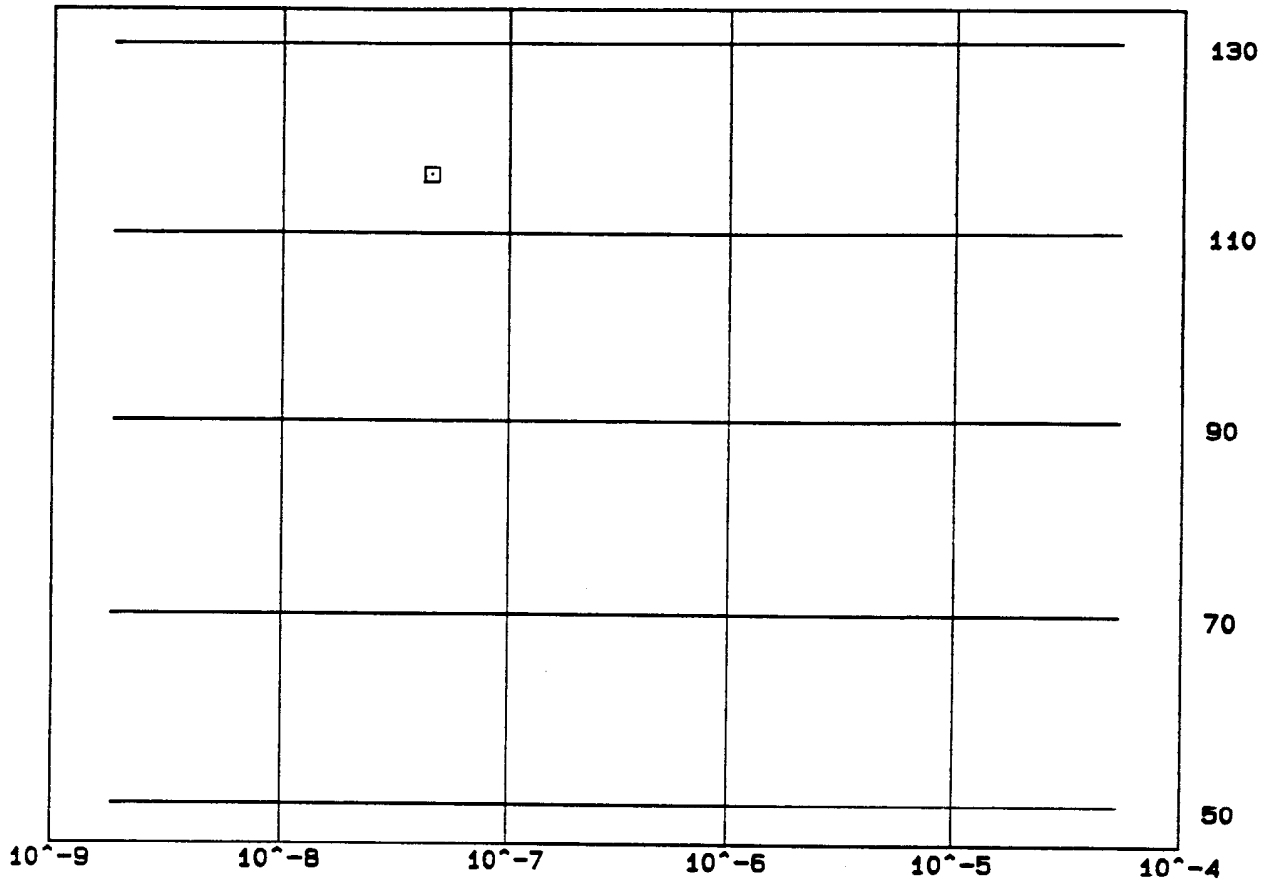
Harding Lawson Associates
Engineers, Geologists & Geophysicists

Permeability Test Report

McKesson Corporation Property
Santa Fe Springs, California

PLATE **J20**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



PHYSICAL CONDITIONS		TEST NO A ⊡	B	C
INITIAL	Diameter (in)	2.43		
	Height (in)	2.00		
	Water Content (%)	15.9		
	Dry Density (pcf)	116		
	Void Ratio	0.469		
	Saturation (%)	93		
FINAL	Consolidation Pressure (psf)	576		
	Water Content (%)	17.3		
	Dry Density (pcf)	116		
	Void Ratio	0.474		
	Saturation (%)	100		
Permeability At 20°C (cm/sec)		4.20 E-8		

Sample Source: ⊡ MK-SB-9 @ 35.5 FT

Classification: ⊡ BROWN SANDY LEAN CLAY (CL)

TEST TYPE: FALLING HEAD

SATURATION METHOD: BACK PRESSURE

MCK0003022

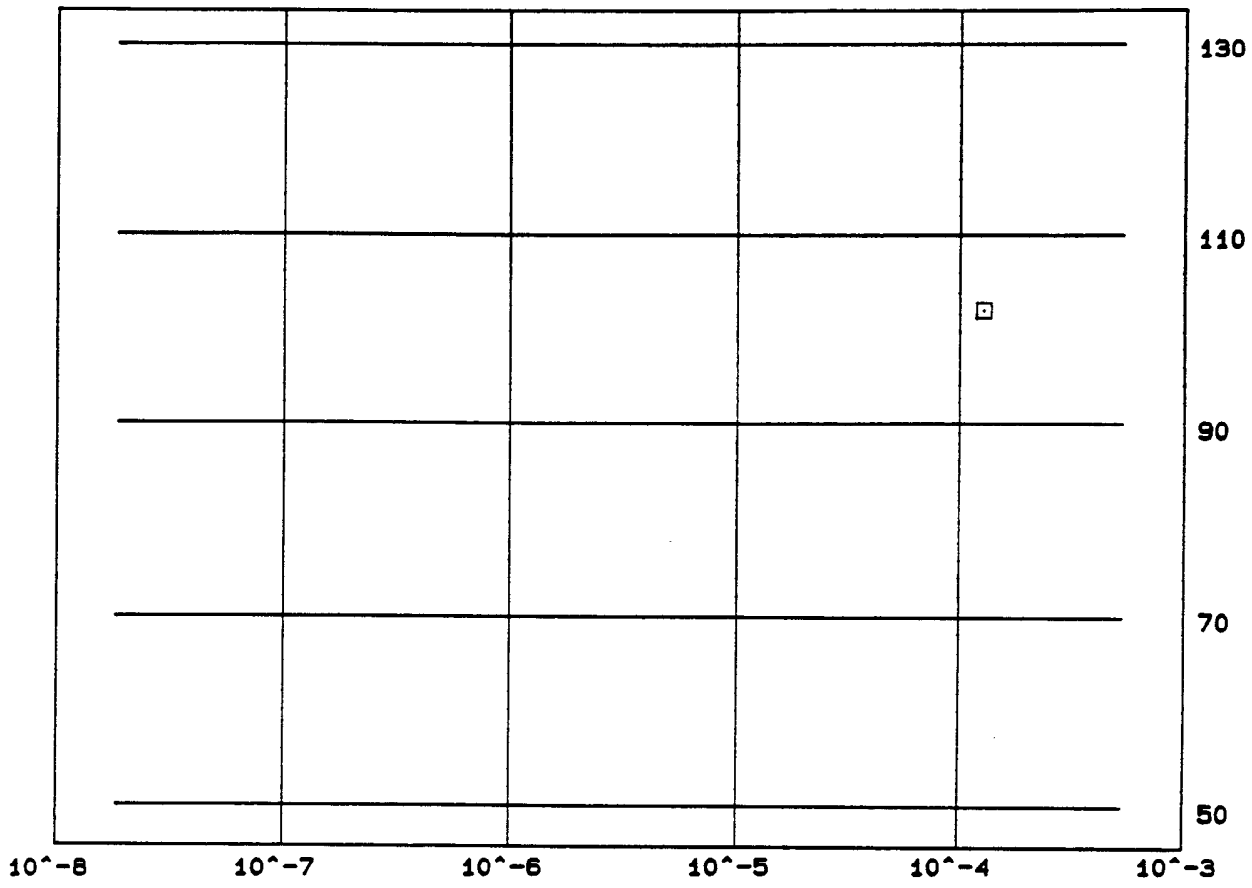
Harding Lawson Associates
Engineers Geologists & Geophysicists

Permeability Test Report

McKesson Corporation Property
Santa Fe Springs, California

PLATE **J21**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	17333,168.11	TAK	6/92		



PHYSICAL CONDITIONS		TEST NO A ⊡	B	C
INITIAL	Diameter (in)	2.43		
	Height (in)	2.00		
	Water Content (%)	13.7		
	Dry Density (pcf)	95		
	Void Ratio	0.800		
	Saturation (%)	47		
FINAL	Consolidation Pressure (psf)	576		
	Water Content (%)	24.3		
	Dry Density (pcf)	102		
	Void Ratio	0.663		
	Saturation (%)	100		
Permeability At 20°C (cm/sec)		1.36 E-4		

Sample Source: ⊡ MK-SB-15 @ 20.5 FT

Classification: ⊡ BROWN SILTY SAND (SM)

TEST TYPE: FALLING HEAD

SATURATION METHOD: BACK PRESSURE

MCK0003023

APPENDIX K

MCK0003024

APPENDIX K
ANALYTICAL RESULTS - SOIL

Printed on Recycled Paper.

Analytical Technologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego CA 92121 (619) 458-9141

000363 3.4.1

ATI I.D. 006240

July 18, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite #100
Tustin, California 92680

Project Name: McKesson SfeS

Project No.: 17333,157.11

Attention: Burton Chadwick

On June 13, 1990, Analytical Technologies, Inc. received six soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

Timothy J. Fitzpatrick
Inorganics Supervisor

TJF:nm

for Richard M. Amano
Laboratory Manager

Analytical Technologies, Inc.

ATI I.D. 006240

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SfeS

PROJECT NO.: 17333,157.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
CHLORIDE	COLORIMETRIC	EPA 325.2
FLUORIDE	ELECTRODE	EPA 340.2
NITRATE AS NITROGEN	COLORIMETRIC	EPA 353.1
PETROLEUM HYDROCARBONS	IR	EPA 418.1 (MODIFIED)
pH	ELECTRODE	EPA 9045
SULFATE	COLORIMETRIC	EPA 9036
IRON	ICAP	EPA 6010
MANGANESE	ICAP	EPA 6010
POTASSIUM	ICAP	EPA 6010
SODIUM	ICAP	EPA 6010
ZINC	ICAP	EPA 6010
GLYCOLS	GC/FID	EPA 8015 (MODIFIED)
VOLATILE ORGANICS	GC/MS	EPA 8240
SEMI-VOLATILE ORGANICS (BNA)	GC/MS	EPA 8270

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SfeS
ATI I.D. : 006240

DATE RECEIVED : 06/13/90
REPORT DATE : 07/18/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-MW-01-23.0	SOIL	06/12/90
02	MK-MW-01-42.0	SOIL	06/12/90
03	MK-MW-02-23.0	SOIL	06/12/90
04	MK-MW-02-45.5	SOIL	06/12/90
05	MK-MW-03-23.0	SOIL	06/12/90
06	MK-MW-03-41.0	SOIL	06/12/90

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	6

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 006240

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SfeS

DATE RECEIVED : 06/13/90
REPORT DATE : 07/18/90

PARAMETER	UNITS	01	02	03	04	05
CHLORIDE	MG/KG	<20	<20	<20	<20	<20
FLUORIDE	MG/KG	19	5	<5	<5	<5
NITRATE AS NITROGEN	MG/KG	0.70	1.2	0.50	6.6	1.0
PETROLEUM HYDROCARBONS, IR	MG/KG	<1	2	<1	1	<1
PH	UNITS	8.2	8.4	8.9	8.0	8.1
SULFATE	MG/KG	<100	<100	<100	<100	<100

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 006240

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SfeS

DATE RECEIVED : 06/13/90
REPORT DATE : 07/18/90

PARAMETER	UNITS	06
CHLORIDE	MG/KG	<20
FLUORIDE	MG/KG	15
NITRATE AS NITROGEN	MG/KG	0.70
PETROLEUM HYDROCARBONS, IR	MG/KG	7
PH	UNITS	7.7
SULFATE	MG/KG	<100

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SfeS ATI I.D. : 006240

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CHLORIDE	MG/KG	00624006	<20	<20	0	800	800	100
FLUORIDE	MG/KG	00624006	15	15	0	32	15	~~71~~ 113
NITRATE AS NITROGEN	MG/KG	00624005	1.0	1.0	0	2.8	5.0	36
PETROLEUM HYDROCARBONS	MG/KG	00624006	7	7	0	106	97	102
PH	UNITS	00626401	8.6	8.6	0	N/A	N/A	N/A
SULFATE	MG/KG	00640001	<100	<100	0	190	200	95

MCK0003031

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 006240

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SfeS

DATE RECEIVED : 06/13/90
REPORT DATE : 07/18/90

PARAMETER	UNITS	01	02	03	04	05
IRON	MG/KG	25200	27600	6780	26200	11700
POTASSIUM	MG/KG	5600	3040	579	2020	1450
MANGANESE	MG/KG	655	640	320	472	189
SODIUM	MG/KG	397	346	222	270	201
ZINC	MG/KG	65.0	65.1	16.9	55.0	27.8

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 006240

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SfeS

DATE RECEIVED : 06/13/90
REPORT DATE : 07/18/90

PARAMETER	UNITS	06
IRON	MG/KG	23200
POTASSIUM	MG/KG	3780
MANGANESE	MG/KG	676
SODIUM	MG/KG	228
ZINC	MG/KG	50.1

Analytical Technologies, Inc.

METALS - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SfeS ATI I.D. : 006240

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
IRON	MG/KG	00624002	27600	28800	4	**	**	**
POTASSIUM	MG/KG	00624002	3040	3040	0	3310	237	114
MANGANESE	MG/KG	00624002	640	700	9	738	94.8	72
SODIUM	MG/KG	00624002	346	347	0	887	563	96
ZINC	MG/KG	00624002	65.1	65.4	1	107	47.4	88

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

** Due to the necessary dilution of the sample, result was not attainable

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00624001

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-MW-01-23.0	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00624002

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-MW-01-42.0	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003036

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00624003

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-MW-02-23.0	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00624004

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-MW-02-45.5	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003038

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00624005

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-MW-03-23.0	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003039

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00624006

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-MW-03-41.0	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003040

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006240
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/05/90
PROJECT NAME	: McKESSON SfeS	DATE ANALYZED	: 07/06/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003041

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006240

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SfeS
REF I.D. : 00633402

DATE EXTRACTED : 07/05/90
DATE ANALYZED : 07/06/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	18	45	18	45	0
DIETHYLENE GLYCOL	<2.0	20.0	2.6	13	3.2	16	21
PROPYLENE GLYCOL	<2.0	20.0	15	75	16	80	6
HEXYLENE GLYCOL	<2.0	40.0	18	45	18	45	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003042

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006240

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SfeS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/06/90
DATE ANALYZED : 07/06/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	37	93	N/A	N/A	N/A
DIETHYLENE GLYCOL	<2.0	20.0	18	90	N/A	N/A	N/A
PROPYLENE GLYCOL	<2.0	20.0	20	100	N/A	N/A	N/A
HEXYLENE GLYCOL	<2.0	40.0	37	93	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003043

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624001

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/22/90
CLIENT I.D.	: MK-MW-01-23.0	DATE ANALYZED	: 06/26/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	80
BFB (%)	92
TOLUENE-D8 (%)	92

MCK0003044

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00624001

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003045

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624002

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/22/90
CLIENT I.D.	: MK-MW-01-42.0	DATE ANALYZED	: 06/26/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	79
4-B (%)	96
TOLUENE-D8 (%)	99

MCK0003046

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00624002

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003047

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624003

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/22/90
CLIENT I.D.	: MK-MW-02-23.0	DATE ANALYZED	: 06/26/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
2-DICHLOROETHANE	<0.05
BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	89
B (%)	106
TOLUENE-D8 (%)	109

MCK0003048

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624003

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/22/90
CLIENT I.D.	: MK-MW-02-23.0	DATE ANALYZED	: 06/26/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	89
BFB (%)	106
TOLUENE-D8 (%)	109

MCK0003049

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00624003

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003050

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624004

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/22/90
CLIENT I.D.	: MK-MW-02-45.5	DATE ANALYZED	: 06/26/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	80
BFB (%)	95
TOLUENE-D8 (%)	94

MCK0003051

Analytical Technologies, Inc ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

ST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00624004

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003052

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624005

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/22/90
CLIENT I.D.	: MK-MW-03-23.0	DATE ANALYZED	: 06/26/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	90
BFB (%)	109
TOLUENE-D8 (%)	107

MCK0003053

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00624005

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624006

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/22/90
CLIENT I.D.	: MK-MW-03-41.0	DATE ANALYZED	: 06/26/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<1.0
2-BUTANONE (MEK)	<0.05
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.50
VINYL ACETATE	<0.05
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.3
BROMOFORM	<0.50
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.05
TETRACHLOROETHENE	<0.10
TOLUENE	<0.05
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	80
BFB (%)	102
TOLUENE-D8 (%)	102

MCK0003055

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00624006

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006240
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 06/22/90
PROJECT NAME	: McKESSON SfeS	DATE ANALYZED	: 06/25/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	TR<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	94
BFB (%)	110
TOLUENE-D8 (%)	112

MCK0003057

TR - Compound detected at an unquantifiable trace level

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006240

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006240

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SfeS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 06/22/90
DATE ANALYZED : 06/26/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<0.05	2.10	2.2	105	1.9	90	15
TRICHLOROETHENE	<0.05	2.85	2.8	98	2.8	98	0
CHLOROBENZENE	<0.05	2.65	2.9	109	3.0	113	3
TOLUENE	<0.1	2.65	2.9	109	2.9	109	0
BENZENE	<0.05	2.45	2.4	98	2.4	98	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624001

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/19/90
CLIENT I.D.	: MK-MW-01-23.0	DATE ANALYZED	: 06/27/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
XACHLOROETHANE	<0.17
TROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
BENZOFURAN	<0.17
4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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AnalyticalTechnologies, Inc. GCMS - RESULTS

ATI I.D. : 00624001

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	61
2-FLUOROBIPHENYL (%)	66
TERPHENYL (%)	54
PHENOL-D6 (%)	36
2-FLUOROPHENOL (%)	56
2,4,6-TRIBROMOPHENOL (%)	59

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00624001

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624002

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/19/90
CLIENT I.D.	: MK-MW-01-42.0	DATE ANALYZED	: 06/27/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.85
BENZOIC ACID	<0.17
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.85
2,4,5-TRICHLOROPHENOL	<0.17
2-CHLORONAPHTHALENE	<0.85
2-NITROANILINE	<0.17
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.85
3-NITROANILINE	<0.17
ACENAPHTHENE	<0.85
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.17
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624002

ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	57
2-FLUOROBIPHENYL (%)	62
TERPHENYL (%)	50
PHENOL-D6 (%)	36
2-FLUOROPHENOL (%)	41
2,4,6-TRIBROMOPHENOL (%)	47

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00624002

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624003

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/19/90
CLIENT I.D.	: MK-MW-02-23.0	DATE ANALYZED	: 06/27/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
-METHYLPHENOL	<0.17
NITROSO-DI-N-PROPYLAMINE	<0.17
EXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
,4-DINITROPHENOL	<0.85
-NITROPHENOL	<0.85
IBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624003

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	62
2-FLUOROBIPHENYL (%)	68
TERPHENYL (%)	57
PHENOL-D6 (%)	44
2-FLUOROPHENOL (%)	58
2,4,6-TRIBROMOPHENOL (%)	67

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Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00624003

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624004

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/19/90
CLIENT I.D.	: MK-MW-02-45.5	DATE ANALYZED	: 06/27/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.85
BENZOIC ACID	<0.17
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.85
2,4,5-TRICHLOROPHENOL	<0.17
2-CHLORONAPHTHALENE	<0.85
2-NITROANILINE	<0.17
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.85
3-NITROANILINE	<0.17
ACENAPHTHENE	<0.85
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.17
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	

MCK0003069

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624004

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
-N-OCTYLPHTHALATE	<0.17
NZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	66
2-FLUOROBIPHENYL (%)	72
TERPHENYL (%)	62
PHENOL-D6 (%)	46
2-FLUOROPHENOL (%)	57
2,4,6-TRIBROMOPHENOL (%)	71

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00624004

UNITS : MG/KG

MATRIX : SOIL

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003071

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624005

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/19/90
CLIENT I.D.	: MK-MW-03-23.0	DATE ANALYZED	: 06/27/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
METHYLPHENOL	<0.17
NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
4-DINITROPHENOL	<0.85
NITROPHENOL	<0.85
BENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003072

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624006

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/12/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/13/90
PROJECT NAME	: McKESSON SfeS	DATE EXTRACTED	: 06/19/90
CLIENT I.D.	: MK-MW-03-41.0	DATE ANALYZED	: 06/27/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.85
BENZOIC ACID	<0.17
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.85
2,4,5-TRICHLOROPHENOL	<0.17
2-CHLORONAPHTHALENE	<0.85
2-NITROANILINE	<0.17
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.85
3-NITROANILINE	<0.17
ACENAPHTHENE	<0.85
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.17
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	

MCK0003073

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00624006

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
-N-OCTYLPHTHALATE	<0.17
NZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	59
2-FLUOROBIPHENYL (%)	62
TERPHENYL (%)	52
PHENOL-D6 (%)	44
2-FLUOROPHENOL (%)	53
2,4,6-TRIBROMOPHENOL (%)	63

MCK0003074

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00624006

UNITS : MG/KG

MATRIX : SOIL

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003075

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006240
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 06/19/90
PROJECT NAME	: McKESSON SfeS	DATE ANALYZED	: 06/26/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLORCISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
SOPHORONE	<0.17
NITROPHENOL	<0.17
,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.17
BIS(2-CHLOROETHOXY)METHANE	<0.85
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.17
2-CHLORONAPHTHALENE	<0.85
2-NITROANILINE	<0.17
DIMETHYL PHTHALATE	<0.85
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.17
ACENAPHTHENE	<0.85
2,4-DINITROPHENOL	<0.17
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.85
2,4-DINITROTOLUENE	<0.17
,6-DINITROTOLUENE	<0.17
IETHYLPHTHALATE	<0.17
-CHLOROPHENYL PHENYL ETHER	<0.17
	<0.17

MCK0003076

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Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ATI I.D. : 006240

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	
SURROGATE PERCENT RECOVERIES	
NITROBENZENE-D5 (%)	55
2-FLUOROBIPHENYL (%)	62
TERPHENYL (%)	60
PHENOL-D6 (%)	33
2-FLUOROPHENOL (%)	43
2,4,6-TRIBROMOPHENOL (%)	48

MCK0003077

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006240

UNITS : MG/KG

COMPOUNDS	RESULTS
455 ALIPHATIC HYDROCARBON C6	0.8
791 BRANCHED FURAN	0.2

MCK0003078

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006240

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SfeS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 06/19/90
DATE ANALYZED : 06/28/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<0.17	3.3	2.9	88	N/A	N/A	N/A
ACENAPHTHENE	<0.17	3.3	2.7	82	N/A	N/A	N/A
2,4-DINITROTOLUENE	<0.17	3.3	2.8	85	N/A	N/A	N/A
PYRENE	<0.17	3.3	3.1	94	N/A	N/A	N/A
N-NITROSO-DI-N-PROPYLAMINE	<0.17	3.3	2.4	73	N/A	N/A	N/A
1,4-DICHLOROBENZENE	<0.17	3.3	2.8	85	N/A	N/A	N/A
PENTACHLOROPHENOL	<0.85	13.2	11.2	85	N/A	N/A	N/A
PHENOL	<0.17	6.6	6.1	92	N/A	N/A	N/A
2-CHLOROPHENOL	<0.17	6.6	7.2	109	N/A	N/A	N/A
4-CHLORO-3-METHYLPHENOL	<0.17	6.6	6.4	97	N/A	N/A	N/A
4-NITROPHENOL	<0.85	13.2	16.5	125	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

Analytical Technologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D. 006334

July 18, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680

Project Name: McKesson Santa Fe Springs

Project No.: 17333-158.11

Attention: Burton Chadwick

On June 19, 1990, Analytical Technologies, Inc. received two soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

Timothy J. Fitzpatrick
Inorganics Supervisor

Richard M. Amano
Laboratory Manager

TJF:bc

Analytical Technologies, Inc.

ATI I.D. 006334

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SANTA FE SPRINGS

PROJECT NO.: 17333-158.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
CHLORIDE	COLORIMETRIC	EPA 325.2
FLUORIDE	ELECTRODE	EPA 340.2
NITRATE AS NITROGEN	COLORIMETRIC	EPA 353.1
PETROLEUM HYDROCARBONS	IR	EPA 418.1 (MODIFIED)
pH	ELECTRODE	EPA 9045
SULFATE	COLORIMETRIC	EPA 9036
IRON	ICAP	EPA 6010
MANGANESE	ICAP	EPA 6010
ZINC	ICAP	EPA 6010
GLYCOLS	GC/FID	EPA 8015 (MODIFIED)
VOLATILE ORGANICS	GC/MS	EPA 8240
SEMI-VOLATILE ORGANICS (BNA)	GC/MS	EPA 8270

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333-157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
ATI I.D. : 006334

DATE RECEIVED : 06/19/90
REPORT DATE : 07/18/9

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-SB-1-36.0-36.5	SOIL	06/18/90
02	MK-SB-1-41.0-41.5	SOIL	06/18/90

----- TOTALS -----

MATRIX	= SAMPLES
SOIL	2

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytico Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 006334

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333-157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 06/19/90
REPORT DATE : 07/18/90

PARAMETER	UNITS	01	02
CHLORIDE	MG/KG	<20	<20
FLUORIDE	MG/KG	<5	<5
NITRATE AS NITROGEN	MG/KG	15.3	50.7
PETROLEUM HYDROCARBONS, IR	MG/KG	3	2
PH	UNITS	8.7	8.2
SULFATE	MG/KG	<100	<100

MCK0003083

Analytical Technologies, Inc. GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333-157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 006334

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CHLORIDE	MG/KG	00624006	<20	<20	0	800	800	100
FLUORIDE	MG/KG	00624006	15	15	0	32	15	71
NITRATE AS NITROGEN	MG/KG	00633402	50.7	38.9	26	**	**	**
PETROLEUM HYDROCARBONS	MG/KG	00632201	9	8	11	126	112	104
PH	UNITS	00635904	9.0	8.9	1	N/A	N/A	N/A
SULFATE	MG/KG	00640001	<100	<100	0	190	200	95

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

** Due to the necessary dilution of the sample, result was not attainable

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 006334

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333-157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 06/19/90
REPORT DATE : 07/18/90

PARAMETER	UNITS	01	02
IRON	MG/KG	18450	29780
MANGANESE	MG/KG	329	418
ZINC	MG/KG	48.7	63.3

Analytico Technologies, Inc. METALS - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333-157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 006334

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
IRON	MG/KG	00635904	11200	11600	4	**	**	**
MANGANESE	MG/KG	00635904	143	161	12	247	97.4	98
ZINC	MG/KG	00635904	29.7	28.3	5	77.1	48.7	99

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

** Due to the necessary dilution of the sample, result was not attainable

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00633401

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/18/90
PROJECT #	: 17333-157.11	DATE RECEIVED	: 06/19/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 06/26/90
CLIENT I.D.	: MK-SB-1-36.0-36.5	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003087

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00633402

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/18/90
PROJECT #	: 17333-157.11	DATE RECEIVED	: 06/19/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 06/26/90
CLIENT I.D.	: MK-SB-1-41.0-41.5	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003088

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006334
PROJECT #	: 17333-157.11	DATE EXTRACTED	: 07/05/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/06/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003089

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006334

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: 07/05/90
PROJECT #	: 17333-157.11	DATE ANALYZED	: 07/06/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	SAMPLE MATRIX	: SOIL
REF I.D.	: 00633402	UNITS	: MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	18	45	18	45	0
DIETHYLENE GLYCOL	<2.0	20.0	2.6	13	3.2	16	21
PROPYLENE GLYCOL	<2.0	20.0	15	75	16	80	6
HEXYLENE GLYCOL	<2.0	40.0	18	45	18	45	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003090

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006334

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: 06/22/90
PROJECT #	: 17333-157.11	DATE ANALYZED	: 06/28/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	SAMPLE MATRIX	: SOIL
REF I.D.	: 00629101	UNITS	: MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<0.05	1.7	1.8	106	1.9	114	7
TRICHLOROETHENE	<0.05	1.9	2.0	105	2.1	111	6
CHLOROBENZENE	<0.05	2.5	2.4	96	2.7	108	12
TOLUENE	<0.1	2.5	2.4	95	2.6	103	8
BENZENE	<0.05	2.6	2.0	78	2.1	80	3

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003091

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00633401

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/18/90
PROJECT #	: 17333-157.11	DATE RECEIVED	: 06/19/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 06/27/90
CLIENT I.D.	: MK-SB-1-36.0-36.5	DATE ANALYZED	: 06/29/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003092

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AnalyticalTechnologies, Inc. GCMS - RESULTS

ATI I.D. : 00633401

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
D[illegible]-OCTYLPHTHALATE	<0.17
B[illegible]O(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17
SURROGATE PERCENT RECOVERIES	
NITROBENZENE-D5 (%)	65
2-FLUOROBIPHENYL (%)	66
TERPHENYL (%)	52
PHENOL-D6 (%)	50
2-FLUOROPHENOL (%)	47
2,4,6-TRIBROMOPHENOL (%)	92

MCK0003093

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

T : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

MATRIX : SOIL

ATI I.D. : 00633401

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00633402

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/18/90
PROJECT #	: 17333-157.11	DATE RECEIVED	: 06/19/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 06/27/90
CLIENT I.D.	: MK-SB-1-41.0-41.5	DATE ANALYZED	: 06/29/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003095

(CONTINUED NEXT PAGE)

Analytical Technologies, Inc. GCMS - RESULTS

ATI I.D. : 00633402

CT : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	69
2-FLUOROBIPHENYL (%)	63
TERPHENYL (%)	54
PHENOL-D6 (%)	56
2-FLUOROPHENOL (%)	54
2,4,6-TRIBROMOPHENOL (%)	97

MCK0003096

Analytical Technologies, ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

T : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00633402

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003097

Analytical Technologies, Inc. GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

		ATI I.D.	: 006334
CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: 06/27/90
PROJECT #	: 17333-157.11	DATE ANALYZED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	UNITS	: MG/KG
CLIENT I.D.	: REAGENT BLANK	DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
[illegible]PHORONE	<0.17
2 [illegible]ITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
[illegible]-DINITROTOLUENE	<0.17
[illegible]THYLPHTHALATE	<0.17
4-CHLOROPHENYL PHENYL ETHER	<0.17

MCK0003098

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Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ATI I.D. : 006334

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	78
2-FLUOROBIPHENYL (%)	78
TERPHENYL (%)	54
PHENOL-D6 (%)	60
2-FLUOROPHENOL (%)	57
2,4,6-TRIBROMOPHENOL (%)	102

MCK0003099

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006334

UNITS : MG/KG

COMPOUNDS	RESULTS
420 ALIPHATIC HYDROCARBON C6	0.9
1800 DIOCTYL ESTER HEXANEDIOIC ACID	0.4

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006334

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333-157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00628816

DATE EXTRACTED : 06/27/90
DATE ANALYZED : 07/09/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<0.85	3.3	3.2	97	2.8	84	14
ACENAPHTHENE	18	3.3	18	*	17.5	*	3
2,4-DINITROTOLUENE	<0.85	3.3	2.4	71	2.4	72	1
PYRENE	2.6	3.3	4.6	61	5.4	83	30
N-NITROSO-DI-N-PROPYLAMINE	<0.85	3.3	2.4	73	2.3	71	3
1,4-DICHLOROBENZENE	<0.85	3.3	2.5	77	2.3	68	12
PENTACHLOROPHENOL	<4.2	13.2	12.1	92	11.2	85	8
PHENOL	<0.85	6.6	3.6	55	3.5	53	4
2-CHLOROPHENOL	<0.85	6.6	6.1	93	5.7	86	8
4-CHLORO-3-METHYLPHENOL	<0.85	6.6	7.3	112	6.1	92	10
4-NITROPHENOL	<4.2	13.2	17.9	136	17.5	132	3

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

* Result out of limits due to sample matrix interference

MCK0003101

15621 Redhill Avenue, Suite 100
Tustin, California 92680
714 — 213/617-7232
Telecopier: 714/259-1378

CHAIN OF CUSTODY FORM

Lab: ATL

Job Number: 17333, 153.11

Samplers: Dan Johnson

Name/Location: McKesson Santa Fe Springs

Project Manager: Burton Chadwick

Recorder: [signature] (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	CONTAINERS & PRESERV: Unpres.	H_2SO_4	HNO_3	Vials	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES
AB		X			X							10	12	13	AM	MK-SB-1 [illegible]
AB		X			X							10	12	13	AM	MK-SB-1 [illegible]

ANALYSIS REQUESTED

EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH	[illegible]

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK0003102				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
[signature]		
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
METHOD OF SHIPMENT		

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

Analytical Technologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D. 006400

July 20, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite #100
Tustin, California 92680

Project Name: McKesson SfeS

Project No.: 17333,157.11

Attention: Burton Chadwick

On June 25, 1990, Analytical Technologies, Inc. received fifteen soil and two water samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

Timothy J. Fitzpatrick
Inorganics Supervisor

TJF:nm

For Richard M. Amano
Laboratory Manager

Analytical Technologies, Inc.

ATI I.D. 006400

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SfeS

PROJECT NO.: 17333,157.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
CHLORIDE	COLORIMETRIC	EPA 325.2
FLUORIDE	ELECTRODE	EPA 340.2
NITRATE AS NITROGEN	COLORIMETRIC	EPA 353.1
PETROLEUM HYDROCARBONS	IR	EPA 418.1 (MODIFIED)
pH	ELECTRODE	EPA 9045
SULFATE	COLORIMETRIC	EPA 9036
IRON	ICAP	EPA 6010
MANGANESE	ICAP	EPA 6010
POTASSIUM	ICAP	EPA 6010
SODIUM	ICAP	EPA 6010
ZINC	ICAP	EPA 6010
GLYCOLS	GC/FID	EPA 8015 (MODIFIED)
VOLATILE ORGANICS	GC/MS	EPA 8240
SEMI-VOLATILE ORGANICS (BNA)	GC/MS	EPA 8270

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes
ATI I.D. : 006400

DATE RECEIVED : 06/25/90
REPORT DATE : 07/20/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-SB-02-20.5-21	SOIL	06/19/90
02	MK-SB-02-41-41.5	SOIL	06/19/90
03	MK-SB-12-20-20.5	SOIL	06/20/90
04	MK-SB-12-30.5-31	SOIL	06/20/90
05	MK-SB-12-41-41.5	SOIL	06/20/90
06	MK-SB-15-26-26.5	SOIL	06/21/90
07	MK-SB-15-41-41.5	SOIL	06/21/90
08	MK-SB-14-26-26.5	SOIL	06/21/90
09	MK-SB-14-41-41.5	SOIL	06/21/90
10	MK-SB-11-26-26.5	SOIL	06/22/90
11	MK-SB-11-41-41.5	SOIL	06/22/90
12	MK-SB-10-30.5-31	SOIL	06/22/90
13	MK-SB-10-46-46.5	SOIL	06/22/90
14	MK-SB-13-25.5-26	SOIL	06/20/90
15	MK-SB-13-41-41.5	SOIL	06/20/90
16	MK-SW-01-62390	WATER	06/23/90
17	MK-SW-02-62390	WATER	06/23/90

----- TOTALS -----

MATRIX	# SAMPLES
WATER	2
SOIL	15

MCK0003105

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc. GENERAL CHEMISTRY RESULTS

ATI I.D. : 006400

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes

DATE RECEIVED : 06/25/90

REPORT DATE : 07/20/90

PARAMETER	UNITS	01	02	03	04	05
CHLORIDE	MG/KG	100	<20	<20	<20	<20
FLUORIDE	MG/KG	<5	<5	<5	<5	<5
NITRATE AS NITROGEN	MG/KG	<2.6	<2.6	<2.6	<2.6	<2.6
PETROLEUM HYDROCARBONS, IR	MG/KG	<1	1	2	<1	<1
PH	UNITS	7.7	7.6	7.7	7.9	7.9
SULFATE	MG/KG	<100	<100	<100	<100	<100

AnalyticalTechnologies, Inc. GENERAL CHEMISTRY RESULTS

ATI I.D. : 006400

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes

DATE RECEIVED : 06/25/90
REPORT DATE : 07/20/90

PARAMETER	UNITS	06	07	08	09	10
CHLORIDE	MG/KG	<20	<20	<20	<20	<20
FLUORIDE	MG/KG	<5	<5	8	8	<5
NITRATE AS NITROGEN	MG/KG	<2.6	<2.6	<2.6	<2.6	<2.6
PETROLEUM HYDROCARBONS, IR	MG/KG	1	<1	<1	<1	<1
PH	UNITS	7.4	7.7	8.0	8.1	7.9
SULFATE	MG/KG	172	<100	<100	<100	<100

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 006400

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes

DATE RECEIVED : 06/25/90
REPORT DATE : 07/20/90

PARAMETER	UNITS	11	12	13	14	15
CHLORIDE	MG/KG	<20	100	<20	-	-
FLUORIDE	MG/KG	<5	13	<5	-	-
NITRATE AS NITROGEN	MG/KG	<2.6	8.4	<2.6	-	-
PETROLEUM HYDROCARBONS, IR	MG/KG	<1	<1	1	<1	2
PH	UNITS	7.9	7.7	7.6	-	-
SULFATE	MG/KG	<100	257	<100	-	-

MCK0003108

Analytical Technologies, GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes ATI I.D. : 006400

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CHLORIDE	MG/KG	00640008	<20	<20	0	800	800	100
CHLORIDE	MG/KG	00640013	<20	<20	0	800	800	100
FLUORIDE	MG/KG	00640009	8	8	0	47	48	81
NITRATE AS NITROGEN	MG/KG	00640010	<2.6	<2.6	0	5.6	5.2	93
NITRATE AS NITROGEN	MG/KG	00640013	<2.6	<2.6	0	4.1	5.1	80
PETROLEUM HYDROCARBONS	MG/KG	00640003	2	3	40	110	101	106
PETROLEUM HYDROCARBONS	MG/KG	00640013	1	1	0	120	104	114
PH	UNITS	00640013	7.6	7.5	1	N/A	N/A	N/A
PH	UNITS	00649702	7.9	8.0	1	N/A	N/A	N/A
SULFATE	MG/KG	00640001	<100	<100	0	190	200	95
SULFATE	MG/KG	00640009	<100	<100	0	239	200	120

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

MCK0003109

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 006400

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes

DATE RECEIVED : 06/25/90
REPORT DATE : 07/20/90

PARAMETER	UNITS	01	02	03	04	05
IRON	MG/KG	12700	26910	8810	30120	23710
POTASSIUM	MG/KG	1240	3550	1290	3750	3160
MANGANESE	MG/KG	141	309	98.0	597	459
SODIUM	MG/KG	196	342	168	407	307
ZINC	MG/KG	42.7	59.6	32.9	87.3	63.4

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 006400

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes

DATE RECEIVED : 06/25/90
REPORT DATE : 07/20/90

PARAMETER	UNITS	06	07	08	09	10
IRON	MG/KG	26030	26490	25250	23260	26400
POTASSIUM	MG/KG	4730	3910	4830	2920	4980
MANGANESE	MG/KG	606	607	545	642	559
SODIUM	MG/KG	333	324	367	381	396
ZINC	MG/KG	121	70.6	71.9	74.7	78.1

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 006400

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes

DATE RECEIVED : 06/25/90
REPORT DATE : 07/20/90

PARAMETER	UNITS	11	12	13
IRON	MG/KG	23920	26430	9140
POTASSIUM	MG/KG	4460	4320	1490
MANGANESE	MG/KG	209	521	102
SODIUM	MG/KG	328	424	178
ZINC	MG/KG	69.2	78.1	32.2

Analytical Technologies, Inc.

METALS - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes ATI I.D. : 006400

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
IRON	MG/KG	00640001	12700	12600	1	**	**	**
IRON	MG/KG	00640013	9140	8760	4	**	**	**
POTASSIUM	MG/KG	00640001	1240	1260	2	1520	248	109
POTASSIUM	MG/KG	00640013	1490	1360	9	1630	250	82
MANGANESE	MG/KG	00640001	141	141	0	263	99.2	123
MANGANESE	MG/KG	00640013	102	114	11	197	99.8	89
SODIUM	MG/KG	00640001	196	217	10	838	590	107
SODIUM	MG/KG	00640013	178	168	6	802	594	106
ZINC	MG/KG	00640001	42.7	43.6	2	79.5	49.6	73
ZINC	MG/KG	00640013	32.2	31.6	2	89.6	49.9	116

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

** Due to the necessary dilution of the sample, result was not attainable

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640001

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/19/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-02-20.5-21	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640002

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/19/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-02-41-41.5	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640003

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-12-20-20.5	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003116

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640004

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-12-30.5-31	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640005

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-12-41-41.5	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003118

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640006

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/21/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-15-26-26.5	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640007

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/21/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-15-41-41.5	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003120

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640008

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/21/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-14-26-26.5	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003121

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640009

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/21/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-14-41-41.5	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003122

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640010

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/22/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-11-26-26.5	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003123

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640011

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/22/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-11-41-41.5	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003124

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640012

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/22/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-10-30.5-31	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003125

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640013

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/22/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-10-46-46.5	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640014

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-13-25.5-26	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00640015

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-13-41-41.5	DATE ANALYZED	: 07/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003128

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006400
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/06/90
PROJECT NAME	: McKESSON Sfes	DATE ANALYZED	: 07/08/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003129

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006400
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/06/90
PROJECT NAME	: McKESSON Sfes	DATE ANALYZED	: 07/08/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003130

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : GLYCOLS

ATI I.D. : 006400

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/06/90
DATE ANALYZED : 07/08/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	40	100	N/A	N/A	N/A
DIETHYLENE GLYCOL	<2.0	20.0	21	105	N/A	N/A	N/A
PROPYLENE GLYCOL	<2.0	20.0	21	105	N/A	N/A	N/A
HEXYLENE GLYCOL	<2.0	40.0	40	100	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006400

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes
REF I.D. : 00640003

DATE EXTRACTED : 07/06/90
DATE ANALYZED : 07/08/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	29	73	28	70	4
DIETHYLENE GLYCOL	<2.0	20.0	5.2	26	4.8	24	8
PROPYLENE GLYCOL	<2.0	20.0	17	85	17	85	0
HEXYLENE GLYCOL	<2.0	40.0	29	73	28	70	4

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003132

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : GLYCOLS

ATI I.D. : 006400

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes
REF I.D. : 00646602

DATE EXTRACTED : 07/06/90
DATE ANALYZED : 07/08/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	15	38	13	33	14
DIETHYLENE GLYCOL	<2.0	20.0	2.6	13	2.5	13	0
PROPYLENE GLYCOL	<2.0	20.0	13	65	13	65	0
HEXYLENE GLYCOL	<2.0	40.0	15	38	13	33	14

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003133

Analytical**Technologies**, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006400

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes
REF I.D. : 00652405

DATE EXTRACTED : 07/06/90
DATE ANALYZED : 07/08/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	20	50	20	50	0
DIETHYLENE GLYCOL	<2.0	20.0	4.0	20	3.7	19	5
PROPYLENE GLYCOL	<2.0	20.0	17	85	16	80	6
HEXYLENE GLYCOL	<2.0	40.0	20	50	20	50	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640001

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/19/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-02-20.5-21	DATE ANALYZED	: 07/01/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
BUTANONE (MEK)	<1.0
1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	101
B (%)	104
LUENE-D8 (%)	106

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640001

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003136

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640002

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/19/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-02-41-41.5	DATE ANALYZED	: 07/01/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	0.1
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	0.1
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	0.08
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	86
3 (%)	95
LUENE-D8 (%)	98

MCK0003137

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640002

UNITS : MG/KG

MATRIX : SOIL

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003138

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640003

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-12-20-20.5	DATE ANALYZED	: 07/04/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
BUTANONE (MEK)	<1.0
1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	108
3 (%)	107
LUENE-D8 (%)	101

MCK0003139

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640003

UNITS : MG/KG

MATRIX : SOIL

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003140

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640004

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-12-30.5-31	DATE ANALYZED	: 07/04/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	105
B (%)	95
OLUENE-D8 (%)	89

MCK0003141

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640004

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003142

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640005

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-12-41-41.5	DATE ANALYZED	: 07/04/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1 2-DICHLOROETHANE-D4 (%)	96
3 (%)	97
LUENE-D8 (%)	94

MCK0003143

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640005

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003144

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640006

ST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/21/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-15-26-26.5	DATE ANALYZED	: 07/04/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	2.0
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	93
BFB (%)	91
TOLUENE-D8 (%)	93

MCK0003145

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640006

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003146

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640007

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/21/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-15-41-41.5	DATE ANALYZED	: 07/04/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	4.0
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	0.80
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	0.14
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	0.91
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	1.4
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	91
BFB (%)	91
TOLUENE-D8 (%)	86

MCK0003147

Analytical Technologies, Inc. ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640007

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
602 ALIPHATIC HYDROCARBON	0.4
610 ALIPHATIC HYDROCARBON	0.3
635 ALIPHATIC HYDROCARBON	0.3
649 ALIPHATIC HYDROCARBON	0.3
736 ALIPHATIC HYDROCARBON	0.3

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640008

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/21/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-14-26-26.5	DATE ANALYZED	: 07/04/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	102
8 (%)	94
LUENE-D8 (%)	93

MCK0003149

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640008

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003150

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640009

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/21/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-14-41-41.5	DATE ANALYZED	: 07/05/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	80
B (%)	89
TOLUENE-D8 (%)	90

MCK0003151

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640009

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003152

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640010

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/22/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-11-26-26.5	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	TR<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	83
BB (%)	84
TOLUENE-D8 (%)	89

MCK0003153

TR - Compound detected at an unquantifiable trace level

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640010

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003154

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640011

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/22/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-11-41-41.5	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	81
BROMOFLUOROBENZENE (%)	91
TOLUENE-D8 (%)	93

MCK0003155

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640011

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003156

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640012

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/22/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-10-30.5-31	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	0.2
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	0.3
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	0.3
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	0.7
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	90
B (%)	97
OLUENE-D8 (%)	98

MCK0003157

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640012

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003158

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640013

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/22/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-10-46-46.5	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	94
BFB (%)	102
TOLUENE-D8 (%)	103

MCK0003159

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640013

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003160

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640014

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/28/90
CLIENT I.D.	: MK-SB-13-25.5-26	DATE ANALYZED	: 07/01/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	3.9
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	88
BFB (%)	101
TOLUENE-D8 (%)	96

MCK0003161

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006400

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003162

Analytical Technologies, Inc. GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006400
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 06/28/90
PROJECT NAME	: McKESSON Sfes	DATE ANALYZED	: 07/04/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	TR<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1.1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	115
BFB (%)	115
TOLUENE-D8 (%)	107

T - Compound detected at an unquantifiable trace level

MCK0003163

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006400

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003164

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006400
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 06/27/90
PROJECT NAME	: McKESSON Sfes	DATE ANALYZED	: 07/05/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.6
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	78
BFB (%)	96
TOLUENE-D8 (%)	96

AnalyticalTechnologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006400

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

AnalyticalTechnologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006400
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 06/30/90
PROJECT NAME	: McKESSON Sfes	DATE ANALYZED	: 07/06/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.6
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	102
BFB (%)	96
TOLUENE-D8 (%)	100

MCK0003167

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006400

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003168

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

LIST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006400
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 06/30/90
PROJECT NAME	: McKESSON Sfes	DATE ANALYZED	: 07/06/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	97
BFB (%)	106
TOLUENE-D8 (%)	107

MCK0003169

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006400

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006400

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 06/30/90
DATE ANALYZED : 07/02/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<0.05	2.1	2.1	100	2.0	98	2
TRICHLOROETHENE	<0.05	2.9	3.0	105	3.1	109	3
CHLOROBENZENE	<0.05	2.6	2.8	106	2.9	109	4
TOLUENE	<0.1	2.6	2.8	106	3.0	113	7
BENZENE	<0.05	2.1	2.4	114	2.5	119	4

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003171

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006400

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 06/25/90
DATE ANALYZED : 07/05/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<0.05	2.1	1.7	81	2.0	95	16
TRICHLOROETHENE	<0.05	2.9	2.8	97	2.8	97	0
CHLOROBENZENE	<0.05	2.6	2.6	100	2.8	108	8
TOLUENE	<0.1	2.6	2.5	96	2.6	100	4
BENZENE	<0.05	2.4	1.9	79	2.0	83	5

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003172

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006400

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 06/30/90
DATE ANALYZED : 07/09/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<0.05	2.10	1.8	90	2.2	105	14
TRICHLOROETHENE	<0.05	2.85	2.8	98	2.9	102	4
CHLOROBENZENE	<0.05	2.65	2.8	106	2.8	106	0
TOLUENE	<0.1	2.65	2.7	102	2.7	102	0
BENZENE	<0.05	2.45	2.1	86	2.2	90	5

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003173

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640016

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/23/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: N/A
CLIENT I.D.	: MK-SW-01-62390	DATE ANALYZED	: 07/07/90
SAMPLE MATRIX	: WATER	UNITS	: UG/L
		DILUTION FACTOR	: 5

COMPOUNDS	RESULTS
CHLOROMETHANE	<50
BROMOMETHANE	<50
VINYL CHLORIDE	<5
CHLOROETHANE	<5
METHYLENE CHLORIDE	<25
ACETONE	<100
CARBON DISULFIDE	<5
1,1-DICHLOROETHENE	<5
1,1-DICHLOROETHANE	180
1,2-DICHLOROETHENE (TOTAL)	<5
CHLOROFORM	<5
1,2-DICHLOROETHANE	<5
2-BUTANONE (MEK)	<100
1,1,1-TRICHLOROETHANE	840
CARBON TETRACHLORIDE	<5
VINYL ACETATE	<50
BROMODICHLOROMETHANE	<5
1,1,2,2-TETRACHLOROETHANE	<5
1,2-DICHLOROPROPANE	<5
CIS-1,3-DICHLOROPROPENE	<5
TRICHLOROETHENE	<5
DIBROMOCHLOROMETHANE	<5
1,1,2 TRICHLOROETHANE	<5
BENZENE	<5
TRANS-1,3-DICHLOROPROPENE	<5
BROMOFORM	<25
2-HEXANONE (MBK)	<50
4-METHYL-2-PENTANONE (MIBK)	<50
TETRACHLOROETHENE	<5
TOLUENE	<10
CHLOROBENZENE	<5
ETHYL BENZENE	<5
STYRENE	<5
TOTAL XYLENES	<5

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	94
BFB (%)	109
TOLUENE-D8 (%)	105

MCK0003174

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640016

MATRIX : WATER

UNITS : UG/L

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003175

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640017

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/23/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: N/A
CLIENT I.D.	: MK-SW-02-62390	DATE ANALYZED	: 07/07/90
SAMPLE MATRIX	: WATER	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1
CHLOROETHANE	<1
METHYLENE CHLORIDE	<5
ACETONE	<20
CARBON DISULFIDE	<1
1,1-DICHLOROETHENE	<1
1,1-DICHLOROETHANE	34
1,2-DICHLOROETHENE (TOTAL)	<1
CHLOROFORM	<1
1,2-DICHLOROETHANE	<1
2-BUTANONE (MEK)	<20
1,1,1-TRICHLOROETHANE	61
CARBON TETRACHLORIDE	<1
VINYL ACETATE	<10
BROMODICHLOROMETHANE	<1
1,1,2,2-TETRACHLOROETHANE	<1
1,2-DICHLOROPROPANE	<1
CIS-1,3-DICHLOROPROPENE	<1
TRICHLOROETHENE	<1
DIBROMOCHLOROMETHANE	<1
1,1,2 TRICHLOROETHANE	<1
BENZENE	<1
TRANS-1,3-DICHLOROPROPENE	<1
BROMOFORM	<5
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	<1
TOLUENE	<2
CHLOROBENZENE	<1
ETHYL BENZENE	<1
STYRENE	<1
TOTAL XYLENES	<1

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	101
BFB (%)	103
TOLUENE-D8 (%)	104

MCK0003176

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00640017

MATRIX : WATER

UNITS : UG/L

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006400
PROJECT #	: 17333,157.11	DATE EXTRACTED	: N/A
PROJECT NAME	: McKESSON Sfes	DATE ANALYZED	: 07/06/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: UG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1
CHLOROETHANE	<1
METHYLENE CHLORIDE	TR<5
ACETONE	<20
CARBON DISULFIDE	<1
1,1-DICHLOROETHENE	<1
1,1-DICHLOROETHANE	<1
1,2-DICHLOROETHENE (TOTAL)	<1
CHLOROFORM	<1
1,2-DICHLOROETHANE	<1
2-BUTANONE (MEK)	<20
1,1,1-TRICHLOROETHANE	<1
CARBON TETRACHLORIDE	<1
VINYL ACETATE	<10
BROMODICHLOROMETHANE	<1
1,1,2,2-TETRACHLOROETHANE	<1
1,2-DICHLOROPROPANE	<1
CIS-1,3-DICHLOROPROPENE	<1
TRICHLOROETHENE	<1
DIBROMOCHLOROMETHANE	<1
1,1,2 TRICHLOROETHANE	<1
BENZENE	<1
TRANS-1,3-DICHLOROPROPENE	<1
BROMOFORM	<5
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	<1
TOLUENE	<2
CHLOROBENZENE	<1
ETHYL BENZENE	<1
STYRENE	<1
TOTAL XYLENES	<1

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	95
BFB (%)	106
TOLUENE-D8 (%)	107

MCK0003178

TR - Compound detected at an unquantifiable trace level

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN ATI I.D. : 006400

UNITS : UG/L

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006400
PROJECT #	: 17333,157.11	DATE EXTRACTED	: N/A
PROJECT NAME	: McKESSON Sfes	DATE ANALYZED	: 07/07/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: UG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1
CHLOROETHANE	<1
METHYLENE CHLORIDE	TR<5
ACETONE	<20
CARBON DISULFIDE	<1
1,1-DICHLOROETHENE	<1
1,1-DICHLOROETHANE	<1
1,2-DICHLOROETHENE (TOTAL)	<1
CHLOROFORM	<1
1,2-DICHLOROETHANE	<1
2-BUTANONE (MEK)	<20
1,1,1-TRICHLOROETHANE	<1
CARBON TETRACHLORIDE	<1
VINYL ACETATE	<10
BROMODICHLOROMETHANE	<1
1,1,2,2-TETRACHLOROETHANE	<1
1,2-DICHLOROPROPANE	<1
CIS-1,3-DICHLOROPROPENE	<1
TRICHLOROETHENE	<1
DIBROMOCHLOROMETHANE	<1
1,1,2 TRICHLOROETHANE	<1
BENZENE	<1
TRANS-1,3-DICHLOROPROPENE	<1
BROMOFORM	<5
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	<1
TOLUENE	<2
CHLOROBENZENE	<1
ETHYL BENZENE	<1
STYRENE	<1
TOTAL XYLENES	<1
SURROGATE PERCENT RECOVERIES	
1,2-DICHLOROETHANE-D4 (%)	96
BFB (%)	96
TOLUENE-D8 (%)	98

MCK0003180

TR - Compound detected at an unquantifiable trace level

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006400

UNITS : UG/L

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003181

AnalyticalTechnologies,Inc.

QUALITY CONTROL DATA

ATI I.D. : 006400

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes
REF I.D. : 00640017

DATE EXTRACTED : N/A
DATE ANALYZED : 07/09/90
SAMPLE MATRIX : WATER
UNITS : UG/L

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	4	42	46	100	45	98	2
TRICHLOROETHENE	<1	57	44	77	46	81	5
CHLOROBENZENE	<1	53	56	106	57	108	2
TOLUENE	6	53	55	92	57	96	4
BENZENE	<1	49	48	98	51	104	6

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003182

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640001

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/19/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-02-20.5-21	DATE ANALYZED	: 07/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
)NITROSO-DI-N-PROPYLAMINE	<0.17
HACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1.2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
NITROPHENOL	<0.85
BENZOFURAN	<0.17
,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003183

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640001

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	58
2-FLUOROBIPHENYL (%)	71
TERPHENYL (%)	65
PHENOL-D6 (%)	51
2-FLUOROPHENOL (%)	62
2,4,6-TRIBROMOPHENOL (%)	72

MCK0003184

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640001

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640002

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/19/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-02-41-41.5	DATE ANALYZED	: 07/10/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.85
BENZOIC ACID	<0.17
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.85
2,4,5-TRICHLOROPHENOL	<0.17
2-CHLORONAPHTHALENE	<0.85
2-NITROANILINE	<0.17
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.85
3-NITROANILINE	<0.17
ACENAPHTHENE	<0.85
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.17
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	

MCK0003186

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640002

ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
NZO(b)FLUORANTHENE	<0.17
NZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	69
2-FLUOROBIPHENYL (%)	71
TERPHENYL (%)	58
PHENOL-D6 (%)	42
2-FLUOROPHENOL (%)	59
2,4,6-TRIBROMOPHENOL (%)	73

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640002

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003188

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640003

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-12-20-20.5	DATE ANALYZED	: 07/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003189

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640003

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17
SURROGATE PERCENT RECOVERIES	
NITROBENZENE-D5 (%)	73
2-FLUOROBIPHENYL (%)	69
TERPHENYL (%)	61
PHENOL-D6 (%)	58
2-FLUOROPHENOL (%)	72
2,4,6-TRIBROMOPHENOL (%)	70

MCK0003190

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640003

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640004

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-12-30.5-31	DATE ANALYZED	: 07/10/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.85
2,4,5-TRICHLOROPHENOL	<0.17
2-CHLORONAPHTHALENE	<0.85
2-NITROANILINE	<0.17
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.85
3-NITROANILINE	<0.17
ACENAPHTHENE	<0.85
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.17
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	

MCK0003192

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640004

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	57
2-FLUOROBIPHENYL (%)	65
TERPHENYL (%)	56
PHENOL-D6 (%)	39
2-FLUOROPHENOL (%)	47
2,4,6-TRIBROMOPHENOL (%)	61

MCK0003193

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640004

UNITS : MG/KG

MATRIX : SOIL

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640005

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-12-41-41.5	DATE ANALYZED	: 07/10/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003195

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Analytical**Technologies**, Inc.

GCMS - RESULTS

ATI I.D. : 00640006

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/21/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-15-26-26.5	DATE ANALYZED	: 07/10/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003196

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Analytical Technologies, Inc. GCMS - RESULTS

ATI I.D. : 00640006

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	55
2-FLUOROBIPHENYL (%)	65
TERPHENYL (%)	52
PHENOL-D6 (%)	45
2-FLUOROPHENOL (%)	57
2,4,6-TRIBROMOPHENOL (%)	62

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640006

UNITS : MG/KG

MATRIX : SOIL

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003198

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640007

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/21/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-15-41-41.5	DATE ANALYZED	: 07/10/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
-NITROSO-DI-N-PROPYLAMINE	<0.17
XACHLOROETHANE	<0.17
TROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
-NITROPHENOL	<0.85
BENZOFURAN	<0.17
4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003199

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640008

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/21/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-14-26-26.5	DATE ANALYZED	: 07/10/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.85
2,4,5-TRICHLOROPHENOL	<0.17
2-CHLORONAPHTHALENE	<0.85
2-NITROANILINE	<0.17
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.85
3-NITROANILINE	<0.17
ACENAPHTHENE	<0.85
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.17
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	

MCK0003200

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640008

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	47
2-FLUOROBIPHENYL (%)	65
TERPHENYL (%)	57
PHENOL-D6 (%)	45
2-FLUOROPHENOL (%)	61
2,4,6-TRIBROMOPHENOL (%)	87

MCK0003201

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640008

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003202

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640009

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/21/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-14-41-41.5	DATE ANALYZED	: 07/10/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
NITROSO-DI-N-PROPYLAMINE	<0.17
XACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
*-NITROPHENOL	<0.85
BENZOFURAN	<0.17
,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003203

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640009

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17
SURROGATE PERCENT RECOVERIES	
NITROBENZENE-D5 (%)	57
2-FLUOROBIPHENYL (%)	67
TERPHENYL (%)	54
PHENOL-D6 (%)	46
2-FLUOROPHENOL (%)	59
2,4,6-TRIBROMOPHENOL (%)	72

MCK0003204

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640010

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/22/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-11-26-26.5	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.85
BENZOIC ACID	<0.17
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.85
2,4,5-TRICHLOROPHENOL	<0.17
2-CHLORONAPHTHALENE	<0.85
2-NITROANILINE	<0.17
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.85
3-NITROANILINE	<0.17
ACENAPHTHENE	<0.85
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.17
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	

MCK0003205

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Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640009

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003206

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640010

--ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
NZO(k)FLUORANTHENE	<0.17
NZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17
SURROGATE PERCENT RECOVERIES	
NITROBENZENE-D5 (%)	53
2-FLUOROBIPHENYL (%)	70
TERPHENYL (%)	69
PHENOL-D6 (%)	45
2-FLUOROPHENOL (%)	53
2,4,6-TRIBROMOPHENOL (%)	65

MCK0003207

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640010

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003208

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640011

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640012

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/22/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-10-30.5-31	DATE ANALYZED	: 07/10/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003210

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640012

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	65
2-FLUOROBIPHENYL (%)	78
TERPHENYL (%)	65
PHENOL-D6 (%)	44
2-FLUOROPHENOL (%)	53
2,4,6-TRIBROMOPHENOL (%)	68

MCK0003211

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640012

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003212

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640013

LIST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/22/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-10-46-46.5	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003213

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640013

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17
SURROGATE PERCENT RECOVERIES	
NITROBENZENE-D5 (%)	62
2-FLUOROBIPHENYL (%)	73
TERPHENYL (%)	64
PHENOL-D6 (%)	52
2-FLUOROPHENOL (%)	61
2,4,6-TRIBROMOPHENOL (%)	74

MCK0003214

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640013

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640014

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-13-25.5-26	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003216

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Analytical Technologies, Inc. GCMS - RESULTS

ATI I.D. : 00640014

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
NZO(k)FLUORANTHENE	<0.17
NZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	78
2-FLUOROBIPHENYL (%)	87
TERPHENYL (%)	72
PHENOL-D6 (%)	57
2-FLUOROPHENOL (%)	60
2,4,6-TRIBROMOPHENOL (%)	65

MCK0003217

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640014

UNITS : MG/KG

MATRIX : SOIL

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640015

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/20/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-13-41-41.5	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
[illegible]-METHYLPHENOL	<0.17
[illegible]NITROSO-DI-N-PROPYLAMINE	<0.17
[illegible]EXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
[illegible]-NITROPHENOL	<0.85
[illegible]IBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003219

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640015

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	68
2-FLUOROBIPHENYL (%)	78
TERPHENYL (%)	68
PHENOL-D6 (%)	52
2-FLUOROPHENOL (%)	46
2,4,6-TRIBROMOPHENOL (%)	61

MCK0003220

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640015

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
815 BUTYL CARBITOL	1
850 PHENOXY ETHANOL	0.6

AnalyticalTechnologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006400
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/02/90
PROJECT NAME	: McKESSON Sfes	DATE ANALYZED	: 07/09/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.85
2,4,5-TRICHLOROPHENOL	<0.17
2-CHLORONAPHTHALENE	<0.85
2-NITROANILINE	<0.17
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.85
3-NITROANILINE	<0.17
ACENAPHTHENE	<0.85
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.17
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17
4-CHLOROPHENYL PHENYL ETHER	

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Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ATI I.D. : 006400

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
NZO(b)FLUORANTHENE	<0.17
NZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	54
2-FLUOROBIPHENYL (%)	59
TERPHENYL (%)	55
PHENOL-D6 (%)	43
2-FLUOROPHENOL (%)	55
2,4,6-TRIBROMOPHENOL (%)	56

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Analytical Technologies, Inc.

GCMS - RESULTS

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ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006400

UNITS : MG/KG

COMPOUNDS	RESULTS
447 ALIPHATIC HYDROCARBON C8	0.8
1631 ALIPHATIC HYDROCARBON C20	0.2

MCK0003224

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 006400

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes
REF I.D. : 00640003

DATE EXTRACTED : 07/02/90
DATE ANALYZED : 07/09/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<0.17	3.3	2.2	68	2.5	74	8
ACENAPHTHENE	<0.17	3.3	2.1	63	2.3	70	10
2,4-DINITROTOLUENE	<0.17	3.3	2.6	78	2.9	87	11
PYRENE	<0.17	3.3	2.7	81	2.6	78	4
N-NITROSO-DI-N-PROPYLAMINE	<0.17	3.3	2.0	60	2.2	68	12
1,4-DICHLOROBENZENE	<0.17	3.3	1.8	55	2.1	63	14
PENTACHLOROPHENOL	<0.85	13.2	9.0	68	10.7	81	17
PHENOL	<0.17	6.6	3.8	57	4.9	74	26
2-CHLOROPHENOL	<0.17	6.6	4.7	72	5.5	84	15
4-CHLORO-3-METHYLPHENOL	<0.17	6.6	4.4	67	5.5	84	22
4-NITROPHENOL	<0.85	13.2	12.3	93	13.0	98	5

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003225

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006400

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes
REF I.D. : 00640309

DATE EXTRACTED : 07/02/90
DATE ANALYZED : 07/18/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<0.17	3.3	3.5	106	3.1	94	12
ACENAPHTHENE	0.38	3.3	2.2	67	2.3	70	4
2,4-DINITROTOLUENE	<0.17	3.3	2.1	64	1.6	49	27
PYRENE	<0.17	3.3	2.8	85	2.9	88	3
N-NITROSO-DI-N-PROPYLAMINE	<0.17	3.3	2.9	88	3.2	97	10
1,4-DICHLOROBENZENE	<0.17	3.3	2.6	79	2.8	85	7
PENTACHLOROPHENOL	<0.85	13.2	15.3	116	13.0	98	17
PHENOL	<0.17	6.6	5.2	79	6.5	98	21
2-CHLOROPHENOL	<0.17	6.6	6.9	104	4.9	74	33
4-CHLORO-3-METHYLPHENOL	<0.17	6.6	4.4	67	3.8	58	14
4-NITROPHENOL	<0.85	13.2	11.3	86	8.9	72	18

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640016

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/23/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/27/90
CLIENT I.D.	: MK-SW-01-62390	DATE ANALYZED	: 07/07/90
SAMPLE MATRIX	: WATER	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<10
PHENOL	65
ANILINE	<10
BIS(2-CHLOROETHYL)ETHER	<10
2-CHLOROPHENOL	<10
1,3-DICHLOROBENZENE	<10
1,4-DICHLOROBENZENE	<10
BENZYL ALCOHOL	TR<10
1,2-DICHLOROBENZENE	<10
2-METHYLPHENOL	<10
BIS(2-CHLOROISOPROPYL)ETHER	<10
4-METHYLPHENOL	27
·NITROSO-DI-N-PROPYLAMINE	<10
.XACHLOROETHANE	<10
.ITROBENZENE	<10
ISOPHORONE	<10
2-NITROPHENOL	<10
2,4-DIMETHYLPHENOL	<10
BENZOIC ACID	<50
BIS(2-CHLOROETHOXY)METHANE	<10
2,4-DICHLOROPHENOL	<10
1,2,4-TRICHLOROBENZENE	<10
NAPHTHALENE	<10
4-CHLOROANILINE	<10
HEXACHLOROBUTADIENE	<10
4-CHLORO-3-METHYLPHENOL	<10
2-METHYLNAPHTHALENE	<10
HEXACHLOROCYCLOPENTADIENE	<10
2,4,6-TRICHLOROPHENOL	<10
2,4,5-TRICHLOROPHENOL	<50
2-CHLORONAPHTHALENE	<10
2-NITROANILINE	<50
DIMETHYL PHTHALATE	<10
ACENAPHTHYLENE	<10
3-NITROANILINE	<50
ACENAPHTHENE	<10
2,4-DINITROPHENOL	<50
'-NITROPHENOL	<50
.BENZOFURAN	<10
,4-DINITROTOLUENE	<10
2,6-DINITROTOLUENE	<10
DIETHYL PHTHALATE	<10

MCK0003227

TR - Compound detected at an unquantifiable trace level

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640016

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<10
FLUORENE	<10
4-NITROANILINE	<50
4,6-DINITRO-2-METHYLPHENOL	<50
N-NITROSODIPHENYLAMINE	<10
4-BROMOPHENYL PHENYL ETHER	<10
HEXACHLOROBENZENE	<10
PENTACHLOROPHENOL	<50
PHENANTHRENE	<10
ANTHRACENE	<10
DI-N-BUTYL PHTHALATE	<10
FLUORANTHENE	<10
BENZIDINE	<100
PYRENE	<10
BUTYLBENZYLPHTHALATE	<10
3,3-DICHLOROBENZIDINE	<20
BENZO(a)ANTHRACENE	<10
BIS(2-ETHYLHEXYL)PHTHALATE	<10
CHRYSENE	<10
DI-N-OCTYL PHTHALATE	<10
BENZO(b)FLUORANTHENE	<10
BENZO(k)FLUORANTHENE	<10
BENZO(a)PYRENE	<10
INDENO(1,2,3-cd)PYRENE	<10
DIBENZO(a,h)ANTHRACENE	<10
BENZO(g,h,i)PERYLENE	<10

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	71
2-FLUOROBIPHENYL (%)	81
TERPHENYL (%)	60
PHENOL-D6 (%)	80
2-FLUOROPHENOL (%)	76
2,4,6-TRIBROMOPHENOL (%)	108

MCK0003228

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640016

MATRIX : WATER

UNITS : UG/L

COMPOUNDS	RESULTS
847 METHYLETHYLPHENOL	40
1200 ALIPHATIC HYDROCARBON C15	70
1355 BRANCHED PHENOL	70
2246 ALIPHATIC HYDROCARBON C25	70
1258 TETRAMETHYLBUTYL PHENOL	70
500-2500 TOTAL EXTRACTABLE HYDROCARBONS C8-C28+	3000

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640017

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/23/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/25/90
PROJECT NAME	: McKESSON Sfes	DATE EXTRACTED	: 06/27/90
CLIENT I.D.	: MK-SW-02-62390	DATE ANALYZED	: 07/07/90
SAMPLE MATRIX	: WATER	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<10
PHENOL	<10
ANILINE	<10
BIS(2-CHLOROETHYL)ETHER	<10
2-CHLOROPHENOL	<10
1,3-DICHLOROBENZENE	<10
1,4-DICHLOROBENZENE	<10
BENZYL ALCOHOL	<10
1,2-DICHLOROBENZENE	<10
2-METHYLPHENOL	<10
BIS(2-CHLOROISOPROPYL)ETHER	<10
4-METHYLPHENOL	<10
N-NITROSO-DI-N-PROPYLAMINE	<10
HEXACHLOROETHANE	<10
NITROBENZENE	<10
ISOPHORONE	<10
2-NITROPHENOL	<10
2,4-DIMETHYLPHENOL	<10
BENZOIC ACID	<50
BIS(2-CHLOROETHOXY)METHANE	<10
2,4-DICHLOROPHENOL	<10
1,2,4-TRICHLOROBENZENE	<10
NAPHTHALENE	<10
4-CHLOROANILINE	<10
HEXACHLOROBUTADIENE	<10
4-CHLORO-3-METHYLPHENOL	<10
2-METHYLNAPHTHALENE	<10
HEXACHLOROCYCLOPENTADIENE	<10
2,4,6-TRICHLOROPHENOL	<10
2,4,5-TRICHLOROPHENOL	<50
2-CHLORONAPHTHALENE	<10
2-NITROANILINE	<50
DIMETHYL PHTHALATE	<10
ACENAPHTHYLENE	<10
3-NITROANILINE	<50
ACENAPHTHENE	<10
2,4-DINITROPHENOL	<50
4-NITROPHENOL	<50
DIBENZOFURAN	<10
2,4-DINITROTOLUENE	<10
2,6-DINITROTOLUENE	<10
DIETHYL PHTHALATE	<10

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AnalyticalTechnologies, Inc.

GCMS - RESULTS

ATI I.D. : 00640017

ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<10
FLUORENE	<10
4-NITROANILINE	<50
4,6-DINITRO-2-METHYLPHENOL	<50
N-NITROSODIPHENYLAMINE	<10
4-BROMOPHENYL PHENYL ETHER	<10
HEXACHLOROBENZENE	<10
PENTACHLOROPHENOL	<50
PHENANTHRENE	<10
ANTHRACENE	<10
DI-N-BUTYL PHTHALATE	<10
FLUORANTHENE	<10
BENZIDINE	<100
PYRENE	<10
BUTYLBENZYLPHTHALATE	<10
3,3-DICHLOROBENZIDINE	<20
BENZO(a)ANTHRACENE	<10
BIS(2-ETHYLHEXYL)PHTHALATE	<10
CHRYSENE	<10
DI-N-OCTYL PHTHALATE	<10
BENZO(b)FLUORANTHENE	<10
BENZO(k)FLUORANTHENE	<10
BENZO(a)PYRENE	<10
INDENO(1,2,3-cd)PYRENE	<10
DIBENZO(a,h)ANTHRACENE	<10
BENZO(g,h,i)PERYLENE	<10

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	81
2-FLUOROBIPHENYL (%)	93
TERPHENYL (%)	46
PHENOL-D6 (%)	63
2-FLUOROPHENOL (%)	68
2,4,6-TRIBROMOPHENOL (%)	113

MCK0003231

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00640017

MATRIX : WATER

UNITS : UG/L

COMPOUNDS	RESULTS
1000-2500 TOTAL EXTRACTABLE HYDROCARBONS C13-C28	2000

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Analytical Technologies, Inc. GCMS - RESULTS

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ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN ATI I.D. : 006400

UNITS : UG/L

COMPOUNDS	RESULTS
793 ALIPHATIC HYDROCARBON C11	80
865 ALIPHATIC HYDROCARBON C12	50
884 ALIPHATIC HYDROCARBON C12	70
942 ALIPHATIC HYDROCARBON C13	200
1210 ALIPHATIC HYDROCARBON C15	40

MCK0003233

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006400

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON Sfes
REF I.D. : REAGENT WATER

DATE EXTRACTED : 06/27/90
DATE ANALYZED : 07/05/90
SAMPLE MATRIX : SOIL
UNITS : UG/L

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<10	100	59	59	57	57	3
ACENAPHTHENE	<10	100	58	58	61	61	5
2,4-DINITROTOLUENE	<10	100	54	54	56	56	4
PYRENE	<10	100	71	71	69	69	3
N-NITROSO-DI-N-PROPYLAMINE	<10	100	38	38	39	39	3
1,4-DICHLOROBENZENE	<10	100	47	47	46	46	2
PENTACHLOROPHENOL	<50	400	214	54	210	52	4
PHENOL	<10	200	91	46	63	32	34
2-CHLOROPHENOL	<10	200	109	55	76	38	37
4-CHLORO-3-METHYLPHENOL	<10	200	121	61	92	46	28
4-NITROPHENOL	<50	400	245	61	271	68	11

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003234

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006400
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 06/27/90
PROJECT NAME	: McKESSON Sfes	DATE ANALYZED	: 07/04/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: UG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<10
PHENOL	<10
ANILINE	<10
BIS(2-CHLOROETHYL)ETHER	<10
2-CHLOROPHENOL	<10
1,3-DICHLOROBENZENE	<10
1,4-DICHLOROBENZENE	<10
BENZYL ALCOHOL	<10
1,2-DICHLOROBENZENE	<10
2-METHYLPHENOL	<10
BIS(2-CHLOROISOPROPYL)ETHER	<10
4-METHYLPHENOL	<10
N-NITROSO-DI-N-PROPYLAMINE	<10
HEXACHLOROETHANE	<10
NITROBENZENE	<10
OPHORONE	<10
-NITROPHENOL	<10
2,4-DIMETHYLPHENOL	<10
BENZOIC ACID	<50
BIS(2-CHLOROETHOXY)METHANE	<10
2,4-DICHLOROPHENOL	<10
1,2,4-TRICHLOROBENZENE	<10
NAPHTHALENE	<10
4-CHLOROANILINE	<10
HEXACHLOROBUTADIENE	<10
4-CHLORO-3-METHYLPHENOL	<10
2-METHYLNAPHTHALENE	<10
HEXACHLOROCYCLOPENTADIENE	<10
2,4,6-TRICHLOROPHENOL	<10
2,4,5-TRICHLOROPHENOL	<50
2-CHLORONAPHTHALENE	<10
2-NITROANILINE	<50
DIMETHYL PHTHALATE	<10
ACENAPHTHYLENE	<10
3-NITROANILINE	<50
ACENAPHTHENE	<10
2,4-DINITROPHENOL	<50
4-NITROPHENOL	<50
DIBENZOFURAN	<10
2,4-DINITROTOLUENE	<10
6-DINITROTOLUENE	<10
ETHYL PHTHALATE	<10
4-CHLOROPHENYL PHENYL ETHER	<10

MCK0003235

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Analytical Technologies, Inc.

GCMS - RESULTS

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ATI I.D. : 006400

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<10
4-NITROANILINE	<50
4,6-DINITRO-2-METHYLPHENOL	<50
N-NITROSODIPHENYLAMINE	<10
4-BROMOPHENYL PHENYL ETHER	<10
HEXACHLOROBENZENE	<10
PENTACHLOROPHENOL	<50
PHENANTHRENE	<10
ANTHRACENE	<10
DI-N-BUTYL PHTHALATE	<10
FLUORANTHENE	<10
BENZIDINE	<100
PYRENE	<10
BUTYLBENZYLPHTHALATE	<10
3,3-DICHLOROBENZIDINE	<20
BENZO(a)ANTHRACENE	<10
BIS(2-ETHYLHEXYL)PHTHALATE	<10
CHRYSENE	<10
DI-N-OCTYL PHTHALATE	<10
BENZO(b)FLUORANTHENE	<10
BENZO(k)FLUORANTHENE	<10
BENZO(a)PYRENE	<10
INDENO(1,2,3-cd)PYRENE	<10
DIBENZO(a,h)ANTHRACENE	<10
BENZO(g,h,i)PERYLENE	<10

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	73
2-FLUOROBIPHENYL (%)	70
TERPHENYL (%)	55
PHENOL-D6 (%)	5*
2-FLUOROPHENOL (%)	49
2,4,6-TRIBROMOPHENOL (%)	86

* Result out of limits due to sample matrix interference

MCK0003236

Lawson Associates
Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

006400

CHAIN OF CUSTODY FORM

Page 1 of 3

Lab: SATI

Samplers: D. Johnson

Job Number: 17333.157.11

Name/Location: Mckesson Sfes

Project Manager: B. Chadwick

Recorder: (Signature Required)

	SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES
01	48		X			X						90	06	19	PM	MK-SB-02-205-21
02												90	06	19	PM	MK-SB-02-41-41.5
03												90	06	20	AM	MK-SB-12-20-20.5
04												90	06	20	AM	MK-SB-12-30.5-31
05												90	06	20	AM	MK-SB-12-41-41.5
14												90	06	20	PM	MK-SB-13-25.5-26
15												90	06	20	PM	MK-SB-13-41-41.5
06												90	06	21	AM	MK-SB-15-26-26.5
07												90	06	21	AM	MK-SB-15-41-41.5
08												90	06	21	PM	MK-SB-14-26-26.5

ANALYSIS REQUESTED

EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH	Volatile Organics by 8240	Extractable Organics by 8270	Pesticides/PCBs by 8080	418.1 Hydrocarbons	PH - 9045 Method	Lead (Pb) by 7421	Chloride, Sulfate, Nitrate by Method 300.0
	X	X			X				X			
	X	X			X				X			
	X	X			X				X			
	X	X			X				X			
	X	X			X				X			
	X	X			X				X			
	X	X			X				X			
	X	X			X				X			
	X	X			X				X			
	X	X			X				X			

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
	MCK	003237				NOTE: MK-SB-02, MK-SB-12, MK-SB-13 = RUSH TO MEET HOLDING TIMES i.e. MK-SB-15 MK-SB-14 Rush if necessary Call B. Chadwick for specifics to meet holding times

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature) Bob DeBry	DATE/TIME 6/23/95 10:05
RELINQUISHED BY: (Signature) Bob DeBry	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME 6/23/95

METHOD OF SHIPMENT: Courier

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6523

Harding Lawson Associates
15821 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy 714/259-1378

CHAIN OF CUSTODY FORM

Lab: ATT

006400

Job Number: 17333,157.11

Name/Location: McKesson Sites

Project Manager: B. Chadwick

Samplers: D Johnson

Recorder: (Signature Required)

	SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES
09	SB			X		X						90	06	21	PM	MK-SB-14-41-41.5
10												90	06	22	AM	MK-SB-11-26-26.5
11												90	06	22	AM	MK-SB-11-41-41.5
12												90	06	22	AM	MK-SB-10-30.5-31
13												90	06	22	PM	MK-SB-10-46-46.5
												90	06	PK		

ANALYSIS REQUESTED

EPA 601/8010	EPA 602/8020	EPA 624/8240 Volatiles	EPA 625/8270 Extract	ICP METALS	EPA 8015M/TPH	8015-Gl/Gas Benzene, Tol, Xyl	418.1 Hydrocarbons	pH 9045 Method	Lead Cd, Cr, Ni, Zn	Kfe Mn	By Method 3010	
	X	X		X		X	X	X	X	X	X	RU
	X	X		X		X	X	X	X	X	X	
	X	X		X		X	X	X	X	X	X	
	X	X		X		X	X	X	X	X	X	
	X	X		X		X	X	X	X	X	X	

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK000323				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature) Bob DeBy	DATE/TIME 6/25/90 1700
RELINQUISHED BY: (Signature) Bob DeBy	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature) Jamie Kado	DATE/TIME 6/25/90 1745
METHOD OF SHIPMENT Courier		

Laboratory Copy Project Office Copy Field Copy

HLA
Hardin... ...son Associates
15621 Re... Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

006400

CHAIN OF CUS..DY FORM

Lab: ATI

Samplers: D Johnson

Job Number: 17333, 157'"

Name/Location: Mckesson Ste S

Project Manager: B Chadwick

Recorder: Burton Chadwick (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH
17	X				X			X				90	06	23	Am	MK-SW-01-62390			X	X		
17	X				X			X				90	06	23	Am	MK-SW-02-62390			X	X		

(2-40 ml/VOAs & 2-1 l glass jar per sample)

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS

MCK0003239

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
Burton Chadwick	Bob DeBoy	6/25/90 10:05
Bob DeBoy		

DISPATCHED BY: (Signature) DATE/TIME

RECEIVED FOR LAB BY: (Signature) Lorrie Lardo 6/25/90 1145 DATE/TIME

METHOD OF SHIPMENT Courier

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

Analytical Technologies, Inc.

ATI I.D. 007029

July 27, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite #100
Tustin, California 92680

Project Name: McKesson Santa Fe Springs

Project No.: 17333,157.11

Attention: Burton Chadwick

On July 3, 1990, Analytical Technologies, Inc. received two soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

Timothy J. Fitzpatrick
Inorganics Supervisor

Richard M. Amano
Laboratory Manager

TJF:hm

Analytical Technologies, Inc.

ATI I.D. 007029

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SANTA FE SPRINGS

PROJECT NO.: 17333,157.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
CHLORIDE	COLORIMETRIC	EPA 325.2
FLUORIDE	ELECTRODE	EPA 340.2
NITRATE AS NITROGEN	COLORIMETRIC	EPA 353.1
pH	ELECTRODE	EPA 9045
SULFATE	COLORIMETRIC	EPA 9036
IRON	ICAP	EPA 6010
MANGANESE	ICAP	EPA 6010
POTASSIUM	ICAP	EPA 6010
SODIUM	ICAP	EPA 6010
ZINC	ICAP	EPA 6010

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
ATI I.D. : 007029

DATE RECEIVED : 07/03/90
REPORT DATE : 07/27/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-SB-16-6'	SOIL	07/02/90
02	MK-SB-16-21'	SOIL	07/02/90

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	2

MCK0003242

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 007029

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/03/90
REPORT DATE : 07/27/90

PARAMETER	UNITS	01	02
CHLORIDE	MG/KG	<5	<5
FLUORIDE	MG/KG	<5	<5
NITRATE AS NITROGEN	MG/KG	3.0	0.6
PH	UNITS	4.2	6.3
SULFATE	MG/KG	5620	239

MCK0003243

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007029

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CHLORIDE	MG/KG	00706204	<5	<5	0	739	667	111
FLUORIDE	MG/KG	00646606	<5	<5	0	37	48	77
NITRATE AS NITROGEN	MG/KG	00704202	0.7	0.7	0	6.8	6.0	102
PH	UNITS	00702902	6.3	6.4	1	N/A	N/A	N/A
SULFATE	MG/KG	00718501	57.0	42.0	30	246	20	98

MCK0003244

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 007029

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/03/90
REPORT DATE : 07/27/90

PARAMETER	UNITS	01	02
IRON	MG/KG	10360	24620
POTASSIUM	MG/KG	999	3060
MANGANESE	MG/KG	622	233
SODIUM	MG/KG	154	268
ZINC	MG/KG	36.9	87.8

AnalyticalTechnologies, Inc. Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

3.4.1

ATI I.D. 006466

July 27, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680

Project Name: McKesson Santa Fe Springs

Project No.: 17333-157.11

Attention: Burton Chadwick

On June 27, 1990, Analytical Technologies, Inc. received six soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

Timothy J. Fitzpatrick
Inorganics Supervisor

Richard M. Amano
Laboratory Manager

TJF:bc

Analytical Technologies, Inc.

ATI I.D. 006466

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SANTA FE SPRINGS

PROJECT NO.: 17333,157.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
CHLORIDE	COLORIMETRIC	EPA 325.2
FLUORIDE	ELECTRODE	EPA 340.2
NITRATE AS NITROGEN	COLORIMETRIC	EPA 353.1
PETROLEUM HYDROCARBONS	IR	EPA 418.1 (MODIFIED)
pH	ELECTRODE	EPA 9045
SULFATE	COLORIMETRIC	EPA 9036
IRON	ICAP	EPA 6010
MANGANESE	ICAP	EPA 6010
POTASSIUM	ICAP	EPA 6010
SODIUM	ICAP	EPA 6010
ZINC	ICAP	EPA 6010
GLYCOLS	GC/FID	EPA 8015 (MODIFIED)
VOLATILE ORGANICS	GC/MS	EPA 8240
SEMI-VOLATILE ORGANICS (BNA)	GC/MS	EPA 8270

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : [illegible]
PROJECT NAME : McKESSON SANTA FE SPRINGS
ATI I.D. : 006466

DATE RECEIVED : 06/27/[illegible]
REPORT DATE : 07/27/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	[illegible]	SOIL	06/26/90
02	[illegible]	SOIL	06/26/90
03	[illegible]	SOIL	06/26/90
04	[illegible]	SOIL	06/26/90
05	[illegible]	SOIL	06/27/90
06	[illegible]	SOIL	06/27/90

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	6

MCK0003248

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

AnalyticalTechnologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 006466

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : [illegible]
PROJECT NAME : MCKESSON SANTA FE SPRINGS

DATE RECEIVED : 06/27/90
REPORT DATE : 07/27/90

PARAMETER	UNITS	01	02	03	04	05
CHLORIDE	MG/KG	51.2	<5	73.9	52.2	94.9
FLUORIDE	MG/KG	<5	8	<5	<5	<5
NITRATE AS NITROGEN	MG/KG	0.7	0.3	0.8	0.5	0.7
PETROLEUM HYDROCARBONS, IR	MG/KG	<1	<1	<1	<1	2
PH	UNITS	8.2	8.2	7.7	7.9	8.0
SULFATE	MG/KG	<100	<100	<100	<100	<100

MCK0003249

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 006466

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : [illegible]
PROJECT NAME : MCKESSON SANTA FE SPRINGS

DATE RECEIVED : 06/27/90
REPORT DATE : 07/27/90

PARAMETER	UNITS	05
CHLORIDE	MG/KG	84.8
FLUORIDE	MG/KG	<8
NITRATE AS [illegible]	MG/KG	0.8
PETROLEUM HYDROCARBONS, IR	MG/KG	<1
PH	UNITS	7.6
SULFATE	MG/KG	<100

MCK0003250

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : [illegible] LAWSON ASSOC.-TUSTIN
PROJECT # : [illegible]
PROJECT NAME : [illegible] SANTA FE SPRINGS ATI I.D. : 006466

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CHLORIDE	MG/KG	00650701	1390	1350	3	**	**	**
FLUORIDE	MG/KG	00646606	<5	<5	0	37	48	77
NITRATE AS NITROGEN	MG/KG	00646605	0.7	0.6	15	7.7	5.0	118
NITRATE AS NITROGEN	MG/KG	00652402	0.5	0.6	18	6.5	6.0	99
PETROLEUM HYDROCARBONS	MG/KG	00646606	<1	<1	0	12	10	120
PH	UNITS	00646606	7.6	7.7	1	N/A	N/A	N/A
SULFATE	MG/KG	00640009	<100	<100	0	239	200	120
SULFATE	MG/KG	00646605	<100	<100	0	275	200	137

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

** Due to the necessary dilution of the sample, result was not attainable

MCK0003251

AnalyticalTechnologies,Inc.

METALS RESULTS

ATI I.D. : 006466

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 06/27/90
REPORT DATE : 07/27/90

PARAMETER	UNITS	01	02	03	04	05
IRON	MG/KG	24220	22300	24740	32070	33240
POTASSIUM	MG/KG	4390	4180	4780	2190	4450
MANGANESE	MG/KG	606	312	488	651	457
SODIUM	MG/KG	350	278	374	329	408
ZINC	MG/KG	68.4	50.0	62.1	61.2	61.2

MCK0003252

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 006466

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17000.107.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 06/27/90
REPORT DATE : 07/27/90

PARAMETER	UNITS	06
IRON	MG/KG	18200
POTASSIUM	MG/KG	2750
MANGANESE	MG/KG	350
SODIUM	MG/KG	250
ZINC	MG/KG	40.4

MCK0003253

Analytical Technologies, Inc.

METALS - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17833.107.11
PROJECT NAME : MCKESSON SANTA FE SPRINGS ATI I.D. : 006466

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
IRON	MG/KG	00646606	18200	19000	4	**	**	**
POTASSIUM	MG/KG	00646605	2750	2810	2	**	**	**
MANGANESE	MG/KG	00646606	362	349	4	463	99.8	100
SODIUM	MG/KG	00646606	260	259	0	851	624	95
ZINC	MG/KG	00646606	40.4	41.4	2	88.0	49.9	95

MCK0003254

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

** Due to the necessary dilution of the sample, result was not attainable

Analytical**Technologies,** Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 9064660i

TEST : [illegible]

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/26/90
PROJECT #	: [illegible]	DATE RECEIVED	: 06/27/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MW-SP-10-25'	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE [illegible]	<2.0
DIETHYLENE [illegible]	<2.0
PROPYLENE [illegible]	<2.0
HEXYLENE [illegible]	<2.0

MCK0003255

Analytical**Technologies**, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00646602

TEST : [illegible]

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/26/90
PROJECT #	: [illegible]	DATE RECEIVED	: 06/27/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: [illegible]	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003256

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00646603

TEST : [illegible]

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/26/90
PROJECT #	: [illegible]	DATE RECEIVED	: 06/27/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 06/30/90
CLIENT I.D.	: MK-SB-3-[illegible]	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE [illegible]	<2.0
DIETHYLENE [illegible]	<2.0
PROPYLENE [illegible]	<2.0
HEXYLENE [illegible]	<2.0

MCK0003257

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 0064660I

TEST : EPA [illegible] 8C MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/26/90
PROJECT #	: [illegible]	DATE RECEIVED	: 06/27/90
PROJECT NAME	: MCNEBBON SANTA FE SPRINGS	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: [illegible]	DATE ANALYZED	: 07/07/90
SAMPLE MATRIX	: [illegible]	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

MCK0003258

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	88
BFB (%)	99
TOLUENE-D8 (%)	101

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA [illegible] TO ME FOR VOLATILE ORGANICS)

ATI I.D. : 00646601

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003259

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646602

TEST : EPA [illegible] 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/26/90
PROJECT #	: 17000.157.11	DATE RECEIVED	: 06/27/90
PROJECT NAME	: MCKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MW-33-18-41'	DATE ANALYZED	: 07/07/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

MCK0003260

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	84
BFB (%)	91
TOLUENE-D8 (%)	98

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA [illegible] GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00546602

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003261

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646603

TEST : EPA [illegible] (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/26/90
PROJECT #	: [illegible]	DATE RECEIVED	: 06/27/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MW-SB-04-26'	DATE ANALYZED	: 07/07/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	85
BFB (%)	92
TOLUENE-D8 (%)	97

MCK0003262

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646605

TEST [illegible] : GC/MS FOR VOLATILE ORGANICS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/27/90
PROJECT #	: [illegible].167.11	DATE RECEIVED	: 06/27/90
PROJECT NAME	: MCCESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/02/90
CLIENT ID.	: SB-[illegible]	DATE ANALYZED	: 07/07/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUND	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	0.1
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	85
BFB (%)	85
TOLUENE-D[illegible] (%)	92

MCK0003264

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 SCAN FOR VOLATILE ORGANICS)

ATI I.D. : 0064660

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003263

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00646605

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003265

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646606

TEST : EPA 8240 GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/27/90
PROJECT #	: 17033.157.11	DATE RECEIVED	: 06/27/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/02/90
CLIENT I.D.	: MK-SB-05-40.5'	DATE ANALYZED	: 07/07/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

MCK0003266

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	85
BFB (%)	93
TOLUENE-D8 %	97

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

T : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00646606

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003267

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646601

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	58
2-FLUOROBIPHENYL (%)	75
TERPHENYL (%)	50
PHENOL-D6 (%)	60
2-FLUOROPHENOL (%)	63
2,4,6-TRIBROMOPHENOL (%)	56

MCK0003268

AnalyticalTechnologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

T : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 0064601

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
2018 ALIPHATIC HYDROCARBON C23	0.2
2074 ALIPHATIC HYDROCARBON C24	0.2
2181 ALIPHATIC HYDROCARBON C25	0.2

MCK0003269

AnalyticalTechnologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00646602

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
2129 ALIPHATIC HYDROCARBON	0.2

MCK0003270

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646603

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/26/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/27/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 06/29/90
CLIENT I.D.	: MK-SB-04-26'	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
F (2-CHLOROISOPROPYL)ETHER	<0.17
ETHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
-DINITROPHENOL	<0.85
ITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003271

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646603

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL) PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	47
2-FLUOROBIPHENYL (%)	59
TERPHENYL (%)	42
PHENOL-D6 (%)	43
2-FLUOROPHENOL (%)	56
2,4,6-TRIBROMOPHENOL (%)	57

MCK0003272

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

T. . : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00646603

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
589 DIPROPYLENE GLYCOL-METHYL ETHER	0.3
816 CYCLIC HYDROCARBON C11	2
905 ALIPHATIC HYDROCARBON C12	0.2
941 CYCLIC HYDROCARBON	0.7
1102 ALIPHATIC HYDROCARBON	0.2

MCK0003273

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646604

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/26/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/27/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 06/29/90
CLIENT I.D.	: MK-SB-04-46'	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003274

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646604

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	48
2-FLUOROBIPHENYL (%)	59
TERPHENYL (%)	46
PHENOL-D6 (%)	45
2-FLUOROPHENOL (%)	49
2,4,6-TRIBROMOPHENOL (%)	56

MCK0003275

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00646604

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003276

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646605

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/27/90
PROJECT #	: 17033.157.11	DATE RECEIVED	: 06/27/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 06/29/90
CLIENT I.D.	: MK-SB-05-33.5'	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2 [illegible]THYLPHENOL	<0.17
[illegible] 2-CHLOROISOPROPYL ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
[illegible] APHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003277

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646605

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	53
2-FLUOROBIPHENYL (%)	70
TERPHENYL (%)	49
PHENOL-D6 (%)	46
2-FLUOROPHENOL (%)	65
2,4,6-TRIBROMOPHENOL (%)	65

MCK0003278

AnalyticalTechnologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

JT : EPA 8270 GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00646605

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003279

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646606

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/27/90
PROJECT #	: 17033.157.11	DATE RECEIVED	: 06/27/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 06/29/90
CLIENT I.D.	: MK-SB-05-42.5'	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003280

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00652404

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
366 FREON 113	10

MCK0003281

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652405

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-08-26	DATE ANALYZED	: 07/12/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

MCK0003282

1,2-DICHLOROETHANE-D4 (%)	92
BFB (%)	102
TOLUENE-D8 (%)	98

AnalyticalTechnologies, Inc.

GCMS - RESULTS

ATI I.D. : 00646606

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	50
2-FLUOROBIPHENYL (%)	63
TERPHENYL (%)	47
PHENOL-D6 (%)	47
2-FLUOROPHENOL (%)	64
2,4,6-TRIBROMOPHENOL (%)	48

MCK0003283

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00646606

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003284

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006466
PROJECT #	: 17232.157.11	DATE EXTRACTED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/11/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,6-DINITROTOLUENE	<0.17
2,4-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17
4-CHLOROPHENYL PHENYL ETHER	<0.17

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MCK0003285

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ATI I.D. : 006466

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	55
2-FLUOROBIPHENYL (%)	74
TERPHENYL-d14 (%)	64
PHENOL-D6 (%)	53
2-FLUOROPHENOL (%)	72
2,4,6-TRIBROMOPHENOL (%)	76

MCK0003286

AnalyticalTechnologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006466

UNITS : MG/KG

COMPOUND	RESULTS
434 ALIPHATIC HYDROCARBON C7	0.8
1810 ALIPHATIC HYDROCARBON C18	0.5
1836 CARBOXYLIC ACID	0.2

MCK0003287

AnalyticalTechnologies,Inc.

QUALITY CONTROL DATA

TEST : EPA [illegible] (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 006466

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : [illegible].157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : [illegible]

DATE EXTRACTED : 06/29/90
DATE ANALYZED : 07/11/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<0.17	3.3	2.2	66	1.6	48	31*
ACENAPHTHENE	<0.17	3.3	2.1	64	1.9	58	10
2,4-DINITROTOLUENE	<0.17	3.3	2.3	70	2.3	70	0
PYRENE	<0.17	3.3	2.5	76	2.7	82	8
N-NITROSO-DI-N-PROPYLAMINE	<0.17	3.3	1.9	58	1.8	55	5
1,4-DICHLOROBENZENE	<0.17	3.3	1.9	58	1.5	45	25
PENTACHLOROPHENOL	<0.85	13.2	7.9	60	8.0	61	2
PHENOL	<0.17	6.6	3.5	53	3.1	47	12
2-CHLOROPHENOL	<0.17	6.6	4.2	64	3.3	50	25
4-CHLORO-3-METHYLPHENOL	<0.17	6.6	4.3	65	3.3	50	26
4-NITROPHENOL	<0.85	13.2	9.6	73	9.8	74	1

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

* Result [illegible] limits due to sample matrix interference

MCK0003288

...ron Associates
15621 I... Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

0 066166

CHAIN OF CUSTODY FORM

Page 1 of 1

Lab: ATT

Samplers: Don Johnson

Job Number: 17333, 157.11

Name/Location: McKesson Santa Fe Springs

Project Manager: B. Chadwick

Recorder: (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES
SB			X		X						90	06	26	AM	MK-SB-19-26'
													26	AM	MK-SB-19-41'
													26	AM	MK-SB-04-26'
													26	AM	MK-SB-04-46'
													27	AM	MK-SB- 33.5'
													27	AM	MK-SB- 43.5'

ANALYSIS REQUESTED	EPA 601/8010	EPA 602/8020	EPA 624/8240 Volatile Organics	EPA 625/8270 Extract. Organics	ICP METALS	EPA 8015M/TPH	418.1 Hydrocarbons	Aromatics	5 Lumps (BTEX & MTBE)	5 Diethylene	DH-TEAS Method	TDS (CL, SO4, F, NO3 N, Fe, Mn, Ca) by Method 300.0/6010
			X	X			X		X		X	X
			X	X			X		X		X	X
			X	X			X		X		X	X
			X	X			X		X		X	X
			X	X			X		X		X	X
			X	X			X		X		X	X

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK000289				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature) Bob DeBay	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
METHOD OF SHIPMENT		

Laboratory Copy (White) Project Office Copy (Yellow) Field or Office Copy (Pink)

6533

Analytical Technologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego CA 92121 (619) 458-9141

C00373

ATI I.D. 006524

July 27, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680

Project Name: McKesson Santa Fe Springs

Project No.: 17333-157.11

Attention: Burton Chadwick

On June 29, 1990, Analytical Technologies, Inc. received eight soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

Timothy J. Fitzpatrick
Inorganics Supervisor

TJF:bc

Richard M. Amano
Laboratory Manager

Analytical Technologies, Inc.

ATI I.D. 006524

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SANTA FE SPRINGS

PROJECT NO.: 17333,157.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
CHLORIDE	COLORIMETRIC	EPA 325.2
FLUORIDE	ELECTRODE	EPA 340.2
NITRATE AS NITROGEN	COLORIMETRIC	EPA 353.1
PETROLEUM HYDROCARBONS	IR	EPA 418.1 (MODIFIED)
pH	ELECTRODE	EPA 9045
SULFATE	COLORIMETRIC	EPA 9036
IRON	ICAP	EPA 6010
MANGANESE	ICAP	EPA 6010
POTASSIUM	ICAP	EPA 6010
SODIUM	ICAP	EPA 6010
ZINC	ICAP	EPA 6010
FUEL HYDROCARBONS	GC/FID	EPA 8015 (MODIFIED)/ CDOHS METHOD
GLYCOLS	GC/FID	EPA 8015 (MODIFIED)
VOLATILE ORGANICS	GC/MS	EPA 8240
SEMI-VOLATILE ORGANICS (BNA)	GC/MS	EPA 8270

MCK0003291

Analytical**Technologies,** Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN DATE RECEIVED : 06/29/90
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS REPORT DATE : 07/27/90
ATI I.D. : 006524

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-SB-06-26	SOIL	06/29/90
02	MK-SB-06-46	SOIL	06/29/90
03	MK-SB-07-26	SOIL	06/29/90
04	MK-SB-07-46	SOIL	06/29/90
05	MK-SB-08-26	SOIL	06/29/90
06	MK-SB-08-42.5	SOIL	06/29/90
07	MK-SB-09-21	SOIL	06/29/90
08	MK-SB-09-41	SOIL	06/29/90

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	8

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 006524

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17232.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 06/29/90
REPORT DATE : 07/27/90

PARAMETER	UNITS	01	02	03	04	05
CHLORIDE	MG/KG	<5	<5	<5	395	<5
FLUORIDE	MG/KG	<5	<5	<5	<5	<5
NITRATE AS NITROGEN	MG/KG	0.8	0.5	0.8	0.5	1.0
PETROLEUM HYDROCARBONS, IR	MG/KG	3	2	9	3	2
PH	UNITS	7.4	8.0	7.4	7.4	7.5
SULFATE	MG/KG	<100	<100	<100	<100	<100

MCK0003293

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 006524

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 06/29/90
REPORT DATE : 07/27/90

PARAMETER	UNITS	06	07	08
CHLORIDE	MG/KG	<5	<5	<5
FLUORIDE	MG/KG	6	<5	<5
NITRATE AS NITROGEN	MG/KG	0.8	2.0	1.0
PETROLEUM HYDROCARBONS, IR	MG/KG	2	<1	1
PH	UNITS	7.7	7.6	7.5
SULFATE	MG/KG	<100	<100	<100

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652401

TEST : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-05-26	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	<5.0
HYDROCARBON RANGE	-
HYDROCARBONS QUANTITATED USING	-

MCK0003295

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652402

TEST : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-06-46	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	<5.0
HYDROCARBON RANGE	-
HYDROCARBONS QUANTITATED USING	-

MCK0003296

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652403

TEST : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-07-25	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	<5.0
HYDROCARBON RANGE	-
HYDROCARBONS QUANTITATED USING	-

MCK0003297

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652404

TEST : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-07-46	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	<5.0
HYDROCARBON RANGE	-
HYDROCARBONS QUANTITATED USING	-

MCK0003298

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652405

TEST : MOD EPA 8015-CDCHS (FUEL HYDROCARBONS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-08-26	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	<5.0
HYDROCARBON RANGE	-
HYDROCARBONS QUANTITATED USING	-

MCK0003299

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652406

TEST : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17033.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-08-42.5	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	<5.0
HYDROCARBON RANGE	-
HYDROCARBONS QUANTITATED USING	-

MCK0003300

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652407

TEST : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-09-21	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	<5.0
HYDROCARBON RANGE	-
HYDROCARBONS QUANTITATED USING	-

MCK0003301

Analytical**Technologies**, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652408

TEST : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-09-41	DATE ANALYZED	: 07/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
FUEL HYDROCARBONS	<5.0
HYDROCARBON RANGE	-
HYDROCARBONS QUANTITATED USING	-

MCK0003302

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : MOD EPA 8015-CDOHS (FUEL HYDROCARBONS)

ATI I.D. : 006524

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00702601

DATE EXTRACTED : 07/03/90
DATE ANALYZED : 07/06/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
FUEL HYDROCARBONS	560	500	830	54*	1100	108	28*

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

* Result out of limits due to sample matrix interference

MCK0003303

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652401

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-06-26	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003304

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652402

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-06-46	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003305

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652403

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-07-26	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003306

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652404

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-07-46	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003307

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652405

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-08-26	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003308

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652406

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-08-42.5	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003309

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00652407

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-09-21	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003310

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00552408

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-09-41	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003311

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006524
PROJECT #	: 17333.157.11	DATE EXTRACTED	: 07/06/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/08/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003312

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006524

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/05/90
DATE ANALYZED : 07/08/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	41	103	N/A	N/A	N/A
DIETHYLENE GLYCOL	<2.0	20.0	22	110	N/A	N/A	N/A
PROPYLENE GLYCOL	<2.0	20.0	21	105	N/A	N/A	N/A
HEXYLENE GLYCOL	<2.0	40.0	41	103	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003313

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 006524

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00652405

DATE EXTRACTED : 07/06/90
DATE ANALYZED : 07/08/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	20	50	20	50	0
DIETHYLENE GLYCOL	<2.0	20.0	4.0	20	3.7	19	5
PROPYLENE GLYCOL	<2.0	20.0	17	85	16	80	6
HEXYLENE GLYCOL	<2.0	40.0	20	50	20	50	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003314

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652401

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-06-26	DATE ANALYZED	: 07/12/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	91
BFB (%)	102
TOLUENE-D8 (%)	96

MCK0003315

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00652401

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003316

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652402

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-06-46	DATE ANALYZED	: 07/12/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	0.2
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	0.9
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	0.07
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	0.5
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	74
BFB (%)	95
TOLUENE-D8 (%)	90

MCK0003317

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

ST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00652402

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652403

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-07-26	DATE ANALYZED	: 07/12/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	0.06
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	75
BFB (%)	89
TOLUENE-D8 (%)	89

MCK0003319

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00652403

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652404

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-07-46	DATE ANALYZED	: 07/12/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	78
BFB (%)	101
TOLUENE-D8 (%)	98

MCK0003321

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652406

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-08-42.5	DATE ANALYZED	: 07/13/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
2-DICHLOROETHANE	<0.05
BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	0.08
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	91
BFB (%)	92
TOLUENE-D8 (%)	90

MCK0003322

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00652405

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003323

Analytical**Technologies**, Inc.

GCMS - RESULTS

ATI I.D. : 00652407

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-09-21	DATE ANALYZED	: 07/13/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	102
BFB (%)	102
TOLUENE-D8 (%)	98

MCK0003324

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00652406

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003325

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652408

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/03/90
CLIENT I.D.	: MK-SB-09-41	DATE ANALYZED	: 07/13/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1-DICHLOROETHANE	<0.05
BUTANONE (MEK)	<1.0
1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	84
BFB (%)	84
TOLUENE-D8 (%)	90

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00652407

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003327

AnalyticalTechnologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006524
PROJECT #	: 17333.157.11	DATE EXTRACTED	: 07/03/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/12/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.35
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	115
BFB (%)	123
TOLUENE-D8 (%)	122

MCK0003328

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00652408

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003329

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006524
PROJECT #	: 17333.157.11	DATE EXTRACTED	: 07/03/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/12/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.4
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	87
BFB (%)	104
TOLUENE-D8 (%)	103

MCK0003330

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006524

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003331

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 006524

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/03/90
DATE ANALYZED : 07/12/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<0.05	2.10	1.68	80	1.59	76	5
TRICHLOROETHENE	<0.05	2.90	2.08	72	2.42	83	14
CHLOROBENZENE	<0.05	2.60	2.60	100	2.68	103	3
TOLUENE	<0.1	2.60	2.28	88	2.74	105	18
BENZENE	<0.05	2.40	2.17	90	2.35	98	8

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003332

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006524

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003333

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652401

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-SB-06-26	DATE ANALYZED	: 07/12/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

(CONTINUED NEXT PAGE)

MCK0003334

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652401

LST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	45
2-FLUOROBIPHENYL (%)	56
TERPHENYL (%)	47
PHENOL-D6 (%)	38
2-FLUOROPHENOL (%)	29
2,4,6-TRIBROMOPHENOL (%)	46

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00706202

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00706202

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/05/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/06/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/09/90
CLIENT I.D.	: MK-SB-23-41	DATE ANALYZED	: 07/18/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	30
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	2.6
1,1-DICHLOROETHANE	0.1
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
2-DICHLOROETHANE	0.6
BUTANONE (MEK)	TR<1.0
1,1,1-TRICHLOROETHANE	21
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	0.84
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	TR<0.50
TETRACHLOROETHENE	3.1
TOLUENE	0.63
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	88
FB (%)	92
TOLUENE-D8 (%)	93

MCK0003337

TR - Compound detected at an unquantifiable trace level

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00706201

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00706201

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/05/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/06/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/09/90
CLIENT I.D.	: MK-SB-23-26	DATE ANALYZED	: 07/19/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
BUTANONE (MEK)	<1.0
1,1-TRICHLORCETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLORCMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	93
B (%)	103
LUENE-D8 (%)	101

MCK0003339

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007062

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00708702

DATE EXTRACTED : 07/11/90
DATE ANALYZED : 07/11/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	28	70	28	70	0
DIETHYLENE GLYCOL	<2.0	20.0	9.3	47	8.5	43	9
PROPYLENE GLYCOL	<2.0	20.0	16	80	16	80	0
HEXYLENE GLYCOL	<2.0	40.0	28	70	28	70	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003340

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : GLYCOLS

ATI I.D. : 007062

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/11/90
DATE ANALYZED : 07/11/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	36	90	N/A	N/A	N/A
DIETHYLENE GLYCOL	<2.0	20.0	17	85	N/A	N/A	N/A
PROPYLENE GLYCOL	<2.0	20.0	19	95	N/A	N/A	N/A
HEXYLENE GLYCOL	<2.0	40.0	36	90	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003341

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

		ATI I.D.	: 007062
CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: 07/11/90
PROJECT #	: 17333.157.11	DATE ANALYZED	: 07/11/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	UNITS	: MG/KG
CLIENT I.D.	: REAGENT BLANK	DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical**Technologies**, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00706202

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/05/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/06/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/09/90
CLIENT I.D.	: MK-SB-23-41	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00706201

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/05/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/06/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/09/90
CLIENT I.D.	: MK-SB-23-26	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003344

Analytical Technologies, Inc.

METALS - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007062

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
IRON	MG/KG	00648901	222	245	10	264	48.6	86
POTASSIUM	MG/KG	00648901	1340	1302	3	1590	225	111
MANGANESE	MG/KG	00648901	4.3	4.5	5	95.6	97.2	94
SODIUM	MG/KG	00648901	136	132	3	661	486	108
ZINC	MG/KG	00648901	14.6	15.2	4	56.4	48.6	85

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 007062

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/06/90
REPORT DATE : 07/31/90

PARAMETER	UNITS	03	04
IRON	MG/KG	27770	30430
POTASSIUM	MG/KG	2650	5520
MANGANESE	MG/KG	298	725
SODIUM	MG/KG	574	246
ZINC	MG/KG	59.9	59.8

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007062

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CHLORIDE	MG/KG	00706204	<5	<5	0	739	667	111
FLUORIDE	MG/KG	00706204	25	<5	0	36	48	75
NITRATE AS NITROGEN	MG/KG	00706203	4.0	5.6	33	12.5	6.0	128
PETROLEUM HYDROCARBONS	MG/KG	00705201	11	10	10	120	105	104
PH	UNITS	00706203	8.0	8.0	0	N/A	N/A	N/A
SULFATE	MG/KG	00718501	57.0	42.0	30	246	20	98

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 007062

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/06/90
REPORT DATE : 07/31/90

PARAMETER	UNITS	01	02	03	04
CHLORIDE	MG/KG	-	-	424	<5
FLUORIDE	MG/KG	-	-	7	<5
NITRATE AS NITROGEN	MG/KG	-	-	4.0	3.6
PETROLEUM HYDROCARBONS, IR	MG/KG	<1	5	-	-
PH	UNITS	-	-	8.0	7.9
SULFATE	MG/KG	-	-	303	<100

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
OJECT # : 17333.157.11
.OJECT NAME : McKESSON SANTA FE SPRINGS
ATI I.D. : 007062

DATE RECEIVED : 07/05/90
REPORT DATE : 07/31/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-SB-23-26	SOIL	07/05/90
02	MK-SB-23-41	SOIL	07/05/90
03	MK-SB-21-6	SOIL	07/05/90
04	MK-SB-21-36	SOIL	07/05/90

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	4

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

ATI I.D. 007062

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SANTA FE SPRINGS

PROJECT NO.: 17333,157.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
CHLORIDE	COLORIMETRIC	EPA 325.2
FLUORIDE	ELECTRODE	EPA 340.2
NITRATE AS NITROGEN	COLORIMETRIC	EPA 353.1
PETROLEUM HYDROCARBONS	IR	EPA 418.1 (MODIFIED)
pH	ELECTRODE	EPA 9045
SULFATE	COLORIMETRIC	EPA 9036
IRON	ICAP	EPA 6010
MANGANESE	ICAP	EPA 6010
POTASSIUM	ICAP	EPA 6010
SODIUM	ICAP	EPA 6010
ZINC	ICAP	EPA 6010
GLYCOLS	GC/FID	EPA 8015 (MODIFIED)
VOLATILE ORGANICS	GC/MS	EPA 8240
SEMI-VOLATILE ORGANICS (BNA)	GC/MS	EPA 8270

Analytical Technologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

C00384

3.4.1

ATI I.D. 007062

July 31, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite #100
Tustin, California 92680

Project Name: McKesson Santa Fe Springs

Project No.: 17333,157.11

Attention: Burton Chadwick

On July 6, 1990, Analytical Technologies, Inc. received four soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

Timothy J. Fitzpatrick
Inorganics Supervisor

TJF:nm

for Richard M. Amano
Laboratory Manager

007042

HLA
Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

CHAIN OF CUSTODY FORM

Lab: ATI

Samplers: Dan Johnson

Job Number: 17333 157 11

Name/Location: McKesson Santa Fe Springs

Project Manager: B. Chadwick

Recorder: [signature] (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	Priority Pltnt. Metals	Benzene/Toluene/Xylene	Total Petrol. Hydrocarb.	PH Method 9045	LONS (Cl, SO4, F, NO3)	Na, K, Fe	Mn, Zn	by 300.0/6010
50			X		X						90	07	03		MK-SB-17-1.5								X	X			
50			X		X								03		MK-SB-17-41								X	X			
50			X		X								03		MK-SB-18-1.5								X	X			
50			X		X								03		MK-SB-18-41								X	X			

ANALYSIS REQUESTED

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS

MCK0003352

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
[signature]	Bob DeBay	7/5/90 1645
Bob DeBay	Marian Van Derhoff	7/5/90 6.15

DISPATCHED BY: (Signature) DATE/TIME

RECEIVED FOR LAB BY: (Signature) DATE/TIME

METHOD OF SHIPMENT

Laboratory Copy White — Project Office Copy Yellow — Field or [illegible] Copy

6533

Analytical Technologies, Inc.

METALS - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007042

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
IRON	MG/KG	00648901	222	245	10	264	48.6	86
POTASSIUM	MG/KG	00648901	1340	1302	3	1590	225	111
MANGANESE	MG/KG	00648901	4.3	4.5	5	95.6	97.2	94
SODIUM	MG/KG	00648901	136	132	3	661	486	108
ZINC	MG/KG	00648901	14.6	15.2	4	56.4	48.6	85

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

MCK0003353

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 007042

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/05/90
REPORT DATE : 07/27/90

PARAMETER	UNITS	01	02	03	04
IRON	MG/KG	20390	28650	19290	21760
POTASSIUM	MG/KG	3180	4570	3800	4300
MANGANESE	MG/KG	598	494	312	317
SODIUM	MG/KG	945	320	2860	267
ZINC	MG/KG	69.7	71.2	48.9	65.0

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007042

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CHLORIDE	MG/KG	00706204	<5	<5	0	739	667	111
FLUORIDE	MG/KG	00706204	25	<5	0	36	48	75
NITRATE AS NITROGEN	MG/KG	00704202	0.7	0.7	0	6.8	6.0	102
PH	UNITS	00711701	8.4	8.4	0	N/A	N/A	N/A
SULFATE	MG/KG	00718501	57.0	42.0	30	245	20	98

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

MCK0003355

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 007042

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/05/90
REPORT DATE : 07/27/90

PARAMETER	UNITS	01	02	03	04
CHLORIDE	MG/KG	12.2	1000	428	<5
FLUORIDE	MG/KG	19	6	55	8
NITRATE AS NITROGEN	MG/KG	1.0	0.7	5.5	1.0
PH	UNITS	4.4	7.8	8.4	8.1
SULFATE	MG/KG	8900	<100	6370	<100

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
ATI I.D. : 007042

DATE RECEIVED : 07/05/90
REPORT DATE : 07/27/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-SB-17-1.5	SOIL	07/03/90
02	MK-SB-17-41	SOIL	07/03/90
03	MK-SB-18-1.5	SOIL	07/03/90
04	MK-SB-18-41	SOIL	07/03/90

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	4

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

ATI I.D. 007042

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SANTA FE SPRINGS

PROJECT NO.: 17333,157.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
CHLORIDE	COLORIMETRIC	EPA 325.2
FLUORIDE	ELECTRODE	EPA 340.2
NITRATE AS NITROGEN	COLORIMETRIC	EPA 353.1
pH	ELECTRODE	EPA 9045
SULFATE	COLORIMETRIC	EPA 9036
IRON	ICAP	EPA 6010
MANGANESE	ICAP	EPA 6010
POTASSIUM	ICAP	EPA 6010
SODIUM	ICAP	EPA 6010
ZINC	ICAP	EPA 6010

Analytical Technologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

C00350

ATI I.D. 007042

July 27, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680

Project Name: McKesson Santa Fe Springs

Project No.: 17333-157.11

Attention: Burton Chadwick

On July 5, 1990, Analytical Technologies, Inc. received four soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

Timothy J. Fitzpatrick
Inorganics Supervisor

TJF:bc

Richard M. Amano
Laboratory Manager

MCK0003359

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

CHAIN OF CUSTODY FORM

00652X 1 2 of 2

Lab: ATL

Samplers: Don Johnson

Job Number: 17333.157.11

Name/Location: McKesson - Santa Fe Springs

Project Manager: Gordon Chadwick

Recorder: (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	Priority Pllnt. Metals	Benzene/Toluene/Xylene	Total Petrol. Hydrocarb.	TLHs	Gases by 8015	Oil & Grease	Total Solids
S			X		X						9	0	6	2	9			X	X				X	X	X	X
															MK-SB-08-26											
															MK-SB-08-42.5			X	X				X	X	X	X
															MK-SB-09-21			X	X				X	X	X	X
															MK-SB-09-41			X	X				X	X	X	X

depths added per FAX 6-30-90 MW

DS

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK000360				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
	Bob DeBay	6/29/90 17:00
RELINQUISHED BY: (Signature) Bob DeBay	RECEIVED BY: (Signature) Marian Dan Deibert	DATE/TIME 6/29/90
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
METHOD OF SHIPMENT		

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

...g Lawson Associates
Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

006524

CHAIN OF CUSTODY FORM

1 of 2

Lab: ATI

Job Number: 17333,157.11

Samplers: Don Johnson

Name/Location: McKesson Santa Fe Springs

Project Manager: B Chadwick

Recorder: Burton Chadwick (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES
50			X		X						90	06	28	Tue 12/5	MK-SB-06-26
															MK-SB-06 46
															MK-SB-07 26
															MK-SB-07 46

BC

ANALYSIS REQUESTED

EPA 601/8010	EPA 602/8020	EPA 624/8240 Volatile Organics	EPA 625/8270 Extract Organics	ICP METALS	EPA 8015M/TPH	418.1 Hydrocarbons	Glycols by 8015 (propylene, ethylene, hexylene, diethylene)	DH 9045 Method	~~ENDC~~ IONS (Cl, SO4, F, NO3, NaK, Fe, Mn, Zn) by Method 300.0/6010
		X	X			X	X	X	X
		X	X			X	X	X	X
		X	X			X	X	X	X
		X	X			X	X	X	X

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS

MCK0003361

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
Burton Chadwick		
RELINQUISHED BY: (Signature) Bob DeBay	RECEIVED BY: (Signature) Marian VanDerhoof	6/2/90 17:00
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME 6.45
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
METHOD OF SHIPMENT		

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 006524

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17233.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00652408

DATE EXTRACTED : 07/05/90
DATE ANALYZED : 07/12/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<0.17	3.3	1.8	55	1.7	52	6
ACENAPHTHENE	<0.17	3.3	1.9	58	2.1	64	9
2,4-DINITROTOLUENE	<0.17	3.3	2.6	79	2.5	76	4
PYRENE	<0.17	3.3	2.5	76	2.4	73	4
N-NITROSO-DI-N-PROPYLAMINE	<0.17	3.3	2.1	63	2.1	64	2
1,4-DICHLOROBENZENE	<0.17	3.3	1.8	55	1.7	52	6
PENTACHLOROPHENOL	<0.85	13.2	8.1	61	7.6	58	5
PHENOL	<0.17	6.6	3.7	56	3.8	58	4
2-CHLOROPHENOL	<0.17	6.6	3.9	45	3.9	59	27
4-CHLORO-3-METHYLPHENOL	<0.17	6.6	3.6	54	3.6	54	0
4-NITROPHENOL	<0.85	13.2	13.2	100	11.8	89	12

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003362

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 006524

UNITS : MG/KG

COMPOUNDS	RESULTS
442 ALIPHATIC HYDROCARBON C7	0.8
1610 ALIPHATIC HYDROCARBON C9	1
2231 ALIPHATIC HYDROCARBON C25	0.6
2283 ALIPHATIC HYDROCARBON C26	0.6
2343 ALIPHATIC HYDROCARBON C26	0.5

AnalyticalTechnologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ATI I.D. : 006524

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	TR<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	55
2-FLUOROBIPHENYL (%)	62
TERPHENYL (%)	47
PHENOL-D6 (%)	41
2-FLUOROPHENOL (%)	49
2,4,6-TRIBROMOPHENOL (%)	54

TR - Compound detected at an unquantifiable trace level

MCK0003364

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 006524
PROJECT #	: 17333.157.11	DATE EXTRACTED	: 07/05/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/11/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	TR<0.17
4-CHLOROPHENYL PHENYL ETHER	<0.17

MCK0003365

TR - Compound detected at an unquantifiable trace level

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Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00652408

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652408

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	39
2-FLUOROBIPHENYL (%)	50
TERPHENYL (%)	41
PHENOL-D6 (%)	30
2-FLUOROPHENOL (%)	39
2,4,6-TRIBROMOPHENOL (%)	44

MCK0003367

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652408

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-SB-09-41	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003368

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00652407

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652407

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	82
2-FLUOROBIPHENYL (%)	84
TERPHENYL (%)	70
PHENOL-D6 (%)	63
2-FLUOROPHENOL (%)	66
2,4,6-TRIBROMOPHENOL (%)	71

MCK0003370

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652407

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-SB-09-21	DATE ANALYZED	: 07/12/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
S(2-CHLORO ISOPROPYL)ETHER	<0.17
-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003371

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Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00652406

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00652405

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003373

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652405

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	37
2-FLUOROBIPHENYL (%)	50
TERPHENYL (%)	46
PHENOL-D6 (%)	34
2-FLUOROPHENOL (%)	43
2,4,6-TRIBROMOPHENOL (%)	60

MCK0003374

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652405

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-SB-08-26	DATE ANALYZED	: 07/12/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003375

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00652404

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003376

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652404

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h) ANTHRACENE	<0.17
BENZO(g,h,i) PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	45
2-FLUOROBIPHENYL (%)	55
TERPHENYL (%)	46
PHENOL-D6 (%)	33
2-FLUOROPHENOL (%)	48
2,4,6-TRIBROMOPHENOL (%)	65

MCK0003377

AnalyticalTechnologies,Inc.

GCMS - RESULTS

ATI I.D. : 00652404

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-SB-07-46	DATE ANALYZED	: 07/12/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
-METHYLPHENOL	<0.17
-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
,4-DINITROPHENOL	<0.85
-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00652403

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652403

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h) ANTHRACENE	<0.17
BENZO(g,h,i) PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	44
2-FLUOROBIPHENYL (%)	54
TERPHENYL (%)	42
PHENOL-D6 (%)	38
2-FLUOROPHENOL (%)	40
2,4,6-TRIBROMOPHENOL (%)	50

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652403

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-SB-07-26	DATE ANALYZED	: 07/12/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
S(2-CHLOROISOPROPYL)ETHER	<0.17
METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00652402

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003382

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652402

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	35
2-FLUOROBIPHENYL (%)	50
TERPHENYL (%)	45
PHENOL-D6 (%)	27
2-FLUOROPHENOL (%)	28
2,4,6-TRIBROMOPHENOL (%)	43

MCK0003383

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00652402

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 06/29/90
PROJECT #	: 17330.157.11	DATE RECEIVED	: 06/29/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/05/90
CLIENT I.D.	: MK-SB-06-46	DATE ANALYZED	: 07/12/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003384

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00552401

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007062
PROJECT #	: 17333.157.11	DATE EXTRACTED	: 07/09/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/19/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	TR<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
RBON TETRACHLORIDE	<0.05
NYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	93
BFB (%)	105
OLUENE-D8 (%)	104

MCK0003386

TR - Compound detected at an unquantifiable trace level

AnalyticalTechnologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 007062

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003387

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007062

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: 07/09/90
PROJECT #	: 17333.157.11	DATE ANALYZED	: 07/13/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	SAMPLE MATRIX	: SOIL
REF I.D.	: REAGENT SOIL	UNITS	: MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<0.05	2.10	1.77	84	1.84	88	5
TRICHLOROETHENE	<0.05	2.90	2.38	82	2.60	90	9
CHLOROBENZENE	<0.05	2.60	2.54	98	2.79	107	9
TOLUENE	<0.10	2.60	2.48	95	2.50	96	1
BENZENE	<0.05	2.40	2.08	87	2.32	97	11

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003388

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00706201

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/05/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/06/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/10/90
CLIENT I.D.	: MK-SB-23-26	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003389

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00706201

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	53
2-FLUOROBIPHENYL (%)	59
TERPHENYL (%)	46
PHENOL-D6 (%)	57
2-FLUOROPHENOL (%)	48
2,4,6-TRIBROMOPHENOL (%)	61

MCK0003390

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00706201

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
941 ALIPHATIC HYDROCARBON C10	0.2
2158 ALIPHATIC HYDROCARBON C26	0.2

MCK0003391

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00706202

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/05/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/06/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/10/90
CLIENT I.D.	: MK-SB-23-41	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
-METHYLPHENOL	<0.17
NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
?,4-DINITROPHENOL	<0.85
NITROPHENOL	<0.85
.BENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003392

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00706202

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	60
2-FLUOROBIPHENYL (%)	61
TERPHENYL (%)	52
PHENOL-D6 (%)	56
2-FLUOROPHENOL (%)	57
2,4,6-TRIBROMOPHENOL (%)	64

MCK0003393

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00706202

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
917 CYCLIC HYDROCARBON C5	0.2
940 ALIPHATIC HYDROCARBON C10	0.3
1863 BRANCHED BENZAMIDE	1

MCK0003394

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

		ATI I.D.	: 007052
CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: 07/10/90
PROJECT #	: 17333.157.11	DATE ANALYZED	: 07/20/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	UNITS	: MG/KG
CLIENT I.D.	: REAGENT BLANK	DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17
4-CHLOROPHENYL PHENYL ETHER	<0.17

MCK0003395

(CONTINUED NEXT PAGE)

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ATI I.D. : 007062

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	67
2-FLUOROBIPHENYL (%)	68
TERPHENYL (%)	52
PHENOL-D6 (%)	71
2-FLUOROPHENOL (%)	76
2,4,6-TRIBROMOPHENOL (%)	68

MCK0003396

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 007062

UNITS : MG/KG

COMPOUNDS	RESULTS
1584 ALIPHATIC HYDROCARBON C18	1
1817 CARBOXYLIC ACID	7

MCK0003397

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007062

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00707209

DATE EXTRACTED : 07/10/90
DATE ANALYZED : 07/20/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<0.17	3.3	3.2	96	3.1	95	1
ACENAPHTHENE	<0.17	3.3	3.4	104	3.4	102	2
2,4-DINITROTOLUENE	<0.17	3.3	2.5	76	2.8	84	10
PYRENE	<0.17	3.3	4.0	120	4.2	127	6
N-NITROSO-DI-N-PROPYLAMINE	<0.17	3.3	9.2	*	6.0	*	42*
1,4-DICHLOROBENZENE	<0.17	3.3	3.0	92	3.0	91	1
PENTACHLOROPHENOL	<0.85	13.2	13.6	103	13.8	104	1
PHENOL	<0.17	6.6	5.5	84	5.3	81	4
2-CHLOROPHENOL	<0.17	6.6	5.3	81	5.5	83	2
4-CHLORO-3-METHYLPHENOL	<0.17	6.6	6.1	93	6.0	91	2
4-NITROPHENOL	<0.85	13.2	8.0	60	8.3	63	5

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

* Result out of limits due to sample matrix interference

MCK0003398

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

007062

CHAIN OF CUSTODY FORM

Lab: ATI

Job Number: 17333,158
Name/Location: McKesson Santa Fe Springs
Project Manager: B. Chadwick

Samplers: Dan Johnson
Recorder: [signature] (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	EPA 601/8010	EPA 602/8020	EPA 624/8240 Volatile Organics	EPA 625/8270 Extractable Organics	ICP METALS	EPA 8015M/TPH	Glycols (diethylene, ethylene, triethylene)	418.1 Hydrocarbons	PH method 7045	IONS (Cl, SO4, F, NO3)	Na, K, Fe, Mn, Zn	[illegible] method, 200.7/6010
50			X		X						90	07	05	AM	MK-SB-23-26			X	X			X	X				
50			X		X						90	07	05	AM	MK-SB-23-41			X	X			X	X				
50			X		X						90	07	05	PM	MK-SB-21-6									X	X		
50			X		X						90	07	05	PM	MK-SB-21-36									X	X		

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS

MCK0003399

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
[signature]	Bob DeBey	7/6/90 1650
Bob DeBey	Marian Van Deuhoof	7/6/90 6:35

DISPATCHED BY: (Signature)	DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME

METHOD OF SHIPMENT: Courier under custody seal on cooler

Laboratory Copy White | Project Office Copy Yellow | Field or O Pink

6533

Analytical**Technologies,** Inc. Corporate Offices 5550 Morehouse Drive San Diego CA 92121 (619) 458-9141

C00085 3.4.1

ATI I.D. 007087

July 31, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite #100
Tustin, California 92680

Project Name: McKesson Santa Fe Springs

Project No.: 17333,157.11

Attention: Burton Chadwick

On July 9, 1990, Analytical Technologies, Inc. received two soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

Timothy J. Fitzpatrick
Inorganics Supervisor

TJF:nm

for Richard M. Amano
Laboratory Manager

MCK0003400

Analytical Technologies, Inc.

ATI I.D. 007087

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SANTA FE SPRINGS

PROJECT NO.: 17333,157.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
PETROLEUM HYDROCARBONS	IR	EPA 418.1 (MODIFIED)
GLYCOLS	GC/FID	EPA 8015 (MODIFIED)
VOLATILE ORGANICS	GC/MS	EPA 8240
SEMI-VOLATILE ORGANICS (BNA)	GC/MS	EPA 8270

MCK0003401

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
OJECT # : 17333.157.11
OJECT NAME : McKESSON SANTA FE SPRINGS
ATI I.D. : 007087

DATE RECEIVED : 07/09/90
REPORT DATE : 07/31/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-SB-03-31	SOIL	07/06/90
02	MK-SB-03-21	SOIL	07/06/90

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	2

MCK0003402

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 007087

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/09/90
REPORT DATE : 07/31/90

PARAMETER	UNITS	01	02
PETROLEUM HYDROCARBONS, IR	MG/KG	<1	<2

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007087

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
PETROLEUM HYDROCARBONS	MG/KG	00711201	570	550	4	650	106	80

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

MCK0003404

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00708701

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/06/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/09/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/10/90
CLIENT I.D.	: MK-SB-03-31	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003405

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007087
PROJECT #	: 17333.157.11	DATE EXTRACTED	: 07/11/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/11/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003406

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00708702

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/06/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/09/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/10/90
CLIENT I.D.	: MK-SB-03-21	DATE ANALYZED	: 07/11/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003407

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : GLYCOLS

ATI I.D. : 007087

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/11/90
DATE ANALYZED : 07/11/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	36	90	N/A	N/A	N/A
DIETHYLENE GLYCOL	<2.0	20.0	17	85	N/A	N/A	N/A
PROPYLENE GLYCOL	<2.0	20.0	19	95	N/A	N/A	N/A
HEXYLENE GLYCOL	<2.0	40.0	36	90	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003408

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007087

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: 07/11/90
PROJECT #	: 17333,157.11	DATE ANALYZED	: 07/11/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	SAMPLE MATRIX	: SOIL
REF I.D.	: 00708702	UNITS	: MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	28	70	28	70	0
DIETHYLENE GLYCOL	<2.0	20.0	9.3	47	8.5	43	9
PROPYLENE GLYCOL	<2.0	20.0	16	80	16	80	0
HEXYLENE GLYCOL	<2.0	40.0	28	70	28	70	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003409

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00708701

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/06/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/09/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/10/90
CLIENT I.D.	: MK-SB-03-31	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.92
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	0.20
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
BUTANONE (MEK)	<1.0
1,1,1-TRICHLORCETHANE	0.16
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	0.50
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	0.25
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	83
B (%)	79
TOLUENE-D8 (%)	84

MCK0003410

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00708701

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003411

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00708702

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/06/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/09/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/10/90
CLIENT I.D.	: MK-SB-03-21	DATE ANALYZED	: 07/21/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
2-DICHLOROETHANE	<0.05
BUTANONE (MEK)	<1.0
1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	0.26
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	80
B (%)	78
TOLUENE-D8 (%)	81

MCK0003412

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00708702

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003413

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007087
PROJECT #	: 17333.157.11	DATE EXTRACTED	: 07/10/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/20/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.52
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1-TRICHLOROETHANE	<0.05
RBON TETRACHLORIDE	<0.05
.NYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	101
BFB (%)	91
LUENE-D8 (%)	94

MCK0003414

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

		ATI I.D.	: 007087
CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: 07/11/90
PROJECT #	: 17333.157.11	DATE ANALYZED	: 07/22/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	UNITS	: MG/KG
CLIENT I.D.	: REAGENT BLANK	DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17
4-CHLOROPHENYL PHENYL ETHER	<0.17

MCK0003415

(CONTINUED NEXT PAGE)

AnalyticalTechnologies,Inc.

GCMS - RESULTS

REAGENT BLANK

ATI I.D. : 007087

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	46
2-FLUOROBIPHENYL (%)	51
TERPHENYL (%)	49
PHENOL-D6 (%)	49
2-FLUOROPHENOL (%)	36
2,4,6-TRIBROMOPHENOL (%)	56

MCK0003416

AnalyticalTechnologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 007087

UNITS : MG/KG

COMPOUNDS	RESULTS
418 ALIPHATIC HYDROCARBON C10	0.4
1595 ALIPHATIC HYDROCARBON C19	0.5

MCK0003417

AnalyticalTechnologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007087

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00710008

DATE EXTRACTED : 07/11/90
DATE ANALYZED : 07/24/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<10	3.3	1.7	52	1.8	55	6
ACENAPHTHENE	<10	3.3	1.8	56	2.1	64	13
2,4-DINITROTOLUENE	<10	3.3	2.4	73	2.5	76	4
PYRENE	<10	3.3	2.0	61	2.1	64	5
N-NITROSO-DI-N-PROPYLAMINE	<10	3.3	1.4	42	1.6	48	13
1,4-DICHLOROBENZENE	<10	3.3	1.6	48	1.8	54	12
PENTACHLOROPHENOL	<50	13.2	10.6	80	11.0	83	4
PHENOL	<10	6.6	2.9	44	3.4	52	17
2-CHLOROPHENOL	<10	6.6	3.5	53	4.0	61	14
4-CHLORO-3-METHYLPHENOL	<10	6.6	2.4	36	3.1	47	27
-NITROPHENOL	<50	13.2	11.7	89	11.2	85	5

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

007087

CHAIN OF CUSTODY FORM

2 C

Lab: ATI

Samplers: Dan Johnson

Job Number: 17333, 158 "

Name/Location: McKesson Santa Fe Springs

Project Manager: B. Chadwick

Recorder: Burton Chadwick (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	# CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES
50			X		X						90	07	06	Am	MK-SB-03-31
50			X		X						90	07	06	Am	MK-SB-03-21

ANALYSIS REQUESTED

EPA 601/8010	EPA 602/8020	EPA 624/8240 Volatile Organics	EPA 625/8270 Extract. Organics	ICP METALS	EPA 8015M/TPH	Glycols/Ethylene Ethylene 8015 diethylene	418.1 Hydrocarbons
		X	X			X	X
		X	X			X	X

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS

MCK0003419

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
Burton Chadwick	Bob DeBay	7/9/90 17:00
Bob DeBay	Ken Thrift	7-9-90 7:07PM

DISPATCHED BY: (Signature) DATE/TIME

RECEIVED FOR LAB BY: (Signature) DATE/TIME

METHOD OF SHIPMENT

Laboratory Copy White — Project Office Copy Yellow — Field or [illegible] Pink

6533

Analytical Technologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

000336 3.4.1

ATI I.D. 007120

August 2, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite #100
Tustin, California 92680

Project Name: McKesson Santa Fe Springs

Project No.: 17333,157.11

Attention: Burton Chadwick

On July 10, 1990, Analytical Technologies, Inc. received two soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

Timothy J. Fitzpatrick
Inorganics Supervisor

TJF:nm

For Richard M. Amano
Laboratory Manager

Analytical Technologies, Inc.

ATI I.D. 007120

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SANTA FE SPRINGS

PROJECT NO.: 17333,157.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
PETROLEUM HYDROCARBONS	IR	EPA 418.1 (MODIFIED)
GLYCOLS	GC/FID	EPA 8015 (MODIFIED)
VOLATILE ORGANICS	GC/MS	EPA 8240
SEMI-VOLATILE ORGANICS (BNA)	GC/MS	EPA 8270

Analytical Technologies, Inc.

IENT : HARDING LAWSON ASSOC.-TUSTIN
rOJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
ATI I.D. : 007120

DATE RECEIVED : 07/10/90
REPORT DATE : 08/02/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-SB-21-21'	SOIL	07/05/90
02	MK-SB-21-31'	SOIL	07/05/90

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	2

MCK0003422

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 007120

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/10/90
REPORT DATE : 08/02/90

PARAMETER	UNITS	01	02
PETROLEUM HYDROCARBONS, IR	MG/KG	2	<1

MCK0003423

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007120

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
PETROLEUM HYDROCARBONS	MG/KG	00712001	2	2	0	110	100	108

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00712001

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/05/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/10/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/12/90
CLIENT I.D.	: MK-SB-21-21'	DATE ANALYZED	: 07/19/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003425

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00712002

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/05/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/10/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/12/90
CLIENT I.D.	: MK-SB-21-31'	DATE ANALYZED	: 07/19/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003426

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

		ATI I.D.	: 007120
CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: 07/18/90
PROJECT #	: 17333.157.11	DATE ANALYZED	: 07/19/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	UNITS	: MG/KG
CLIENT I.D.	: REAGENT BLANK	DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : GLYCOLS

ATI I.D. : 007120

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00723003

DATE EXTRACTED : 07/18/90
DATE ANALYZED : 07/19/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	9.9	25	8.8	22	13
DIETHYLENE GLYCOL	<2.0	20.0	3.0	15	3.2	13	14
PROPYLENE GLYCOL	<2.0	20.0	14	70	13	65	7
HEXYLENE GLYCOL	<2.0	40.0	9.9	25	8.8	22	13

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003428

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007120

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: 07/18/90
PROJECT #	: 17333.157.11	DATE ANALYZED	: 07/19/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	SAMPLE MATRIX	: SOIL
REF I.D.	: REAGENT SOIL	UNITS	: MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	36	90	35	88	2
DIETHYLENE GLYCOL	<2.0	20.0	20	100	20	100	0
PROPYLENE GLYCOL	<2.0	20.0	20	100	20	100	0
HEXYLENE GLYCOL	<2.0	40.0	36	90	35	88	2

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00712001

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/05/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/10/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/12/90
CLIENT I.D.	: MK-SB-21-21'	DATE ANALYZED	: 07/19/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
?-DICHLOROETHANE	<0.05
BUTANONE (MEK)	<1.0
,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	94
B (%)	102
TOLUENE-D8 (%)	104

MCK0003430

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00712001

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003431

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00712002

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/05/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/10/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/12/90
CLIENT I.D.	: MK-SB-21-31'	DATE ANALYZED	: 07/19/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	1.1
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
?-DICHLOROETHANE	<0.05
- BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	0.06
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	74
BFB (%)	98
TOLUENE-D8 (%)	95

MCK0003432

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00712002

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007120
PROJECT #	: 17333.157.11	DATE EXTRACTED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/19/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	TR<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
?BON TETRACHLORIDE	<0.05
NYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	97
BFB (%)	110
`LUENE-D8 (%)	105

.A - Compound detected at an unquantifiable trace level

MCK0003434

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN ATI I.D. : 007120

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003435

AnalyticalTechnologies, Inc.

QUALITY CONTROL DATA

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 007120

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333.157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/09/90
DATE ANALYZED : 07/13/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<0.05	2.10	1.77	84	1.84	88	5
TRICHLOROETHENE	<0.05	2.90	2.38	82	2.60	90	9
CHLOROBENZENE	<0.05	2.60	2.54	98	2.79	107	9
TOLUENE	<0.10	2.60	2.48	95	2.50	96	1
BENZENE	<0.05	2.40	2.08	87	2.32	97	11

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003436

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00712001

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/05/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/10/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/11/90
CLIENT I.D.	: MK-SB-21-21'	DATE ANALYZED	: 07/22/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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MCK0003437

AnalyticalTechnologies, Inc.

GCMS - RESULTS

ATI I.D. : 00712001

..ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
-N-OCTYLPHTHALATE	<0.17
NZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	61
2-FLUOROBIPHENYL (%)	59
TERPHENYL (%)	37
PHENOL-D6 (%)	64
2-FLUOROPHENOL (%)	63
2,4,6-TRIBROMOPHENOL (%)	56

MCK0003438

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00712001

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003439

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00712002

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/05/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/10/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/11/90
CLIENT I.D.	: MK-SB-21-31'	DATE ANALYZED	: 07/22/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
METHYLPHENOL	<0.17
NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
4-DINITROPHENOL	<0.85
NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003440

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00712002

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17
SURROGATE PERCENT RECOVERIES	
NITROBENZENE-D5 (%)	54
2-FLUOROBIPHENYL (%)	56
TERPHENYL (%)	34
PHENOL-D6 (%)	53
2-FLUOROPHENOL (%)	50
2,4,6-TRIBROMOPHENOL (%)	51

MCK0003441

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00712002

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003442

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007120
PROJECT #	: 17333.157.11	DATE EXTRACTED	: 07/11/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/22/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17
4-CHLOROPHENYL PHENYL ETHER	<0.17

MCK0003443

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Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ATI I.D. : 007120

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
RYSENE	<0.17
-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	46
2-FLUOROBIPHENYL (%)	51
TERPHENYL (%)	49
PHENOL-D6 (%)	49
2-FLUOROPHENOL (%)	36
2,4,6-TRIBROMOPHENOL (%)	56

MCK0003444

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 007120

UNITS : MG/KG

COMPOUNDS	RESULTS
418 ALIPHATIC HYDROCARBON C10	0.4
1595 ALIPHATIC HYDROCARBON C19	0.5

MCK0003445

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 007120

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00712001

DATE EXTRACTED : 07/11/90
DATE ANALYZED : 07/27/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<0.17	3.3	1.3	39	1.3	39	0
ACENAPHTHENE	<0.17	3.3	1.3	39	1.3	39	0
2,4-DINITROTOLUENE	<0.17	3.3	1.1	33*	1.1	33*	0
PYRENE	<0.17	3.3	1.5	45	1.5	45	0
N-NITROSO-DI-N-PROPYLAMINE	<0.17	3.3	1.4	42	1.4	42	0
1,4-DICHLOROBENZENE	<0.17	3.3	1.4	42	1.4	42	0
PENTACHLOROPHENOL	<0.85	13.2	7.1	54	7.1	54	0
PHENOL	<0.17	6.6	2.4	36	2.6	39	8
2-CHLOROPHENOL	<0.17	6.6	2.7	45	3.0	45	0
4-CHLORO-3-METHYLPHENOL	<0.17	6.6	1.8	27	2.0	30	11
NITROPHENOL	<0.85	13.2	6.2	47	6.0	45	4

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

* Result out of limits due to sample matrix interference

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

007120

CHAIN OF CUSTODY FORM

Lab: ATI

Samplers: Don Johnson

ob Number: 17333,157.11

ame/Location: McKesson Santa Fe Springs

roject Manager: B. Chadwick

Recorder: [signature] (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH	[illegible]	[illegible]	[illegible]
50			X		X						9	0	07	05	MK-SB-21-21'			X	X			X	X	
50			X		X						9	0	07	05	MK-SB 21-31'			X	X			X	X	

ANALYSIS REQUESTED

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS

MCK0003447

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
[signature]	[signature]	[illegible]
Bob De Bry	[signature]	5/10/91 6:30 pm

DISPATCHED BY: (Signature)	DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME

METHOD OF SHIPMENT
[illegible] under custody seal on cooler

Laboratory Copy White | Project Office Copy Yellow | Field or Office Pink

6533

AnalyticalTechnologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

3.4.1

ATI I.D. 007171

August 9, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680

Project Name: McKesson Santa Fe Springs

Project No.: 17333-158.11

Attention: Burton Chadwick

On July 12, 1990, Analytical Technologies, Inc. received six soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

Timothy J. Fitzpatrick
Senior Project Manager

TJF:bc

Richard M. Amano
Laboratory Manager

Analytical Technologies, Inc.

ATI I.D. 007171

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SANTA FE SPRINGS

PROJECT NO.: 17333,158.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
PETROLEUM HYDROCARBONS	IR	EPA 418.1 (MODIFIED)
GLYCOLS	GC/FID	EPA 8015 (MODIFIED)/ CDOHS METHOD
VOLATILE ORGANICS	GC/MS	EPA 8240
SEMI-VOLATILE ORGANICS (BNA)	GC/MS	EPA 8270

MCK0003449

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,158.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
ATI I.D. : 007171

DATE RECEIVED : 07/12/90
REPORT DATE : 08/09/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-SB-24-1	SOIL	07/11/90
02	MK-SB-24-21	SOIL	07/11/90
03	MK-SB-24-41	SOIL	07/11/90
04	MK-SB-30-1.5	SOIL	07/12/90
05	MK-SB-30-21	SOIL	07/12/90
06	MK-SB-30-41	SOIL	07/12/90

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	6

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc. GENERAL CHEMISTRY RESULTS

ATI I.D. : 007171

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,158.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/12/90
REPORT DATE : 08/09/90

PARAMETER	UNITS	01	02	03	04	05
PETROLEUM HYDROCARBONS, IR	MG/KG	3100	600	30	170	140

Analytical Technologies, Inc. GENERAL CHEMISTRY RESULTS

ATI I.D. : 007171

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,158.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/12/90
REPORT DATE : 08/09/90

PARAMETER	UNITS	06
PETROLEUM HYDROCARBONS, IR	MG/KG	<1

MCK0003452

Analytical Technologies, GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,158.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007171

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
PETROLEUM HYDROCARBONS	MG/KG	00717003	35	33	6	140	106	100

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

MCK0003453

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00717101

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/11/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-24-1	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	9.5
DIETHYLENE GLYCOL	2.1
PROPYLENE GLYCOL	6.8
HEXYLENE GLYCOL	6.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00717102

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/11/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-24-21	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	6.5
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003455

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00717103

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/11/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-24-41	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003456

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00717104

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/12/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-30-1.5	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003457

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00717105

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/12/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-30-21	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00717106

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/12/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-30-41	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003459

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007171
PROJECT #	: 17333,158.11	DATE EXTRACTED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/19/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003460

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007171

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,158.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/18/90
DATE ANALYZED : 07/19/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	36	90	35	88	2
DIETHYLENE GLYCOL	<2.0	20.0	20	100	20	100	0
PROPYLENE GLYCOL	<2.0	20.0	20	100	20	100	0
HEXYLENE GLYCOL	<2.0	40.0	36	90	35	88	2

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003461

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007171

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,158.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00723003

DATE EXTRACTED : 07/18/90
DATE ANALYZED : 07/19/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	9.9	25	8.8	22	13
DIETHYLENE GLYCOL	<2.0	20.0	3.0	15	3.2	13	14
PROPYLENE GLYCOL	<2.0	20.0	14	70	13	65	7
HEXYLENE GLYCOL	<2.0	40.0	9.9	25	8.8	22	13

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003462

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007171

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,158.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00725703

DATE EXTRACTED : 07/18/90
DATE ANALYZED : 07/19/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	11	28	8.0	20	33
DIETHYLENE GLYCOL	<2.0	20.0	3.1	16	2.5	13	21
PROPYLENE GLYCOL	<2.0	20.0	15	75	13	65	14
HEXYLENE GLYCOL	<2.0	40.0	11	28	8.0	20	33

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003463

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007171

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,158.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/18/90
DATE ANALYZED : 07/19/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	35	88	35	88	0
DIETHYLENE GLYCOL	<2.0	20.0	20	100	20	100	0
PROPYLENE GLYCOL	<2.0	20.0	20	100	20	100	0
HEXYLENE GLYCOL	<2.0	40.0	35	88	35	88	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003464

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717101

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/11/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/13/90
CLIENT I.D.	: MK-SB-24-1	DATE ANALYZED	: 07/25/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 25

COMPOUNDS	RESULTS
CHLOROMETHANE	<12
BROMOMETHANE	<12
VINYL CHLORIDE	<1.2
CHLOROETHANE	<1.2
METHYLENE CHLORIDE	<7.5
ACETONE	<25
CARBON DISULFIDE	<1.2
1,1-DICHLOROETHENE	<1.2
1,1-DICHLOROETHANE	<1.2
1,2-DICHLOROETHENE (TOTAL)	<1.2
CHLOROFORM	<1.2
1,2-DICHLOROETHANE	<1.2
2-BUTANONE (MEK)	<25
1,1,1-TRICHLOROETHANE	160
CARBON TETRACHLORIDE	<1.2
VINYL ACETATE	<12
BROMODICHLOROMETHANE	<1.2
1,1,2,2-TETRACHLOROETHANE	<1.2
1,2-DICHLOROPROPANE	<1.2
TRANS-1,3-DICHLOROPROPENE	<1.2
TRICHLOROETHENE	3.5
DIBROMOCHLOROMETHANE	<1.2
1,1,2 TRICHLOROETHANE	<1.2
BENZENE	<1.2
CIS-1,3-DICHLOROPROPENE	<1.2
BROMOFORM	<7.5
2-HEXANONE (MBK)	<12
4-METHYL-2-PENTANONE (MIBK)	<12
TETRACHLOROETHENE	33
TOLUENE	78
CHLOROBENZENE	11
ETHYL BENZENE	<1.2
STYRENE	<1.2
TOTAL XYLENES	<1.2

SURROGATE PERCENT RECOVERIES

MCK0003465

1,2-DICHLOROETHANE-D4 (%)	**
BFB (%)	**
TOLUENE-D8 (%)	**

** Due to the necessary dilution of the sample, result was not attainable

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00717101

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
343 TRICHLOROTRIFLUOROETHANE	8
827 AROMATIC HYDROCARBON	400
911 AROMATIC HYDROCARBON	90
938 AROMATIC HYDROCARBON	100

MCK0003466

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717102

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/11/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/13/90
CLIENT I.D.	: MK-SB-24-21	DATE ANALYZED	: 07/26/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 40

COMPOUNDS	RESULTS
CHLOROMETHANE	<20
BROMOMETHANE	<20
VINYL CHLORIDE	<2.0
CHLOROETHANE	<2.0
METHYLENE CHLORIDE	<12
ACETONE	120
CARBON DISULFIDE	<2.0
1,1-DICHLOROETHENE	<2.0
1,1-DICHLOROETHANE	<2.0
1,2-DICHLOROETHENE (TOTAL)	<2.0
CHLOROFORM	<2.0
1,2-DICHLOROETHANE	6.4
2-BUTANONE (MEK)	65
1,1,1-TRICHLOROETHANE	530
CARBON TETRACHLORIDE	82
VINYL ACETATE	<20
BROMODICHLOROMETHANE	<2.0
1,1,2,2-TETRACHLOROETHANE	5.9
1,2-DICHLOROPROPANE	<2.0
TRANS-1,3-DICHLOROPROPENE	<2.0
TRICHLOROETHENE	33
DIBROMOCHLOROMETHANE	<2.0
1,1,2 TRICHLOROETHANE	<2.0
BENZENE	<2.0
CIS-1,3-DICHLOROPROPENE	<2.0
BROMOFORM	<12
2-HEXANONE (MBK)	<20
4-METHYL-2-PENTANONE (MIBK)	<20
TETRACHLOROETHENE	630
TOLUENE	130
CHLOROBENZENE	<2.0
ETHYL BENZENE	31
STYRENE	<2.0
TOTAL XYLENES	160

MCK0003467

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	**
BFB (%)	**
TOLUENE-D8 (%)	**

** Due to the necessary dilution of the sample, result was not attainable

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00717102

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
338 FREON 113	200
847 OCTANE	20

MCK0003468

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717103

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/11/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/13/90
CLIENT I.D.	: MK-SB-24-41	DATE ANALYZED	: 07/26/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 20

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1.0
CHLOROETHANE	<1.0
METHYLENE CHLORIDE	48
ACETONE	<20
CARBON DISULFIDE	<1.0
1,1-DICHLOROETHENE	5
1,1-DICHLOROETHANE	<1.0
1,2-DICHLOROETHENE (TOTAL)	<1.0
CHLOROFORM	<1.0
1,2-DICHLOROETHANE	<1.0
2-BUTANONE (MEK)	<20
1,1,1-TRICHLOROETHANE	100
CARBON TETRACHLORIDE	<1.0
VINYL ACETATE	<10
BROMODICHLOROMETHANE	<1.0
1,1,2,2-TETRACHLOROETHANE	<1.0
1,2-DICHLOROPROPANE	<1.0
TRANS-1,3-DICHLOROPROPENE	<1.0
TRICHLOROETHENE	6
DIBROMOCHLOROMETHANE	<1.0
1,1,2 TRICHLOROETHANE	<1.0
BENZENE	<1.0
CIS-1,3-DICHLOROPROPENE	<1.0
BROMOFORM	<6.0
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	58
TOLUENE	12
CHLOROBENZENE	<1.0
ETHYL BENZENE	1.8
STYRENE	<1.0
TOTAL XYLENES	8.6

MCK0003469

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	84
BFB (%)	121*
TOLUENE-D8 (%)	114

* Result out of limits due to sample matrix interference

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

T : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00717103

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003470

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717104

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/12/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/13/90
CLIENT I.D.	: MK-SB-30-1.5	DATE ANALYZED	: 07/26/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 400

COMPOUNDS	RESULTS
CHLOROMETHANE	<200
BROMOMETHANE	<200
VINYL CHLORIDE	<20
CHLOROETHANE	<20
METHYLENE CHLORIDE	380
ACETONE	<400
CARBON DISULFIDE	<20
1,1-DICHLOROETHENE	<20
1,1-DICHLOROETHANE	<20
1,2-DICHLOROETHENE (TOTAL)	<20
CHLOROFORM	<20
1,2-DICHLOROETHANE	32
2-BUTANONE (MEK)	<400
1,1,1-TRICHLOROETHANE	3500
CARBON TETRACHLORIDE	550
VINYL ACETATE	<200
BROMODICHLOROMETHANE	<20
1,1,2,2-TETRACHLOROETHANE	31
1,2-DICHLOROPROPANE	<20
TRANS-1,3-DICHLOROPROPENE	<20
TRICHLOROETHENE	60
DIBROMOCHLOROMETHANE	<20
1,1,2 TRICHLOROETHANE	<20
BENZENE	<20
CIS-1,3-DICHLOROPROPENE	<20
BROMOFORM	<120
2-HEXANONE (MBK)	<200
4-METHYL-2-PENTANONE (MIBK)	<200
TETRACHLOROETHENE	2900
TOLUENE	110
CHLOROBENZENE	170
ETHYL BENZENE	50
STYRENE	<20
TOTAL XYLENES	90

MCK0003471

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	**
BFB (%)	**
TOLUENE-D8 (%)	**

** Due to the necessary dilution of the sample, result was not attainable

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00717104

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
339 FREON 113	2000

MCK0003472

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717105

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/12/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/13/90
CLIENT I.D.	: MK-SB-30-21	DATE ANALYZED	: 07/26/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 120

COMPOUNDS	RESULTS
CHLOROMETHANE	<60
BROMOMETHANE	<60
VINYL CHLORIDE	<6.0
CHLOROETHANE	<6.0
METHYLENE CHLORIDE	120
ACETONE	<120
CARBON DISULFIDE	<6.0
1,1-DICHLOROETHENE	<6.0
1,1-DICHLOROETHANE	<6.0
1,2-DICHLOROETHENE (TOTAL)	<6.0
CHLOROFORM	<6.0
1,2-DICHLOROETHANE	<6.0
2-BUTANONE (MEK)	<120
1,1,1-TRICHLOROETHANE	190
CARBON TETRACHLORIDE	30
VINYL ACETATE	<60
BROMODICHLOROMETHANE	<6.0
1,1,2,2-TETRACHLOROETHANE	<6.0
1,2-DICHLOROPROPANE	<6.0
TRANS-1,3-DICHLOROPROPENE	<6.0
TRICHLOROETHENE	17
DIBROMOCHLOROMETHANE	<6.0
1,1,2 TRICHLOROETHANE	<6.0
BENZENE	<6.0
CIS-1,3-DICHLOROPROPENE	<6.0
BROMOFORM	<36
2-HEXANONE (MBK)	<60
4-METHYL-2-PENTANONE (MIBK)	<60
TETRACHLOROETHENE	1000
TOLUENE	83
CHLOROBENZENE	<6.0
ETHYL BENZENE	15
STYRENE	<6.0
TOTAL XYLENES	60

MCK0003473

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	**
BFB (%)	**
TOLUENE-D8 (%)	**

** Due to the necessary dilution of the sample, result was not attainable

Analytical Technologies, Inc. ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00717105

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003474

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717106

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/12/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/13/90
CLIENT I.D.	: MK-SB-30-41	DATE ANALYZED	: 07/26/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 2

COMPOUNDS	RESULTS
CHLOROMETHANE	<1.0
BROMOMETHANE	<1.0
VINYL CHLORIDE	<0.10
CHLOROETHANE	<0.10
METHYLENE CHLORIDE	17
ACETONE	<2.0
CARBON DISULFIDE	<0.10
1,1-DICHLOROETHENE	5.4
1,1-DICHLOROETHANE	<0.10
1,2-DICHLOROETHENE (TOTAL)	<0.10
CHLOROFORM	<0.10
1,2-DICHLOROETHANE	<0.10
2-BUTANONE (MEK)	<2.0
1,1,1-TRICHLOROETHANE	3.4
CARBON TETRACHLORIDE	0.5
VINYL ACETATE	<1.0
BROMODICHLOROMETHANE	<0.10
1,1,2,2-TETRACHLOROETHANE	<0.10
1,2-DICHLOROPROPANE	<0.10
TRANS-1,3-DICHLOROPROPENE	<0.10
TRICHLOROETHENE	2.6
DIBROMOCHLOROMETHANE	<0.10
1,1,2 TRICHLOROETHANE	<0.10
BENZENE	<0.10
CIS-1,3-DICHLOROPROPENE	<0.10
BROMOFORM	<0.6
2-HEXANONE (MBK)	<1.0
4-METHYL-2-PENTANONE (MIBK)	<1.0
TETRACHLOROETHENE	7.4
TOLUENE	0.3
CHLOROBENZENE	<0.10
ETHYL BENZENE	<0.10
STYRENE	<0.10
TOTAL XYLENES	<0.10

SURROGATE PERCENT RECOVERIES

MCK0003475

1,2-DICHLOROETHANE-D4 (%)	93
BFB (%)	92
TOLUENE-D8 (%)	80

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00717106

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003476

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007171
PROJECT #	: 17333,158.11	DATE EXTRACTED	: 07/13/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/25/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.48
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

MCK0003477

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	111
BFB (%)	105
TOLUENE-D8 (%)	105

Analytical Technologies, Inc. GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN ATI I.D. : 007171

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003478

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007171
PROJECT #	: 17333,158.11	DATE EXTRACTED	: 07/13/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/26/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.7
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	101
BFB (%)	100
TOLUENE-D8 (%)	101

MCK0003479

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 007171

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003480

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007171
PROJECT #	: 17333,158.11	DATE EXTRACTED	: 07/13/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/25/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.5
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	104
BFB (%)	108
TOLUENE-D8 (%)	106

MCK0003481

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 007171

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical**Technologies**, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007171

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,158.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/13/90
DATE ANALYZED : 07/25/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<0.05	2.00	1.9	95	1.9	95	0
TRICHLOROETHENE	<0.05	2.80	2.7	96	2.9	104	8
CHLOROBENZENE	<0.05	2.50	2.6	104	2.7	108	4
TOLUENE	<0.05	2.50	2.5	100	2.7	108	8
BENZENE	<0.05	2.50	2.1	84	2.2	88	5

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717101

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/11/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/13/90
CLIENT I.D.	: MK-SB-24-1	DATE ANALYZED	: 08/02/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
'-METHYLPHENOL	<0.17
NITROSO-DI-N-PROPYLAMINE	<0.17
XACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	6.9
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	4.3
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
NITROPHENOL	<0.85
BENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717101

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	53
2-FLUOROBIPHENYL (%)	66
TERPHENYL (%)	79
PHENOL-D6 (%)	55
2-FLUOROPHENOL (%)	77
2,4,6-TRIBROMOPHENOL (%)	55

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Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00717101

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
519 ALIPHATIC HYDROCARBON C8	10
567 TRIMETHYLBENZENE	7
652 ALIPHATIC HYDROCARBON C10	9
943 ALIPHATIC HYDROCARBON C12	10
1043 ALIPHATIC HYDROCARBON C13	10
300-2500 TOTAL EXTRACTABLE HYDROCARBONS C8-C28	400

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717102

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/11/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/13/90
CLIENT I.D.	: MK-SB-24-21	DATE ANALYZED	: 08/03/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	2.7
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	1.0
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003487

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717102

ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	69
2-FLUOROBIPHENYL (%)	66
TERPHENYL (%)	77
PHENOL-D6 (%)	41
2-FLUOROPHENOL (%)	60
2,4,6-TRIBROMOPHENOL (%)	59

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00717102

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
514 ALIPHATIC HYDROCARBON C8	20
561 TRIMETHYLBENZENE	8
623 ALIPHATIC HYDROCARBON C9	8
649 ALIPHATIC HYDROCARBON C9	10
665 ALIPHATIC HYDROCARBON C10	10
300-2500 TOTAL EXTRACTABLE HYDROCARBONS C8-C28	200

MCK0003489

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717103

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/11/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/13/90
CLIENT I.D.	: MK-SB-24-41	DATE ANALYZED	: 08/03/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
(ACHLOROETHANE	<0.17
.TROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	TR<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
BENZOFURAN	<0.17
4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003490

TR - Compound detected at an unquantifiable trace level

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717103

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	52
2-FLUOROBIPHENYL (%)	56
TERPHENYL (%)	59
PHENOL-D6 (%)	52
2-FLUOROPHENOL (%)	53
2,4,6-TRIBROMOPHENOL (%)	59

MCK0003491

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00717103

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
507 ETHYLMETHYLBENZENE	0.5
1880 AROMATIC HYDROCARBON	0.3
2464 ALIPHATIC HYDROCARBON C28	0.9

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717104

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/12/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/13/90
CLIENT I.D.	: MK-SB-30-1.5	DATE ANALYZED	: 08/03/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	0.24
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003493

(CONTINUED NEXT PAGE)

AnalyticalTechnologies,Inc.

GCMS - RESULTS

ATI I.D. : 00717104

EST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	55
2-FLUOROBIPHENYL (%)	66
TERPHENYL (%)	80
PHENOL-D6 (%)	35
2-FLUOROPHENOL (%)	47
2,4,6-TRIBROMOPHENOL (%)	7*

* Result out of limits due to sample matrix interference

MCK0003494

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717105

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	1.4
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	65
2-FLUOROBIPHENYL (%)	72
TERPHENYL (%)	76
PHENOL-D6 (%)	66
2-FLUOROPHENOL (%)	5*
2,4,6-TRIBROMOPHENOL (%)	68

* Result out of limits due to sample matrix interference

MCK0003495

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00717105

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
462 ALIPHATIC HYDROCARBON C8	20
505 BENZALDEHYDE	1
553 TRIMETHYLBENZENE	1
814 BUTYL CARBITOL	1
850 PHENOXY ETHANOL	3
200-1100 TOTAL EXTRACTABLE HYDROCARBONS C7-C14	70

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00717106

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/12/90
PROJECT #	: 17333,158.11	DATE RECEIVED	: 07/12/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/13/90
CLIENT I.D.	: MK-SB-30-41	DATE ANALYZED	: 08/03/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003497

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Analytical Technologies, Inc. GCMS - RESULTS

ATI I.D. : 00717106

.ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
..T-N-OCTYLPHTHALATE	<0.17
..NZO(b)FLUORANTHENE	<0.17
..ENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	55
2-FLUOROBIPHENYL (%)	62
TERPHENYL (%)	71
PHENOL-D6 (%)	50
2-FLUOROPHENOL (%)	48
2,4,6-TRIBROMOPHENOL (%)	56

MCK0003498

Analytical Technologies, ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00717106

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
422 BUTYL CELLOSOLVE	1

MCK0003499

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

		ATI I.D.	: 007171
CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: 07/13/90
PROJECT #	: 17333,158.11	DATE ANALYZED	: 08/02/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	UNITS	: MG/KG
CLIENT I.D.	: REAGENT BLANK	DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
TROBENZENE	<0.17
OPHORONE	<0.17
NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
6-DINITROTOLUENE	<0.17
ETHYLPHTHALATE	<0.17
4-CHLOROPHENYL PHENYL ETHER	<0.17

MCK0003500

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Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ATI I.D. : 007171

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	TR<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	48
2-FLUOROBIPHENYL (%)	54
TERPHENYL (%)	72
PHENOL-D6 (%)	46
2-FLUOROPHENOL (%)	44
2,4,6-TRIBROMOPHENOL (%)	52

TR - Compound detected at an unquantifiable trace level

MCK0003501

Analytical Technologies, Inc. GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN ATI I.D. : 007171

UNITS : MG/KG

COMPOUNDS	RESULTS
442 ALIPHATIC HYDROCARBON C7	0.5

MCK0003502

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 007171

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT = : 17333,158.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00707703

DATE EXTRACTED : 07/17/90
DATE ANALYZED : 08/03/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<0.17	3.3	2.6	79	2.0	61	26
ACENAPHTHENE	<0.17	3.3	2.2	67	1.8	55	20
2,4-DINITROTOLUENE	<0.17	3.3	2.2	67	1.8	55	20
PYRENE	<0.17	3.3	2.1	64	1.8	55	15
N-NITROSO-DI-N-PROPYLAMINE	<0.17	3.3	1.7	52	1.4	42	19
1,4-DICHLOROBENZENE	<0.17	3.3	2.0	61	1.4	42	35
PENTACHLOROPHENOL	<0.85	13.2	9.2	69	7.9	59	15
PHENOL	<0.17	6.7	2.5	37	2.2	33	13
2-CHLOROPHENOL	<0.17	6.7	3.5	52	2.9	43	19
4-CHLORO-3-METHYLPHENOL	<0.17	6.7	2.9	44	2.7	40	7
4-NITROPHENOL	<0.85	13.2	5.0	38	4.4	32	17

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

HLA

15621 [illegible] Avenue, Suite 100
Tustin 92680
714/2[illegible] — 213/617-7232
Telecopy: 714/259-1378

CHAIN OF CUSTODY FORM

Lab: [illegible]

Samplers: Don Johnson

Job Number: 17333, 158.11

Name/Location: McKesson Santa Fe Springs

Project Manager: B Chadwick

Recorder: [signature] (Signature Required)

SOURCE CODE	MATRIX: Water	MATRIX: Sediment	MATRIX: Soil	MATRIX: Oil	CONTAINERS & PRESERV.: Unpres.	CONTAINERS & PRESERV.: H_2SO_4	CONTAINERS & PRESERV.: HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601.8010	EPA 602.8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH		Pb
0			X		X						90	07	11	Am	MK-SB-24-1		X	X			X		X
0			X		X						90	07	11	Am	MK-SB-24-21		X	X			X		X
0			X		X						90	07	11	Am	MK-SB-24-41		X	X			X		X
0			X		X						90	07	12	Am	MK-SB-30-1.5		X	X			X		X
0			X		X						90	07	12	Am	MK-SB-30-21		X	X			X		X
0			X		X						90	07	12	Am	MK-SB-30-41		X	X			X		X

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK0003504				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) [signature]	RECEIVED BY: (Signature) Bob DeBey	DATE/TIME 11/12/90 17[illegible]
RELINQUISHED BY: (Signature) Bob DeBey	RECEIVED BY: (Signature) [illegible]	DATE/TIME [illegible]
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
METHOD OF SHIPMENT: Courier w/ custody seal on cooler		

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

Analytical Technologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego CA 92121 (619) 458-9141

3.4.1

ATI I.D. 007230

August 13, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite #100
Tustin, California 92680

Project Name: McKesson Santa Fe Springs

Project No.: 17333,157.11

Attention: Burton Chadwick

On July 16, 1990, Analytical Technologies, Inc. received six soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

for: Timothy J. Fitzpatrick
Inorganics Supervisor

Richard M. Amano
Laboratory Manager

TJF:nm

Analytical Technologies, Inc.

ATI I.D. 007230

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SANTA FE SPRINGS

PROJECT NO.: 17333,157.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
CHLORIDE	COLORIMETRIC	EPA 325.2
FLUORIDE	ELECTRODE	EPA 340.2
NITRATE AS NITROGEN	COLORIMETRIC	EPA 353.1
PETROLEUM HYDROCARBONS	IR	EPA 418.1 (MODIFIED)
pH	ELECTRODE	EPA 9045
SULFATE	COLORIMETRIC	EPA 9036
IRON	ICAP	EPA 6010
MANGANESE	ICAP	EPA 6010
POTASSIUM	ICAP	EPA 6010
SODIUM	ICAP	EPA 6010
ZINC	ICAP	EPA 6010
GLYCOLS	GC/FID	EPA 8015 (MODIFIED)
VOLATILE ORGANICS	GC/MS	EPA 8240
SEMI-VOLATILE ORGANICS (BNA)	GC/MS	EPA 8270

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
ATI I.D. : 007230

DATE RECEIVED : 07/16/9
REPORT DATE : 08/13/9

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-SB-20-11	SOIL	07/13/90
02	MK-SB-20-20.5	SOIL	07/13/90
03	MK-SB-20-41	SOIL	07/13/90
04	MK-SB-25-6	SOIL	07/13/90
05	MK-SB-25-21	SOIL	07/13/90
06	MK-SB-25-41	SOIL	07/13/90

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	6

MCK0003507

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc. GENERAL CHEMISTRY RESULTS

ATI I.D. : 007230

LIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/16/90
REPORT DATE : 08/13/90

PARAMETER	UNITS	01	02	03	04	05
CHLORIDE	MG/KG	399	184	<5	-	-
FLUORIDE	MG/KG	<5	<5	<5	-	-
NITRATE AS NITROGEN	MG/KG	128	91.8	78.8	-	-
PETROLEUM HYDROCARBONS, IR	MG/KG	<1	<1	1	1	<1
PH	UNITS	7.9	7.7	8.3	-	-
SULFATE	MG/KG	139	<100	<100	-	-

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 007230

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/16/90
REPORT DATE : 08/13/90

PARAMETER	UNITS	06
PETROLEUM HYDROCARBONS, IR	MG/KG	<1

MCK0003509

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007230

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CHLORIDE	MG/KG	00721703	19600	19100	3	19900	400	138
FLUORIDE	MG/KG	00728306	12	13	8	60	48	98
NITRATE AS NITROGEN	MG/KG	00723003	78.8	73.7	7	**	**	**
PETROLEUM HYDROCARBONS	MG/KG	00722202	4	4	0	110	103	103
PH	UNITS	00723608	8.1	8.1	0	N/A	N/A	N/A
SULFATE	MG/KG	00728302	<100	<100	0	211	200	106

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

** Due to the necessary dilution of the sample, result was not attainable

Analytical Technologies, Inc. METALS RESULTS

ATI I.D. : 007230

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/16/9
REPORT DATE : 08/13/90

PARAMETER	UNITS	01	02	03
IRON	MG/KG	18020	8030	22900
POTASSIUM	MG/KG	2990	1070	3270
MANGANESE	MG/KG	587	421	337
SODIUM	MG/KG	289	183	321
ZINC	MG/KG	51.4	23.4	70.2

Analytical Technologies, Inc. METALS - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007230

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
IRON	MG/KG	00728301	23400	23100	1	**	**	**
POTASSIUM	MG/KG	00728301	3380	3380	0	**	**	**
MANGANESE	MG/KG	00728301	522	502	4	610	98.8	99
SODIUM	MG/KG	00728301	294	310	5	946	556	116
ZINC	MG/KG	00728301	54.5	58.9	4	110	49.4	108

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

** Due to the necessary dilution of the sample, result was not attainable

MCK0003512

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00723001

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-20-11	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003513

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00723002

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-20-20.5	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003514

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00723003

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-20-41	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003515

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00723004

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-25-6	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003516

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00723005

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-25-21	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003517

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00723006

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-25-41	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007230
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/19/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003519

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007230

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00723003

DATE EXTRACTED : 07/18/90
DATE ANALYZED : 07/19/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	9.9	25	8.8	22	13
DIETHYLENE GLYCOL	<2.0	20.0	3.0	15	3.2	13	14
PROPYLENE GLYCOL	<2.0	20.0	14	70	13	65	7
HEXYLENE GLYCOL	<2.0	40.0	9.9	25	8.8	22	13

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003520

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723001

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-20-11	DATE ANALYZED	: 07/27/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	93
4-BROMOFLUOROBENZENE (%)	110
TOLUENE-D8 (%)	90

MCK0003521

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00723001

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
580 ALIPHATIC HYDROCARBON	0.6
604 ALIPHATIC HYDROCARBON	2
637 ALIPHATIC HYDROCARBON	3
655 ALIPHATIC HYDROCARBON	7
682 ALIPHATIC HYDROCARBON	1

MCK0003522

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723002

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-20-20.5	DATE ANALYZED	: 07/27/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	101
4-BROMOFLUOROBENZENE (%)	114
TOLUENE-D8 (%)	102

MCK0003523

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00723002

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003524

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723003

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-20-41	DATE ANALYZED	: 07/27/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	0.1
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
2-DICHLOROETHANE	<0.05
BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	0.09
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	0.07
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	0.2
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

2-DICHLOROETHANE-D4 (%)	89
BFB (%)	94
TOLUENE-D8 (%)	88

MCK0003525

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00723003

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003526

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723004

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-25-6	DATE ANALYZED	: 07/27/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 2

COMPOUNDS	RESULTS
CHLOROMETHANE	<1.0
BROMOMETHANE	<1.0
VINYL CHLORIDE	<0.10
CHLOROETHANE	<0.10
METHYLENE CHLORIDE	3.5
ACETONE	19
CARBON DISULFIDE	<0.10
1,1-DICHLOROETHENE	<0.10
1,1-DICHLOROETHANE	0.3
1,2-DICHLOROETHENE (TOTAL)	<0.10
CHLOROFORM	<0.10
1,2-DICHLOROETHANE	0.2
2-BUTANONE (MEK)	<2.0
1,1,1-TRICHLOROETHANE	0.1
CARBON TETRACHLORIDE	<0.10
VINYL ACETATE	<1.0
BROMODICHLOROMETHANE	<0.10
1,1,2,2-TETRACHLOROETHANE	<0.10
1,2-DICHLOROPROPANE	<0.10
TRANS-1,3-DICHLOROPROPENE	<0.10
TRICHLOROETHENE	<0.10
DIBROMOCHLOROMETHANE	<0.10
1,1,2 TRICHLOROETHANE	<0.10
BENZENE	<0.10
CIS-1,3-DICHLOROPROPENE	<0.10
BROMOFORM	<0.6
2-HEXANONE (MBK)	<1.0
4-METHYL-2-PENTANONE (MIBK)	<1.0
TETRACHLOROETHENE	0.1
TOLUENE	0.1
CHLOROBENZENE	<0.10
ETHYL BENZENE	<0.10
STYRENE	<0.10
TOTAL XYLENES	<0.10

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	89
[illegible] (%)	88
TOLUENE-D8 (%)	91

MCK0003527

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00723004

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytico Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723005

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-25-21	DATE ANALYZED	: 07/27/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 2

COMPOUNDS	RESULTS
CHLOROMETHANE	<1.0
BROMOMETHANE	<1.0
VINYL CHLORIDE	<0.10
CHLOROETHANE	<0.10
METHYLENE CHLORIDE	<0.6
ACETONE	37
CARBON DISULFIDE	<0.10
1,1-DICHLOROETHENE	<0.10
1,1-DICHLOROETHANE	<0.10
1,2-DICHLOROETHENE (TOTAL)	<0.10
CHLOROFORM	<0.10
1,2-DICHLOROETHANE	<0.10
2-BUTANONE (MEK)	2.4
1,1,1-TRICHLOROETHANE	<0.10
CARBON TETRACHLORIDE	<0.10
VINYL ACETATE	<1.0
BROMODICHLOROMETHANE	<0.10
1,1,2,2-TETRACHLOROETHANE	<0.10
1,2-DICHLOROPROPANE	<0.10
TRANS-1,3-DICHLOROPROPENE	<0.10
TRICHLOROETHENE	<0.10
DIBROMOCHLOROMETHANE	<0.10
1,1,2 TRICHLOROETHANE	<0.10
BENZENE	<0.10
CIS-1,3-DICHLOROPROPENE	<0.10
BROMOFORM	<0.6
2-HEXANONE (MBK)	<1.0
4-METHYL-2-PENTANONE (MIBK)	<1.0
TETRACHLOROETHENE	<0.10
TOLUENE	<0.20
CHLOROBENZENE	<0.10
ETHYL BENZENE	<0.10
STYRENE	<0.10
TOTAL XYLENES	<0.10

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	97
BROMOFLUOROBENZENE (%)	102
TOLUENE-D8 (%)	103

MCK0003529

Analytico Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00723005

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003530

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723006

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/17/90
CLIENT I.D.	: MK-SB-25-41	DATE ANALYZED	: 07/27/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 3

COMPOUNDS	RESULTS
CHLOROMETHANE	<1.5
BROMOMETHANE	<1.5
VINYL CHLORIDE	<0.15
CHLOROETHANE	<0.15
METHYLENE CHLORIDE	3.0
ACETONE	3.5
CARBON DISULFIDE	<0.15
1,1-DICHLOROETHENE	0.7
1,1-DICHLOROETHANE	<0.15
1,2-DICHLOROETHENE (TOTAL)	0.6
CHLOROFORM	<0.15
1,2-DICHLOROETHANE	0.3
2-BUTANONE (MEK)	<3.0
1,1,1-TRICHLOROETHANE	<0.15
CARBON TETRACHLORIDE	<0.15
VINYL ACETATE	<1.5
BROMODICHLOROMETHANE	<0.15
1,1,2,2-TETRACHLOROETHANE	<0.15
1,2-DICHLOROPROPANE	<0.15
TRANS-1,3-DICHLOROPROPENE	<0.15
TRICHLOROETHENE	0.5
DIBROMOCHLOROMETHANE	<0.15
1,1,2 TRICHLOROETHANE	<0.15
BENZENE	<0.15
CIS-1,3-DICHLOROPROPENE	<0.15
BROMOFORM	<0.9
2-HEXANONE (MBK)	<1.5
4-METHYL-2-PENTANONE (MIBK)	<1.5
TETRACHLOROETHENE	0.6
TOLUENE	0.3
CHLOROBENZENE	<0.15
ETHYL BENZENE	<0.15
STYRENE	<0.15
TOTAL XYLENES	<0.15

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	87
B (%)	100
LUENE-D8 (%)	91

MCK0003531

Analytico Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00723006

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003532

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

.ST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007230
PROJECT =	: 17333,157.11	DATE EXTRACTED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/26/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
,1-DICHLOROETHANE	<0.05
,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
OMODICHLOROMETHANE	<0.05
,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
-HEXANONE (MBK)	<0.50
-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	101
BFB (%)	116
TOLUENE-D8 (%)	102

MCK0003533

Analytical Technologies, Inc. GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN ATI I.D. : 007230

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003534

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007230
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/25/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/27/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	104
BFB (%)	100
TOLUENE-D8 (%)	100

MCK0003535

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 007230

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007230

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE EXTRACTED	: 07/20/90
PROJECT #	: 17333,157.11	DATE ANALYZED	: 07/26/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	SAMPLE MATRIX	: SOIL
REF I.D.	: REAGENT SOIL	UNITS	: MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<0.05	2.0	1.9	95	1.7	85	11
TRICHLOROETHENE	<0.05	2.8	3.2	114	3.2	114	0
CHLOROBENZENE	<0.05	2.5	2.8	112	2.7	108	4
TOLUENE	<0.05	2.5	2.5	100	2.5	100	0
BENZENE	<0.05	2.5	2.1	84	2.0	80	5

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723001

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-20-11	DATE ANALYZED	: 08/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,6-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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Analytico Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723001

ST - EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	82
2-FLUOROBIPHENYL (%)	89
TERPHENYL (%)	86
PHENOL-D6 (%)	66
2-FLUOROPHENOL (%)	31
2,4,6-TRIBROMOPHENOL (%)	43

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00723001

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003540

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723002

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT =	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-20-20.5	DATE ANALYZED	: 08/06/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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MCK0003541

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723002

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	91
2-FLUOROBIPHENYL (%)	86
TERPHENYL (%)	79
PHENOL-D6 (%)	78
2-FLUOROPHENOL (%)	45
2,4,6-TRIBROMOPHENOL (%)	47

MCK0003542

Analytical Technologies, Inc. ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00723002

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723003

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-20-41	DATE ANALYZED	: 08/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723003

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	81
2-FLUOROBIPHENYL (%)	64
TERPHENYL (%)	83
PHENOL-D6 (%)	65
2-FLUOROPHENOL (%)	38
2,4,6-TRIBROMOPHENOL (%)	33

MCK0003545

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00723003

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723004

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
CLIENT I.D. : MK-SB-25-6
SAMPLE MATRIX : SOIL

DATE SAMPLED : 07/13/90
DATE RECEIVED : 07/16/90
DATE EXTRACTED : 07/18/90
DATE ANALYZED : 08/08/90
UNITS : MG/KG
DILUTION FACTOR : 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
-METHYLPHENOL	<0.17
NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003547

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723004

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	70
2-FLUOROBIPHENYL (%)	70
TERPHENYL (%)	86
PHENOL-D6 (%)	66
2-FLUOROPHENOL (%)	43
2,4,6-TRIBROMOPHENOL (%)	49

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00723004

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723005

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-25-21	DATE ANALYZED	: 08/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723005

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	104
2-FLUOROBIPHENYL (%)	84
TERPHENYL (%)	100
PHENOL-D6 (%)	83
2-FLUOROPHENOL (%)	58
2,4,6-TRIBROMOPHENOL (%)	51

MCK0003551

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00723005

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723006

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/13/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/16/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-25-41	DATE ANALYZED	: 08/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
-NITROSO-DI-N-PROPYLAMINE	<0.17
EXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
-NITROPHENOL	<0.85
BENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00723006

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	89
2-FLUOROBIPHENYL (%)	69
TERPHENYL (%)	95
PHENOL-D6 (%)	67
2-FLUOROPHENOL (%)	34
2,4,6-TRIBROMOPHENOL (%)	42

MCK0003554

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00723006

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007230
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 08/06/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17
4-CHLOROPHENYL PHENYL ETHER	<0.17

MCK0003556

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Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ATI I.D. : 007230

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	93
2-FLUOROBIPHENYL (%)	93
TERPHENYL (%)	85
PHENOL-D6 (%)	75
2-FLUOROPHENOL (%)	43
2,4,6-TRIBROMOPHENOL (%)	55

MCK0003557

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 007230

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003558

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007230

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00723003

DATE EXTRACTED : 07/18/90
DATE ANALYZED : 08/09/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<0.17	1.7	1.9	112	2.0	118	5
ACENAPHTHENE	<0.17	1.7	1.8	106	1.8	106	0
2,4-DINITROTOLUENE	<0.17	1.7	1.9	112	2.0	118	5
PYRENE	<0.17	1.7	1.8	106	1.8	106	0
N-NITROSO-DI-N-PROPYLAMINE	<0.17	1.7	1.8	106	1.9	112	5
1,4-DICHLOROBENZENE	<0.17	1.7	1.8	106	1.9	112	5
PENTACHLOROPHENOL	<0.85	13.3	10.3	77	10.0	75	3
PHENOL	<0.17	3.3	3.4	103	3.7	112	8
2-CHLOROPHENOL	<0.17	3.3	3.5	106	3.7	112	6
4-CHLORO-3-METHYLPHENOL	<0.17	3.3	3.9	118	4.1	124	5
4-NITROPHENOL	<0.85	13.3	12.4	93	11.6	87	7

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003559

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

007230

CHAIN OF CUSTODY FORM

Lab: ATI

Samplers: Dan Johnson

Job Number: 17333.157.11

Name/Location: McKesson Santa Fe Springs

Project Manager: B. Chadwick

Recorder: [signature] (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES
SO			X		X						90	07	13	Am	MK-SB-20-11
SO			X		X						90	07	13	Am	MK-SB-20-20.5
SO			X		X						90	07	13	Am	MK-SB-20-41
SO			X		X						90	07	13	PM	MK-SB-25-6
SO			X		X						90	07	13	PM	MK-SB-25-21
SO			X		X						90	07	13	PM	MK-SB-25-41

ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH	418.1 Hydrocarbons	413.1 Hydrocarbons	9045	TCLP Cd, Cr, Pb	Ni, Zn
	X	X				X		X	X	
	X	X				X		X	X	
	X	X				X		X	X	
	X	X				X	X	X	X	
	X	X				X	X	X	X	
	X	X				X	X	X	X	

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK0003560				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
[signature]	[signature]	
RELINQUISHED BY: (Signature) [signature]	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
METHOD OF SHIPMENT: Courier w/ Custody Seal		

Laboratory Copy White — Project Office Copy Yellow — Field or C... Pink ...opy

6533

Analytical**Technologies,** Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

3 4.1

CC3408

ATI I.D. 007257

August 13, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite #100
Tustin, California 92680

Project Name: McKesson Santa Fe Springs

Project No.: 17333,157.11

Attention: Burton Chadwick

On July 17, 1990, Analytical Technologies, Inc. received six soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

CAS for

for: Timothy J. Fitzpatrick
Inorganics Supervisor

Richard M. Amano
Laboratory Manager

TJF:da

Analytical Technologies, Inc.

ATI I.D. 007257

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SANTA FE SPRINGS

PROJECT NO.: 17333,157.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
PETROLEUM HYDROCARBONS	IR	EPA 418.1 (MODIFIED)
GLYCOLS	GC/FID	EPA 8015 (MODIFIED)
VOLATILE ORGANICS	GC/MS	EPA 8240
SEMI-VOLATILE ORGANICS (BNA)	GC/MS	EPA 8270

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
ATI I.D. : 007257

DATE RECEIVED : 07/17/90
REPORT DATE : 08/13/90

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-SB-26-21	SOIL	07/16/90
02	MK-SB-26-26	SOIL	07/16/90
03	MK-SB-26-41	SOIL	07/16/90
04	MK-SB-27-21	SOIL	07/16/90
05	MK-SB-27-31	SOIL	07/16/90
06	MK-SB-27-41	SOIL	07/16/90

----- TOTALS -----

MATRIX	# SAMPLES
SOIL	6

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc. GENERAL CHEMISTRY RESULTS

ATI I.D. : 007257

CLIENT : HARDING LAWSON ASSOC.-IRVINE
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/17/90
REPORT DATE : 08/13/90

PARAMETER	UNITS	01	02	03	04	05
PETROLEUM HYDROCARBONS, IR	MG/KG	<1	<1	<1	<1	9

MCK0003564

Analytical Technologies, Inc. GENERAL CHEMISTRY RESULTS

ATI I.D. : 007257

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/17/90
REPORT DATE : 08/13/90

PARAMETER	UNITS	06
PETROLEUM HYDROCARBONS, IR	MG/KG	1

MCK0003565

Analytical Technologies, Inc. GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007257

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
PETROLEUM HYDROCARBONS	MG/KG	00724416	130	130	0	230	115	83

$$\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00725701

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-26-21	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003567

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00725702

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-26-26	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003568

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00725703

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-26-41	DATE ANALYZED	: 02/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003569

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00725704

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-27-21	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003570

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00725705

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-27-31	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003571

Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00725706

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-27-41	DATE ANALYZED	: 07/20/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003572

Analytical Technologies, GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007257
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/19/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003573

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : GLYCOLS

ATI I.D. : 007257

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00725703

DATE EXTRACTED : 07/18/90
DATE ANALYZED : 07/19/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.[illegible]	[illegible].0	11	28	8.0	20	33
DIETHYLENE GLYCOL	[illegible]	20.0	3.1	16	2.5	13	21
PROPYLENE GLYCOL	<3.[illegible]	20.0	15	75	13	65	14
HEXYLENE GLYCOL	<2.[illegible]	40.0	11	28	8.0	20	33

Recovery = (Spike Sample Result - Sample Result) / Spike Concentration x 100

RPD (Relative % Difference) = (Spiked Sample Result - Duplicate Spike Sample Result) / Average of Spiked Sample x 100

MCK0003574

Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007257

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-IRVINE
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/18/90
DATE ANALYZED : 07/19/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	35	88	35	88	0
DIETHYLENE GLYCOL	<2.0	20.0	20	100	20	100	0
PROPYLENE GLYCOL	<2.0	20.0	20	100	20	100	0
HEXYLENE GLYCOL	<2.0	40.0	35	88	35	88	0

$$\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003575

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725701

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-26-21	DATE ANALYZED	: 07/30/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2-TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	80
BFB (%)	100
TOLUENE-D8 (%)	104

MCK0003576

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

T : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00725701

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003577

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725702

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-26-26	DATE ANALYZED	: 07/30/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	3.8
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	0.1
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	0.2
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	0.07
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	0.07
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05
SURROGATE PERCENT RECOVERIES	
1,2-DICHLOROETHANE-D4 (%)	87
BFB (%)	98
TOLUENE-D8 (%)	99

MCK0003578

Technologies, ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00725702

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Technologies,

GCMS - RESULTS

ATI I.D. : 00725703

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-26-41	DATE ANALYZED	: 07/30/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	4.4
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	0.4
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	0.08
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	0.4
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	0.3
DIBROMOCHLOROMETHANE	<0.05
1,1,2-TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	0.4
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	84
BFB (%)	91
TOLUENE-D8	96

MCK0003580

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

I : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00725703

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725704

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-27-21	DATE ANALYZED	: 07/30/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	80
BFB (%)	100
TOLUENE-D8 (%)	106

MCK0003582

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

T : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00725704

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
203 PROPANONE	0.3

MCK0003583

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725705

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-27-31	DATE ANALYZED	: 07/31/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 2.5

COMPOUNDS	RESULTS
CHLOROMETHANE	<1.2
BROMOMETHANE	<1.2
VINYL CHLORIDE	<0.12
CHLOROETHANE	<0.12
METHYLENE CHLORIDE	23
ACETONE	<2.5
CARBON DISULFIDE	<0.12
1,1-DICHLOROETHENE	0.6
1,1-DICHLOROETHANE	0.2
1,2-DICHLOROETHENE (TOTAL)	0.4
CHLOROFORM	<0.12
1,2-DICHLOROETHANE	0.8
2-BUTANONE (MEK)	4.6
1,1,1-TRICHLOROETHANE	3.0
CARBON TETRACHLORIDE	<0.12
VINYL ACETATE	<1.2
BROMODICHLOROMETHANE	<0.12
1,1,2,2-TETRACHLOROETHANE	<0.12
1,2-DICHLOROPROPANE	<0.12
TRANS-1,3-DICHLOROPROPENE	<0.12
TRICHLOROETHENE	0.5
DIBROMOCHLOROMETHANE	<0.12
1,1,2 TRICHLOROETHANE	<0.12
BENZENE	<0.12
CIS-1,3-DICHLOROPROPENE	<0.12
BROMOFORM	<0.75
2-HEXANONE (MBK)	<1.2
4-METHYL-2-PENTANONE (MIBK)	<1.2
TETRACHLOROETHENE	1
TOLUENE	3.2
CHLOROBENZENE	<0.12
ETHYL BENZENE	<0.12
STYRENE	<0.12
TOTAL XYLENES	0.4

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	89
BFB (%)	96
TOLUENE-D8 (%)	87

MCK0003584

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

I : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00725705

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003585

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725706

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-27-41	DATE ANALYZED	: 07/31/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 4

COMPOUNDS	RESULTS
CHLOROMETHANE	<2.0
BROMOMETHANE	<2.0
VINYL CHLORIDE	<0.20
CHLOROETHANE	<0.20
METHYLENE CHLORIDE	26
ACETONE	<4.0
CARBON DISULFIDE	<0.20
1,1-DICHLOROETHENE	0.5
1,1-DICHLOROETHANE	<0.20
1,2-DICHLOROETHENE (TOTAL)	<0.20
CHLOROFORM	<0.20
1,2-DICHLOROETHANE	<0.20
2-BUTANONE (MEK)	2.2
1,1,1-TRICHLOROETHANE	0.3
CARBON TETRACHLORIDE	<0.20
VINYL ACETATE	<2.0
BROMODICHLOROMETHANE	<0.20
1,1,2,2-TETRACHLOROETHANE	<0.20
1,2-DICHLOROPROPANE	<0.20
TRANS-1,3-DICHLOROPROPENE	<0.20
TRICHLOROETHENE	0.4
DIBROMOCHLOROMETHANE	<0.20
1,1,2 TRICHLOROETHANE	<0.20
BENZENE	<0.20
CIS-1,3-DICHLOROPROPENE	<0.20
BROMOFORM	<1.2
2-HEXANONE (MBK)	<2.0
4-METHYL-2-PENTANONE (MIBK)	<2.0
TETRACHLOROETHENE	0.8
TOLUENE	1
CHLOROBENZENE	<0.20
ETHYL BENZENE	<0.20
STYRENE	<0.20
TOTAL XYLENES	<0.20

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	78
BFB (%)	91
TOLUENE-D8 (%)	77

MCK0003586

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

: EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00725706

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007257
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/30/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	TR<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	101
BFB (%)	100
TOLUENE-D8 (%)	106

MCK0003588

TR - Compound detected at an unquantifiable trace level

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 007257

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003589

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007257
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/31/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.72
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	105
BFB (%)	106
TOLUENE-D8 (%)	105

MCK0003590

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 007283

CLIENT : HARDING LAWSON ASSOC.-IRVINE
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/18/90
REPORT DATE : 08/13/90

PARAMETER	UNITS	06	07	08
IRON	MG/KG	24580	22990	22800
POTASSIUM	MG/KG	3190	4210	4100
MANGANESE	MG/KG	416	222	346
SODIUM	MG/KG	306	340	295
ZINC	MG/KG	801	159	250

Analytical Technologies, Inc. METALS RESULTS

ATI I.D. : 007283

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/18/90
REPORT DATE : 08/13/90

PARAMETER	UNITS	01	02	03	04	05
IRON	MG/KG	23400	26150	28340	26700	24310
POTASSIUM	MG/KG	3380	3620	4090	4050	4110
MANGANESE	MG/KG	522	528	428	294	494
SODIUM	MG/KG	294	340	319	286	316
ZINC	MG/KG	84.5	68.6	555	913	117

MCK0003592

Analytical Technologies, Inc. GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT = : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007283

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CARBONATE AS CACO3	MG/L	00730402	<5	<5	0	N/A	N/A	N/A
BICARBONATE AS CACO3	MG/L		136	140	3	N/A	N/A	N/A
HYDROXIDE AS CACO3	MG/L		<5	<5	0	N/A	N/A	N/A
TOTAL ALKALINITY AS CA	MG/L		136	140	3	N/A	N/A	N/A
CHLORIDE	MG/L	00730701	40	45	12	85	40	106
CHLORIDE	MG/KG	00728305	8.3	8.3	0	67.0	66.7	88
CONDUCTIVITY, UMHOS/CM	-	00730702	3030	3040	0	N/A	N/A	N/A
FLUORIDE	MG/L	00726301	<0.5	<0.5	0	4.9	5.0	98
FLUORIDE	MG/KG	00728306	12	13	8	60	48	98
SURFACTANTS	MG/L	00728309	<0.1	<0.1	0	0.9	1.0	90
NITRATE AS NITROGEN	MG/L	00728309	1.1	1.1	0	2.70	2.00	80
NITRATE AS NITROGEN	MG/KG	00728308	75.5	62.5	19	**	**	**
PETROLEUM HYDROCARBONS	MG/L	00728615	<0.05	<0.05	0	3.0	4.0	75
PETROLEUM HYDROCARBONS	MG/KG	00725421	<1	<1	0	98	99	99
PETROLEUM HYDROCARBONS	MG/KG	00717001	16	18	12	115	92	107
PH	UNITS	00730403	7.61	7.60	0	N/A	N/A	N/A
PH	UNITS	00728308	7.4	7.4	0	N/A	N/A	N/A
SULFATE	MG/L	00730702	1600	1490	7	2420	1000	88
SULFATE	MG/KG	00728302	<100	<100	0	211	200	106
SULFATE	MG/KG	00728301	<100	<100	0	209	200	105
TOTAL DISSOLVED SOLIDS	MG/L	00730401	2970	2960	0	N/A	N/A	N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

** Due to the necessary dilution of the sample, result was not attainable

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 007283

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/18/90
REPORT DATE : 08/13/90

PARAMETER	UNITS	09
CARBONATE AS CACO3	MG/L	<5
BICARBONATE AS CACO3	MG/L	181
HYDROXIDE AS CACO3	MG/L	<5
TOTAL ALKALINITY AS CACO3	MG/L	181
CATION/ANION BALANCE	RATIO	1.02
CHLORIDE	MG/L	60
CONDUCTIVITY, UMHOS/CM	-	778
FLUORIDE	MG/L	<0.5
SURFACTANTS	MG/L	<0.1
NITRATE AS NITROGEN	MG/L	1.1
PETROLEUM HYDROCARBONS, IR	MG/L	0.06
PH	UNITS	7.91
SULFATE	MG/L	135
TOTAL DISSOLVED SOLIDS	MG/L	494

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 007283

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/18/90
REPORT DATE : 08/13/90

PARAMETER	UNITS	06	07	08
CHLORIDE	MG/KG	24.7	37.6	12.5
FLUORIDE	MG/KG	12	10	13
NITRATE AS NITROGEN	MG/KG	95.4	109	75.5
PETROLEUM HYDROCARBONS, IR	MG/KG	710	290	840
PH	UNITS	7.8	6.9	7.4
SULFATE	MG/KG	<100	133	<100

MCK0003595

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

ATI I.D. : 007283

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT = : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/18/90
REPORT DATE : 08/13/90

PARAMETER	UNITS	01	02	03	04	05
CHLORIDE	MG/KG	<5	24.5	<5	8.3	8.3
FLUORIDE	MG/KG	15	11	6	8	8
NITRATE AS NITROGEN	MG/KG	77.6	144	157	72.6	98.4
PETROLEUM HYDROCARBONS, IR	MG/KG	14	13	1400	430	200
PH	UNITS	8.1	8.0	7.4	7.1	7.8
SULFATE	MG/KG	<100	<100	<100	<100	<100

Analytical Technologies, Inc.

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/18/90
REPORT DATE : 08/13/9

ATI I.D. : 007283

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	MK-SS-01-05	SOIL	07/17/90
02	MK-SS-01-1.0	SOIL	07/17/90
03	MK-SS-02-0.5	SOIL	07/18/90
04	MK-SS-02-1.0	SOIL	07/18/90
05	MK-SS-03-0.5	SOIL	07/18/90
06	MK-SS-03-1.0	SOIL	07/18/90
07	MK-SS-04-0.5	SOIL	07/17/90
08	MK-SS-04-1.0	SOIL	07/17/90
09	MK-TW-01-071890	WATER	07/18/90
10	TRIP BLANK	WATER	07/18/90

----- TOTALS -----

MATRIX	# SAMPLES
WATER	2
SOIL	8

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

ATI I.D. 007283

ANALYTICAL SCHEDULE

CLIENT: HARDING LAWSON ASSOCIATES
PROJECT NAME: McKESSON SANTA FE SPRINGS

PROJECT NO.: 17333,157.11

ANALYSIS	TECHNIQUE	REFERENCE/METHOD
ALKALINITY	TITRIMETRIC	EPA 310.1
CHLORIDE	COLORIMETRIC	EPA 325.2
CONDUCTIVITY	ELECTRODE	EPA 9050
FLUORIDE	ELECTRODE	EPA 340.2
HARDNESS	CALCULATION	EPA 6010
NITRATE AS NITROGEN	COLORIMETRIC	EPA 353.1
PETROLEUM HYDROCARBONS	IR	EPA 418.1 (MODIFIED)
pH	ELECTRODE	EPA 9045
SULFATE	COLORIMETRIC	EPA 9036
SURFACTANTS	COLORIMETRIC	EPA 425.1
TOTAL DISSOLVED SOLIDS	GRAVIMETRIC	EPA 160.1
CALCIUM	ICAP	EPA 6010
COPPER	ICAP	EPA 6010
IRON	ICAP	EPA 6010
MAGNESIUM	ICAP	EPA 6010
MANGANESE	ICAP	EPA 6010
POTASSIUM	ICAP	EPA 6010
SODIUM	ICAP	EPA 6010
ZINC	ICAP	EPA 6010
GLYCOLS	GC/FID	EPA 8015 (MODIFIED)
VOLATILE ORGANICS	GC/MS	EPA 8240
SEMI-VOLATILE ORGANICS (BNA)	GC/MS	EPA 8270

Analytical Technologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

C00007 3 4.1*

* also contains water sample results for sample collected from onsite water supply.

ATI I.D. 007283

August 13, 1990

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680

Project Name: McKesson Santa Fe Springs

Project No.: 17333-157.11

Attention: Burton Chadwick

On July 18, 1990, Analytical Technologies, Inc. received two water and eight soil samples for analyses. The samples were analyzed with EPA methodology or equivalent methods as specified in the attached analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference.

The results of these analyses and the quality control data are enclosed.

CA Sites
for: Timothy J. Fitzpatrick
Senior Project Manager

Richard M. Amano
Laboratory Manager

TJF:bc

MCK0003599

Harding Lawson Associates
1562' Avenue, Suite 100
Tust ia 92680
714/ ne — 213/617-7232
Telecopy: 714/259-1378

CHAIN OF CI DY FORM

Lab: ATT

Job Number:

Name/Location:

Project Manager:

Samplers: Ben Johnson

Recorder: Burton Lockett
(Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES
			X								90	7	11	AM	MK-SB-26-21
			X								90	7	11	AM	MK-SB-26-26
			X								90	7	11	AM	MK-SB-26-41
			X								90	7	11	AM	MK-SB-27-21
			X								90	7	11	AM	MK-SB-27-31
			X								90	7	11	AM	MK-SB-27-41

ANALYSIS REQUESTED

EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH	Gasoline & BTEX (Purgeable Aromatics)	Diesel (Extractables)	Hydrocarbon ID
X	X	X	X			X	X	X
X	X	X	X			X	X	X
X	X	X	X			X	X	X
X	X	X	X			X	X	X
X	X	X	X			X	X	X
X	X	X	X			X	X	X

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK0003600				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
Burton Lockett	Bob DeBoy	7/12/90 1645
RELINQUISHED BY: (Signature) Bob DeBoy	RECEIVED BY: (Signature) Marian Van Dieken	DATE/TIME 7/12/90
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
METHOD OF SHIPMENT: Courier by Custody Seal on Cooler		

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007257

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00723003

DATE EXTRACTED : 07/18/90
DATE ANALYZED : 08/09/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<0.17	1.7	1.9	112	2.0	118	5
ACENAPHTHENE	<0.17	1.7	1.8	106	1.8	106	0
2,4-DINITROTOLUENE	<0.17	1.7	1.9	112	2.0	118	5
PYRENE	<0.17	1.7	1.8	106	1.8	106	0
N-NITROSO-DI-N-PROPYLAMINE	<0.17	1.7	1.8	106	1.9	112	5
1,4-DICHLOROBENZENE	<0.17	1.7	1.8	106	1.9	112	5
PENTACHLOROPHENOL	<0.85	13.3	10.3	77	10.0	75	3
PHENOL	<0.17	3.3	3.4	103	3.7	112	8
2-CHLOROPHENOL	<0.17	3.3	3.5	106	3.7	112	6
4-CHLORO-3-METHYLPHENOL	<0.17	3.3	3.9	118	4.1	124	5
4-NITROPHENOL	<0.85	13.3	12.4	93	11.6	87	7

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003601

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 007257

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003602

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ATI I.D. : 007257

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	93
2-FLUOROBIPHENYL (%)	93
TERPHENYL (%)	78
PHENOL-D6 (%)	75
2-FLUOROPHENOL (%)	43
2,4,6-TRIBROMOPHENOL (%)	85

MCK0003603

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007257
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 08/06/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
[illegible]ROBENZENE	<0.17
[illegible]PHORONE	<0.17
[illegible]NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
[illegible]-DICHLOROPHENOL	<0.17
[illegible]2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
[illegible]-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
[illegible]CHLORO-3-METHYLPHENOL	<0.17
[illegible]-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
[illegible],6-TRICHLOROPHENOL	<0.17
[illegible] 3-TRICHLOROPHENOL	<0.85
[illegible]-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
[illegible]CENAPHTHYLENE	<0.17
[illegible]-NITROANILINE	<0.85
[illegible]CENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
[illegible]-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
[illegible]-DINITROTOLUENE	<0.17
[illegible]-DINITROTOLUENE	<0.17
[illegible]ETHYLPHTHALATE	<0.17
[illegible]-CHLOROPHENYL PHENYL ETHER	<0.17

MCK0003604

(CONTINUED NEXT PAGE)

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00725706

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725706

[illegible] : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
[illegible]O(b)FLUORANTHENE	<0.17
[illegible]O(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	84
2-FLUOROBIPHENYL (%)	73
TERPHENYL (%)	91
PHENOL-D6 (%)	62
2-FLUOROPHENOL (%)	37
2,4,6-TRIBROMOPHENOL (%)	36

MCK0003606

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725706

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-27-41	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003607

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

T T : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00725705

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003608

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725705

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17
SURROGATE PERCENT RECOVERIES	
NITROBENZENE-D5 (%)	113
2-FLUOROBIPHENYL (%)	100
TERPHENYL (%)	105
PHENOL-D6 (%)	114
2-FLUOROPHENOL (%)	71
2,4,6-TRIBROMOPHENOL (%)	55

MCK0003609

AnalyticalTechnologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725705

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-27-31	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
ETHYLPHENOL	<0.17
ITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
-DINITROPHENOL	<0.85
ITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003610

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Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00725704

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725704

T : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	104
2-FLUOROBIPHENYL (%)	88
TERPHENYL (%)	98
PHENOL-D6 (%)	81
2-FLUOROPHENOL (%)	51
2,4,6-TRIBROMOPHENOL (%)	46

MCK0003612

Analytical**Technologies**, Inc.

GCMS - RESULTS

ATI I.D. : 00725704

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-27-21	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003613

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Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

. : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00725703

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003614

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725703

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17
SURROGATE PERCENT RECOVERIES	
NITROBENZENE-D5 (%)	89
2-FLUOROBIPHENYL (%)	80
TERPHENYL (%)	94
PHENOL-D6 (%)	86
2-FLUOROPHENOL (%)	59
2,4,6-TRIBROMOPHENOL (%)	51

MCK0003615

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725703

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-26-41	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
' METHYLPHENOL	<0.17
ITROSO-DI-N-PROPYLAMINE	<0.17
ACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHONY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2 4-DINITROPHENOL	<0.85
ITROPHENOL	<0.85
BENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003616

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Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00725702

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003617

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725702

T : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	92
2-FLUOROBIPHENYL (%)	78
TERPHENYL (%)	100
PHENOL-D6 (%)	72
2-FLUOROPHENOL (%)	47
2,4,6-TRIBROMOPHENOL (%)	48

MCK0003618

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725702

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-26-26	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003619

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Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

T : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00725701

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725701

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17
SURROGATE PERCENT RECOVERIES	
NITROBENZENE-D5 (%)	92
2-FLUOROBIPHENYL (%)	80
TERPHENYL (%)	94
PHENOL-D6 (%)	65
2-FLUOROPHENOL (%)	34
2,4,6-TRIBROMOPHENOL (%)	41

MCK0003621

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00725701

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/16/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/17/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/18/90
CLIENT I.D.	: MK-SB-26-21	DATE ANALYZED	: 08/08/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
ITROSO-DI-N-PROPYLAMINE	<0.17
ACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
ITROPHENOL	<0.85
ENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003622

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Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007257

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/18/90
DATE ANALYZED : 07/31/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<0.05	2.0	2.0	100	2.1	105	5
TRICHLOROETHENE	<0.05	2.8	3.1	113	3.1	113	0
CHLOROBENZENE	<0.05	2.5	2.9	116	3.0	120	3
TOLUENE	<0.1	2.5	2.8	112	2.8	112	0
BENZENE	<0.05	2.5	2.5	100	2.5	100	0

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003623

Analytico Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN

ATI I.D. : 007257

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

METALS RESULTS

ATI I.D. : 007283

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS

DATE RECEIVED : 07/18/90
REPORT DATE : 08/13/90

PARAMETER	UNITS	09
CALCIUM	MG/L	91.3
COPPER	MG/L	0.09
IRON	MG/L	<0.01
HARDNESS	MG/L	313
POTASSIUM	MG/L	3.5
MAGNESIUM	MG/L	20.7
MANGANESE	MG/L	<0.01
SODIUM	MG/L	47.4
ZINC	MG/L	<0.01

MCK0003625

Analytical Technologies, Inc. METALS - QUALITY CONTROL

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS ATI I.D. : 007283

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE	SPIKE CONC	% REC
CALCIUM	MG/L	00730403	171	165	4	**	**	**
COPPER	MG/L	00730403	<0.02	<0.02	0	0.89	1.0	89
IRON	MG/L	00730403	<0.01	<0.01	0	1.1	1.0	110
IRON	MG/KG	00728301	23400	23100	1	**	**	**
HARDNESS	MG/L	00730403	710	683	4	N/A	N/A	N/A
POTASSIUM	MG/L	00730403	3.5	3.3	6	13.6	10.0	101
POTASSIUM	MG/KG	00728301	3380	3380	0	**	**	**
MAGNESIUM	MG/L	00730403	66.7	65.9	4	**	**	**
MANGANESE	MG/L	00730403	0.03	<0.01	0	0.89	1.0	89
MANGANESE	MG/KG	00728301	522	502	4	610	98.8	99
SODIUM	MG/L	00730403	122	117	4	**	**	**
SODIUM	MG/KG	00728301	294	310	5	946	556	116
ZINC	MG/L	00730403	<0.01	<0.01	0	0.93	1.0	93
ZINC	MG/KG	00728301	54.5	58.9	4	110	49.4	108

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

** - Due to the necessary dilution of the sample, result was not attainable

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00728301

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/17/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-01-05	DATE ANALYZED	: 07/29/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003627

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00728302

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-AUSTIN	DATE SAMPLED	: 07/17/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-01-1.0	DATE ANALYZED	: 07/29/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00728303

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-02-0.5	DATE ANALYZED	: 07/29/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003629

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00728304

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-IRVINE	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-02-1.0	DATE ANALYZED	: 07/29/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003630

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00728305

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-03-0.5	DATE ANALYZED	: 07/29/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003631

Analytical**Technologies**, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00728306

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-03-1.0	DATE ANALYZED	: 07/29/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003632

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00728307

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-IRVINE	DATE SAMPLED	: 07/17/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-04-0.5	DATE ANALYZED	: 07/29/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003633

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00728308

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-EUSTIN	DATE SAMPLED	: 07/17/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-04-1.0	DATE ANALYZED	: 07/29/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003634

Analytical Technologies, Inc. GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007283
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/23/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/29/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007283

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/23/90
DATE ANALYZED : 07/29/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	35	88	35	88	0
DIETHYLENE GLYCOL	<2.0	20.0	19	95	19	95	0
PROPYLENE GLYCOL	<2.0	20.0	19	95	20	100	5
HEXYLENE GLYCOL	<2.0	40.0	35	88	35	88	0

$$\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003636

Analytical Technologies, Inc.

QUALITY CONTROL DATA

TEST : GLYCOLS

ATI I.D. : 007283

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00728302

DATE EXTRACTED : 07/23/90
DATE ANALYZED : 07/29/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	40.0	16	40	14	35	13
DIETHYLENE GLYCOL	<2.0	20.0	3.6	18	4.1	21	15
PROPYLENE GLYCOL	<2.0	20.0	13	65	13	65	0
HEXYLENE GLYCOL	<2.0	40.0	16	40	14	35	13

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003637

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 00728309

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: N/A
CLIENT I.D.	: MK-TW-01-071890	DATE ANALYZED	: 08/02/90
SAMPLE MATRIX	: WATER	UNITS	: MG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

MCK0003638

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST : GLYCOLS

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007283
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 08/02/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 08/02/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
ETHYLENE GLYCOL	<2.0
DIETHYLENE GLYCOL	<2.0
PROPYLENE GLYCOL	<2.0
HEXYLENE GLYCOL	<2.0

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007283

TEST : GLYCOLS

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00728309

DATE EXTRACTED : 08/02/90
DATE ANALYZED : 08/02/90
SAMPLE MATRIX : WATER
UNITS : MG/L

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
ETHYLENE GLYCOL	<2.0	20.0	20	100	19	95	5
DIETHYLENE GLYCOL	<2.0	10.0	9.9	99	9.6	96	3
PROPYLENE GLYCOL	<2.0	10.0	6.4	64	5.0	50	25
HEXYLENE GLYCOL	<2.0	20.0	20	100	19	95	5

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003640

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728309

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: N/A
CLIENT I.D.	: MK-TW-01-071890	DATE ANALYZED	: 07/31/90
SAMPLE MAIRIX	: WATER	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1
CHLOROETHANE	<1
METHYLENE CHLORIDE	<5
ACETONE	<20
CARBON DISULFIDE	<1
1,1-DICHLOROETHENE	<1
1,1-DICHLOROETHANE	<1
1,2-DICHLOROETHENE (TOTAL)	<1
CHLOROFORM	<1
1,2-DICHLOROETHANE	<1
-BUTANONE (MEK)	<20
1,1-TRICHLOROETHANE	<1
CARBON TETRACHLORIDE	<1
VINYL ACETATE	<10
BROMODICHLOROMETHANE	<1
1,1,2,2-TETRACHLOROETHANE	<1
1,2-DICHLOROPROPANE	<1
CIS-1,3-DICHLOROPROPENE	<1
TRICHLOROETHENE	2
DIBROMOCHLOROMETHANE	<1
1,1,2 TRICHLOROETHANE	<1
BENZENE	<1
TRANS-1,3-DICHLOROPROPENE	<1
BROMOFORM	<5
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	<1
TOLUENE	<2
CHLOROBENZENE	<1
ETHYL BENZENE	<1
STYRENE	<1
TOTAL XYLENES	<1

SURROGATE PERCENT RECOVERIES

,2-DICHLOROETHANE-D4 (%)	101
B (%)	99
OLUENE-D8 (%)	106

MCK0003641

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00728309

MATRIX : WATER

UNITS : UG/L

COMPOUNDS	RESULTS
FREON 113	5@

MCK0003642

@ - A standard was used to quantitate this value.

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728310

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: N/A
CLIENT I.D.	: TRIP BLANK	DATE ANALYZED	: 07/31/90
SAMPLE MATRIX	: WATER	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1
CHLOROETHANE	<1
METHYLENE CHLORIDE	<5
ACETONE	50
CARBON DISULFIDE	<1
1,1-DICHLOROETHENE	<1
1,1-DICHLOROETHANE	<1
1,2-DICHLOROETHENE (TOTAL)	<1
CHLOROFORM	<1
1,2-DICHLOROETHANE	<1
2-BUTANONE (MEK)	<20
1,1-TRICHLOROETHANE	1
RBON TETRACHLORIDE	<1
VINYL ACETATE	<10
BROMODICHLOROMETHANE	<1
1,1,2,2-TETRACHLOROETHANE	<1
1,2-DICHLOROPROPANE	<1
CIS-1,3-DICHLOROPROPENE	<1
TRICHLOROETHENE	<1
DIBROMOCHLOROMETHANE	<1
1,1,2 TRICHLOROETHANE	<1
BENZENE	<1
TRANS-1,3-DICHLOROPROPENE	<1
BROMOFORM	<5
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	<1
TOLUENE	<2
CHLOROBENZENE	<1
ETHYL BENZENE	<1
STYRENE	<1
TOTAL XYLENES	<1

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	104
B (%)	105
LUENE-D8 (%)	112

MCK0003643

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00728310

MATRIX : WATER

UNITS : UG/L

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003644

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007283
PROJECT #	: 17333,157.11	DATE EXTRACTED	: N/A
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/30/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: UG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<10
BROMOMETHANE	<10
VINYL CHLORIDE	<1
CHLOROETHANE	<1
METHYLENE CHLORIDE	TR<5
ACETONE	<20
CARBON DISULFIDE	<1
1,1-DICHLOROETHENE	<1
1,1-DICHLOROETHANE	<1
1,2-DICHLOROETHENE (TOTAL)	<1
CHLOROFORM	<1
1,2-DICHLOROETHANE	<1
2-BUTANONE (MEK)	<20
1,1,1-TRICHLOROETHANE	<1
CARBON TETRACHLORIDE	<1
NYL ACETATE	<10
OMODICHLOROMETHANE	<1
1,1,2,2-TETRACHLOROETHANE	<1
1,2-DICHLOROPROPANE	<1
CIS-1,3-DICHLOROPROPENE	<1
TRICHLOROETHENE	<1
DIBROMOCHLOROMETHANE	<1
1,1,2 TRICHLOROETHANE	<1
BENZENE	<1
TRANS-1,3-DICHLOROPROPENE	<1
BROMOFORM	<5
2-HEXANONE (MBK)	<10
4-METHYL-2-PENTANONE (MIBK)	<10
TETRACHLOROETHENE	<1
TOLUENE	TR<2
CHLOROBENZENE	<1
ETHYL BENZENE	<1
STYRENE	<1
TOTAL XYLENES	<1

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	108
BFB (%)	101
TOLUENE-D8 (%)	113

- Compound detected at an unquantifiable trace level

MCK0003645

Analytical Technologies, Inc. GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN ATI I.D. : 007283

UNITS : UG/L

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007283

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT WATER

DATE EXTRACTED : N/A
DATE ANALYZED : 08/01/90
SAMPLE MATRIX : WATER
UNITS : UG/L

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<1	40	34	85	32	80	6
TRICHLOROETHENE	<1	55	59	107	60	109	2
CHLOROBENZENE	<1	50	56	112	56	112	0
TOLUENE	<2	50	54	108	54	108	0
BENZENE	<1	50	45	90	46	92	2

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003647

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728301

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/17/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-01-05	DATE ANALYZED	: 07/31/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	87
BFB (%)	96
TOLUENE-D8 (%)	93

MCK0003648

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00728301

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728302

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/17/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-01-1.0	DATE ANALYZED	: 07/31/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	82
TB (%)	86
TOLUENE-D8 (%)	87

MCK0003650

Analytical Technologies, Inc. ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

ST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00728302

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728303

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-02-0.5	DATE ANALYZED	: 07/31/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1-TRICHLOROETHANE	0.08
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	0.07
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	0.71
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	88
BFB (%)	92
TOLUENE-D8 (%)	93

MCK0003652

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00728303

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
261 TRICHLOROFLUOROMETHANE	0.09

MCK0003653

AnalyticalTechnologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728304

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-02-1.0	DATE ANALYZED	: 07/31/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	0.1
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	89
B (%)	91
TOLUENE-D8 (%)	91

MCK0003654

Analytical**Technologies,** ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00728304

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003655

AnalyticalTechnologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728305

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-03-0.5	DATE ANALYZED	: 07/31/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

MCK0003656

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	92
B (%)	96
TOLUENE-D8 (%)	92

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00728305

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003657

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728306

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-03-1.0	DATE ANALYZED	: 07/31/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1 3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	1.0
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	96
B (%)	98
TOLUENE-D8 (%)	95

MCK0003658

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00728306

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003659

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728307

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/17/90
PROJECT =	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-04-0.5	DATE ANALYZED	: 07/31/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	<0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1 1 2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	1.9
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	83
TB (%)	96
TOLUENE-D8 (%)	97

MCK0003660

Analytical Technologies, Inc. ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

ST EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00728307

TRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003661

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728308

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/17/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/23/90
CLIENT I.D.	: MK-SS-04-1.0	DATE ANALYZED	: 07/31/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 5

COMPOUNDS	RESULTS
CHLOROMETHANE	<2.5
BROMOMETHANE	<2.5
VINYL CHLORIDE	<0.25
CHLOROETHANE	<0.25
METHYLENE CHLORIDE	<1.5
ACETONE	<5.0
CARBON DISULFIDE	<0.25
1,1-DICHLOROETHENE	<0.25
1,1-DICHLOROETHANE	<0.25
1,2-DICHLOROETHENE (TOTAL)	<0.25
CHLOROFORM	<0.25
1,2-DICHLOROETHANE	<0.25
2-BUTANONE (MEK)	<5.0
1,1-TRICHLOROETHANE	<0.25
CARBON TETRACHLORIDE	<0.25
VINYL ACETATE	<2.5
BROMODICHLOROMETHANE	<0.25
1,1,2,2-TETRACHLOROETHANE	<0.25
1,2-DICHLOROPROPANE	<0.25
TRANS-1,3-DICHLOROPROPENE	<0.25
TRICHLOROETHENE	<0.25
DIBROMOCHLOROMETHANE	<0.25
1,1,2-TRICHLOROETHANE	<0.25
BENZENE	<0.25
CIS-1,3-DICHLOROPROPENE	<0.25
BROMOFORM	<1.5
2-HEXANONE (MEK)	<2.5
4-METHYL-2-PENTANONE (MIBK)	<2.5
TETRACHLOROETHENE	61
TOLUENE	<0.50
CHLOROBENZENE	<0.25
ETHYL BENZENE	<0.25
STYRENE	<0.25
TOTAL XYLENES	<0.25

SURROGATE PERCENT RECOVERIES

MCK0003662

1,2-DICHLOROETHANE-D4 (%)	**
TB (%)	**
TOLUENE-D8 (%)	**

** Due to the necessary dilution of the sample, result was not attainable

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

ATI I.D. : 00728308

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003663

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

LIST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007283
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/23/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/31/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.5
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1,3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.2
2-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	92
BFB (%)	97
TOLUENE-D8 (%)	101

MCK0003664

Analytical Technologies, Inc. GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN ATI I.D. : 007283

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003665

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

LIST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007283
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/30/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 07/31/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: MG/KG
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
CHLOROMETHANE	<0.50
BROMOMETHANE	<0.50
VINYL CHLORIDE	<0.05
CHLOROETHANE	<0.05
METHYLENE CHLORIDE	0.3
ACETONE	<1.0
CARBON DISULFIDE	<0.05
1,1-DICHLOROETHENE	<0.05
1,1-DICHLOROETHANE	<0.05
1,2-DICHLOROETHENE (TOTAL)	<0.05
CHLOROFORM	<0.05
1,2-DICHLOROETHANE	<0.05
2-BUTANONE (MEK)	<1.0
1,1,1-TRICHLOROETHANE	<0.05
CARBON TETRACHLORIDE	<0.05
VINYL ACETATE	<0.50
BROMODICHLOROMETHANE	<0.05
1,1,2,2-TETRACHLOROETHANE	<0.05
1,2-DICHLOROPROPANE	<0.05
TRANS-1,3-DICHLOROPROPENE	<0.05
TRICHLOROETHENE	<0.05
DIBROMOCHLOROMETHANE	<0.05
1,1,2 TRICHLOROETHANE	<0.05
BENZENE	<0.05
CIS-1 3-DICHLOROPROPENE	<0.05
BROMOFORM	<0.3
4-HEXANONE (MBK)	<0.50
4-METHYL-2-PENTANONE (MIBK)	<0.50
TETRACHLOROETHENE	<0.05
TOLUENE	<0.10
CHLOROBENZENE	<0.05
ETHYL BENZENE	<0.05
STYRENE	<0.05
TOTAL XYLENES	<0.05

SURROGATE PERCENT RECOVERIES

1,2-DICHLOROETHANE-D4 (%)	71
BFB (%)	84
TOLUENE-D8 (%)	87

MCK0003666

Analytical Technologies, Inc. GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN ATI I.D. : 007283

UNITS : MG/KG

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003667

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007283

TEST : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT SOIL

DATE EXTRACTED : 07/23/90
DATE ANALYZED : 07/31/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE	<0.05	2.0	1.8	90	2.0	100	10
TRICHLOROETHENE	<0.05	2.8	2.5	89	2.6	93	4
CHLOROBENZENE	<0.05	2.5	2.7	108	3.0	120	11
TOLUENE	<0.1	2.5	2.6	104	2.7	108	4
BENZENE	<0.05	2.5	2.8	112	3.1	111	10

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003668

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728309

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/19/90
CLIENT I.D.	: MK-TW-01-071890	DATE ANALYZED	: 08/05/90
SAMPLE MATRIX	: WATER	UNITS	: UG/L
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<10
PHENOL	<10
ANILINE	<10
BIS(2-CHLOROETHYL)ETHER	<10
2-CHLOROPHENOL	<10
1,3-DICHLOROBENZENE	<10
1,4-DICHLOROBENZENE	<10
BENZYL ALCOHOL	<10
1,2-DICHLOROBENZENE	<10
2-METHYLPHENOL	<10
BIS(2-CHLOROISOPROPYL)ETHER	<10
4-METHYLPHENOL	<10
NITROSO-DI-N-PROPYLAMINE	<10
HEXACHLOROETHANE	<10
NITROBENZENE	<10
ISOPHORONE	<10
2-NITROPHENOL	<10
2,4-DIMETHYLPHENOL	<10
BENZOIC ACID	<50
BIS(2-CHLOROETHOXY)METHANE	<10
2,4-DICHLOROPHENOL	<10
1,2,4-TRICHLOROBENZENE	<10
NAPHTHALENE	<10
4-CHLOROANILINE	<10
HEXACHLOROBUTADIENE	<10
4-CHLORO-3-METHYLPHENOL	<10
2-METHYLNAPHTHALENE	<10
HEXACHLOROCYCLOPENTADIENE	<10
2,4,6-TRICHLOROPHENOL	<10
2,4,5-TRICHLOROPHENOL	<50
2-CHLORONAPHTHALENE	<10
2-NITROANILINE	<50
DIMETHYL PHTHALATE	<10
ACENAPHTHYLENE	<10
3-NITROANILINE	<50
ACENAPHTHENE	<10
2,4-DINITROPHENOL	<50
4-NITROPHENOL	<50
DIBENZOFURAN	<10
2,4-DINITROTOLUENE	<10
2,6-DINITROTOLUENE	<10
DIETHYL PHTHALATE	<10

MCK0003669

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AnalyticalTechnologies, Inc. GCMS - RESULTS

ATI I.D. : 00728309

.ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<10
FLUORENE	<10
4-NITROANILINE	<50
4,6-DINITRO-2-METHYLPHENOL	<50
N-NITROSODIPHENYLAMINE	<10
4-BROMOPHENYL PHENYL ETHER	<10
HEXACHLOROBENZENE	<10
PENTACHLOROPHENOL	<50
PHENANTHRENE	<10
ANTHRACENE	<10
DI-N-BUTYL PHTHALATE	<10
FLUORANTHENE	<10
BENZIDINE	<100
PYRENE	<10
BUTYLBENZYLPHTHALATE	<10
3,3-DICHLOROBENZIDINE	<20
BENZO(a)ANTHRACENE	<10
BIS(2-ETHYLHEXYL)PHTHALATE	<10
CHRYSENE	<10
DI-N-OCTYL PHTHALATE	<10
NZO(b)FLUORANTHENE	<10
NZO(k)FLUORANTHENE	<10
BENZO(a)PYRENE	<10
INDENO(1,2,3-cd)PYRENE	<10
DIBENZO(a,h)ANTHRACENE	<10
BENZO(g,h,i)PERYLENE	<10

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	58
2-FLUOROBIPHENYL (%)	82
TERPHENYL (%)	89
PHENOL-D6 (%)	40
2-FLUOROPHENOL (%)	51
2,4,6-TRIBROMOPHENOL (%)	58

MCK0003670

Analytical Technologies, Inc. ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

;T : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00728309

MATRIX : WATER

UNITS : UG/L

COMPOUNDS	RESULTS
NONE DETECTED	N/A

MCK0003671

Analytical Technologies, Inc.

GCMS - RESULTS

REAGENT BLANK

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	ATI I.D.	: 007283
PROJECT #	: 17333,157.11	DATE EXTRACTED	: 07/19/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE ANALYZED	: 08/03/90
CLIENT I.D.	: REAGENT BLANK	UNITS	: UG/L
		DILUTION FACTOR	: N/A

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<10
PHENOL	<10
ANILINE	<10
BIS(2-CHLOROETHYL)ETHER	<10
2-CHLOROPHENOL	<10
1,3-DICHLOROBENZENE	<10
1,4-DICHLOROBENZENE	<10
BENZYL ALCOHOL	<10
1,2-DICHLOROBENZENE	<10
2-METHYLPHENOL	<10
BIS(2-CHLOROISOPROPYL)ETHER	<10
4-METHYLPHENOL	<10
N-NITROSO-DI-N-PROPYLAMINE	<10
HEXACHLOROETHANE	<10
NITROBENZENE	<10
OPHORONE	<10
NITROPHENOL	<10
2,4-DIMETHYLPHENOL	<10
BENZOIC ACID	<50
BIS(2-CHLOROETHOXY)METHANE	<10
2,4-DICHLOROPHENOL	<10
1,2,4-TRICHLOROBENZENE	<10
NAPHTHALENE	<10
4-CHLOROANILINE	<10
HEXACHLOROBUTADIENE	<10
4-CHLORO-3-METHYLPHENOL	<10
2-METHYLNAPHTHALENE	<10
HEXACHLOROCYCLOPENTADIENE	<10
2,4,6-TRICHLOROPHENOL	<10
2,4,5-TRICHLOROPHENOL	<50
2-CHLORONAPHTHALENE	<10
2-NITROANILINE	<50
DIMETHYL PHTHALATE	<10
ACENAPHTHYLENE	<10
3-NITROANILINE	<50
ACENAPHTHENE	<10
2,4-DINITROPHENOL	<50
4-NITROPHENOL	<50
DIBENZOFURAN	<10
2,4-DINITROTOLUENE	<10
6-DINITROTOLUENE	<10
ETHYL PHTHALATE	<10
4-CHLOROPHENYL PHENYL ETHER	<10

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MCK0003672

AnalyticalTechnologies, Inc.

GCMS - RESULTS

REAGENT BLANK

ATI I.D. : 007283

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
FLUORENE	<10
4-NITROANILINE	<50
4,6-DINITRO-2-METHYLPHENOL	<50
N-NITROSODIPHENYLAMINE	<10
4-BROMOPHENYL PHENYL ETHER	<10
HEXACHLOROBENZENE	<10
PENTACHLOROPHENOL	<50
PHENANTHRENE	<10
ANTHRACENE	<10
DI-N-BUTYL PHTHALATE	<10
FLUORANTHENE	<10
BENZIDINE	<100
PYRENE	<10
BUTYLBENZYLPHTHALATE	<10
3,3-DICHLOROBENZIDINE	<20
BENZO(a)ANTHRACENE	<10
BIS(2-ETHYLHEXYL)PHTHALATE	<10
CHRYSENE	<10
[illegible]-N-OCTYL PHTHALATE	<10
[illegible]NZO(b)FLUORANTHENE	<10
BENZO(k)FLUORANTHENE	<10
BENZO(a)PYRENE	<10
INDENO(1,2,3-cd)PYRENE	<10
DIBENZO(a,h)ANTHRACENE	<10
BENZO(g,h,i)PERYLENE	<10

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	52
2-FLUOROBIPHENYL (%)	67
TERPHENYL (%)	79
PHENOL-D6 (%)	45
2-FLUOROPHENOL (%)	48
2,4,6-TRIBROMOPHENOL (%)	57

MCK0003673

Analytical Technologies, Inc. GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN ATI I.D. : 007283

UNITS : UG/L

COMPOUNDS	RESULTS
420 ALIPHATIC HYDROCARBON C7	20
1602 ALIPHATIC HYDROCARBON C20	60

MCK0003674

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007283

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : REAGENT WATER

DATE EXTRACTED : 07/19/90
DATE ANALYZED : 08/04/90
SAMPLE MATRIX : WATER
UNITS : UG/L

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<10	100	63	63	68	68	8
ACENAPHTHENE	<10	100	68	68	73	73	7
2,4-DINITROTOLUENE	<10	100	57	57	61	61	7
PYRENE	<10	100	93	93	98	98	5
N-NITROSO-DI-N-PROPYLAMINE	<10	100	42	42	43	43	2
1,4-DICHLOROBENZENE	<10	100	57	57	60	60	5
PENTACHLOROPHENOL	<50	400	384	96	333	83	14
PHENOL	<10	200	110	55	122	61	10
2-CHLOROPHENOL	<10	200	120	60	128	64	6
4-CHLORO-3-METHYLPHENOL	<10	200	154	77	76	38	67
4-NITROPHENOL	<50	400	578	144	494	124	15

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003675

AnalyticalTechnologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728301

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/17/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/19/90
CLIENT I.D.	: MK-SS-01-05	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
XACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
PHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
BENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

MCK0003676

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728301

:ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	<0.17
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	100
2-FLUOROBIPHENYL (%)	92
TERPHENYL (%)	90
PHENOL-D6 (%)	105
2-FLUOROPHENOL (%)	83
2,4,6-TRIBROMOPHENOL (%)	80

MCK0003677

Analytico! **Technologies,** ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00728301

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
PENTATRICONTANE	3
HEXATRICONTANE	4

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728302

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/17/90
PROJECT #	: 17333.157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/19/90
CLIENT I.D.	: MK-SS-01-1.0	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728303

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/19/90
CLIENT I.D.	: MK-SS-02-0.5	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 5

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.85
PHENOL	<0.85
ANILINE	<0.85
BIS(2-CHLOROETHYL)ETHER	<0.85
2-CHLOROPHENOL	<0.85
1,3-DICHLOROBENZENE	<0.85
1,4-DICHLOROBENZENE	<0.85
BENZYL ALCOHOL	<0.85
1,2-DICHLOROBENZENE	<0.85
2-METHYLPHENOL	<0.85
BIS(2-CHLOROISOPROPYL)ETHER	<0.85
4-METHYLPHENOL	<0.85
N-NITROSO-DI-N-PROPYLAMINE	<0.85
HEXACHLOROETHANE	<0.85
NITROBENZENE	<0.85
ISOPHORONE	<0.85
2-NITROPHENOL	<0.85
2,4-DIMETHYLPHENOL	<0.85
BENZOIC ACID	<4.25
BIS(2-CHLOROETHOXY)METHANE	<0.85
2,4-DICHLOROPHENOL	<0.85
1,2,4-TRICHLOROBENZENE	<0.85
NAPHTHALENE	<0.85
4-CHLOROANILINE	<0.85
HEXACHLOROBUTADIENE	<0.85
4-CHLORO-3-METHYLPHENOL	<0.85
2-METHYLNAPHTHALENE	<0.85
HEXACHLOROCYCLOPENTADIENE	<0.85
2,4,6-TRICHLOROPHENOL	<0.85
2,4,5-TRICHLOROPHENOL	<4.25
2-CHLORONAPHTHALENE	<0.85
2-NITROANILINE	<4.25
DIMETHYL PHTHALATE	<0.85
ACENAPHTHYLENE	<0.85
3-NITROANILINE	<4.25
ACENAPHTHENE	<0.85
2,4-DINITROPHENOL	<4.25
4-NITROPHENOL	<4.25
DIBENZOFURAN	<0.85
2,4-DINITROTOLUENE	<0.85
2,6-DINITROTOLUENE	<0.85
DIETHYLPHTHALATE	<0.85

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728303

ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.85
FLUORENE	<0.85
4-NITROANILINE	<4.25
4,6-DINITRO-2-METHYLPHENOL	<4.25
N-NITROSODIPHENYLAMINE	<0.85
4-BROMOPHENYL PHENYL ETHER	<0.85
HEXACHLOROBENZENE	<0.85
PENTACHLOROPHENOL	<4.25
PHENANTHRENE	<0.85
ANTHRACENE	<0.85
DI-BUTYL PHTHALATE	<0.85
FLUORANTHENE	<0.85
BENZIDINE	<8.5
PYRENE	<0.85
BUTYLBENZYLPHTHALATE	<0.85
3,3-DICHLOROBENZIDINE	<1.70
BENZO(a)ANTHRACENE	<0.85
BIS(2-ETHYLHEXYL)PHTHALATE	<0.85
CHRYSENE	<0.85
DI-N-OCTYLPHTHALATE	<0.85
BENZO(b)FLUORANTHENE	<0.85
BENZO(k)FLUORANTHENE	<0.85
BENZO(a)PYRENE	<0.85
INDENO(1,2,3-cd)PYRENE	<0.85
DIBENZO(a,h)ANTHRACENE	<0.85
BENZO(g,h,i)PERYLENE	<0.85

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	15*
2-FLUOROBIPHENYL (%)	36
TERPHENYL (%)	51
PHENOL-D6 (%)	18*
2-FLUOROPHENOL (%)	29
2,4,6-TRIBROMOPHENOL (%)	77

* Result out of limits due to sample matrix interference

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Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00728303

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
TOTAL EXTRACTABLE HYDROCARBONS C15-C35	300

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728304

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17033,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/19/90
CLIENT I.D.	: MK-SS-02-1.0	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728305

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/19/90
CLIENT I.D.	: MK-SS-03-0.5	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728305

ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	1.9
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	114
2-FLUOROBIPHENYL (%)	96
TERPHENYL (%)	96
PHENOL-D6 (%)	113
2-FLUOROPHENOL (%)	81
2,4,6-TRIBROMOPHENOL (%)	65

MCK0003685

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00728305

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
TOTAL EXTRACTABLE HYDROCARBONS C15-C35	500

MCK0003686

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728306

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/18/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/19/90
CLIENT I.D.	: MK-SS-03-1.0	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
-METHYLPHENOL	<0.17
-NITROSO-DI-N-PROPYLAMINE	<0.17
XACHLOROETHANE	<0.17
TROBENZENE	<0.17
OPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY,METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
2,4-TRICHLOROBENZENE	<0.17
PHTHALENE	<0.17
-CHLORONILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
-METHYLNAPHTHALENE	<0.17
EXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
BENZOFURAN	<0.17
,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

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AnalyticalTechnologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728307

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/17/90
PROJECT #	: 17033,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/19/90
CLIENT I.D.	: MK-SS-04-0.5	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
2-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.85
2,4,5-TRICHLOROPHENOL	<0.17
2-CHLORONAPHTHALENE	<0.85
2-NITROANILINE	<0.17
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.85
3-NITROANILINE	<0.17
ACENAPHTHENE	<0.85
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.17
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	

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MCK0003688

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728307

ST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

COMPOUNDS	RESULTS
4-CHLOROPHENYL PHENYL ETHER	<0.17
FLUORENE	<0.17
4-NITROANILINE	<0.85
4,6-DINITRO-2-METHYLPHENOL	<0.85
N-NITROSODIPHENYLAMINE	<0.17
4-BROMOPHENYL PHENYL ETHER	<0.17
HEXACHLOROBENZENE	<0.17
PENTACHLOROPHENOL	<0.85
PHENANTHRENE	<0.17
ANTHRACENE	<0.17
DI-BUTYL PHTHALATE	<0.17
FLUORANTHENE	<0.17
BENZIDINE	<1.7
PYRENE	<0.17
BUTYLBENZYLPHTHALATE	<0.17
3,3-DICHLOROBENZIDINE	<0.34
BENZO(a)ANTHRACENE	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	1.9
CHRYSENE	<0.17
DI-N-OCTYLPHTHALATE	<0.17
BENZO(b)FLUORANTHENE	<0.17
BENZO(k)FLUORANTHENE	<0.17
BENZO(a)PYRENE	<0.17
INDENO(1,2,3-cd)PYRENE	<0.17
DIBENZO(a,h)ANTHRACENE	<0.17
BENZO(g,h,i)PERYLENE	<0.17

SURROGATE PERCENT RECOVERIES

NITROBENZENE-D5 (%)	65
2-FLUOROBIPHENYL (%)	50
TERPHENYL (%)	56
PHENOL-D6 (%)	64
2-FLUOROPHENOL (%)	53
2,4,6-TRIBROMOPHENOL (%)	42

MCK0003689

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

ATI I.D. : 00728307

MATRIX : SOIL

UNITS : MG/KG

COMPOUNDS	RESULTS
TOTAL EXTRACTABLE HYDROCARBONS C15-C35	400

Analytical Technologies, Inc.

GCMS - RESULTS

ATI I.D. : 00728308

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT	: HARDING LAWSON ASSOC.-TUSTIN	DATE SAMPLED	: 07/17/90
PROJECT #	: 17333,157.11	DATE RECEIVED	: 07/18/90
PROJECT NAME	: McKESSON SANTA FE SPRINGS	DATE EXTRACTED	: 07/19/90
CLIENT I.D.	: MK-SS-04-1.0	DATE ANALYZED	: 08/09/90
SAMPLE MATRIX	: SOIL	UNITS	: MG/KG
		DILUTION FACTOR	: 1

COMPOUNDS	RESULTS
N-NITROSODIMETHYLAMINE	<0.17
PHENOL	<0.17
ANILINE	<0.17
BIS(2-CHLOROETHYL)ETHER	<0.17
2-CHLOROPHENOL	<0.17
1,3-DICHLOROBENZENE	<0.17
1,4-DICHLOROBENZENE	<0.17
BENZYL ALCOHOL	<0.17
1,2-DICHLOROBENZENE	<0.17
2-METHYLPHENOL	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	<0.17
4-METHYLPHENOL	<0.17
N-NITROSO-DI-N-PROPYLAMINE	<0.17
HEXACHLOROETHANE	<0.17
NITROBENZENE	<0.17
ISOPHORONE	<0.17
2-NITROPHENOL	<0.17
2,4-DIMETHYLPHENOL	<0.17
BENZOIC ACID	<0.85
BIS(2-CHLOROETHOXY)METHANE	<0.17
2,4-DICHLOROPHENOL	<0.17
1,2,4-TRICHLOROBENZENE	<0.17
NAPHTHALENE	<0.17
4-CHLOROANILINE	<0.17
HEXACHLOROBUTADIENE	<0.17
4-CHLORO-3-METHYLPHENOL	<0.17
1-METHYLNAPHTHALENE	<0.17
HEXACHLOROCYCLOPENTADIENE	<0.17
2,4,6-TRICHLOROPHENOL	<0.17
2,4,5-TRICHLOROPHENOL	<0.85
2-CHLORONAPHTHALENE	<0.17
2-NITROANILINE	<0.85
DIMETHYL PHTHALATE	<0.17
ACENAPHTHYLENE	<0.17
3-NITROANILINE	<0.85
ACENAPHTHENE	<0.17
2,4-DINITROPHENOL	<0.85
4-NITROPHENOL	<0.85
DIBENZOFURAN	<0.17
2,4-DINITROTOLUENE	<0.17
2,6-DINITROTOLUENE	<0.17
DIETHYLPHTHALATE	<0.17

(CONTINUED NEXT PAGE)

MCK0003691

Analytical Technologies, Inc. GCMS - RESULTS

REAGENT BLANK

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN ATI I.D. : 007283

UNITS : MG/KG

COMPOUNDS	RESULTS
415 ALIPHATIC HYDROCARBON C7	1
402 ALIPHATIC HYDROCARBON C7	0.2

MCK0003692

Analytical Technologies, Inc.

QUALITY CONTROL DATA

ATI I.D. : 007283

TEST : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)

CLIENT : HARDING LAWSON ASSOC.-TUSTIN
PROJECT # : 17333,157.11
PROJECT NAME : McKESSON SANTA FE SPRINGS
REF I.D. : 00728303

DATE EXTRACTED : 07/19/90
DATE ANALYZED : 08/09/90
SAMPLE MATRIX : SOIL
UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,2,4-TRICHLOROBENZENE	<0.17	3.3	2.8	85	2.6	79	7
ACENAPHTHENE	<0.17	3.3	3.3	100	30	91	10
2,4-DINITROTOLUENE	<0.17	3.3	2.1	64	1.7	52	21
PYRENE	<0.17	3.3	3.1	109	3.1	97	15
N-NITROSO-DI-N-PROPYLAMINE	<0.17	3.3	2.7	82	2.3	70	16
1,4-DICHLOROBENZENE	<0.17	3.3	2.6	79	2.3	70	12
PENTACHLOROPHENOL	<0.85	13.3	13.6	45	12.9	97	5
PHENOL	<0.17	6.7	5.5	82	4.8	72	14
2-CHLOROPHENOL	<0.17	6.7	5.6	84	5.0	75	11
4-CHLORO-3-METHYLPHENOL	<0.17	6.7	5.2	78	4.9	73	6
4-NITROPHENOL	<0.85	13.3	13.2	99	11.8	89	11

$$\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative \% Difference)} = \frac{(\text{Spiked Sample Result} - \text{Duplicate Spike Sample Result})}{\text{Average of Spiked Sample}} \times 100$$

MCK0003693

007283

1 of 2

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy 714/259-1378

CHAIN OF CUSTODY FORM

Lab: ATI

Samplers: Don Johnson

Job Number: 17333 157 "

Name/Location: McKesson Santa Fe Springs

Project Manager: B. Chadwick

Recorder: [signature] (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	EPA 601/8010	EPA 602/8020	EPA 624/8240 Volatile Organics	EPA 625/8270 Extract Organics	ICP METALS	EPA 8015M/TPH	ATB Hydrocarbons	Glycols (propylene, ethylene, hexylene, diethylene)	PH 9045 Method	Ions (Cl, SO4, Na, K, Fe, Mn, Zn)	Bg 300 ollenio
1B			X		X						90	07	17	AM	MK-SS-01-0.5			X	X			X	X	X	X	
													17		MK-SS-01-1.0			X	X			X	X	X	X	
													18		MK-SS-02-0.5			X	X			X	X	X	X	
													18		MK-SS-02-1.0			X	X			X	X	X	X	
													18		MK-SS-03-0.5			X	X			X	X	X	X	
													18		MK-SS-03-1.0			X	X			X	X	X	X	
													17		MK-SS-04-0.5			X	X			X	X	X	X	
													17		MK-SS-04-1.0			X	X			X	X	X	X	

ZN 20 per Burton

Ions → Cl, SO_4, F, NO_3, Na, K, Fe, Mn, Zn, Mo

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS

MCK0003694

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
[signature]	Bob DeBoy	7/18/90 17:00
RELINQUISHED BY: (Signature) Bob DeBoy	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature) Christine Toulo	DATE/TIME 7/18/90 18:40

METHOD OF SHIPMENT

Laboratory Copy White | Project Office Copy Yellow | Field or Offic Pink

6533

Harding Lawson Associates
1562 [illegible] Avenue, Suite 100
Irvine, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

CHAIN OF CUSTODY FORM

Lab: ATL

Samplers: Dan Johnson

Job Number: 17333,157.11

Name/Location: McKesson Bulk Terminals

Project Manager: B Christensen

Recorder: [signature] (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	HCl	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES
25	X				X	X	X	X				90	07	18		MK-TW-01-071890
																TL

ANALYSIS REQUESTED

EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH	
		X	X		X	418.1 Hydrocarbons
					X	Gly. o/s (specify)
					X	Total Lead
					X	Gen. Min.

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	OA CODE	MISCELLANEOUS
		MCK0003695				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) [signature]	RECEIVED BY: (Signature) Bob DeRay	DATE/TIME 7/18/90 17[illegible]
RELINQUISHED BY: (Signature) Bob DeRay	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature) [signature]	DATE/TIME 7/18/90 18[illegible]
METHOD OF SHIPMENT		

Laboratory Copy White — Project Office Copy Yellow — Field or C[illegible] Pin[illegible] Copy

6533

Analytical Technologies, Inc. Corporate Offices: 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D.: 101271

February 21, 1991

HARDING LAWSON
15621 REDHILL AVE., SUITE 100
TUSTIN, CA 92680

Project Name: MCKESSON-SANTA FE SPRINGS
Project # : 17333,163.11

Attention: BURTON CHADWICK

Analytical Technologies, Inc. has received the following sample(s):

Date Received	Quantity	Matrix
January 24, 1991	13	SOIL

The sample(s) were analyzed with EPA methodology or equivalent methods as specified in the enclosed analytical schedule. The symbol for "less than" indicates a value below the reportable action limit. Please see the attached sheet for the sample cross reference table.

The results of these analyses and the quality control data are enclosed.

TIM J. FITZPATRICK
SENIOR PROJECT MANAGER

for RICHARD M. AMANO
LABORATORY MANAGER

Analytical Technologies, Inc.

SAMPLE CROSS REFERENCE

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS

Report Date: February 21, 1991
ATI I.D. : 101271

ATI #	Client Description	Matrix	Date Collected
1	MK-SB-36 15.0-15.5	SOIL	23-JAN-91
2	MK-SB-36 24.5-25.0	SOIL	23-JAN-91
3	MK-SB-36 39.5-40.0	SOIL	23-JAN-91
4	MK-SB-36 45.0-45.5	SOIL	23-JAN-91
5	MK-SB-35 1.5-2.0	SOIL	23-JAN-91
6	MK-SB-35 10.0-10.5	SOIL	23-JAN-91
7	MK-SB-35 14.5-15.0	SOIL	23-JAN-91
8	MK-SB-34 5.0-5.5	SOIL	23-JAN-91
9	MK-SB-34 10.0-10.5	SOIL	23-JAN-91
10	MK-SB-34 15.0-15.5	SOIL	23-JAN-91
11	MK-SB-33 1.5-2.0	SOIL	23-JAN-91
12	MK-SB-33 10.0-10.5	SOIL	23-JAN-91
13	MK-SB-33 15.0-15.5	SOIL	23-JAN-91

---TOTALS---

Matrix	# Samples
SOIL	13

ATI STANDARD DISPOSAL PRACTICE

The sample(s) from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

ANALYTICAL SCHEDULE

ent : HARDING LAWSON
roject # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS

ATI I.D.: 101271

Analysis	Technique/Description
EPA 325.2 (CHLORIDE)	COLORIMETRIC
EPA 340.2 (FLUORIDE)	ELECTRODE
EPA 353.1 (NITRATE AS NITROGEN)	COLORIMETRIC
EPA 6010 (IRON)	INDUCTIVELY COUPLED ARGON PLASMA
EPA 6010 (MANGANESE)	INDUCTIVELY COUPLED ARGON PLASMA
EPA 6010 (POTASSIUM)	INDUCTIVELY COUPLED ARGON PLASMA
EPA 6010 (SODIUM)	INDUCTIVELY COUPLED ARGON PLASMA
EPA 6010 (ZINC)	INDUCTIVELY COUPLED ARGON PLASMA
EPA 8240 (GC/MS FOR VOLATILE ORGANICS)	GC/MASS SPECTROMETER
EPA 9036 (SULFATE)	COLORIMETRIC
EPA 9045 (pH)	ELECTRODE

MCK0003698

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS ATI I.D.: 10127

Sample #	Client ID	Matrix	Date Sampled	Date Received
5	MK-SB-35 1.5-2.0	SOIL	23-JAN-91	24-JAN-9
6	MK-SB-35 10.0-10.5	SOIL	23-JAN-91	24-JAN-9
7	MK-SB-35 14.5-15.0	SOIL	23-JAN-91	24-JAN-9
8	MK-SB-34 5.0-5.5	SOIL	23-JAN-91	24-JAN-9
9	MK-SB-34 10.0-10.5	SOIL	23-JAN-91	24-JAN-9

Parameter	Units	5	6	7	8	9
CHLORIDE	MG/KG	891	58	33	110	322
FLUORIDE	MG/KG	6.0	7.1	<5	11.3	9.3
NITRATE AS NITROGEN	MG/KG	16	14	9.0	2.8	3.5
pH	UNITS	8.2	8.0	7.9	4.3	7.6
SULFATE	MG/KG	6400	174	119	9270	741

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS

ATI I.D.: 10127

Sample #	Client ID	Matrix	Date Sampled	Date Received
10	MK-SB-34 15.0-15.5	SOIL	23-JAN-91	24-JAN-9
11	MK-SB-33 1.5-2.0	SOIL	23-JAN-91	24-JAN-9
12	MK-SB-33 10.0-10.5	SOIL	23-JAN-91	24-JAN-9
13	MK-SB-33 15.0-15.5	SOIL	23-JAN-91	24-JAN-9

Parameter	Units	10	11	12	13
CHLORIDE	MG/KG	1170	540	79.3	30
FLUORIDE	MG/KG	<5	122	10	<5
NITRATE AS NITROGEN	MG/KG	18	32	8.6	6.0
pH	UNITS	7.2	10	7.7	7.9
SULFATE	MG/KG	179	1730	254	<100

MCK0003700

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

MSMSD

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS ATI I.D. : 10127

Parameters	REF I.D.	Units	Sample Result	Dup Result	RPD	Spiked Sample	Spike Conc	% Rec
pH	101271-07	UNITS	7.9	7.8	1	N/A	N/A	N/A
NITRATE AS NITROGEN	101266-09	MG/KG	47.5	47.1	1	52.4	4.6	111
FLUORIDE	101215-02	MG/KG	<5.0	<5.0	0	51	50	102
CHLORIDE	101271-12	MG/KG	79.3	81.7	3	187	93.7	114
NITRATE AS NITROGEN	101289-24	MG/KG	824	662	22*	N/A**	N/A**	N/A**
FLUORIDE	101271-09	MG/KG	9.3	9.3	<1	51	50	83
SULFATE	101271-05	MG/KG	6400	6960	8	8780	3330	63*

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

* RESULT OUTSIDE OF LIMITS DUE TO SAMPLE MATRIX INTERFERENCE.
** DUE TO THE NECESSARY DILUTION OF THE SAMPLE, RESULT WAS NOT ATTAINABLE.

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

BLANK SPIKE

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS

ATI I.D. : 10127:

Parameters	Blank Spike	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
NITRATE AS NITROGEN	10144	MG/KG	<0.05	2.04	2.0	102
CHLORIDE	10188	MG/KG	<20	1000	1000	100
FLUORIDE	10237	MG/KG	<0.5	4.9	5.0	98
SULFATE	10256	MG/KG	<100	21.8	20.0	109

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS
ATI I.D. : 101271

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
1	MK-SB-36 15.0-15.5	SOIL	25-JAN-91	23-JAN-91	01-FEB-91	1.00
2	MK-SB-36 24.5-25.0	SOIL	25-JAN-91	23-JAN-91	01-FEB-91	1.00
3	MK-SB-36 39.5-40.0	SOIL	25-JAN-91	23-JAN-91	01-FEB-91	1.00

Parameter	Units	1	2	3
ACETONE	MG/KG	<1	<1	<1
BENZENE	MG/KG	<0.05	<0.05	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
BROMOFORM	MG/KG	<0.3	<0.3	<0.3
BROMOMETHANE	MG/KG	<0.5	<0.5	<0.5
2-BUTANONE (MEK)	MG/KG	<1	<1	<1
CARBON DISULFIDE	MG/KG	<0.05	<0.05	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05	<0.05	<0.05
CHLOROBENZENE	MG/KG	<0.05	<0.05	<0.05
CHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
CHLOROFORM	MG/KG	<0.05	<0.05	<0.05
CHLOROMETHANE	MG/KG	<0.5	<0.5	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
1,1-DICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
1,2-DICHLOROETHANE	MG/KG	<0.05	2	0.07
1,1-DICHLOROETHENE	MG/KG	<0.05	<0.05	0.32
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05	<0.05	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
ETHYLBENZENE	MG/KG	<0.05	<0.05	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	MG/KG	<0.3	<0.3	<0.3
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5	<0.5	<0.5
STYRENE	MG/KG	<0.05	<0.05	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TETRACHLOROETHENE	MG/KG	<0.05	12	0.87
TOLUENE	MG/KG	<0.1	<0.1	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05	33	1.4
1,1,2-TRICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TRICHLOROETHENE	MG/KG	<0.05	2	0.1
VINYL ACETATE	MG/KG	<0.5	<0.5	<0.5
VINYL CHLORIDE	MG/KG	<0.05	<0.05	<0.05
XYLENES (TOTAL)	MG/KG	<0.05	<0.05	<0.05
BFB	%	93	94	86
1,2-DICHLOROETHANE-D4	%	79	89	85
TOLUENE	%	83	89	83

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: EPA 8240 (GC/MS FOR VOLATILE ORGANICS) Matrix: SOIL

ATI I.D.: 101271

Sample	Parameters	Units	Results
1	NONE DETECTED		N/A
2	NONE DETECTED		N/A
3	NONE DETECTED		N/A

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
Client : HARDING LAWSON ATI I.D. : 101271
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
4	MK-SB-36 45.0-45.5	SOIL	25-JAN-91	23-JAN-91	01-FEB-91	1.00

Parameter	Units	4
ACETONE	MG/KG	<1
BENZENE	MG/KG	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05
BROMOFORM	MG/KG	<0.3
BROMOMETHANE	MG/KG	<0.5
2-BUTANONE (MEK)	MG/KG	<1
CARBON DISULFIDE	MG/KG	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05
CHLOROBENZENE	MG/KG	<0.05
CHLOROETHANE	MG/KG	<0.05
CHLOROFORM	MG/KG	<0.05
CHLOROMETHANE	MG/KG	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05
1,1-DICHLOROETHANE	MG/KG	<0.05
1,2-DICHLOROETHANE	MG/KG	0.09
1,1-DICHLOROETHENE	MG/KG	0.35
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05
ETHYLBENZENE	MG/KG	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5
METHYLENE CHLORIDE	MG/KG	<0.3
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5
STYRENE	MG/KG	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05
TETRACHLOROETHENE	MG/KG	1.4
TOLUENE	MG/KG	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05
TRICHLOROETHENE	MG/KG	0.2
VINYL ACETATE	MG/KG	<0.5
VINYL CHLORIDE	MG/KG	<0.05
XYLENES (TOTAL)	MG/KG	<0.05
BFB	%	85
1,2-DICHLOROETHANE-D4	%	80
TOLUENE	%	78

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: EPA 8240 (GC/MS FOR VOLATILE ORGANICS) **Matrix:** SOIL

ATI I.D.: 101271

Sample	Parameters	Units	Results
4	NONE DETECTED		N/A

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Test : EPA 8240
Blank I.D. : 10199
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS

ATI I.D. : 101271
Date Extracted: 25-JAN-91
Date Analyzed : 25-JAN-91
Dil. Factor : 1.00

Parameters	Units	Results
ACETONE	MG/KG	<1
BENZENE	MG/KG	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05
BROMOFORM	MG/KG	<0.3
BROMOMETHANE	MG/KG	<0.5
2-BUTANONE (MEK)	MG/KG	<1
CARBON DISULFIDE	MG/KG	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05
CHLOROBENZENE	MG/KG	<0.05
CHLOROETHANE	MG/KG	<0.05
CHLOROFORM	MG/KG	<0.05
CHLOROMETHANE	MG/KG	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05
1,1-DICHLOROETHANE	MG/KG	<0.05
1,2-DICHLOROETHANE	MG/KG	<0.05
1,1-DICHLOROETHENE	MG/KG	<0.05
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05
ETHYLBENZENE	MG/KG	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5
METHYLENE CHLORIDE	MG/KG	<0.3
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5
STYRENE	MG/KG	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05
TETRACHLOROETHENE	MG/KG	<0.05
TOLUENE	MG/KG	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05
TRICHLOROETHENE	MG/KG	<0.05
VINYL ACETATE	MG/KG	<0.5
VINYL CHLORIDE	MG/KG	<0.05
XYLENES (TOTAL)	MG/KG	<0.05
BFB	%	85
1,2-DICHLOROETHANE-D4	%	89
TOLUENE	%	93

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK
(ADDITIONAL COMPOUNDS)

Test	: EPA 8240		
Blank I.D.	: 10199	ATI I.D.	: 101271
Client	: HARDING LAWSON	Date Extracted	: 25-JAN-91
Project #	: 17333,163.11	Date Analyzed	: 25-JAN-91
Project Name	: MCKESSON-SANTA FE SPRINGS	Dil. Factor	: 1.00

Parameters	Units	Results
NONE DETECTED		N/A

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

Test : EPA 8240
MSMSD # : 10247
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS

ATI I.D. : 101271
Date Extracted: 25-JAN-91
Date Analyzed : 01-FEB-91
Sample Matrix : SOIL
REF I.D. : 101271-01

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	MG/KG	<0.05	2.8	2.3	84	2.3	84	0
CHLOROBENZENE	MG/KG	<0.05	2.8	2.8	100	2.6	94	6
1,1-DICHLOROETHENE	MG/KG	<0.05	2.4	2.3	95	2.1	89	6
TOLUENE	MG/KG	<0.1	2.8	2.7	98	2.7	98	0
TRICHLOROETHENE	MG/KG	<0.05	2.5	2.1	85	2.0	80	6

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

Hr... wson Associates
15... ill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

1-1270

CHAIN OF C... ODY FORM

Page 1 of 2

Lab: ATI

Samplers: Dan Johnson

Job Number: 17333, 163.11

Name/Location: McKesson Santa Fe Spring

Project Manager: Burton Chadwick

Recorder: Burton Chadwick (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	EPA 601/8010	EPA 602/8020	EPA 624/8240 Volatile Organics	EPA 625/8270	ICP METALS	EPA 8015M/TPH	PH 1045 Method	Soil Ions 300.0/6010 Method	Cl, SO_4, F, NO_3, Na, K	Fe, Mn & Zn	
50			X		X						91	01	23	PM	MK-SB-36 15.0-15.5			X								01
														PM	MK-SB-36 24.5-25'			X								02
														PM	MK-SB-36 39.5-40.0			X								03
														PM	MK-SB-36 45.0-45.5			X								04
														AM	MK-SB-35 1.5-2.0							X	X			05
															MK-SB-35 10.0-10.5							X	X			06
															MK-SB-35 14.5-15.0							X	X			07
															MK-SB-34 5.0-5.5							X	X			08
															MK-SB-34 10.0-10.5							X	X			09
															MK-SB-34 15.0-15.5							X	X			10

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK0003710				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
Burton Chadwick	Bob DeBay	1/24/91 16:30
Bob DeBay		

DISPATCHED BY: (Signature) DATE/TIME

RECEIVED FOR LAB BY: (Signature) Marvin VanDerhoof DATE/TIME 1/24/91 6:07

METHOD OF SHIPMENT

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

101 ... 101271

Page 2 of 2

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

CHAIN OF CUSTODY FORM

Lab: ATI

Samplers: Dan Johnson

Job Number: 17333,163.11

Name/Location: McKesson Santa Fe Springs

Project Manager: Burton Chadwick

Recorder: Burton Chadwick (Signature Required)

CODE	MATRIX Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV. Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER Yr	Wk	Seq	DATE Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH	pH 9045 Method	Soil Ions 300/6010 (Cl, SO4, F, NO3, Na, K, Fe, Mn, Al, Zn)
2			X		X						91	01	23	AM	MK-SB-33 1.5-2.0							X	X
			↓		↓						↓	↓	↓	↓	MK-SB-33 10.0-10.5							X	X
			↓		↓						↓	↓	↓	↓	MK-SB-33 15-15.5							X	X

LAB NUMBER Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS

MCK0003711

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
Burton Chadwick	Bob DeBay	1/24/91 16:30
Bob DeBay		

DISPATCHED BY: (Signature)	DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
		Marian VanDerhoof	1/24/91 6:07

METHOD OF SHIPMENT

Laboratory Copy White | Project Office Copy Yellow | Field or Office Pink

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Analytical Technologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

AMENDED

ATI I.D.: 101271

March 13, 1991

HARDING LAWSON
15621 REDHILL AVE., SUITE 100
TUSTIN, CA 92680

Project Name: MCKESSON-SANTA FE SPRINGS
Project # : 17333,163.11

Attention: BURTON CHADWICK

Analytical Technologies, Inc. has received the following sample(s):

Date Received	Quantity	Matrix
January 24, 1991	13	SOIL

The sample(s) were analyzed with EPA methodology or equivalent methods as specified in the enclosed analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference table.

losed are the metals results and the quality control data.

TIMOTHY J. FITZPATRICK
SENIOR PROJECT MANAGER

RICHARD M. AMANO
LABORATORY MANAGER

AnalyticalTechnologies, Inc.

SAMPLE CROSS REFERENCE

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS

Report Date: March 13, 1991
ATI I.D. : 101271

ATI #	Client Description	Matrix	Date Collected
1	MK-SB-36 15.0-15.5	SOIL	23-JAN-91
2	MK-SB-36 24.5-25.0	SOIL	23-JAN-91
3	MK-SB-36 39.5-40.0	SOIL	23-JAN-91
4	MK-SB-36 45.0-45.5	SOIL	23-JAN-91
5	MK-SB-35 1.5-2.0	SOIL	23-JAN-91
6	MK-SB-35 10.0-10.5	SOIL	23-JAN-91
7	MK-SB-35 14.5-15.0	SOIL	23-JAN-91
8	MK-SB-34 5.0-5.5	SOIL	23-JAN-91
9	MK-SB-34 10.0-10.5	SOIL	23-JAN-91
10	MK-SB-34 15.0-15.5	SOIL	23-JAN-91
11	MK-SB-33 1.5-2.0	SOIL	23-JAN-91
12	MK-SB-33 10.0-10.5	SOIL	23-JAN-91
13	MK-SB-33 15.0-15.5	SOIL	23-JAN-91

---TOTALS---

Matrix	# Samples
SOIL	13

ATI STANDARD DISPOSAL PRACTICE

The sample(s) from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

ANALYTICAL SCHEDULE

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS

ATI I.D.: 101271

Analysis	Technique/Description
EPA 340.2 (FLUORIDE)	ELECTRODE
EPA 353.1 (NITRATE AS NITROGEN)	COLORIMETRIC
EPA 6010 (IRON)	INDUCTIVELY COUPLED ARGON PLASMA
EPA 6010 (MANGANESE)	INDUCTIVELY COUPLED ARGON PLASMA
EPA 6010 (POTASSIUM)	INDUCTIVELY COUPLED ARGON PLASMA
EPA 6010 (SODIUM)	INDUCTIVELY COUPLED ARGON PLASMA
EPA 6010 (ZINC)	INDUCTIVELY COUPLED ARGON PLASMA
EPA 8240 (GC/MS FOR VOLATILE ORGANICS)	GC/MASS SPECTROMETER
EPA 9038 (SULFATE)	TURBIDIMETRIC
EPA 9045 (pH)	ELECTRODE
EPA 9251 (CHLORIDE)	COLORIMETRIC

Analytical Technologies, Inc.

METALS RESULTS

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS

ATI I.D.: 101271

Sample #	Client ID	Matrix	Date Sampled	Date Received
5	MK-SB-35 1.5-2.0	SOIL	23-JAN-91	24-JAN-91
6	MK-SB-35 10.0-10.5	SOIL	23-JAN-91	24-JAN-91
7	MK-SB-35 14.5-15.0	SOIL	23-JAN-91	24-JAN-91
8	MK-SB-34 5.0-5.5	SOIL	23-JAN-91	24-JAN-91
9	MK-SB-34 10.0-10.5	SOIL	23-JAN-91	24-JAN-91

Parameter	Units	5	6	7	8	9
IRON	MG/KG	23100	23200	10500	23200	20000
POTASSIUM	MG/KG	3990	3620	1360	3980	3190
MANGANESE	MG/KG	398	875	157	250	738
SODIUM	MG/KG	3640	365	181	631	516
ZINC	MG/KG	61.2	54.2	170	170	48.8

Analytical Technologies, Inc.

METALS RESULTS

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: MCKESSON-SANTA FE SPRINGS

ATI I.D.: 101271

Sample #	Client ID	Matrix	Date Sampled	Date Received
10	MK-SB-34 15.0-15.5	SOIL	23-JAN-91	24-JAN-91
11	MK-SB-33 1.5-2.0	SOIL	23-JAN-91	24-JAN-91
12	MK-SB-33 10.0-10.5	SOIL	23-JAN-91	24-JAN-91
13	MK-SB-33 15.0-15.5	SOIL	23-JAN-91	24-JAN-91

Parameter	Units	10	11	12	13
IRON	MG/KG	25000	17800	22800	8770
POTASSIUM	MG/KG	4580	8380	3680	1240
MANGANESE	MG/KG	743	360	940	143
SODIUM	MG/KG	380	4730	268	162
ZINC	MG/KG	60.3	59.4	56.6	25.7

Analytical Technologies, Inc.

METALS - QUALITY CONTROL

DUP/MS

Client : HARDING LAWSON
Project # : 17333,163.11 ATI I.D. : 101271
Project Name: MCKESSON-SANTA FE SPRINGS

Parameters	REF I.D.	Units	Sample Result	Dup Result	RPD	Spiked Sample	Spike Conc	% Rec
IRON	101279-14	MG/KG	10700	11300	5	**	**	**
MANGANESE	101279-14	MG/KG	276	253	9	**	**	**
POTASSIUM	101279-14	MG/KG	2150	2260	5	217	2400	115
SODIUM	101279-14	MG/KG	135	142	5	542	653	96
ZINC	101279-14	MG/KG	30.0	32.6	8	71.2	43.4	95

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

AnalyticalTechnologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D.: 101280

uary 14, 1991

HARDING LAWSON
15621 REDHILL AVE., SUITE 100
TUSTIN, CA 92680

Project Name: McKESSON SANTA FE SPRINGS

Attention: BURTON CHADWICK

Analytical Technologies, Inc. has received the following sample(s):

Date Received	Quantity	Matrix
January 25, 1991	21	SOIL

The sample(s) were analyzed with EPA methodology or equivalent methods as specified in the enclosed analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference table.

The results of these analyses and the quality control data are enclosed.

J. FITZPATRICK
OR PROJECT MANAGER

RICHARD M. AMANO
LABORATORY MANAGER

Analytical Technologies, Inc.

SAMPLE CROSS REFERENCE

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

Report Date: February 14, 1991
ATI I.D. : 101280

ATI #	Client Description	Matrix	Date Collected
1	MK-SB-37 1.0-1.5	SOIL	25-JAN-91
2	MK-SB-37 5.0-5.5	SOIL	25-JAN-91
3	MK-SB-37 9.5-10.0	SOIL	25-JAN-91
4	MK-SB-37 14.5-15.0	SOIL	25-JAN-91
5	MK-SB-37 19.5-20.0	SOIL	25-JAN-91
6	MK-SB-37 24.0-24.5	SOIL	25-JAN-91
7	MK-SB-38 5.0-5.5	SOIL	25-JAN-91
8	MK-SB-38 15.0-15.5	SOIL	25-JAN-91
9	MK-SB-38 19.5-20.0	SOIL	25-JAN-91
10	MK-SB-38 24.5-25.0	SOIL	25-JAN-91
11	MK-SB-38 29.5-30.0	SOIL	25-JAN-91
12	MK-SB-38 34.5-35.0	SOIL	25-JAN-91
13	MK-SB-38 40.0-40.5	SOIL	25-JAN-91
14	MK-SB-38 44.0-44.5	SOIL	25-JAN-91
15	MK-SB-39 9.5-10.0	SOIL	25-JAN-91
16	MK-SB-40 5.0-5.5	SOIL	25-JAN-91
17	MK-SB-40 9.5-10.0	SOIL	25-JAN-91
18	MK-SB-41 9.5-10.0	SOIL	25-JAN-91
19	MK-SB-41 4.5-5.0	SOIL	25-JAN-91
--	MK-SB-42 9.5-10.0	SOIL	25-JAN-91
	MK-SB-42 5.0-5.5	SOIL	25-JAN-91

---TOTALS---

Matrix	# Samples
SOIL	21

ATI STANDARD DISPOSAL PRACTICE

The sample(s) from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

ANALYTICAL SCHEDULE

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D.: 101280

Analysis	Technique/Description
EPA 8240 (GC/MS FOR VOLATILE ORGANICS)	GC/MASS SPECTROMETER

MCK0003720

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

: : 8240
Client : HARDING LAWSON
Project #: 17333,163.11

ATI I.D. : 101280
Project Name: McKESSON SANTA FE SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
1	MK-SB-37 1.0-1.5	SOIL	26-JAN-91	25-JAN-91	01-FEB-91	1.00
2	MK-SB-37 5.0-5.5	SOIL	26-JAN-91	25-JAN-91	01-FEB-91	1.00
3	MK-SB-37 9.5-10.0	SOIL	26-JAN-91	25-JAN-91	01-FEB-91	1.00

Parameter	Units	1	2	3
ACETONE	MG/KG	<1	<1	<1
BENZENE	MG/KG	<0.05	<0.05	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
BROMOFORM	MG/KG	<0.3	<0.3	<0.3
BROMOMETHANE	MG/KG	<0.5	<0.5	<0.5
2-BUTANONE (MEK)	MG/KG	<1	<1	<1
CARBON DISULFIDE	MG/KG	<0.05	<0.05	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05	<0.05	<0.05
CHLOROBENZENE	MG/KG	<0.05	<0.05	<0.05
CHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
CHLOROFORM	MG/KG	<0.05	<0.05	<0.05
CHLOROMETHANE	MG/KG	<0.5	<0.5	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
·DICHLOROETHANE	MG/KG	0.2	0.63	0.1
·DICHLOROETHANE	MG/KG	0.2	0.2	0.2
1,1-DICHLOROETHENE	MG/KG	0.58	<0.05	<0.05
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05	0.1	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05	<0.05	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
ETHYLBENZENE	MG/KG	<0.05	<0.05	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	MG/KG	11	6.3	4.9
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5	<0.5	<0.5
STYRENE	MG/KG	<0.05	<0.05	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TETRACHLOROETHENE	MG/KG	1.5	5.0	0.3
TOLUENE	MG/KG	<0.1	<0.1	0.1
1,1,1-TRICHLOROETHANE	MG/KG	1.6	0.3	0.5
1,1,2-TRICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TRICHLOROETHENE	MG/KG	0.4	<0.05	0.1
VINYL ACETATE	MG/KG	<0.5	<0.5	<0.5
VINYL CHLORIDE	MG/KG	<0.05	<0.05	<0.05
XYLENES (TOTAL)	MG/KG	<0.05	0.09	<0.05
BFB	%	90	90	94
1,2-DICHLOROETHANE-D4	%	82	91	94
TOLUENE-d8	%	88	88	90

Analytical**Technologies**, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: 8240 **Matrix:** SOIL

ATI I.D.: 101280

Sample	Parameters	Units	Results
1	NONE DETECTED		N/A
2	NONE DETECTED		N/A
3	NONE DETECTED		N/A

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

t : 8240
Client : HARDING LAWSON
Project #: 17333,163.11

ATI I.D. : 101280
Project Name: McKESSON SANTA FE SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
4	MK-SB-37 14.5-15.0	SOIL	26-JAN-91	25-JAN-91	01-FEB-91	1.00
5	MK-SB-37 19.5-20.0	SOIL	26-JAN-91	25-JAN-91	02-FEB-91	1.00
6	MK-SB-37 24.0-24.5	SOIL	26-JAN-91	25-JAN-91	02-FEB-91	1.00

Parameter	Units	4	5	6
ACETONE	MG/KG	<1	<1	<1
BENZENE	MG/KG	0.07	<0.05	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
BROMOFORM	MG/KG	<0.3	<0.3	<0.3
BROMOMETHANE	MG/KG	<0.5	<0.5	<0.5
2-BUTANONE (MEK)	MG/KG	<1	<1	<1
CARBON DISULFIDE	MG/KG	<0.05	<0.05	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05	<0.05	<0.05
CHLOROBENZENE	MG/KG	<0.05	<0.05	<0.05
CHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
CHLOROFORM	MG/KG	<0.05	<0.05	<0.05
CHLOROMETHANE	MG/KG	<0.5	<0.5	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
-DICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
-DICHLOROETHANE	MG/KG	0.2	0.1	<0.05
1,1-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05	<0.05	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
ETHYLBENZENE	MG/KG	<0.05	<0.05	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	MG/KG	2.6	1.8	0.66
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5	<0.5	<0.5
STYRENE	MG/KG	<0.05	<0.05	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TETRACHLOROETHENE	MG/KG	0.1	<0.05	<0.05
TOLUENE	MG/KG	<0.1	<0.1	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05	0.1	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TRICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
VINYL ACETATE	MG/KG	<0.5	<0.5	<0.5
VINYL CHLORIDE	MG/KG	<0.05	<0.05	<0.05
XYLENES (TOTAL)	MG/KG	<0.05	<0.05	<0.05
BFB	%	90	99	99
1,2-DICHLOROETHANE-D4	%	91	93	97
TOLUENE-d8	%	88	97	102

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: 8240 Matrix: SOIL

ATI I.D.: 101280

Sample	Parameters	Units	Results
4	NONE DETECTED		N/A
5	ALIPHATIC HYDROCARBON 302	MG/KG	3
6	NONE DETECTED		N/A

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : 8240
Client : HARDING LAWSON
Project #: 17333,163.11

ATI I.D. : 101280
Project Name: McKESSON SANTA FE SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
7	MK-SB-38 5.0-5.5	SOIL	26-JAN-91	25-JAN-91	02-FEB-91	1.00
8	MK-SB-38 15.0-15.5	SOIL	26-JAN-91	25-JAN-91	02-FEB-91	1.00
9	MK-SB-38 19.5-20.0	SOIL	26-JAN-91	25-JAN-91	05-FEB-91	1.00

Parameter	Units	7	8	9
ACETONE	MG/KG	<1	<1	<1
BENZENE	MG/KG	<0.05	<0.05	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
BROMOFORM	MG/KG	<0.3	<0.3	<0.3
BROMOMETHANE	MG/KG	<0.5	<0.5	<0.5
2-BUTANONE (MEK)	MG/KG	<1	<1	<1
CARBON DISULFIDE	MG/KG	<0.05	<0.05	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05	<0.05	<0.05
CHLOROBENZENE	MG/KG	<0.05	<0.05	<0.05
CHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
CHLOROFORM	MG/KG	<0.05	<0.05	<0.05
CHLOROMETHANE	MG/KG	<0.5	<0.5	<0.5
`ROMOCHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
-DICHLOROETHANE	MG/KG	0.2	<0.05	<0.05
,,-DICHLOROETHANE	MG/KG	<0.05	0.06	<0.05
1,1-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05	<0.05	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
ETHYLBENZENE	MG/KG	<0.05	<0.05	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	MG/KG	0.55	1.8	<0.3
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5	<0.5	<0.5
STYRENE	MG/KG	<0.05	<0.05	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TETRACHLOROETHENE	MG/KG	0.93	2.1	<0.05
TOLUENE	MG/KG	<0.1	<0.1	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	0.4	0.3	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TRICHLOROETHENE	MG/KG	0.1	0.1	<0.05
VINYL ACETATE	MG/KG	<0.5	<0.5	<0.5
VINYL CHLORIDE	MG/KG	<0.05	<0.05	<0.05
XYLENES (TOTAL)	MG/KG	<0.05	<0.05	<0.05
BFB	%	92	92	89
1,2-DICHLOROETHANE-D4	%	84	86	84
TOLUENE-d8	%	92	94	92

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: 8240 **Matrix:** SOIL

ATI I.D.: 101280

Sample	Parameters	Units	Results
7	ALIPHATIC HYDROCARBON 275	MG/KG	0.5
8	ALIPHATIC HYDROCARBON 247	MG/KG	0.3
	ALIPHATIC HYDROCARBON 564	MG/KG	0.3
	ALIPHATIC HYDROCARBON 564	MG/KG	0.3
	ALIPHATIC HYDROCARBON 648	MG/KG	0.7
	ALIPHATIC HYDROCARBON 749	MG/KG	0.4
9	317 METHYL ACETATE	MG/KG	0.4

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

t : 8240
Client : HARDING LAWSON
Project #: 17333,163.11

ATI I.D. : 101280
Project Name: McKESSON SANTA FE SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
10	MK-SB-38 24.5-25.0	SOIL	26-JAN-91	25-JAN-91	05-FEB-91	1.00
11	MK-SB-38 29.5-30.0	SOIL	26-JAN-91	25-JAN-91	01-FEB-91	1.00
12	MK-SB-38 34.5-35.0	SOIL	26-JAN-91	25-JAN-91	01-FEB-91	1.00

Parameter	Units	10	11	12
ACETONE	MG/KG	<1	<1	<1
BENZENE	MG/KG	<0.05	<0.05	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
BROMOFORM	MG/KG	<0.3	<0.3	<0.3
BROMOMETHANE	MG/KG	<0.5	<0.5	<0.5
2-BUTANONE (MEK)	MG/KG	<1	<1	<1
CARBON DISULFIDE	MG/KG	<0.05	<0.05	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05	<0.05	<0.05
CHLOROBENZENE	MG/KG	<0.05	<0.05	<0.05
CHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
CHLOROFORM	MG/KG	<0.05	<0.05	<0.05
CHLOROMETHANE	MG/KG	<0.5	<0.5	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
-DICHLOROETHANE	MG/KG	<0.05	0.2	0.1
-DICHLOROETHANE	MG/KG	<0.05	0.2	0.08
1,1-DICHLOROETHENE	MG/KG	<0.05	0.58	0.77
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	0.63
1,2-DICHLOROPROPANE	MG/KG	<0.05	<0.05	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
ETHYLBENZENE	MG/KG	<0.05	<0.05	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	MG/KG	<0.3	11	5.7
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5	<0.5	<0.5
STYRENE	MG/KG	<0.05	<0.05	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TETRACHLOROETHENE	MG/KG	<0.05	1.5	1.9
TOLUENE	MG/KG	<0.1	<0.1	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05	1.6	1.5
1,1,2-TRICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TRICHLOROETHENE	MG/KG	<0.05	0.4	0.4
VINYL ACETATE	MG/KG	<0.5	<0.5	<0.5
VINYL CHLORIDE	MG/KG	<0.05	<0.05	<0.05
XYLENES (TOTAL)	MG/KG	<0.05	<0.05	<0.05
BFB	%	89	90	90
1,2-DICHLOROETHANE-D4	%	80	82	84
TOLUENE-d8	%	91	88	89

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: 8240 **Matrix:** SOIL

ATI I.D.: 101280

Sample	Parameters	Units	Results
10	316 METHYL ACETATE	MG/KG	0.3
11	NONE DETECTED		N/A
12	NONE DETECTED		N/A

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : 8240
Client : HARDING LAWSON
Project #: 17333,163.11

ATI I.D. : 101280
Project Name: McKESSON SANTA FE SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
13	MK-SB-38 40.0-40.5	SOIL	26-JAN-91	25-JAN-91	01-FEB-91	1.00
14	MK-SB-38 44.0-44.5	SOIL	26-JAN-91	25-JAN-91	01-FEB-91	1.00
15	MK-SB-39 9.5-10.0	SOIL	26-JAN-91	25-JAN-91	05-FEB-91	1.00

Parameter	Units	13	14	15
ACETONE	MG/KG	<1	<1	<1
BENZENE	MG/KG	<0.05	<0.05	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
BROMOFORM	MG/KG	<0.3	<0.3	<0.3
BROMOMETHANE	MG/KG	<0.5	<0.5	<0.5
2-BUTANONE (MEK)	MG/KG	<1	<1	<1
CARBON DISULFIDE	MG/KG	<0.05	<0.05	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05	<0.05	<0.05
CHLOROBENZENE	MG/KG	<0.05	<0.05	<0.05
CHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
CHLOROFORM	MG/KG	<0.05	<0.05	<0.05
CHLOROMETHANE	MG/KG	<0.5	<0.5	<0.5
[illegible]ROMOCHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
[illegible]-DICHLOROETHANE	MG/KG	0.2	0.4	<0.05
1,2-DICHLOROETHANE	MG/KG	0.08	<0.05	0.1
1,1-DICHLOROETHENE	MG/KG	0.82	<0.05	<0.05
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05	0.4	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05	<0.05	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
ETHYLBENZENE	MG/KG	<0.05	<0.05	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	MG/KG	5.4	4.3	2.0
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5	<0.5	<0.5
STYRENE	MG/KG	<0.05	<0.05	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TETRACHLOROETHENE	MG/KG	1.7	0.80	0.1
TOLUENE	MG/KG	<0.1	<0.1	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	2.2	0.70	0.2
1,1,2-TRICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TRICHLOROETHENE	MG/KG	0.4	0.2	<0.05
VINYL ACETATE	MG/KG	<0.5	<0.5	<0.5
VINYL CHLORIDE	MG/KG	<0.05	<0.05	<0.05
XYLENES (TOTAL)	MG/KG	0.06	<0.05	<0.05
BFB	%	89	94	88
1,2-DICHLOROETHANE-D4	%	81	89	73
TOLUENE-d8	%	88	93	86

MCK0003729

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: 8240 Matrix: SOIL

ATI I.D.: 101280

Sample	Parameters	Units	Results
13	NONE DETECTED		N/A
14	NONE DETECTED		N/A
15	NONE DETECTED		N/A

MCK0003730

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

c : 8240
Client : HARDING LAWSON
Project #: 17333,163.11

ATI I.D. : 101280
Project Name: McKESSON SANTA FE SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
16	MK-SB-40 5.0-5.5	SOIL	28-JAN-91	25-JAN-91	06-FEB-91	1.00
17	MK-SB-40 9.5-10.0	SOIL	28-JAN-91	25-JAN-91	01-FEB-91	1.00
18	MK-SB-41 9.5-10.0	SOIL	28-JAN-91	25-JAN-91	01-FEB-91	1.00

Parameter	Units	16	17	18
ACETONE	MG/KG	27	<1	<1
BENZENE	MG/KG	<0.05	<0.05	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
BROMOFORM	MG/KG	<0.3	<0.3	<0.3
BROMOMETHANE	MG/KG	<0.5	<0.5	<0.5
2-BUTANONE (MEK)	MG/KG	4.5	<1	<1
CARBON DISULFIDE	MG/KG	<0.05	<0.05	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05	<0.05	<0.05
CHLOROBENZENE	MG/KG	<0.05	<0.05	<0.05
CHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
CHLOROFORM	MG/KG	<0.05	<0.05	<0.05
CHLOROMETHANE	MG/KG	<0.5	<0.5	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
-DICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
-DICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
1,1-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05	<0.05	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
ETHYLBENZENE	MG/KG	<0.05	<0.05	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	MG/KG	<0.3	<0.3	<0.3
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5	<0.5	<0.5
STYRENE	MG/KG	<0.05	<0.05	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TETRACHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
TOLUENE	MG/KG	<0.1	<0.1	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TRICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
VINYL ACETATE	MG/KG	<0.5	<0.5	<0.5
VINYL CHLORIDE	MG/KG	<0.05	<0.05	<0.05
XYLENES (TOTAL)	MG/KG	<0.05	<0.05	<0.05
BFB	%	84	91	94
1,2-DICHLOROETHANE-D4	%	75	94	90
TOLUENE-d8	%	84	90	91

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: 8240

Matrix: SOIL

ATI I.D.: 101280

Sample	Parameters	Units	Results
16	NONE DETECTED		N/A
17	NONE DETECTED		N/A
18	NONE DETECTED		N/A

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

: : 8240
Client : HARDING LAWSON
Project #: 17333,163.11

ATI I.D. : 101280
Project Name: McKESSON SANTA FE SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
19	MK-SB-41 4.5-5.0	SOIL	28-JAN-91	25-JAN-91	01-FEB-91	1.00
20	MK-SB-42 9.5-10.0	SOIL	28-JAN-91	25-JAN-91	05-FEB-91	5.00
21	MK-SB-42 5.0-5.5	SOIL	28-JAN-91	25-JAN-91	05-FEB-91	5.00

Parameter	Units	19	20	21
ACETONE	MG/KG	<1	49	95
BENZENE	MG/KG	<0.05	<0.25	<0.25
BROMODICHLOROMETHANE	MG/KG	<0.05	<0.25	<0.25
BROMOFORM	MG/KG	<0.3	<1.5	<1.5
BROMOMETHANE	MG/KG	<0.5	<2.5	<2.5
2-BUTANONE (MEK)	MG/KG	<1	6.0	13
CARBON DISULFIDE	MG/KG	<0.05	<0.25	<0.25
CARBON TETRACHLORIDE	MG/KG	<0.05	<0.25	<0.25
CHLOROBENZENE	MG/KG	<0.05	<0.25	<0.25
CHLOROETHANE	MG/KG	<0.05	<0.25	<0.25
CHLOROFORM	MG/KG	<0.05	<0.25	<0.25
CHLOROMETHANE	MG/KG	<0.5	<2.5	<2.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05	<0.25	<0.25
' '-DICHLOROETHANE	MG/KG	<0.05	<0.25	<0.25
-DICHLOROETHANE	MG/KG	<0.05	<0.25	<0.25
,1-DICHLOROETHENE	MG/KG	<0.05	<0.25	<0.25
CIS-1,2-DICHLOROETHENE	MG/KG	0.13	<0.25	<0.25
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.25	<0.25
1,2-DICHLOROPROPANE	MG/KG	<0.05	<0.25	<0.25
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.25	<0.25
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.25	<0.25
ETHYLBENZENE	MG/KG	<0.05	<0.25	<0.25
2-HEXANONE (MBK)	MG/KG	<0.5	<2.5	<2.5
METHYLENE CHLORIDE	MG/KG	<0.3	<1.5	<1.5
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5	<2.5	<2.5
STYRENE	MG/KG	<0.05	<0.25	<0.25
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05	<0.25	<0.25
TETRACHLOROETHENE	MG/KG	<0.05	<0.25	<0.25
TOLUENE	MG/KG	<0.1	<0.5	<0.5
1,1,1-TRICHLOROETHANE	MG/KG	0.1	<0.25	<0.25
1,1,2-TRICHLOROETHANE	MG/KG	<0.05	<0.25	<0.25
TRICHLOROETHENE	MG/KG	<0.05	<0.25	<0.25
VINYL ACETATE	MG/KG	<0.5	<2.5	<2.5
VINYL CHLORIDE	MG/KG	<0.05	<0.25	<0.25
XYLENES (TOTAL)	MG/KG	<0.05	<0.25	<0.25
BFB	%	82	108	91
1,2-DICHLOROETHANE-D4	%	79	104	87
TOLUENE-d8	%	79	104	86

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: 8240 **Matrix:** SOIL

ATI I.D.: 101280

Sample	Parameters	Units	Results
19	NONE DETECTED		N/A
20	NONE DETECTED		N/A
21	NONE DETECTED		N/A

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Test : EPA 8240
Blank I.D. : 10204
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 101280
Date Extracted: 26-JAN-91
Date Analyzed : 31-JAN-91
Dil. Factor : 1.00

Parameters	Units	Results
ACETONE	MG/KG	<1
BENZENE	MG/KG	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05
BROMOFORM	MG/KG	<0.3
BROMOMETHANE	MG/KG	<0.5
2-BUTANONE (MEK)	MG/KG	<1
CARBON DISULFIDE	MG/KG	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05
CHLOROBENZENE	MG/KG	<0.05
CHLOROETHANE	MG/KG	<0.05
CHLOROFORM	MG/KG	<0.05
CHLOROMETHANE	MG/KG	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05
1,1-DICHLOROETHANE	MG/KG	<0.05
1,2-DICHLOROETHANE	MG/KG	<0.05
1 1-DICHLOROETHENE	MG/KG	<0.05
·1,2-DICHLOROETHENE	MG/KG	<0.05
NS-1,2-DICHLOROETHENE	MG/KG	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05
ETHYLBENZENE	MG/KG	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5
METHYLENE CHLORIDE	MG/KG	<0.3
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5
STYRENE	MG/KG	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05
TETRACHLOROETHENE	MG/KG	<0.05
TOLUENE	MG/KG	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05
TRICHLOROETHENE	MG/KG	<0.05
VINYL ACETATE	MG/KG	<0.5
VINYL CHLORIDE	MG/KG	<0.05
XYLENES (TOTAL)	MG/KG	<0.05
BFB	%	105
1,2-DICHLOROETHANE-D4	%	106
TOLUENE	%	102

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK
(ADDITIONAL COMPOUNDS)

Test : EPA 8240
Blank I.D. : 10204
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 101280
Date Extracted: 26-JAN-91
Date Analyzed : 31-JAN-91
Dil. Factor : 1.00

Parameters	Units	Results
NONE DETECTED		N/A

MCK0003736

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Test : EPA 8240
Blank I.D. : 10209
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 101280
Date Extracted: 28-JAN-91
Date Analyzed : 01-FEB-91
Dil. Factor : 1.00

Parameters	Units	Results
ACETONE	MG/KG	<1
BENZENE	MG/KG	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05
BROMOFORM	MG/KG	<0.3
BROMOMETHANE	MG/KG	<0.5
2-BUTANONE (MEK)	MG/KG	<1
CARBON DISULFIDE	MG/KG	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05
CHLOROBENZENE	MG/KG	<0.05
CHLOROETHANE	MG/KG	<0.05
CHLOROFORM	MG/KG	<0.05
CHLOROMETHANE	MG/KG	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05
1,1-DICHLOROETHANE	MG/KG	<0.05
1,2-DICHLOROETHANE	MG/KG	<0.05
1,1-DICHLOROETHENE	MG/KG	<0.05
-1,2-DICHLOROETHENE	MG/KG	<0.05
IS-1,2-DICHLOROETHENE	MG/KG	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05
ETHYLBENZENE	MG/KG	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5
METHYLENE CHLORIDE	MG/KG	<0.3
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5
STYRENE	MG/KG	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05
TETRACHLOROETHENE	MG/KG	<0.05
TOLUENE	MG/KG	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05
TRICHLOROETHENE	MG/KG	<0.05
VINYL ACETATE	MG/KG	<0.5
VINYL CHLORIDE	MG/KG	<0.05
XYLENES (TOTAL)	MG/KG	<0.05
BFB	%	104
1,2-DICHLOROETHANE-D4	%	102
TOLUENE	%	102

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK
(ADDITIONAL COMPOUNDS)

Test	: EPA 8240		
Blank I.D.	: 10209	ATI I.D.	: 101280
Client	: HARDING LAWSON	Date Extracted	: 28-JAN-91
Project #	: 17333,163.11	Date Analyzed	: 01-FEB-91
Project Name	: McKESSON SANTA FE SPRINGS	Dil. Factor	: 1.00

Parameters	Units	Results
NONE DETECTED		N/A

MCK0003738

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

Test : EPA 8240
MSMSD # : 10249
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 101280
Date Extracted: 26-JAN-91
Date Analyzed : 02-FEB-91
Sample Matrix : SOIL
REF I.D. : 101280-03

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	MG/KG	<0.05	2.8	2.8	100	2.7	96	4
CHLOROBENZENE	MG/KG	<0.05	2.8	2.7	96	27	96	0
1,1-DICHLOROETHENE	MG/KG	<0.05	2.4	2.0	83	1.9	79	5
TOLUENE	MG/KG	0.1	2.8	2.8	96	27	93	3
TRICHLOROETHENE	MG/KG	0.1	2.5	2.3	88	2.3	88	0

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

Test : EPA 8240
MSMSD # : 10269
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 101280
Date Extracted: 28-JAN-91
Date Analyzed : 02-FEB-91
Sample Matrix : SOIL
REF I.D. : 101280-19

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	MG/KG	<2.5	2.8	2.4	86	2.3	82	5
CHLOROBENZENE	MG/KG	<2.5	2.8	2.5	89	2.4	86	3
1,1-DICHLOROETHENE	MG/KG	<2.5	2.4	1.6	67	1.4	58	14
TOLUENE	MG/KG	<0.5	2.8	25	89	2.4	86	3
TRICHLOROETHENE	MG/KG	<2.5	25	2.1	88	2.0	80	10

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

AnalyticalTechnologies,Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

Test : EPA 8240
MSMSD # : 10347
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 101280
Date Extracted: 31-JAN-91
Date Analyzed : 05-FEB-91
Sample Matrix : SOIL
REF I.D. : 101339-07

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	MG/KG	<0.05	2.75	2.07	75	2.00	73	3
CHLOROBENZENE	MG/KG	<0.05	2.75	2.15	78	2.05	75	4
1,1-DICHLOROETHENE	MG/KG	0.2	2.40	1.46	52*	1.64	60	14
TOLUENE	MG/KG	0.4	2.75	2.31	69	2.37	72	4
TRICHLOROETHENE	MG/KG	0.5	2.50	2.36	68	2.28	65	4

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

* RESULT OUTSIDE OF LIMITS DUE TO SAMPLE MATRIX INTERFERENCE.

MCK0003741

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

BLANK SPIKE

Test : EPA 8240
Blank Spike #: 10052
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name : McKESSON SANTA FE SPRINGS

ATI I.D. : 101280
Date Extracted: 26-JAN-91
Date Analyzed : 06-FEB-91
Sample Matrix : SOIL

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	MG/KG	<0.05	2.4	2.8	86
CHLOROBENZENE	MG/KG	<0.05	2.5	2.8	90
1,1-DICHLOROETHENE	MG/KG	<0.05	1.7	2.4	71
TOLUENE	MG/KG	<0.1	2.4	2.8	89
TRICHLOROETHENE	MG/KG	<0.05	2.4	2.5	94

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

BLANK SPIKE

Test : EPA 8240
Blank Spike #: 10057
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name : McKESSON SANTA FE SPRINGS

ATI I.D. : 101280
Date Extracted: 28-JAN-91
Date Analyzed : 06-FEB-91
Sample Matrix : SOIL

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	MG/KG	<0.05	2.3	2.8	82
CHLOROBENZENE	MG/KG	<0.05	2.4	2.8	87
1,1-DICHLOROETHENE	MG/KG	<0.05	1.5	2.4	64
TOLUENE	MG/KG	<0.2	2.5	2.8	89
TRICHLOROETHENE	MG/KG	<0.02	2.3	2.5	92

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy 714/259-1378

101280

CHAIN OF CUSTODY FORM

Pg 2 of 3

Lab: ATI

Samplers: Dan Johnson

Job Number: 17333, 163.11

Name/Location: McKesson Santa Fe Springs

Project Manager: _____ Recorder: _____ (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020	EPA 624/8240 Volatile	EPA 625/8270	ICP METALS	EPA 8015M/TPH
X			X		X						91	01	29		MK-SB-38 29.5-30.0			X			11 01
															MK-SB-38 34.5-35.0			X			12 02
															MK-SB-38 40.0-40.5			X			13 03
															MK-SB-38 44.0-44.5			X			14 04
																		8240			05
																					06
																					07
																					08
																					09
																					10

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK0003744				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature) Burton Crawford	RECEIVED BY: (Signature) Bob DaBrey	DATE/TIME 1/25/91 16:14
RELINQUISHED BY: (Signature) Bob DaBrey	RECEIVED BY: (Signature) [illegible]	DATE/TIME 1-25-91 18:14
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
METHOD OF SHIPMENT		

Laboratory Copy White — Project Office Copy Yellow — Field or Pink

6533

Lawson Associates
[illegible]edhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

10125

CHAIN OF CUSTODY FORM

Pg 1 of 2

Lab: ATI

Samplers: Dan Johnson

Job Number: 17333.163.11

Name/Location: McKesson Santa Fe Springs

Project Manager: Burton Chadwick Recorder: Burton Chadwick (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH	
SO		X			X						91	01	24		MK-SB-37 1.0-1.5	X						01
															MK-SB-37 5.0-5.5	X						02
															MK-SB-37 9.5-10.0	X						03
															MK-SB-37 14.5-15.0	X						04
															MK-SB-37 19.5-20.0	X						05
															MK-SB-37 24.0-24.5	X						06
															MK-SB-38 5.0-5.5	X						07
															MK-SB-38 15.0-15.5	X						08
															MK-SB-38 19.5-20.0	X						09
															MK-SB-38 24.5-25.0	X						10

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK0003745				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
Burton Chadwick	Bob DeRay	1/25/91 1614
RELINQUISHED BY: (Signature) Bob DeRay	RECEIVED BY: (Signature) Ben Wright	DATE/TIME 1-25-91 1814
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
METHOD OF SHIPMENT		

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy 714/259-1378

CHAIN OF CUSTODY FORM

Pg 3 of 3

Lab: ATI

Samplers: Dan Johnson

Job Number: 17333.163.11

Name/Location: McKesson Santa Fe Springs

Project Manager: B. Chadwick

Recorder: (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH	
SO			X		X						91	01	25		MK-SB-39 9.5-10.0			X			15	
															MK-SB-40 5.0-5.5			X			12	
															MK-SB-40 9.5 10.0			X			13	
															MK-SB-41 9.5-10.0			X			14	
															MK-SB-41 4.5-5.0			X			10	
															MK-SB-42 9.5-10.0			X			09	
															MK-SB-42 5.0-5.5			X			20	
																					01	

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS

MCK0003746

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
Barbara Chadwick	Barbara Dibb	1/25/91 1614
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
Barb Dibb		1-25-91 1814
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
METHOD OF SHIPMENT		

Laboratory Copy White — Project Office Copy Yellow — Field or Off Pink

6533

AnalyticalTechnologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D.: 10133

ɔruary 13, 1991

HARDING LAWSON
15621 REDHILL AVE., SUITE 100
TUSTIN, CA 92680

Project Name: McKESSON SANTA FE SPRINGS

Attention: BURTON CHADWICK

Analytical Technologies, Inc. has received the following sample(s):

Date Received	Quantity	Matrix
January 30, 1991	7	SOIL

The sample(s) were analyzed with EPA methodology or equivalent methods as specified in the enclosed analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference table.

The results of these analyses and the quality control data are enclosed.

J. FITZPATRICK
IOR PROJECT MANAGER

RICHARD M. AMANO
LABORATORY MANAGER

Analytical Technologies, Inc.

SAMPLE CROSS REFERENCE

lient : HARDING LAWSON
roject # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

Report Date: February 13, 199
ATI I.D. : 101339

ATI #	Client Description	Matrix	Date Collected
1	MK-SB-17A SB2A	SOIL	29-JAN-91
2	MK-SB-17B SB2B	SOIL	29-JAN-91
3	MK-SB-23A SB1A	SOIL	29-JAN-91
4	MK-SB-23B SB1B	SOIL	29-JAN-91
5	MK-SB-17A 41	SOIL	25-JAN-91
6	MK-SB-39 5-5.5	SOIL	25-JAN-91
7	MK-SB-23A 30.5-31	SOIL	25-JAN-91
8	MK-SB-17 COMPOSITE (01,02)	SOIL	29-JAN-91
9	MK-SB-23 COMPOSITE (03,04)	SOIL	29-JAN-91

---TOTALS---

Matrix	# Samples
SOIL	9

ATI STANDARD DISPOSAL PRACTICE

The sample(s) from this project will be disposed of in twenty-one (21) days from the date his report. If an extended storage period is required, please contact our sample contr epartment before the scheduled disposal date.

Analytical Technologies, Inc.

ANALYTICAL SCHEDULE

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D.: 1013

Analysis	Technique/Description
EPA 8240 (GC/MS FOR VOLATILE ORGANICS)	GC/MASS SPECTROMETER

MCK0003749

AnalyticalTechnologies,Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

est : EPA 8240
lient : HARDING LAWSON
Project #: 17333,163.11

ATI I.D. : 101339
Project Name: McKESSON SANTA SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
5	MK-SB-17A 41	SOIL	31-JAN-91	25-JAN-91	06-FEB-91	1.00
6	MK-SB-39 5-5.5	SOIL	31-JAN-91	25-JAN-91	06-FEB-91	1.00
7	MK-SB-23A 30.5-31	SOIL	31-JAN-91	25-JAN-91	06-FEB-91	1.00

Parameter	Units	5	6	7
ACETONE	MG/KG	<1	<1	<1
BENZENE	MG/KG	<0.05	<0.05	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
BROMOFORM	MG/KG	<0.3	<0.3	<0.3
BROMOMETHANE	MG/KG	<0.5	<0.5	<0.5
2-BUTANONE (MEK)	MG/KG	<1	<1	<1
CARBON DISULFIDE	MG/KG	<0.05	<0.05	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05	<0.05	<0.05
CHLOROBENZENE	MG/KG	<0.05	<0.05	<0.05
CHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
CHLOROFORM	MG/KG	<0.05	<0.05	<0.05
CHLOROMETHANE	MG/KG	<0.5	<0.5	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05	<0.05	<0.05
1,1-DICHLOROETHANE	MG/KG	<0.05	<0.05	0.09
,2-DICHLOROETHANE	MG/KG	<0.05	<0.05	0.87
.,1-DICHLOROETHENE	MG/KG	0.1	<0.05	0.2
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05	<0.05	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05	<0.05
ETHYLBENZENE	MG/KG	<0.05	<0.05	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	MG/KG	<0.3	<0.3	21
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5	<0.5	<0.5
STYRENE	MG/KG	<0.05	<0.05	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TETRACHLOROETHENE	MG/KG	0.2	0.3	0.50
TOLUENE	MG/KG	<0.1	<0.1	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	0.1	0.3	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05	<0.05	<0.05
TRICHLOROETHENE	MG/KG	0.07	<0.05	<0.05
VINYL ACETATE	MG/KG	<0.5	<0.5	<0.5
VINYL CHLORIDE	MG/KG	<0.05	<0.05	<0.05
XYLENES (TOTAL)	MG/KG	<0.05	<0.05	0.1
BFB	%	83	84	81
1,2-DICHLOROETHANE-D4	%	74	80	70
TOLUENE-D8	%	84	86	78

MCK0003750

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: EPA 8240

Matrix: SOIL

ATI I.D.: 101339

Sample	Parameters	Units	Results
5	NONE DETECTED		N/A
6	NONE DETECTED		N/A
7	247 ALIPHATIC HYDROCARBON	MG/KG	0.7

MCK0003751

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

est : EPA 8240
lient : HARDING LAWSON
Project #: 17333,163.11

ATI I.D. : 101339
Project Name: McKESSON SANTA SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
8	MK-SB-17 COMPOSITE (01,02)	SOIL	31-JAN-91	29-JAN-91	06-FEB-91	1.00
9	MK-SB-23 COMPOSITE (03,04)	SOIL	31-JAN-91	29-JAN-91	06-FEB-91	1.00

Parameter	Units	8	9
ACETONE	MG/KG	<1	<1
BENZENE	MG/KG	<0.05	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05	<0.05
BROMOFORM	MG/KG	<0.3	<0.3
BROMOMETHANE	MG/KG	<0.5	<0.5
2-BUTANONE (MEK)	MG/KG	<1	<1
CARBON DISULFIDE	MG/KG	<0.05	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05	<0.05
CHLOROBENZENE	MG/KG	<0.05	<0.05
CHLOROETHANE	MG/KG	<0.05	<0.05
CHLOROFORM	MG/KG	<0.05	<0.05
CHLOROMETHANE	MG/KG	<0.5	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05	<0.05
1,1-DICHLOROETHANE	MG/KG	<0.05	<0.05
1,2-DICHLOROETHANE	MG/KG	<0.05	<0.05
,1-DICHLOROETHENE	MG/KG	<0.05	<0.05
IS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05
ETHYLBENZENE	MG/KG	<0.05	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5	<0.5
METHYLENE CHLORIDE	MG/KG	<0.3	<0.3
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5	<0.5
STYRENE	MG/KG	<0.05	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05	<0.05
TETRACHLOROETHENE	MG/KG	<0.05	<0.05
TOLUENE	MG/KG	<0.1	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05	<0.05
TRICHLOROETHENE	MG/KG	<0.05	<0.05
VINYL ACETATE	MG/KG	<0.5	<0.5
VINYL CHLORIDE	MG/KG	<0.05	<0.05
XYLENES (TOTAL)	MG/KG	<0.05	<0.05
BFB	%	89	92
1,2-DICHLOROETHANE-D4	%	77	78
TOLUENE-D8	%	90	92

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: EPA 8240 Matrix: SOIL

ATI I.D.: 101339

Sample	Parameters	Units	Results
8	NONE DETECTED		N/A
9	NONE DETECTED		N/A

MCK0003753

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Test : EPA 8240
Blank I.D. : 10246
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 101339
Date Extracted: 31-JAN-91
Date Analyzed : 04-FEB-91
Dil. Factor : 1.00

Parameters	Units	Results
ACETONE	MG/KG	<1
BENZENE	MG/KG	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05
BROMOFORM	MG/KG	<0.3
BROMOMETHANE	MG/KG	<0.5
2-BUTANONE (MEK)	MG/KG	<1
CARBON DISULFIDE	MG/KG	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05
CHLOROBENZENE	MG/KG	<0.05
CHLOROETHANE	MG/KG	<0.05
CHLOROFORM	MG/KG	<0.05
CHLOROMETHANE	MG/KG	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05
1,1-DICHLOROETHANE	MG/KG	<0.05
1,2-DICHLOROETHANE	MG/KG	<0.05
1,1-DICHLOROETHENE	MG/KG	<0.05
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05
RANS-1,2-DICHLOROETHENE	MG/KG	<0.05
,2-DICHLOROPROPANE	MG/KG	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05
ETHYLBENZENE	MG/KG	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5
METHYLENE CHLORIDE	MG/KG	0.4
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5
STYRENE	MG/KG	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05
TETRACHLOROETHENE	MG/KG	<0.05
TOLUENE	MG/KG	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05
TRICHLOROETHENE	MG/KG	<0.05
VINYL ACETATE	MG/KG	<0.5
VINYL CHLORIDE	MG/KG	<0.05
XYLENES (TOTAL)	MG/KG	<0.05
BFB	%	100
1,2-DICHLOROETHANE-D4	%	91
TOLUENE-D8	%	99

MCK0003754

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

Test : EPA 8240
MSMSD # : 10347
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 101339
Date Extracted: 31-JAN-91
Date Analyzed : 05-FEB-91
Sample Matrix : SOIL
REF I.D. : 101339-07

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	MG/KG	<0.05	2.75	2.07	75	2.00	73	3
CHLOROBENZENE	MG/KG	<0.05	2.75	2.15	78	2.05	75	4
1,1-DICHLOROETHENE	MG/KG	0.2	2.40	1.46	52*	1.64	60	14
TOLUENE	MG/KG	0.4	2.75	2.31	69	2.37	72	4
TRICHLOROETHENE	MG/KG	0.5	2.50	2.36	68	2.28	65	4

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

* RESULT OUTSIDE OF LIMITS DUE TO SAMPLE MATRIX INTERFERENCE.

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

BLANK SPIKE

Test : EPA 8240
Blank Spike #: 10099
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name : McKESSON SANTA FE SPRINGS

ATI I.D. : 101339
Date Extracted: 31-JAN-91
Date Analyzed : 06-FEB-91
Sample Matrix : SOIL

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	MG/KG	<0.05	2.7	2.8	96
CHLOROBENZENE	MG/KG	<0.05	2.6	2.8	93
1,1-DICHLOROETHENE	MG/KG	<0.05	2.0	2.4	83
TOLUENE	MG/KG	<0.1	2.6	2.8	93
TRICHLOROETHENE	MG/KG	<0.05	2.6	2.5	104

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

101339

CHAIN OF CUSTODY FORM

Lab: [illegible]

Samplers: Dan Johnson, B. Chadwick, T. Harder

Job Number: 17333,164.11

Name/Location: McKesson Santa Fe Springs

Project Manager: B. Chadwick

Recorder: [signature] (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH
TB			X		X						91	01	29		MK-SB-17A SS2A			X			
TB			X		X						91	01	29		MK-SB-17A SS2B			X			
TB			X		X						91	01	29		MK-SB-23A SS1A			X			
TB			X		X						91	01	29		MK-SB-23B SS2A			X			

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK0003757				

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
[signature]	[signature]	[illegible]
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
[signature]	[signature]	[illegible]
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
[signature]		
RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME	RECEIVED FOR LAB BY: (Signature)	DATE/TIME
	[signature]	[illegible]
METHOD OF SHIPMENT		
[illegible]		

Laboratory Copy Project Office Copy Field or Office Copy

6

HLA
Harding Lawson Associates
1 Redhill Avenue, Suite 100
n, California 92660
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

1 1539

CHAIN OF CUSTODY FORM

Lab: ATI

Job Number: 17333, 163"
Name/Location: McKesson Santa Fe Springs
Project Manager: B. Chadwick

Samplers: Dan Johnson / Burton Chadwick / Tom Harder
Recorder: Burton Chadwick (Signature Required)

	SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	ANALYSIS REQUESTED: EPA 601/8010	EPA 602/8020	EPA 624/8240 (Volatile Organics)	EPA 625/8270	ICP METALS	EPA 8015M/TPH	
05	50			X		X						91	01	25		MK-SB-17A 41			X				*
06	50			X		X						91	01	25		MK-SB-39 5-5.5			X				*
07	50			X		X						91	01	29		MK-SB-23A 30.5-31			X				

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
						Note: * indicates may need rush to extract within extraction holding time. Please advise B Chadwick

MCK0003758

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	RECEIVED BY: (Signature)	DATE/TIME
Burton Chadwick	James Riley	1/30/91 1540
James Riley	Micheal Teague	1/30/91 16:40
Micheal Teague		

DISPATCHED BY: (Signature) DATE/TIME

RECEIVED FOR LAB BY: (Signature) Michael Hallee DATE/TIME 1-30-91 1815

METHOD OF SHIPMENT: Courier w/ custody seal on cooler

Laboratory Copy White — Project Office Copy Yellow — Field or Office Copy Pink

6533

Analytical Technologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D.: 102043

ruary 18, 1991

HARDING LAWSON
15621 REDHILL AVE., SUITE 100
TUSTIN, CA 92680

Project Name: McKESSON SANTA FE SPRINGS

Attention: BURTON CHADWICK

Analytical Technologies, Inc. has received the following sample(s):

Date Received	Quantity	Matrix
February 04, 1991	1	SOIL

The sample(s) were analyzed with EPA methodology or equivalent methods as specified in the enclosed analytical schedule. The symbol for "less than" indicates a value below the reportable detection limit. Please see the attached sheet for the sample cross reference table.

The results of these analyses and the quality control data are enclosed.

for J. FITZPATRICK
SENIOR PROJECT MANAGER

for: RICHARD M. AMANO
LABORATORY MANAGER

Analytical Technologies, Inc.

SAMPLE CROSS REFERENCE

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

Report Date: February 18, 1991
ATI I.D. : 102043

ATI #	Client Description	Matrix	Date Collected
1	MK-SB-23A 128.8'-129.2'	SOIL	04-FEB-91

---TOTALS---

Matrix	# Samples
SOIL	1

ATI STANDARD DISPOSAL PRACTICE

The sample(s) from this project will be disposed of in twenty-one (21) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

Analytical Technologies, Inc.

ANALYTICAL SCHEDULE

Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D.: 102043

Analysis	Technique/Description
EPA 8240 (GC/MS FOR VOLATILE ORGANICS)	GC/MASS SPECTROMETER

MCK0003761

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 8240
Client : HARDING LAWSON
Project #: 17333,163.11

ATI I.D. : 102043
Project Name: McKESSON SANTA FE SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
1	MK-SB-23A 128.8'-129.2'	SOIL	05-FEB-91	04-FEB-91	08-FEB-91	1.00

Parameter	Units	1
ACETONE	MG/KG	<1
BENZENE	MG/KG	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05
BROMOFORM	MG/KG	<0.3
BROMOMETHANE	MG/KG	<0.5
2-BUTANONE (MEK)	MG/KG	<1
CARBON DISULFIDE	MG/KG	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05
CHLOROBENZENE	MG/KG	<0.05
CHLOROETHANE	MG/KG	<0.05
CHLOROFORM	MG/KG	<0.05
CHLOROMETHANE	MG/KG	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05
1,1-DICHLOROETHANE	MG/KG	<0.05
1,2-DICHLOROETHANE	MG/KG	<0.05
1,1-DICHLOROETHENE	MG/KG	<0.05
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05
ETHYLBENZENE	MG/KG	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5
METHYLENE CHLORIDE	MG/KG	<0.3
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5
STYRENE	MG/KG	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05
TETRACHLOROETHENE	MG/KG	<0.05
TOLUENE	MG/KG	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05
TRICHLOROETHENE	MG/KG	<0.05
VINYL ACETATE	MG/KG	<0.5
VINYL CHLORIDE	MG/KG	<0.05
XYLENES (TOTAL)	MG/KG	<0.05
BFB	%	87
1,2-DICHLOROETHANE-D4	%	81
TOLUENE-D8	%	82

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: EPA 8240

Matrix: SOIL

ATI I.D.: 102043

Sample	Parameters	Units	Results
1	NONE DETECTED		N/A

MCK0003763

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Test : EPA 8240
Blank I.D. : 10288
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 102043
Date Extracted: 05-FEB-91
Date Analyzed : 08-FEB-91
Dil. Factor : 1.00

Parameters	Units	Results
ACETONE	MG/KG	<1
BENZENE	MG/KG	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05
BROMOFORM	MG/KG	<0.3
BROMOMETHANE	MG/KG	<0.5
2-BUTANONE (MEK)	MG/KG	<1
CARBON DISULFIDE	MG/KG	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05
CHLOROBENZENE	MG/KG	<0.05
CHLOROETHANE	MG/KG	<0.05
CHLOROFORM	MG/KG	<0.05
CHLOROMETHANE	MG/KG	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05
1,1-DICHLOROETHANE	MG/KG	<0.05
1,2-DICHLOROETHANE	MG/KG	<0.05
1,1-DICHLOROETHENE	MG/KG	<0.05
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05
ETHYLBENZENE	MG/KG	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5
METHYLENE CHLORIDE	MG/KG	0.37
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5
STYRENE	MG/KG	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05
TETRACHLOROETHENE	MG/KG	<0.05
TOLUENE	MG/KG	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05
TRICHLOROETHENE	MG/KG	<0.05
VINYL ACETATE	MG/KG	<0.5
VINYL CHLORIDE	MG/KG	<0.05
XYLENES (TOTAL)	MG/KG	<0.05
BFB	%	97
1,2-DICHLOROETHANE-D4	%	100
TOLUENE-D8	%	94

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK
(ADDITIONAL COMPOUNDS)

Test : EPA 8240
Blank I.D. : 10288
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 102043
Date Extracted: 05-FEB-91
Date Analyzed : 08-FEB-91
Dil. Factor : 1.00

Parameters	Units	Results
NONE DETECTED		N/A

MCK0003765

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

Test : EPA 8240
MSMSD # : 10411
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 102043
Date Extracted: 02-FEB-91
Date Analyzed : 08-FEB-91
Sample Matrix : SOIL
REF I.D. : 102016-02

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
BENZENE	MG/KG	<0.05	2.8	2.2	79	2.2	79	0
CHLOROBENZENE	MG/KG	<0.05	2.8	2.1	75	2.1	75	0
1,1-DICHLOROETHENE	MG/KG	<0.05	2.4	1.8	75	1.5	63	18
TOLUENE	MG/KG	<0.1	2.8	2.2	79	2.2	79	0
TRICHLOROETHENE	MG/KG	<0.05	2.5	2.1	84	2.0	80	5

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

MCK0003766

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

BLANK SPIKE

Test : EPA 8240
Blank Spike #: 10158
Client : HARDING LAWSON
Project # : 17333,163.11
Project Name : McKESSON SANTA FE SPRINGS

ATI I.D. : 102043
Date Extracted: 05-FEB-91
Date Analyzed : 05-FEB-91
Sample Matrix : SOIL

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	MG/KG	<0.05	2.5	2.8	88
CHLOROBENZENE	MG/KG	<0.05	2.5	2.8	89
1,1-DICHLOROETHENE	MG/KG	<0.05	1.9	2.4	79
TOLUENE	MG/KG	<0.1	2.5	2.8	89
TRICHLOROETHENE	MG/KG	<0.05	2.4	2.5	95

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

Harding Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

102043

CHAIN OF CUSTODY FORM

Lab: ATL

Samplers: Dan Johnson

Job Number: 17333, 164.11

Name/Location: McKesson - Santa Fe Springs

Project Manager: Burton Chadwick

Recorder: _____ (Signature Required)

CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES
C			X		X						9	1	0	2	0	4	1	2	0	0	MK-SB-23A 12'-12½'

ANALYSIS REQUESTED

EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH
		X			

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
						Normal turnaround time

MCK0003768

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	DATE/TIME	RECEIVED BY: (Signature)	DATE/TIME
[signature]	2-4-91	[signature]	2/4/91 16[illegible]
Bob Darby	1655	[signature]	2/4/91 1655
[signature]	2-4-91 1753	[signature]	2/4/91 1753
[signature]		[signature]	2/4/91 1[illegible]

DISPATCHED BY: (Signature) DATE/TIME

RECEIVED FOR LAB BY: (Signature) DATE/TIME: [signature] 2/4/91 1755

METHOD OF SHIPMENT

Laboratory Copy (White) Project Office Copy (Yellow) Field or Office (Pink)

6533

Analytical Technologies, Inc. Corporate Offices 5550 Morehouse Drive San Diego, CA 92121 (619) 458-9141

ATI I.D.: 1021

February 25, 1991

EARDING LAWSON
15621 REDHILL AVE., SUITE 100
TUSTIN, CA 92680

Project Name: McKESSON SANTA FE SPRINGS
Project # : 17333,164.11

Attention: BURTON CHADWICK

Analytical Technologies, Inc. has received the following sample(s):

Date Received	Quantity	Matrix
February 07, 1991	5	SOIL

The sample(s) were analyzed with EPA methodology or equivalent methods as specified in t enclosed analytical schedule. The symbol for "less than" indicates a value below the reportab detection limit. Please see the attached sheet for the sample cross reference table.

ıe results of these analyses and the quality control data are enclosed.

TIM J. FITZPATRICK
SENIOR PROJECT MANAGER

RICHARD M. AMANO
LABORATORY MANAGER

Analytical Technologies, Inc.

SAMPLE CROSS REFERENCE

Client : HARDING LAWSON
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

Report Date: February 25, 199
ATI I.D. : 102107

ATI #	Client Description	Matrix	Date Collected
1	MK-SB-23A SB2B	SOIL	07-FEB-91
2	MK-SB-23A 2B3A	SOIL	07-FEB-91
3	MK-SB-23A SB2A	SOIL	07-FEB-91
4	MK-SB-17A SB2A	SOIL	07-FEB-91
5	MK-SB-17A SB3A	SOIL	07-FEB-91
6	COMPOSITE MK-SB-23A (01-03)	SOIL	07-FEB-91
7	COMPOSITE MK-SB-17A (04,05)	SOIL	07-FEB-91

---TOTALS---

Matrix	# Samples
SOIL	7

ATI STANDARD DISPOSAL PRACTICE

The sample(s) from this project will be disposed of in twenty-one (21) days from the date this report. If an extended storage period is required, please contact our sample contr department before the scheduled disposal date.

Analytical Technologies, Inc.

ANALYTICAL SCHEDULE

Client : HARDING LAWSON
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D.: 1021

Analysis	Technique/Description
EPA 8240 (GC/MS FOR VOLATILE ORGANICS)	GC/MASS SPECTROMETER
EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)	GC/MASS SPECTROMETER
MOD EPA 418.1 (PETROLEUM HYDROCARBONS)	INFRARED SPECTROMETER

MCK0003771

Analytical Technologies, Inc.

GENERAL CHEMISTRY RESULTS

Client : HARDING LAWSON
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS ATI I.D.: 1021

Sample #	Client ID	Matrix	Date Sampled	Date Receive
6	COMPOSITE MK-SB-23A (01-03)	SOIL	07-FEB-91	07-FEB-
7	COMPOSITE MK-SB-17A (04,05)	SOIL	07-FEB-91	07-FEB-

Parameter	Units	6	7
PETROLEUM HYDROCARBONS	MG/KG	4	11

MCK0003772

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

MSMSD

Client : HARDING LAWSON
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 1021

Parameters	REF I.D.	Units	Sample Result	Dup Result	RPD	Spiked Sample	Spike Conc	% Rec
PETROLEUM HYDROCARBONS	102116-13	MG/KG	2	2	0	139	127	10

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

MCK0003773

Analytical Technologies, Inc.

GENERAL CHEMISTRY - QUALITY CONTROL

BLANK SPIKE

Client : HARDING LAWSON
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 1021

Parameters	Blank Spike	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
PETROLEUM HYDROCARBONS	10278	MG/KG	<1	125	136	109

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

MCK0003774

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 8240 (GC/MS FOR VOLATILE ORGANICS)
Client : HARDING LAWSON
ATI I.D. : 102107
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
6	COMPOSITE MK-SB-23A (01-03)	SOIL	09-FEB-91	07-FEB-91	13-FEB-91	1.00
7	COMPOSITE MK-SB-17A (04,05)	SOIL	09-FEB-91	07-FEB-91	13-FEB-91	1.00

Parameter	Units	6	7
ACETONE	MG/KG	<1	<1
BENZENE	MG/KG	<0.05	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05	<0.05
BROMOFORM	MG/KG	<0.3	<0.3
BROMOMETHANE	MG/KG	<0.5	<0.5
2-BUTANONE (MEK)	MG/KG	<1	<1
CARBON DISULFIDE	MG/KG	<0.05	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05	<0.05
CHLOROBENZENE	MG/KG	<0.05	<0.05
CHLOROETHANE	MG/KG	<0.05	<0.05
CHLOROFORM	MG/KG	<0.05	<0.05
CHLOROMETHANE	MG/KG	<0.5	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05	<0.05
1,1-DICHLOROETHANE	MG/KG	<0.05	<0.05
1,2-DICHLOROETHANE	MG/KG	<0.05	<0.05
,1-DICHLOROETHENE	MG/KG	<0.05	<0.05
IS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05	<0.05
1,2-DICHLOROPROPANE	MG/KG	<0.05	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05	<0.05
ETHYLBENZENE	MG/KG	<0.05	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5	<0.5
METHYLENE CHLORIDE	MG/KG	<0.3	<0.3
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5	<0.5
STYRENE	MG/KG	<0.05	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05	<0.05
TETRACHLOROETHENE	MG/KG	<0.05	<0.05
TOLUENE	MG/KG	<0.1	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05	<0.05
TRICHLOROETHENE	MG/KG	<0.05	<0.05
VINYL ACETATE	MG/KG	<0.5	<0.5
VINYL CHLORIDE	MG/KG	<0.05	<0.05
XYLENES (TOTAL)	MG/KG	<0.05	<0.05
BFB	%	93	79
1,2-DICHLOROETHANE-D4	%	82	73
TOLUENE-D8	%	82	71

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

Method: EPA 8240 (GC/MS FOR VOLATILE ORGANICS) Matrix: SOIL

ATI I.D.: 102107

Sample	Parameters	Units	Results
6	NONE DETECTED		N/A
7	NONE DETECTED		N/A

MCK0003776

AnalyticalTechnologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Test : EPA 8240
Blank I.D. : 10364
Client : HARDING LAWSON
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 102107
Date Extracted: 09-FEB-91
Date Analyzed : 12-FEB-91
Dil. Factor : 1.00

Parameters	Units	Results
ACETONE	MG/KG	<1
BENZENE	MG/KG	<0.05
BROMODICHLOROMETHANE	MG/KG	<0.05
BROMOFORM	MG/KG	<0.3
BROMOMETHANE	MG/KG	<0.5
2-BUTANONE (MEK)	MG/KG	<1
CARBON DISULFIDE	MG/KG	<0.05
CARBON TETRACHLORIDE	MG/KG	<0.05
CHLOROBENZENE	MG/KG	<0.05
CHLOROETHANE	MG/KG	<0.05
CHLOROFORM	MG/KG	<0.05
CHLOROMETHANE	MG/KG	<0.5
DIBROMOCHLOROMETHANE	MG/KG	<0.05
1,1-DICHLOROETHANE	MG/KG	<0.05
1,2-DICHLOROETHANE	MG/KG	<0.05
1,1-DICHLOROETHENE	MG/KG	<0.05
CIS-1,2-DICHLOROETHENE	MG/KG	<0.05
TRANS-1,2-DICHLOROETHENE	MG/KG	<0.05
,2-DICHLOROPROPANE	MG/KG	<0.05
CIS-1,3-DICHLOROPROPENE	MG/KG	<0.05
TRANS-1,3-DICHLOROPROPENE	MG/KG	<0.05
ETHYLBENZENE	MG/KG	<0.05
2-HEXANONE (MBK)	MG/KG	<0.5
METHYLENE CHLORIDE	MG/KG	0.3
4-METHYL-2-PENTANONE (MIBK)	MG/KG	<0.5
STYRENE	MG/KG	<0.05
1,1,2,2-TETRACHLOROETHANE	MG/KG	<0.05
TETRACHLOROETHENE	MG/KG	<0.05
TOLUENE	MG/KG	<0.1
1,1,1-TRICHLOROETHANE	MG/KG	<0.05
1,1,2-TRICHLOROETHANE	MG/KG	<0.05
TRICHLOROETHENE	MG/KG	<0.05
VINYL ACETATE	MG/KG	<0.5
VINYL CHLORIDE	MG/KG	<0.05
XYLENES (TOTAL)	MG/KG	<0.05
BFB	%	98
1,2-DICHLOROETHANE-D4	%	95
TOLUENE-D8	%	104

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK
(ADDITIONAL COMPOUNDS)

Test	: EPA 8240		
Blank I.D.	: 10364	ATI I.D.	: 102107
Client	: HARDING LAWSON	Date Extracted	: 09-FEB-91
Project #	: 17333,164.11	Date Analyzed	: 12-FEB-91
Project Name	: McKESSON SANTA FE SPRINGS	Dil. Factor	: 1.00

Parameters	Units	Results
NONE DETECTED		N/A

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

Test : EPA 8240
MSMSD # : 10599
Client : HARDING LAWSON
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 102107
Date Extracted: 09-FEB-91
Date Analyzed : 12-FEB-91
Sample Matrix : SOIL

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPI
BENZENE	MG/KG	<0.05	2.8	2.6	93	2.5	89	4
CHLOROBENZENE	MG/KG	<0.05	2.8	2.7	96	2.7	96	0
1,1-DICHLOROETHENE	MG/KG	<0.05	2.4	1.9	79	1.8	75	5
TOLUENE	MG/KG	<0.10	2.8	2.7	96	2.6	93	3
TRICHLOROETHENE	MG/KG	<0.05	2.5	2.6	104	2.3	92	12

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

BLANK SPIKE

Test : EPA 8240
Blank Spike #: 10218
Client : HARDING LAWSON
Project # : 17333,164.11
Project Name : McKESSON SANTA FE SPRINGS

ATI I.D. : 102107
Date Extracted: 09-FEB-91
Date Analyzed : 12-FEB-91
Sample Matrix : SOIL

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
BENZENE	MG/KG	<0.05	2.61	2.75	95
CHLOROBENZENE	MG/KG	<0.05	2.71	2.75	99
1,1-DICHLOROETHENE	MG/KG	<0.05	1.92	2.40	80
TOLUENE	MG/KG	<0.10	2.72	2.75	99
TRICHLOROETHENE	MG/KG	<0.05	2.55	2.50	102

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)
Client : HARDING LAWSON ATI I.D. : 102107
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
6	COMPOSITE MK-SB-23A (01-03)	SOIL	09-FEB-91	07-FEB-91	18-FEB-91	1.00
7	COMPOSITE MK-SB-17A (04,05)	SOIL	09-FEB-91	07-FEB-91	18-FEB-91	1.00

Parameter	Units	6	7
ACENAPHTHENE	MG/KG	<0.17	<0.17
ACENAPHTHYLENE	MG/KG	<0.17	<0.17
ANILINE	MG/KG	<0.17	<0.17
ANTHRACENE	MG/KG	<0.17	<0.17
BENZOIC ACID	MG/KG	<0.85	<0.85
BENZO(a)ANTHRACENE	MG/KG	<0.17	<0.17
BENZO(a)PYRENE	MG/KG	<0.17	<0.17
BENZO(b)FLUORANTHENE	MG/KG	<0.17	<0.17
BENZO(g,h,i)PERYLENE	MG/KG	<0.17	<0.17
BENZO(k)FLUORANTHENE	MG/KG	<0.17	<0.17
BENZYL ALCOHOL	MG/KG	<0.17	<0.17
BIS(2-CHLOROETHOXY)METHANE	MG/KG	<0.17	<0.17
BIS(2-CHLOROETHYL)ETHER	MG/KG	<0.17	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	MG/KG	<0.17	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	MG/KG	<0.17	<0.17
4-BROMOPHENYL-PHENYLETHER	MG/KG	<0.17	<0.17
BUTYLBENZYLPHTHALATE	MG/KG	<0.17	<0.17
4-CHLOROANILINE	MG/KG	<0.17	<0.17
4-CHLORO-3-METHYLPHENOL	MG/KG	<0.17	<0.17
2-CHLORONAPHTHALENE	MG/KG	<0.17	<0.17
2-CHLOROPHENOL	MG/KG	<0.17	<0.17
4-CHLOROPHENYL-PHENYLETHER	MG/KG	<0.17	<0.17
CHRYSENE	MG/KG	<0.17	<0.17
DIBENZ(a,h)ANTHRACENE	MG/KG	<0.17	<0.17
DIBENZOFURAN	MG/KG	<0.17	<0.17
1,2-DICHLOROBENZENE	MG/KG	<0.17	<0.17
1,3-DICHLOROBENZENE	MG/KG	<0.17	<0.17
1,4-DICHLOROBENZENE	MG/KG	<0.17	<0.17
3,3'-DICHLOROBENZIDINE	MG/KG	<0.34	<0.34
2,4-DICHLOROPHENOL	MG/KG	<0.17	<0.17
DIETHYLPHTHALATE	MG/KG	<0.17	<0.17
2,4-DIMETHYLPHENOL	MG/KG	<0.17	<0.17
DIMETHYLPHTHALATE	MG/KG	<0.17	<0.17
DI-N-BUTYLPHTHALATE	MG/KG	<0.17	<0.17
2-METHYL-4,6-DINITROPHENOL	MG/KG	<0.85	<0.85
2,4-DINITROPHENOL	MG/KG	<0.85	<0.85
2,4-DINITROTOLUENE	MG/KG	<0.17	<0.17
2,6-DINITROTOLUENE	MG/KG	<0.17	<0.17

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY RESULTS

Test : EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS)
Client : HARDING LAWSON ATI I.D. : 102107
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

Sample #	Client ID	Matrix	Date Extracted	Date Sampled	Date Analyzed	Dil. Factor
6	COMPOSITE MK-SB-23A (01-03)	SOIL	09-FEB-91	07-FEB-91	13-FEB-91	1.00
7	COMPOSITE MK-SB-17A (04,05)	SOIL	09-FEB-91	07-FEB-91	18-FEB-91	1.00

Parameter	Units	6	7
DI-N-OCTYLPHTHALATE	MG/KG	<0.17	<0.17
FLUORANTHENE	MG/KG	<0.17	<0.17
FLUORENE	MG/KG	<0.17	<0.17
HEXACHLOROBENZENE	MG/KG	<0.17	<0.17
HEXACHLOROBUTADIENE	MG/KG	<0.17	<0.17
HEXACHLOROCYCLOPENTADIENE	MG/KG	<0.17	<0.17
HEXACHLOROETHANE	MG/KG	<0.17	<0.17
INDENO(1,2,3-cd)PYRENE	MG/KG	<0.17	<0.17
ISOPHORONE	MG/KG	<0.17	<0.17
2-METHYLNAPHTHALENE	MG/KG	<0.17	<0.17
2-METHYLPHENOL	MG/KG	<0.17	<0.17
4-METHYLPHENOL	MG/KG	<0.17	<0.17
NAPHTHALENE	MG/KG	<0.17	<0.17
2-NITROANILINE	MG/KG	<0.85	<0.85
3-NITROANILINE	MG/KG	<0.85	<0.85
4-NITROANILINE	MG/KG	<0.85	<0.85
NITROBENZENE	MG/KG	<0.17	<0.17
2-NITROPHENOL	MG/KG	<0.17	<0.17
4-NITROPHENOL	MG/KG	<0.85	<0.85
N-NITROSODIMETHYLAMINE	MG/KG	<0.17	<0.17
N-NITROSO-DI-N-PROPYLAMINE	MG/KG	<0.17	<0.17
N-NITROSODIPHENYLAMINE	MG/KG	<0.17	<0.17
PENTACHLOROPHENOL	MG/KG	<0.85	<0.85
PHENOL	MG/KG	<0.17	<0.17
PHENANTHRENE	MG/KG	<0.17	<0.17
PYRENE	MG/KG	<0.17	<0.17
PYRIDINE	MG/KG	<0.85	<0.85
1,2,4-TRICHLOROBENZENE	MG/KG	<0.17	<0.17
2,4,5-TRICHLOROPHENOL	MG/KG	<0.85	<0.85
2,4,6-TRICHLOROPHENOL	MG/KG	<0.17	<0.17
NITROBENZENE-D5	%	58	52
2-FLUOROBIPHENYL	%	59	55
TERPHENYL-D14	%	71	63
PHENOL-D6	%	59	52
2-FLUOROPHENOL	%	51	48
2,4,6-TRIBROMOPHENOL	%	63	62

Analytical Technologies, Inc.

ADDITIONAL COMPOUNDS (SEMI-QUANTITATED)

:thod: EPA 8270 (GC/MS FOR SEMIVOLATILE ORGANICS) Matrix: SOIL

ATI I.D.: 102107

Sample	Parameters	Units	Results
6	NONE DETECTED		N/A
7	NONE DETECTED		N/A

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Test : EPA 8270
Blank I.D. : 10417
Client : HARDING LAWSON
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 102107
Date Extracted: 09-FEB-91
Date Analyzed : 18-FEB-91
Dil. Factor : 1.00

Parameters	Units	Results
ACENAPHTHENE	MG/KG	<0.17
ACENAPHTHYLENE	MG/KG	<0.17
ANILINE	MG/KG	<0.17
ANTHRACENE	MG/KG	<0.17
BENZOIC ACID	MG/KG	<0.85
BENZO(a)ANTHRACENE	MG/KG	<0.17
BENZO(a)PYRENE	MG/KG	<0.17
BENZO(b)FLUORANTHENE	MG/KG	<0.17
BENZO(g,h,i)PERYLENE	MG/KG	<0.17
BENZO(k)FLUORANTHENE	MG/KG	<0.17
BENZYL ALCOHOL	MG/KG	<0.17
BIS(2-CHLOROETHOXY)METHANE	MG/KG	<0.17
BIS(2-CHLOROETHYL)ETHER	MG/KG	<0.17
BIS(2-CHLOROISOPROPYL)ETHER	MG/KG	<0.17
BIS(2-ETHYLHEXYL)PHTHALATE	MG/KG	<0.17
4-BROMOPHENYL-PHENYLETHER	MG/KG	<0.17
BUTYLBENZYLPHTHALATE	MG/KG	<0.17
4-CHLOROANILINE	MG/KG	<0.17
4-CHLORO-3-METHYLPHENOL	MG/KG	<0.17
2-CHLORONAPHTHALENE	MG/KG	<0.17
2-CHLOROPHENOL	MG/KG	<0.17
4-CHLOROPHENYL-PHENYLETHER	MG/KG	<0.17
CHRYSENE	MG/KG	<0.17
DIBENZ(a,h)ANTHRACENE	MG/KG	<0.17
DIBENZOFURAN	MG/KG	<0.17
1,2-DICHLOROBENZENE	MG/KG	<0.17
1,3-DICHLOROBENZENE	MG/KG	<0.17
1,4-DICHLOROBENZENE	MG/KG	<0.17
3,3'-DICHLOROBENZIDINE	MG/KG	<0.34
2,4-DICHLOROPHENOL	MG/KG	<0.17
DIETHYLPHTHALATE	MG/KG	<0.17
2,4-DIMETHYLPHENOL	MG/KG	<0.17
DIMETHYLPHTHALATE	MG/KG	<0.17
DI-N-BUTYLPHTHALATE	MG/KG	<0.17
2-METHYL-4,6-DINITROPHENOL	MG/KG	<0.85
2,4-DINITROPHENOL	MG/KG	<0.85
2,4-DINITROTOLUENE	MG/KG	<0.17
2,6-DINITROTOLUENE	MG/KG	<0.17
DI-N-OCTYLPHTHALATE	MG/KG	<0.17
FLUORANTHENE	MG/KG	<0.17
FLUORENE	MG/KG	<0.17
HEXACHLOROBENZENE	MG/KG	<0.17
HEXACHLOROBUTADIENE	MG/KG	<0.17
HEXACHLOROCYCLOPENTADIENE	MG/KG	<0.17
HEXACHLOROETHANE	MG/KG	<0.17
INDENO(1,2,3-cd)PYRENE	MG/KG	<0.17

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Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK

Test : EPA 8270
Blank I.D. : 10417
Client : HARDING LAWSON
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 102107
Date Extracted: 09-FEB-91
Date Analyzed : 18-FEB-91
Dil. Factor : 1.00

Parameters	Units	Results
ISOPHORONE	MG/KG	<0.17
2-METHYLNAPHTHALENE	MG/KG	<0.17
2-METHYLPHENOL	MG/KG	<0.17
4-METHYLPHENOL	MG/KG	<0.17
NAPHTHALENE	MG/KG	<0.17
2-NITROANILINE	MG/KG	<0.85
3-NITROANILINE	MG/KG	<0.85
4-NITROANILINE	MG/KG	<0.85
NITROBENZENE	MG/KG	<0.17
2-NITROPHENOL	MG/KG	<0.17
4-NITROPHENOL	MG/KG	<0.85
N-NITROSODIMETHYLAMINE	MG/KG	<0.17
N-NITROSO-DI-N-PROPYLAMINE	MG/KG	<0.17
N-NITROSODIPHENYLAMINE	MG/KG	<0.17
PENTACHLOROPHENOL	MG/KG	<0.85
PHENOL	MG/KG	<0.17
PHENANTHRENE	MG/KG	<0.17
YRENE	MG/KG	<0.17
YRIDINE	MG/KG	<0.85
1,2,4-TRICHLOROBENZENE	MG/KG	<0.17
2,4,5-TRICHLOROPHENOL	MG/KG	<0.85
2,4,6-TRICHLOROPHENOL	MG/KG	<0.17
NITROBENZENE-D5	%	59
2-FLUOROBIPHENYL	%	57
TERPHENYL-D14	%	76
PHENOL-D6	%	58
2-FLUOROPHENOL	%	52
2,4,6-TRIBROMOPHENOL	%	66

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

REAGENT BLANK
(ADDITIONAL COMPOUNDS)

Test : EPA 8270
Blank I.D. : 10417
Client : HARDING LAWSON
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 102107
Date Extracted: 09-FEB-91
Date Analyzed : 18-FEB-91
Dil. Factor : 1.00

Parameters	Units	Results
2379 ALIPHATIC HYDROCARBON	MG/KG	3
2429 ALIPHATIC HYDROCARBON	MG/KG	7
2474 ALIPHATIC HYDROCARBON	MG/KG	8

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

MSMSD

Test : EPA 8270
MSMSD # : 10658
Client : HARDING LAWSON
Project # : 17333,164.11
Project Name: McKESSON SANTA FE SPRINGS

ATI I.D. : 102107
Date Extracted: 09-FEB-91
Date Analyzed : 18-FEB-91
Sample Matrix : SOIL
REF I.D. : 102107-06

Parameters	Units	Sample Result	Conc Spike	Spiked Sample	% Rec	Dup Spike	Dup % Rec	RPD
ACENAPHTHENE	MG/KG	<0.17	3.3	1.5	45	1.6	48	6
4-CHLORO-3-METHYLPHENOL	MG/KG	<0.17	6.6	3.6	55	3.7	56	2
2-CHLOROPHENOL	MG/KG	<0.17	6.6	3.1	47	3.3	50	6
1,4-DICHLOROBENZENE	MG/KG	<0.17	3.3	1.7	52	1.8	55	6
2,4-DINITROTOLUENE	MG/KG	<0.17	3.3	1.9	58	1.9	58	0
4-NITROPHENOL	MG/KG	<0.85	13.2	7.4	56	8.7	66	16
N-NITROSO-DI-N-PROPYLAMINE	MG/KG	<0.17	3.3	1.9	58	2.0	61	5
PENTACHLOROPHENOL	MG/KG	<0.85	13.2	6.4	48	6.9	52	8
PHENOL	MG/KG	<0.17	6.6	3.0	45	3.1	47	4
PYRENE	MG/KG	<0.17	3.3	2.1	64	2.2	67	5
1,2,4-TRICHLOROBENZENE	MG/KG	<0.17	3.3	1.8	55	2.0	61	10

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

MCK0003787

Analytical Technologies, Inc.

GAS CHROMATOGRAPHY/MASS SPECTROSCOPY - QUALITY CONTROL

BLANK SPIKE

Test : EPA 8270
Blank Spike #: 10252
Client : HARDING LAWSON
Project # : 17333,164.11
Project Name : McKESSON SANTA FE SPRINGS

ATI I.D. : 102107
Date Extracted: 09-FEB-91
Date Analyzed : 18-FEB-91
Sample Matrix : SOIL

Parameters	Units	Blank Result	Spiked Sample	Spike Conc.	% Rec
ACENAPHTHENE	MG/KG	<0.17	3.3	0.17	52
4-CHLORO-3-METHYLPHENOL	MG/KG	<0.17	6.6	3.8	58
2-CHLOROPHENOL	MG/KG	<0.17	6.6	3.4	52
1,4-DICHLOROBENZENE	MG/KG	<0.17	3.3	1.9	58
2,4-DINITROTOLUENE	MG/KG	<0.17	3.3	1.9	58
4-NITROPHENOL	MG/KG	<0.85	13.2	8.9	67
N-NITROSO-DI-N-PROPYLAMINE	MG/KG	<0.17	3.3	2.1	64
PENTACHLOROPHENOL	MG/KG	<0.85	13.2	7.7	58
PHENOL	MG/KG	<0.17	6.6	3.3	50
PYRENE	MG/KG	<0.17	3.3	2.2	68
1,2,4-TRICHLOROBENZENE	MG/KG	<0.17	3.3	2.0	61

% Recovery = (Spike Sample Result - Sample Result)*100/Spike Concentration
RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)*100/Average Result

H. J. Lawson Associates
15621 Redhill Avenue, Suite 100
Tustin, California 92680
714/259-7992 — 213/617-7232
Telecopy: 714/259-1378

102107

CHAIN OF CUSTODY FORM

Lab: _____

Samplers: Dan Johnson

Job Number: 17333, 164.11

Name/Location: McKesson - Santa Fe Springs

Project Manager: Burton Chadwick

Recorder: _____ (Signature Required)

SOURCE CODE	MATRIX: Water	Sediment	Soil	Oil	#CONTAINERS & PRESERV.: Unpres.	H_2SO_4	HNO_3	Glass Jar	SAMPLE NUMBER OR LAB NUMBER: Yr	Wk	Seq	DATE: Yr	Mo	Dy	Time	STATION DESCRIPTION/ NOTES	EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	ICP METALS	EPA 8015M/TPH
SB			X		X			X				91	02	07		MK-SB-23B						
SB			X		X			X				91	02	07		MK-SB-23A			X	X		X
SB			X		X			X				91	02	07		MK-SB-22A						
SB			X		X			X				91	02	07		MK-SB-17B						
SB			X		X			X				91	02	07		MK-SB-17A			X	X		X

LAB NUMBER: Yr	Wk	Seq	DEPTH IN FEET	COL MTD CD	QA CODE	MISCELLANEOUS
		MCK0003789				For Composite Samples MK-SB-23B & MK-SB-23A together * Composite samples MK-SB-17A & MK-SB-17B together Standard turnaround time

CHAIN OF CUSTODY RECORD

RELINQUISHED BY: (Signature)	2-7-11	RECEIVED BY: (Signature) DATE/TIME
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature) DATE/TIME
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature) DATE/TIME
RELINQUISHED BY: (Signature)		RECEIVED BY: (Signature) DATE/TIME
DISPATCHED BY: (Signature) DATE/TIME		RECEIVED FOR LAB BY: (Signature) DATE/TIME
METHOD OF SHIPMENT		

Laboratory Copy Project Office Copy Field or Office Copy

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1 copy:	Latham & Watkins 650 Town Center Drive, 20th Floor Costa Mesa, California 92626 Attention: Mr. Bruce Howard
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1 copy:	City of Santa Fe Springs 11710 Telegraph Road Santa Fe Springs, California 90670-3658 Attention: Mr. Andrew C. Lazzaretto

QUALITY CONTROL REVIEWER:

Donald W. Quigley

Donald W. Quigley, P.E.
Civil Engineer - 22026

TH/TAK/BS/DWQ/lf

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