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REPORTS

DATE:

6/1992 PHASE II

Brown McCarroll & Oaks Hartline

Austin, Texas

ENSR

Phase II Site Inspection Report Exxon Chemical Company 1715 Dal Paso Street Hobbs, New Mexico

ENSR Consulting and Engineering

June 1992

Document Number 1009-001-160

PRIVILEGED AND CONFIDENTIAL

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EXECUTIVE SUMMARY

Exxon Chemical Company (Exxon) currently uses the facility at 1715 Dal Paso Street in Hobbs, New Mexico for administrative purposes only. Exxon purchased the property from NL Treating Company (NL) in 1987. NL operated the site from 1969 until 1987. NL McCullough operated the site from 1940s until 1969. NL McCullough and NL shared the site from 1969 to 1984.

ENSR Consulting and Engineering (ENSR) conducted a Phase I Preliminary Assessment of the facility in August 1991. As a result of the Phase I findings, a Phase II Site Inspection was conducted. ENSR conducted the Phase II Site Inspection of the facility in January 1992. The objectives of the Phase II Site Inspection were to:

- identify the presence and nature of known or suspected contamination in areas identified during the Phase I Preliminary Assessment, and

- Delineate the extent of contaminated soil that may require removal.

To accomplish these objectives ENSR conducted a Phase II Site Inspection which included a soil sampling program at the site. The samples were collected primarily at the surface of the exposed soil or at the surface of the native soils beneath the caliche ground cover in the fenced yard area. Samples were also collected from boreholes and backhoe excavations, where warranted. The samples were analyzed for one of two sets of analytical parameters, Test A and Test B parameters as follows:

- Test A analytical parameters include TPH, pH, RCRA metals.

- Test B analytical parameters include TPH, pH, RCRA metals, Target Compound List (TCL) Total Volatiles, and TCL Total Semi-volatiles. These samples were collected primarily in areas displaying physical characteristics of contamination (odors and stains). Test B samples were also collected from selected areas that did not exhibit physical evidence of contamination but were in close proximity to a potential source of contamination. The additional data provided by the total volatile and total semi-volatile parameters aided in fully understanding the type of organic contamination present in a given area.

The areas sampled during Phase II included:

- Yard Area - 25 soil samples were collected on a grid system covering the entire 7-acre site. The samples were analyzed for Test A parameters.

- Aboveground Tank Area - One sample was collected and analyzed for Test A parameters.

- Truck Bay Area - One Test A soil sample was collected in this area.

- Sump Area - Two samples for Test A parameters were collected from the soil adjacent to the base of the north and east wall of the sump inside the main building.

- Main Building Area - Four soil samples were collected from the west side of the main building in areas of stained soil. Three samples were analyzed for Test A parameters. One sample was analyzed for Test B parameters.

- Septic Tank - One soil sample was collected near the base of the north wall of the septic tank and analyzed for Test A parameters.

Areas exhibiting physical evidence of contamination observed during Phase II include:

- Waste Oil Storage Area - heavily oil stained caliche and concrete was observed in this area.

- Truck Washing Area - yellow stains were observed on the caliche layer.

The analytical results of the Phase II Site Inspection revealed:

- Soil surface sample MBA-1A collected in the truck washing area directly behind the main building has elevated levels of lead, relative to the other samples, of 1500 mg/kg.

- Soil surface sample MBA-2A collected in the waste oil storage area directly behind the main building has elevated levels of lead, relative to the other samples, of 1300 mg/kg and a TPH concentration of 191 mg/kg.

As a result of the findings of the Phase II Site Inspection, ENSR made the following recommendations.

1) Exxon should determine if notification to the State of New Mexico is required for this type of petroleum contamination.

2) Exxon should review the necessity for implementing a response action at this facility.

1.0 INTRODUCTION

A Phase I Preliminary Assessment was conducted between August 27 and September 6, 1991 at the Exxon facility at 1715 Dal Paso Street in Hobbs, New Mexico. Results of this assessment were submitted to the law firm of Brown McCarroll & Oaks Hartline in a June 1992 report. Areas were identified in the Phase I Preliminary Assessment, which required additional investigation. These areas were investigated in a Phase II Site Inspection conducted in January 1992. ENSR Consulting and Engineering (ENSR) conducted both the Phase I Preliminary Assessment and Phase II Site Inspection.

This report presents the results of the Phase II Site Inspection and provides recommendations for future activities at the Dal Paso Street facility.

2.0 FACILITY BACKGROUND

Exxon purchased the site at 1715 Dal Paso Street in Hobbs, New Mexico from NL in 1987. NL operated the site from 1969 to 1987. NL McCullough operated the site from the 1940s to 1969 and shared the property with NL from 1969 to 1984.

The subject property covers approximately 7 acres in Lea County and consists of a fenced yard area adjacent to Dal Paso Street and a vacant field extending north, south, and west of the fenced area. The fenced area contains three buildings and storage areas for aboveground tanks and drums. A trailer is located just outside the fenced area adjacent to the main building on Dal Paso Street. The buildings inside the fenced area are:

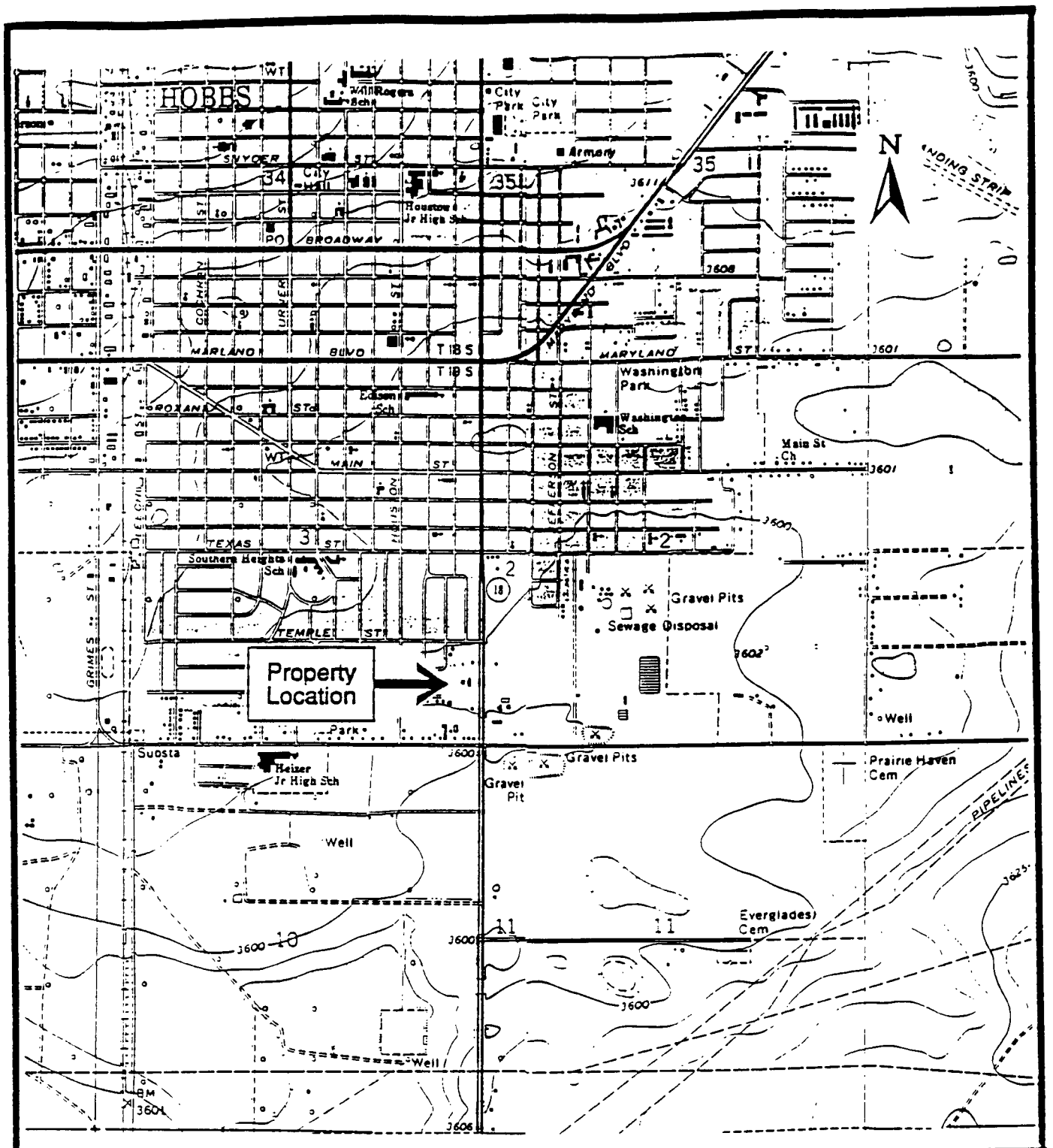
- the main building containing a storage area and office space on the east,
- a building containing truck bays and storage space (Building No. 1 in Phase I report) just west of the main building, and
- a small building (Building No. 2 in Phase I Report) southeast of building No. 1 used for storage of radioactive materials.

The site location is shown on Figure 2-1. The property boundaries are shown on Figure 2-2 and a Site Plot Plan is shown on Figure 2-3. Exxon currently uses the property for administrative purposes only. With the exception of the office trailer, the property and buildings are currently vacant and unused.

NL used the property as a storage yard for chemicals used in oil and gas production. NL McCullough used the property to store materials and equipment used in the oil well service industry.

Past activities at the site included:

- storage of chemicals and equipment;
- loading and unloading of chemicals and equipment from service trucks;



Source: USGS, Hobbs, West, N. Mex. quadrangle, 1969. Photo Revised 1979.

NEW MEXICO

QUADRANGLE LOCATION

Scale

0 1Mile

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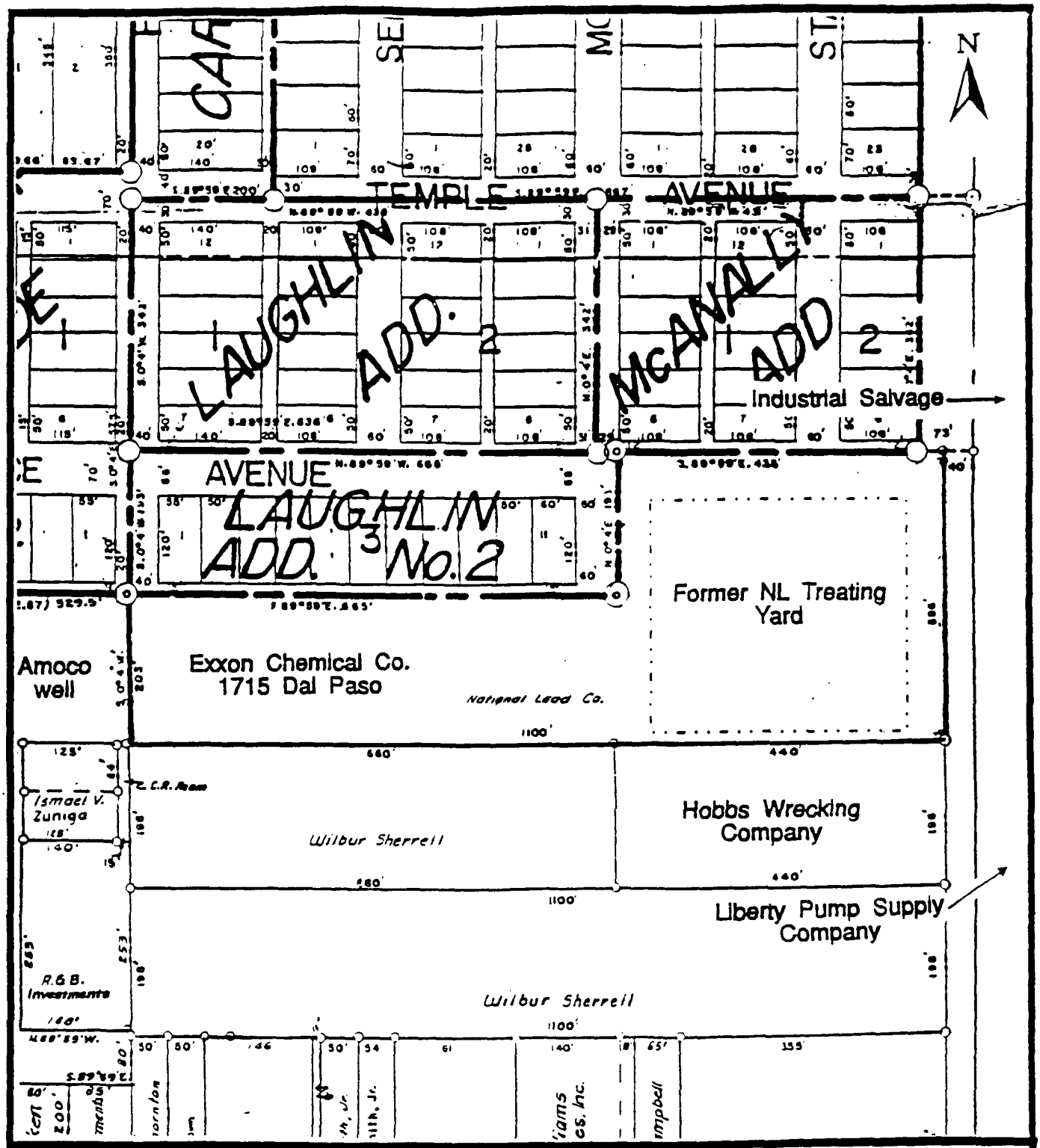
FIGURE 2-1
Property Location
1715 Dal Paso
Hobbs, NM

DRAWN: BBS DATE: 9-5-91 PRJ. NO.: 2620-092-517



Source: Commercial Appraisal Report for Exxon Company, U.S.A. May 9, 1989.

Scale: 1 inch = 200 feet

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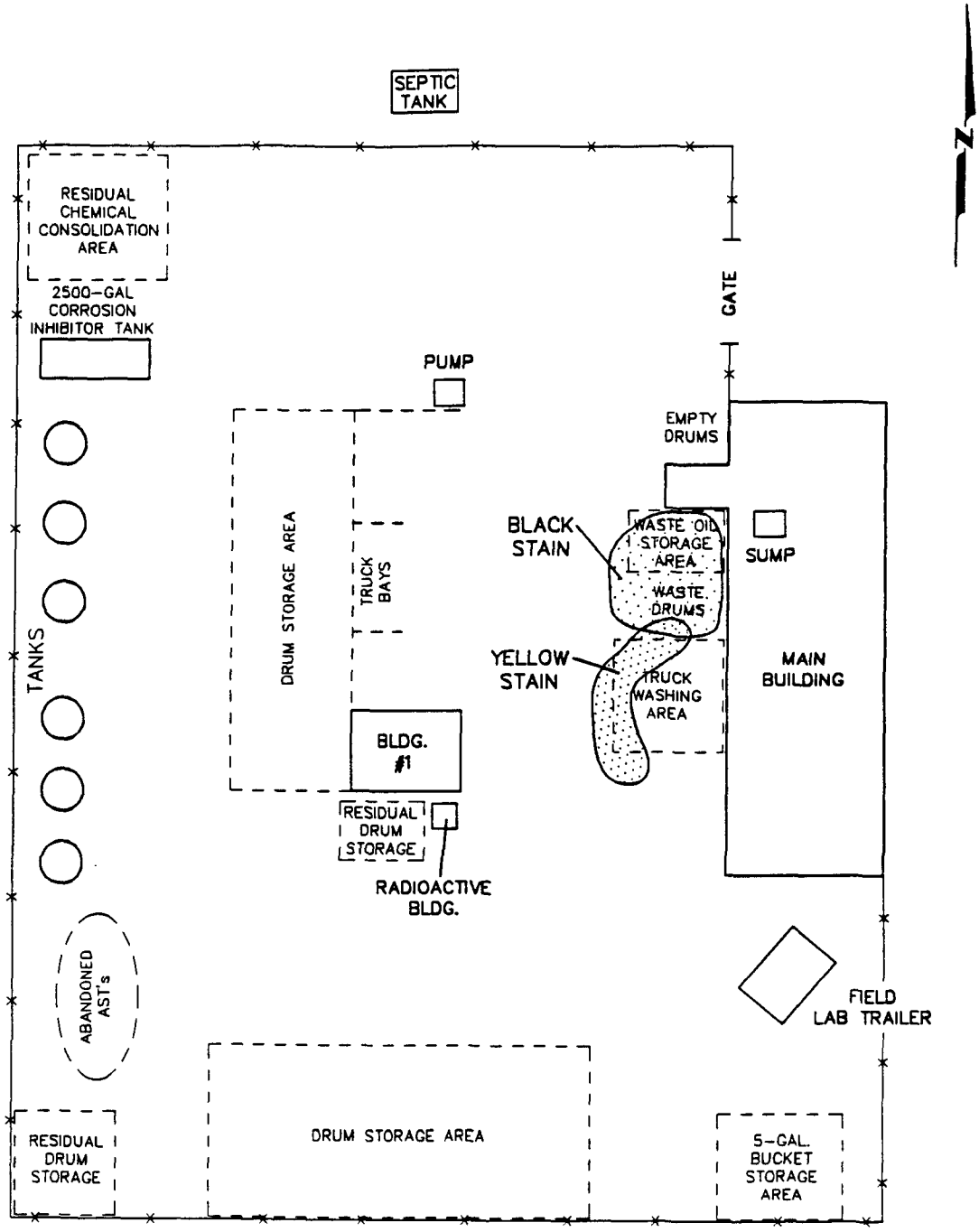
FIGURE 2-2
Property Boundaries
1715 Dal Paso, Hobbs, NM

DRAWN: BBS | DATE: 9-5-91 | PRJ. NO.: 2620-092-517



NOT TO SCALE

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FIGURE 2-3
FENCED YARD AREA PLOT PLAN
CHEMICAL DISTRIBUTION FACILITY
HOBBS, NEW MEXICO

DRAWN: SJF	DATE: 6-9-92	PROJECT NUMBER:
APPV'D:	REVISED:	1009-001-150

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- maintenance of service trucks, including washing, oil changes, fueling, etc.; and

- drum residues were consolidated for reuse or were shipped to NL in Houston, Texas via NL in Odessa, Texas.

2.1 Previous Investigation

ENSR conducted a Phase I Environmental Preliminary Assessment from August 27 through September 6, 1991 at the facility Investigative activities included site visits, interviews with personnel who worked at the facility, facility records review, and state agency and EPA files research. The results were presented to Brown McCarroll & Oaks Hartline in a June 1992 report.

The Phase I report indicated that the subject site is bordered by Hobbs Wrecking Company to the south; a residential neighborhood to the north; an Amoco well location to the west; and Atlas Wireline Services, Liberty Pump Supply Co. and Industrial Salvage Company across Dal Paso Street to the east. The site is currently used for administrative purposes only, and those activities take place in the trailer east of the main building.

Groundwater is at a depth of 40 to 60 feet below grade in this area. Groundwater gradient is generally southeast.

Abandoned aboveground storage tanks are located along the west side of the fenced yard area. An abandoned septic tank is located just north of the fenced yard area. An exposed sand-filled sump is located in the main building. Drums were formerly stored to the west of the main building, to the west and south of Building No. 1, and along the south side of the fenced yard area. A few drums were located in the drum residual consolidation area in the northwest corner of the fenced yard area.

NL used and stored the following chemicals at the facility:

- paraffin solvents,
- corrosion inhibitors,
- scale inhibitors,
- emulsion breakers,
- desalting compounds,
- microbicides,
- surfactants,
- defoamers,
- water clarifiers,

- dry chemical products (Sodium sulfide and caustic), and
- other miscellaneous chemicals.

Chemical residues from nonempty drums were consolidated into drums for reuse or disposal at NL in Houston, Texas via NL in Odessa, Texas.

Waste generated at the site during former NL operations included solid waste, waste oil, oil filters from truck maintenance and wastewater which may have contained diesel fuel from truck washing. Wastewaters were disposed of onto the ground or into the septic tank.

No blending or mixing operations were conducted at the facility during the time NL occupied the site or during the current occupancy of the property. No hazardous or nonhazardous wastes are known to have been stored inside the buildings. No underground storage tanks are known to have been present on the property.

NL McCullough maintained an aboveground fuel tank and pump at the northeast corner of Building No. 1.

Building No. 2 was used for storage of radioactive isotopes by NL McCullough. In 1981, ambient radioactivity levels were checked by NL McCullough with all readings indicating normal background levels.

Discolored surface soils were observed at several locations at the site. A black oily stain was observed in the former waste oil storage area behind the main building. A yellow stain originating in the same area as the black oily stain and extending south past the former truck washing area was observed. Small areas of discolored soil were observed along the south side of the drum storage area and the southwest corner of the fenced yard area.

2.2 Program Objectives

The objectives of the Phase II assessment at the Dal Paso Street facility were to:

- identify the presence and nature of known or suspected contamination at the site, and
- delineate, where possible, the extent of contamination through visual observations and sampling.

2.3 Scope of Work

The scope of work conducted during Phase II site assessment at the Dal Paso Street facility is outlined below:

- Soil samples were collected at grid points within a 100-foot grid system established for both the fenced yard area and the adjacent vacant field. The samples were collected at the soil surface and from soil borings.

- Soil samples were collected from process areas that may have been impacted by activities at the facility.

- Soil samples were analyzed for either Test A or Test B analytical parameters. Test A parameters include TPH, pH, total RCRA Metals. Test B parameters include TPH, pH, Total RCRA Metals, Target Compound List (TCL) total volatiles, and TCL total semi-volatiles. Test B samples were collected primarily from areas exhibiting physical evidence of contamination (odor and stain). Test B samples were also collected from areas that did not exhibit physical evidence of contamination but were in close proximity to a potential source of contamination. The additional parameters of TCL total volatiles and TCL total semi-volatiles were needed to provide additional data in order to fully understand the type of organic contamination present in the sample. Normally, the Test B sample was first analyzed for TPH, pH, and RCRA metals. If TPH was present, the sample was then analyzed for TCL total volatiles and TCL total semi-volatiles.

- The volume of contaminated soils that may require removal was estimated.

3.0 FIELD ACTIVITIES

The Phase II Site Inspection was conducted from January 20 to January 29, 1992 at the facility in Hobbs, New Mexico. Sample locations are shown on Figures 3-1 and 3-2. Sample location coordinates are listed in Table 3-1. Analytical results are discussed in Section 6.0.

3.1 Soil Sampling

A total of 35 soil samples, including QA/QC soil duplicates, were collected. The samples were collected at grid points on a 100-foot grid system established in the fenced yard area as well as in the adjacent vacant field. Soil samples were also collected in several process areas where surface soils may have been contaminated by past facility activities. The process areas included:

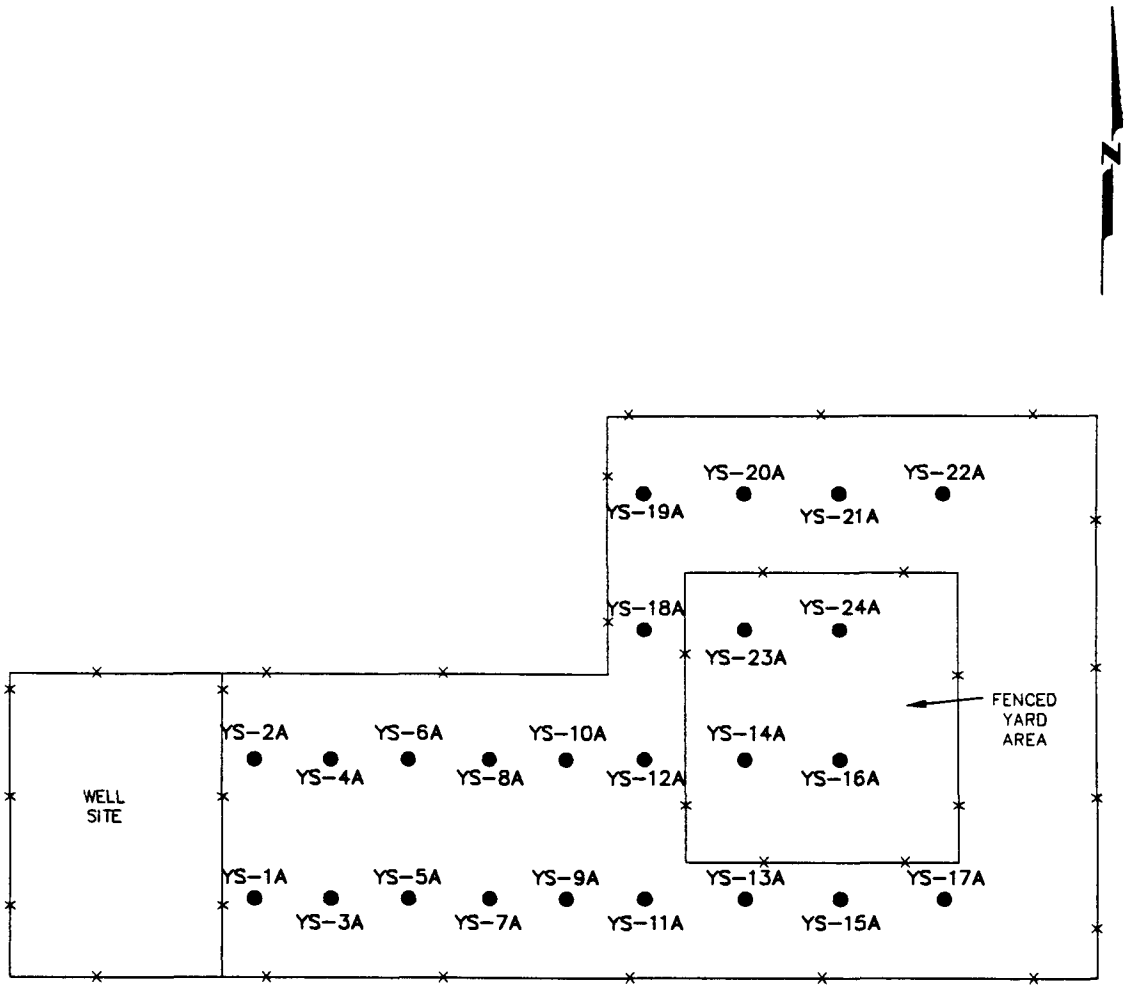
- the former aboveground storage area,
- the truck bay area adjacent to Building No. 1,
- the sump area inside main building,
- the stained soil areas immediately west of main building in the truck washing area, and
- the waste oil storage area, and the septic tank area north of the fenced yard.

Thirty surface soil and five subsurface soil samples were collected from these areas.

Because the fenced yard area is covered by what appeared to be fresh caliche, either a pick ax or hand auger was used to reach the underlying soil which may have been impacted by past operations. All reusable sampling equipment was decontaminated between sample points. In any area exhibiting physical evidence of contamination, a soil boring or excavation was advanced until the bottom of the contaminated soil was reached. This was determined by visual inspection. A sample was collected to verify that the bottom of the contamination had been reached. A backhoe was used to collect samples beyond the extent of the hand auger. The samples were analyzed for either Test A or Test B parameters.

3.1.1 Yard Area

A 100-foot grid system was established across the property, and samples were collected at the intersection of grid lines. The sample locations on the grid system are shown on Figure 3-1. Twenty-six surface soil samples were collected within the grid system. Samples YS-1A through YS-15A and YS 17A through YS-24A were collected and analyzed for Test A analysis. No physical evidence of contamination was noted at any of these locations. Sample YS-16A was



SAMPLE	ANALYTICAL TEST
YS-1A TO YS-15A	A
YS-16A	B
YS-17A TO YS-24A	A

LEGEND

● – SAMPLE LOCATION

NOTE: ALL SAMPLES COLLECTED AT SOIL SURFACE.
TEST A – TPH, ph, RCRA METALS.
TEST B – TPH, ph, RCRA METALS, TOTAL VOLATILES, TOTAL SEMI-VOLATILES.

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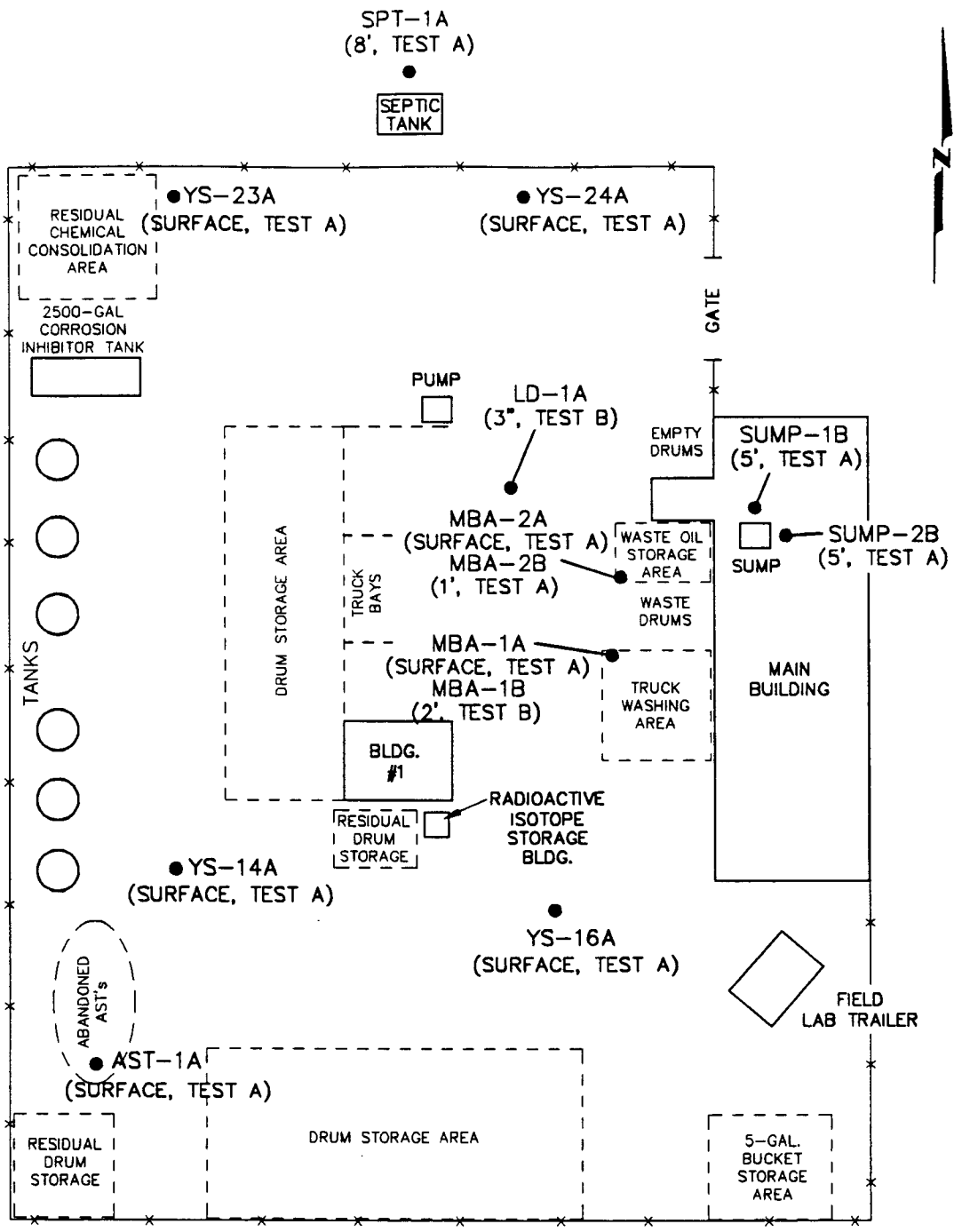
FIGURE 3-1
GRID SOIL SAMPLE LOCATIONS
CHEMICAL DISTRIBUTION FACILITY
HOBBS, NEW MEXICO

DRAWN: SJF	DATE: 3-11-92	PROJECT NUMBER:
APPV'D:	REVISED:	1009-001-150

CE100911



L E G E N D

● – SAMPLE LOCATION

NOTE: SURFACE SAMPLES COLLECTED BENEATH CALICHE PAD.
TEST A – TPH, ph, RCRA METALS.
TEST B – TPH, ph, RCRA METALS, TOTAL VOLATILES, TOTAL SEMI-VOLATILES.

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FIGURE 3-2
FENCED YARD SAMPLE LOCATIONS
CHEMICAL DISTRIBUTION FACILITY
HOBBS, NEW MEXICO

DRAWN: SJF	DATE: 3-10-92	PROJECT NUMBER:
APPV'D:	REVISED:	1009-001-150

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TABLE 3-1

Sample Location Coordinates

YS-1A	50' from south property line along west fence separating vacant field and well site
YS-2A	50' from north property line along west fence separating vacant field and well site
YS-3A	50' from south property line 100' from west fence
YS-4A	50' from north property line 100' from west fence
YS-5A	50' from south property line 200' from west fence
YS-6A	50' from south property line 200' from west fence
YS-7A	50' from south property line 300' from west fence
YS-8A	50' from north property line 300' from west fence
YS-9A	50' from south property line 400' from west fence
YS-10A	50' from north property line 400' from west fence
YS-11A	50' south property line 500' from west property line
YS-12A	150' from south property line 500' from west fence
YS-13A	50' from south property line 600' from west fence
YS-14A	150' from south property line 600' from west fence
YS-15A	50' from south property line 700' from west fence
YS-16A	150' from south property line 700' from west fence
YS-17A	50' from south property line 800' from west fence

TABLE 3-1

Sample Location Coordinates

YS-18A	250' from south property line 500' from west fence
YS-19A	325' from south property line 75' due north of YS-18A
YS-20A	325' from south property line 100' due east of YS-19A
YS-21A	325' from south property line 100' due east of YS-20A
YS-22A	325' from south property line 100' due east of YS-21A
YS-23A	250' from south property line 100' due east of YS-18A
YS-24A	250' from south property line 100 due east of YS-23A
LD-1A	8' east and 27' south of northeast corner of building #1
AST-1A	30' from south fence (fenced yard area) 10' from west fence (fenced yard area)
SPT-1A	Along north wall of septic tank
MBA-1A, 1B	15' south of SW corner of slab behind main building
MBA-2A, 2B	12' south and 3' east of southwest corner of building addition at back of main building
Sump-1B	Just outside north wall of sump inside main building
Sump-2B	Just outside east wall of sump inside main building

analyzed for a Test B analysis because a very thin (< 1 inch) stain was observed at or just below the surface of the caliche. The sample had no odor. Samples YS-15X and YS-22X were collected as QA/QC duplicates of samples YS-15A and YS-22A, respectively.

3.1.2 Aboveground Storage Tank Area

Sample AST-1A was or surface soil sample collected from the former aboveground storage tank area, in the southwestern portion of the fenced yard area. The sample was analyzed for Test A parameters. No odor was detected in the sample, but a rusty stain was observed at the surface of the caliche in this location. The staining appeared to be the result of rust originating from the abandoned aboveground tanks.

3.1.3 Truck Bay Area - Building No. 1

Sample LD-1A was collected in the truck bay area in Building No. 1. The sample was collected of the surface soils and analyzed for Test B parameters. The sample was collected at the surface of what appeared to be an old caliche layer that had been covered by new caliche. No odor or stain was observed in the sample.

3.1.4 Sump Area Inside Main Building

Samples "Sump - 1B" and "Sump - 2B" were collected adjacent to the north and east walls of the sand filled sump inside the main building. Both samples were collected at the base of the sump at a depth of 5 feet. Both samples were analyzed for Test A parameters. Neither sample exhibited odor or staining. The sand that filled the sump was observed to be stained and had a petroleum odor. A dark oily stain on the concrete slab extended from the waste oil storage area into the sump.

Several small cracks are present in the concrete slab surrounding the sump inside the main building. Petroleum odor was detected in the sand that filled the sump.

3.1.5 Stained Soil Areas Immediately West of Main Building

Samples MBA-1A and MBA-1B were collected from a yellow stained area in the waste oil storage and truck washing areas behind the main building.

Samples MBA-1A and MBA-1B were located 15 feet south of the southwest corner of the slab behind the main building. Sample MBA-1A was collected at the surface of the caliche layer because the yellow stain appeared to be at the surface only. The sample had no odor. Sample

MBA-1B was collected at a depth of 1 foot. No odors or stains were observed in this sample. Both MBA-1A and MBA-1B were analyzed for Test A parameters.

Sample MBA-2A was collected in the surface caliche in the waste oil storage area. The sample, which had a dark hydrocarbon stain and a petroleum odor, was analyzed for Test B parameters. The waste oil storage area, including the adjacent walls of the main building, were observed to be heavily stained with petroleum residue. Sample MBA-2B was collected from a soil boring advanced with a hand auger in the same location as MBA-2A. The sample was collected at a depth of 2 feet and had no odor or stain. MBA-2B was analyzed for Test A parameters. The thickness of the visually contaminated soil was approximately 6 inches.

The horizontal area of the oily stained and yellow stained areas adjacent to the main building is approximately 400-500 square feet.

3.1.6 Septic Tank

A septic tank with a collapsed concrete roof is located just north of the fenced yard area. At the time of the site inspection, the septic tank appeared to be unused. The wastewater system on the property has been connected to the city sewer system since 1989. A backhoe was used to excavate a trench along the north wall of the tank. Sample SPT-1A was collected at the base of the septic tank from the trench at a depth of 8 feet. The sample was analyzed for Test A parameters.

3.2 Observations of Site Conditions

During the Phase II field activities at the Dal Paso Street facility, several scattered dark colored low areas were observed within and just south of the fenced yard area. No odor was present in these areas and their origin is unknown. Sample YS-13A was collected in one of these low spots.

3.3 Decontamination Procedures

Soil samples were collected using a stainless steel hand auger and stainless steel trowel. All equipment was decontaminated between each sample point. The equipment was first rinsed with de-ionized water then scrubbed with alconox non-phosphate detergent mixed with deionized water followed by a deionized water rinse. The equipment was then allowed to air dry.

4.0 FIELD AND LABORATORY QA/QC CONTROL

4.1 Sample Handling and Preservations Methods

Samples collected during Phase II were collected using a stainless steel auger or a stainless steel trowel.

Each soil sample was collected from the trowel or auger and then placed directly into an appropriate pre-cleaned sample jar and labeled using indelible ink. The sample jar was placed in bubble wrap and then placed in an ice filled ice chest for delivery to either the AnalytiKEM Laboratory in Houston, Texas or the Environ Express Laboratory in LaPorte, Texas. The ice chest was sealed with duct tape and chain-of-custody tape.

4.2 Chain-of-Custody and Recordkeeping Procedure

Proper chain-of-custody (COC) procedures were followed during sampling. A COC form was completed and shipped with the samples. Copies of all COC forms are included with the laboratory data packages in the Appendix section of this report. The following information is recorded on the COC form:

- Page Number
- Project Number
- Client/Project Number
- Field Logbook Number Appropriate to the Samples
- Field Sample No./identification
- Date and Time of Each Sample Collection
- Grab or Composite Sample
- Sample Container (size/material)
- Sample type (liquid, soil, sludge, etc.)
- Preservative used on each sample
- Analysis requested on each sample
- Sampler/Company/Agency Affiliation
- Date and time when samples are relinquished
- COC seal numbers, and
- Location/Destination of the analytical laboratory

All field activities were documented in a field logbook, which is kept on file in ENSR's Houston office.

4.3 QA/QC Field Samples

Two duplicate soil samples were collected. Sample YS-15X and YS-22X were duplicates of YS-15A and YS-22A respectively. The duplicates were analyzed for TPH, pH, and Total RCRA Metals. A trip blank to be analyzed for Total Volatiles was included with the soil sample shipment to the AnalytiKEM laboratory in Houston.

An equipment blank was also collected and sent to the AnalytiKEM Laboratory for analysis. The equipment blank was collected using a stainless steel trowel and was analyzed for Total Volatiles, Total Semi-volatiles, and RCRA metals.

The analytical results for the QA/QC samples are shown on Table 6-2.

4.4 QA/QC Laboratory Samples

The following QA/QC laboratory procedures were employed during Phase II.

Method 1 - An analytical control sample consisting of all reagents and standards exposed to the complete preparation procedure beginning with sample preparation and ending with sample analysis. Method blank measures contamination introduced in the analytical laboratory.

Laboratory Duplicate - Laboratory split of a single sample. This provides a measure of the precision attainable by the laboratory.

Matrix Spike - An aliquot of a sample with known quantities of selected analytes. This provides measures of the laboratory's bias (accuracy) and precision.

Internal Standard - Known standard(s) added to every standard, QC sample, and environmental sample after preparation and prior to analysis. This allows for normalization of instrument response to a known concentration of internal standard. An internal standard is used for sample quantification of highly variable responses.

5.0 HEALTH AND SAFETY

A Health and Safety Plan designed for the Phase II field work at the Dal Paso Street site is on file at ENSR Consulting and Engineering in Houston.

6.0 ANALYTICAL RESULTS

This section presents the analytical results from the Phase II site inspection performed at the Dal Paso Street facility. The laboratory data packages are included in Appendix A.

6.1 Soil Samples

Table 6-1 provides the analytical results of the soil samples and the QA/QC samples collected during the Phase II Site Inspection.

6.2 Summary of Analytical Results

- Soil surface sample MBA-1A collected in the truck washing area directly behind the main building an elevated total lead concentrations, relative to other samples. The concentration was 1500 mg/kg.

- Soil surface sample MBA-2A collected in the waste oil storage area directly behind the main building had a total lead concentration of 1300 mg/kg and a TPH concentration of 191 mg/kg.

Table 6.1
Analytical Test Results
Site Inspection
Exxon Chemical Americas
Hobbs, NM
Dal Paso Site

Sample I.D.	Location	Depth	TPH 8015 (M) (mg/kg)	Total Metals (mg/kg) Ag	As	Ba	Cd	Cr	Hg	Pb	Se	pH	Detected Total Volatiles Code(ug/kg)	Detected Total Semivolatiles Code(ug/kg)
YS-1A	Yard Grid Sample	Surface	BDL	BDL	9.8	89	BDL	8.0	BDL	31	0.3	7.99		
YS-2A	Yard Grid Sample	Surface	BDL	BDL	9.9	120	BDL	7.0	BDL	BDL	BDL	8.12		
YS-3A	Yard Grid Sample	Surface	BDL	BDL	3.1	120	BDL	6.2	BDL	24	BDL	7.84		
YS-4A	Yard Grid Sample	Surface	BDL	BDL	2.4	110	BDL	15	BDL	9.9	BDL	7.85		
YS-5A	Yard Grid Sample	Surface	BDL	BDL	1.1	73	BDL	7.8	BDL	8	BDL	7.87		
YS-6A	Yard Grid Sample	Surface	BDL	BDL	1.1	110	BDL	6.6	BDL	21	BDL	7.72		
YS-7A	Yard Grid Sample	Surface	BDL	BDL	1.2	63	BDL	7.9	BDL	6	BDL	7.98		
YS-8A	Yard Grid Sample	Surface	BDL	BDL	1.0	58	BDL	7.6	BDL	BDL	BDL	7.99		
YS-9A	Yard Grid Sample	Surface	BDL	BDL	1.6	100	BDL	6.1	BDL	8.4	BDL	7.84		
YS-10A	Yard Grid Sample	Surface	BDL	BDL	0.8	71	BDL	5.9	BDL	8.2	BDL	8.07		
YS-11A	Yard Grid Sample	Surface	BDL	BDL	0.8	91	BDL	5.7	BDL	14	BDL	7.97		
YS-12A	Yard Grid Sample	Surface	BDL	BDL	4.0	3800	BDL	15	BDL	37	0.4	7.77		
YS-13A	Yard Grid Sample	Surface	BDL	BDL	2.0	330	BDL	16	BDL	110	BDL	7.57		
YS-14A	Yard Grid Sample	Surface	BDL	BDL	1.4	140	BDL	8.1	BDL	21	BDL	7.96		
YS-15A	Yard Grid Sample	Surface	BDL	BDL	1.2	130	BDL	7.4	BDL	24	BDL	7.79		
YS-16A	Yard Grid Sample	Surface	BDL	BDL	12	110	BDL	10	BDL	120	BDL	7.78		
YS-17A	Yard Grid Sample	Surface	BDL	BDL	1.3	160	BDL	8	BDL	35	BDL	7.83		
YS-18A	Yard Grid Sample	Surface	BDL	BDL	4.1	3100	BDL	24	0.6	110	BDL	7.85		
YS-19A	Yard Grid Sample	Surface	BDL	BDL	1.8	140	BDL	10	BDL	21	BDL	7.92		
YS-20A	Yard Grid Sample	Surface	BDL	BDL	2.1	170	BDL	8.4	BDL	38	BDL	7.79		
YS-21A	Yard Grid Sample	Surface	BDL	BDL	1.7	220	BDL	9.8	BDL	86	BDL	8.01		
YS-22A	Yard Grid Sample	Surface	BDL	BDL	2.4	180	BDL	14	BDL	45	BDL	7.80		
YS-23A	Yard Grid Sample	Surface	BDL	BDL	2.4	130	BDL	12	BDL	19	BDL	8.18		
YS-24A	Yard Grid Sample	Surface	BDL	BDL	2.1	82	BDL	9.8	BDL	9.9	BDL	8.06		
LD-1A	Loading Dock Area	Surface	BDL	BDL	2.7	250	BDL	7.0	BDL	130	0.3	8.99		
AST-1A	Above Ground Storage Tank Area	Surface	BDL	BDL	1.2	94	BDL	7.9	BDL	8.3	BDL	7.59		
SPT-1A	Septic Tank Area	8'	BDL	BDL	2.2	96	BDL	9.5	BDL	BDL	BDL	8.31		
MBA-1A		Surface	BDL	1.5	6.0	380	3.6	59	0.3	1500	0.8	8.47		
MBA-1B		1'	BDL	BDL	2.7	190	BDL	5.1	BDL	BDL	BDL	8.76		
MBA-2A		Surface	191	BDL	4.4	350	BDL	32	BDL	1300	BDL	8.71	1(30)(B), 2(16), 3(34), 5(18)	None Detected
MBA-2B		2'	BDL	BDL	1.5	62	BDL	10	BDL	10	BDL	8.20		
Sump 1B	Sump Area	5'	BDL	BDL	6.5	95	BDL	13	BDL	BDL	BDL	8.05		
Sump 2B	Sump Area	5'	BDL	BDL	4.3	96	BDL	12	BDL	BDL	BDL	8.22		
YS-15X	QA/QC Samples	Surface	BDL	BDL	1.2	110	BDL	8	BDL	20	BDL	7.80		
YS-22X	QA/QC Samples	Surface	BDL	BDL	2.5	180	BDL	14	BDL	46	BDL	7.82		
Trip Blank	QA/QC Sample												1(22)(B), 2(5)	
Equipment Blank	QA/QC Sample			BDL	0.005	0.002	BDL	0.2	BDL	0.02	BDL	1.64	1(7)(B), 4(10)	None Detected

LEGEND

BDL = Below analytical detection limit

Blank cells indicate that the sample was not analyzed for that parameter.

COMPOUND CODE FOR VOLATILES

1) Acetone
2) Methylene Chloride
3) Xylene (total)
4) Bromoform
5) 4-methyl-2-pentanone

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

Of the areas sampled during Phase II, only two areas showed physical and analytical evidence of soil contamination. These areas were the truck washing area and the waste oil storage area. The two areas overlap and are located behind the main building. Surface soil sample MBA-1A from the truck washing area had a total lead concentration of 1,500 mg/kg. Surface soil sample MBA-2A had a TPH concentration of 91 mg/kg and a total lead concentration of 1,300 mg/kg. Deeper sampling indicates the contamination to be confined to the upper foot of the caliche pad and soil. The volume of contaminated soil is estimated at approximately 30 cubic yards.

A sump was located just inside the main building from the waste oil storage area. The sump was partially filled with sand that exhibited a petroleum odor.

7.2 Recommendations

1. Exxon should determine if notification to the State of New Mexico is required for this type of petroleum contamination.

2. Exxon should review the necessity of implementing a response action at the facility.

APPENDIX A

LABORATORY DATA PACKAGES

ANALYTICAL RESULTS

PREPARED FOR:

SCOTT KUYKENDAHL
OF
ENSR

PRESENTED BY:

ENVIRON EXPRESS LABORATORIES
401 N. 11th ST.
LA PORTE, TEXAS 77571-315

1-713-471-0951 1-800-880-0156 (FAX): 1-713-471-5821

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

CUSTOMER: ENSR CONSULTING & ENGINEERING
3000 RICHMOND
HOUSTON, TEXAS 77098

INVOICE NUMBER: 2118

DATE: 02/12/92

P.O.:

REQUESTED BY: MS. CINDY OVERTON

PROJECT ID: 1009-001-154

INVOICE TO: MS. SHEILA HAWKS

ENVIRON ID: 09774 - 09808

DATE RECEIVED: 01/30/92

DATE REPORTED: 02/05/92

TERMS: Net 30 days

DESCRIPTION	TURNAROUND	PRICE	QTY	DISCOUNT	AMOUNT
TPH - SOIL (GC)	5 DAY	50.00	35		1750.00

TOTAL INVOICE AMOUNT $1750.00

PLEASE INCLUDE INVOICE NUMBER WHEN REMITTING

1009-001-154
YS-1A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-1A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09774

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 01:55

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-2A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-2A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09775

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 02:20

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-3A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-3A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09776

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 02:44

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-4A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-4A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09777

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 03:08

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-5A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-5A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09778

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 03:31

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-6A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-6A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09779

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 03:57

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-7A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-7A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09780

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 04:21

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-8A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-8A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09781

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 04:46

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-9A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-9A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09782

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 04:29

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-10A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-10A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09783

Sample Matrix: SOIL Sample Depth: _____ Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 04:54

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-11A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-11A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09784

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 05:18
Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-12A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-12A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09785

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 05:43

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-13A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-13A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09786

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 06:07

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-18A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-18A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09787

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 23 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 06:32

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-15A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-15A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09788

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 24 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 06:56

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-15X

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-15X Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09789

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 24 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 07:21

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-17A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-17A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09790

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 24 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 07:45

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-19A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-19A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09791

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 24 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 08:10

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-20A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-20A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09792

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 24 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 08:34

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-21A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-21A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09793

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 24 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 08:59
Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-22A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-22A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09794

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 24 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 09:24

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-22X

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-22X Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09795

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 24 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 09:48

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-23A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-23A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09796

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 27 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 10:13

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-24A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-24A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09797

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 27 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 10:38

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
LD-1A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: LD-1A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09798

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 27 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 11:03

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
AST-1A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: AST-1A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09799

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 27 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 11:27
Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-14A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-14A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09800

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 27 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 11:52

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
YS-16A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: YS-16A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09801

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 27 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/01/92 Date Analyzed: 02/02/92 @ 12:17

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
SPT-1A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: SPT-1A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09802

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 28 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/02/92 Date Analyzed: 02/03/92 @ 01:48
Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
MBA-1A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: MBA-1A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09803

Sample Matrix: SOIL Sample Depth: _____ Sampled: 01/ 28 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/02/92 Date Analyzed: 02/03/92 @ 05:03

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
MBA-1B

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: MBA-1B Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09804

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 28 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/02/92 Date Analyzed: 02/03/92 @ 02:13

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
MBA-2A

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: MBA-2A Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09805

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 28 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	*191	< 25	25

Analyst: J.M. Date Extracted: 02/02/92 Date Analyzed: 02/03/92 @ 18:16

Standard : DIESEL

NOTE: *This sample contains some heavy material that may not be suitable for anaylsis by Method 8015M. (TPH by G.C.)

John E. Keller

John E. Keller, Ph.D.

1009-001-154
MBA-2B

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: MBA-2B Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09806

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 28 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/02/92 Date Analyzed: 02/03/92 @ 02:37

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
SUMP-1B

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: SUMP-1B Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09807

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 28 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/02/92 Date Analyzed: 02/03/92 @ 03:02

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

1009-001-154
SUMP-2B

Express Laboratories

401 North 11th • La Porte, Texas 77571

(713) 471-0951 • 1 (800) 880-0156 • FAX (713) 471-5821

Customer: ENSR Sample ID: SUMP-2B Attn: C. OVERTON

Client: BROWN MARONEY (EXXON) Proj. No: 1009001154

Proj. Location: HOBBS - DAL PASO Environ ID: 09808

Sample Matrix: SOIL Sample Depth: Sampled: 01/ 28 / 92

Received: 01/ 30 / 92 Reported: 02/ 05 / 92 Invoice No.: 2118

Test Method 8015(M)	Result PPM (mg/kg)	Blank PPM (mg/kg)	Detection Limit PPM (mg/kg)
Petroleum Extractables	< 25	< 25	25

Analyst: J.M. Date Extracted: 02/02/92 Date Analyzed: 02/03/92 @ 03:26

Standard : DIESEL

John E. Keller

John E. Keller, Ph.D.

ENVIRON QUALITY CONTROL REPORT

ANALYSIS: TPH (GC)	METHOD: 8015M	MATRIX: SOIL
ANALYST: J.K.	DETECTION LIMIT:<25	UNITS: PPM (mg/kg)
DATE: 02/01/92	SAMPLES IN SET: 20	FREQUENCY: 1/20

SAMPLES:	09762-09781

MATRIX SPIKE [MS] ANALYSIS

SAMPLE ID	[A] SAMPLE ANALYSIS PPM mg/kg	[B] SPIKE ADDED PPM mg/kg	[C] MS TOTAL PPM mg/kg	[D] MS ANALYSIS PPM mg/kg	[E] RECOVERY %
MATRIX	< 25	100	100	106	106

MATRIX DUPLICATE [MD] ANALYSIS

SAMPLE ID	[F] ORIG. SAMPLE ANALYSIS PPM mg/kg	[G] MD ANALYSIS PPM mg/kg	[H] RELATIVE DIFFERENCE %
MATRIX	106	113	6

MS TOTAL [C] = [A] + [B]

SAMPLE ANALYSIS [A] = [F + G] / 2

% RECOVERY [E] = 100 * |[D - A]| / [B]

% RELATIVE DIFFERENCE [H] = 200 * |[F - G]| / [F + G]

ND = NONE DETECTED WHEN ANALYZED

John E. Keller

JOHN KELLER, Ph.D

ENVIRON QUALITY CONTROL REPORT

ANALYSIS: TPH (GC)	METHOD: 8015M	MATRIX: SOIL
ANALYST: J.K.	DETECTION LIMIT:<25	UNITS: PPM (mg/kg)
DATE: 02/01/92	SAMPLES IN SET: 20	FREQUENCY: 1/20

SAMPLES:	09782-09801

MATRIX SPIKE [MS] ANALYSIS

SAMPLE ID	[A] SAMPLE ANALYSIS PPM mg/kg	[B] SPIKE ADDED PPM mg/kg	[C] MS TOTAL PPM mg/kg	[D] MS ANALYSIS PPM mg/kg	[E] RECOVERY %
MATRIX	< 25	100	100	105	105

MATRIX DUPLICATE [MD] ANALYSIS

SAMPLE ID	[F] ORIG. SAMPLE ANALYSIS PPM mg/kg	[G] MD ANALYSIS PPM mg/kg	[H] RELATIVE DIFFERENCE %
MATRIX	105	108	3

MS TOTAL [C] = [A] + [B]

SAMPLE ANALYSIS [A] = [F + G] / 2

% RECOVERY [E] = 100 * |[D - A]| / [B]

% RELATIVE DIFFERENCE [H] = 200 * |[F - G]| / [F + G]

ND = NONE DETECTED WHEN ANALYZED

John E. Keller

JOHN KELLER, Ph.D

ENVIRON QUALITY CONTROL REPORT

ANALYSIS: TPH (GC)	METHOD: 8015M	MATRIX: SOIL
ANALYST: J.K.	DETECTION LIMIT:<25	UNITS: PPM (mg/kg)
DATE: 02/02/92	SAMPLES IN SET: 18	FREQUENCY: 1/20

SAMPLES:	09802-09811, 09823-09830

MATRIX SPIKE [MS] ANALYSIS

SAMPLE ID	[A] SAMPLE ANALYSIS PPM mg/kg	[B] SPIKE ADDED PPM mg/kg	[C] MS TOTAL PPM mg/kg	[D] MS ANALYSIS PPM mg/kg	[E] RECOVERY %
MATRIX	< 25	100	100	75	75

MATRIX DUPLICATE [MD] ANALYSIS

SAMPLE ID	[F] ORIG. SAMPLE ANALYSIS PPM mg/kg	[G] MD ANALYSIS PPM mg/kg	[H] RELATIVE DIFFERENCE %
MATRIX	75	73	3

MS TOTAL [C] = [A] + [B]

SAMPLE ANALYSIS [A] = [F + G] / 2

% RECOVERY [E] = 100 * |[D - A]| / [B]

% RELATIVE DIFFERENCE [H] = 200 * |[F - G]| / [F + G]

ND = NONE DETECTED WHEN ANALYZED

John E. Keller

JOHN KELLER, Ph.D

ENVIRON
Express Laboratories

CHAIN OF CUSTODY RECORD

ENVIRON EXPRESS LABORATORIES
401 North 11th, La Porte, Texas 77571
(713) 471-0951 / (800) 880-0156
Fax No. (713) 471-5821

Project No.	Project Name	Project Location	Turn Around Time Changes
1009-001-154	Brown Maronet (Exxon)	Hobbs - Dal Paso	

Sampler's Affiliation: ENSR CoE
Samper's Name (PRINT): J. Scott Kuykendall
Sampler's: (Signature) [signature]
LABORATORY ANALYSIS Reference EPA Method #

Results to: Cindy Overton phone 520-9900 fax
Sampler Remarks:
Address: 3000 Richmond
City: Houston Texas 77098
Lab Remarks:
Invoice to: SAME No. ( )

Lab Number	Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat,l)	Sample Type (Liquid, Sludge, Etc.)	Preser-vative	BTEX 8020	TPH ~~418.1~~ 8015	Total Lead	TCLP Lead 1311	EPTOX Lead 1310	
09774	YS-1A	1-23-92 1430	✓		4oz ssum	Soil	4°C		✓				
09775	YS-2A	1-23-92 1430	✓		4oz ssum	Soil	4°C		✓				
09776	YS-3A	1-23-92 1445	✓		4oz ssum	Soil	4°C		✓				
09777	YS-4A	1-23-92 1445	✓		4oz ssum	Soil	4°C		✓				
09778	YS-5A	1-23-92 1450	✓		4oz ssum	Soil	4°C		✓				
09779	YS-6A	1-23-92 1450	✓		4oz ssum	Soil	4°C		✓				
09780	YS-7A	1-23-92 1500	✓		4oz ssum	Soil	4°C		✓				
09781	YS-8A	1-23-92 1500	✓		4oz ssum	Soil	4°C		✓				
09782	YS-9A	1-23-92 1510	✓		4oz ssum	Soil	4°C		✓				DUE: 2-5-92 INV. # 2118
09783	YS-10A	1-23-92 1510	✓		4oz ssum	Soil	4°C		✓				

Relinquished by: (Signature) [signature]	Date: 1-28 Time: 1100	Received By: (Signature) [signature]	Date: 1/30 Time: 1030	Intact
Relinquished by: (Signature)	Date: Time:	Received By: (Signature)	Date: Time:	Intact

ENVIRON
Express Laboratories

CHAIN OF CUSTODY RECORD

ENVIRON EXPRESS LABORATORIES
401 North 11th, La Porte, Texas 77571
(713) 471-0951 / (800) 880-0156
Fax No. (713) 471-5821

Project No.	Project Name	Project Location	Turn Around Time Changes
1009-001-154	Brown Maroney (Exxon)	Hobbs (Dal Paso)	

Sampler's Affiliation: ENSR C&E
Samper's Name (PRINT): J. Scott Kuykendall
Sampler's: (Signature)
LABORATORY ANALYSIS Reference EPA Method #

Results to: Cindy Averton phone 520 9900 fax
Sampler Remarks:
Address: 3000 Richmond
City: Houston Texas 77098
Lab Remarks:
Invoice to: SAMG No. ( )

Lab Number	Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat.l)	Sample Type (Liquid, Sludge, Etc.)	Preser-vative	BTEX 8020	TPH 418.1 8015	Total Lead	TCLP Lead 1311	EPTOX Lead 1310	
09784	4S-11A	1-23-92 1520	✓		4oz SSWM	Soil	4°C		✓				
09785	4S-12A	1-23-92 1520	✓		4oz SSWM	Soil	4°C		✓				
09786	4S-13A	1-23-92 1535	✓		4oz SSWM	Soil	4°C		✓				
09787	4S-18A	1-23-92 1535	✓		4oz SSWM	Soil	4°C		✓				
09788	4S-15A	1-21-92 0800	✓		4oz SSWM	Soil	4°C		✓				
09789	4S-15X	1-21-92 0800	✓		4oz SSWM	Soil	4°C		✓				
09790	4S-17A	1-24-92 0810	✓		4oz SSWM	Soil	4°C		✓				
09791	4S-19A	1-24-92 0800	✓		4oz SSWM	Soil	4°C		✓				
09792	4S-20A	1-24-92 0810	✓		4oz SSWM	Soil	4°C		✓				DUE: 2-5-92 INV # 2118
09793	4S-21A	1-24-92 0815	✓		4oz SSWM	Soil	4°C		✓				

Relinquished by: (Signature)	Date: 1-28 Time: 1400	Received By: (Signature)	Date: 1/30 Time: 1030	Intact	
Relinquished by: (Signature)	Date: Time:	Received By: (Signature)	Date: Time:	Intact	

CHAIN OF CUSTODY RECORD

ENVIRON EXPRESS LABORATORIES
401 North 11th, La Porte, Texas 77571
(713) 471-0951 / (800) 880-0156
Fax No. (713) 471-5821

Project No.	Project Name	Project Location	Turn Around Time Changes
1009-001-154	Brown Maroney (Exxon)	Hobbs - Dal Paso	

Sampler's Affiliation: ENSR C&E
Samper's Name (PRINT): J. Scott Kirkendall
Sampler's: (Signature) J Scott Kirkendall
LABORATORY ANALYSIS Reference EPA Method #

Results to: Cindy Acton phone 520 9900 fax
Sampler Remarks:
Address: 3000 Richmond
City: Houston Tx 77098
Lab Remarks:
Invoice to: SAME No. ( )

Lab Number	Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat.)	Sample Type (Liquid, Sludge, Etc.)	Preservative	BTEX 8020	TPH ~~418.1~~ 8015	Total Lead	TCLP Lead 1311	EPTOX Lead 1310				
09794	YS-22A	1-24-92 0820	✓		4oz SS wm	Soil	4°C		✓							
09795	YS-22X	1-24-92 0820	✓		4oz SS wm	Soil	4°C		✓							
09796	YS-23A	1-27-92 ~~1000~~ 1160	✓		4oz SS wm	Soil	4°C		✓							
09797	YS-24A	1-27-92 ~~1030~~ 1130	✓		4oz SS wm	Soil	4°C		✓							
09798	LD 1A	1-27-92 ~~1100~~ 1345	✓		4oz SS wm	Soil	4°C		✓							
09799	AST-1A	1-27-92 ~~1430~~ 1530	✓		4oz SS wm	Soil	4°C		✓							
09800	YS-14A	1-27-92 1000	✓		4oz SS wm	Soil	4°C		✓							
09801	YS-16A	1-27-92 1030	✓		4oz SS wm	Soil	4°C		✓							
09802	SPT-1A	1-28-92 1115	✓		4oz SS wm	Soil	4°C		✓							DUE: 2-5-92 INV.#2118
09803	MBA-1A	1-28-92 1130	✓		4oz SS wm	Soil	4°C		✓							

Relinquished by: (Signature) J Scott Kirkendall	Date: 1-28 Time: 1600	Received By: (Signature)	Date: 1/30 Time: 1030	Intact
Relinquished by: (Signature)	Date: Time:	Received By: (Signature)	Date: Time:	Intact

ENVIRON
Express Laboratories

CHAIN OF CUSTODY RECORD

ENVIRON EXPRESS LABORATORIES
401 North 11th, La Porte, Texas 77571
(713) 471-0951 / (800) 880-0156
Fax No. (713) 471-5821

Project No.	Project Name	Project Location	Turn Around Time Changes
1009-001-154	Brown Maroney (Exxon)	Hobbs - Dal Paso	

Sampler's Affiliation: ~~Exxon~~ ENSR C&E
Samper's Name (PRINT): J. S Ky Kendall
Sampler's: (Signature) J S Kendall

LABORATORY ANALYSIS
Reference EPA Method #

Results to: Cindy Outton phone 520-9900 fax
Sampler Remarks:
Address: 3000 Richmond
City: Houston Texas 77098
Lab Remarks:
Invoice to: Same No. ( )

Lab Number	Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat,l)	Sample Type (Liquid, Sludge, Etc.)	Preservative	BTEX 8020	TPH ~~418.1~~ 8015	Total Lead	TCLP Lead 1311	EPTOX Lead 1310	
09804	MBA-1B	1-28-92 1135	✓		40z 55um	Soil	4°C	✓					
09805	MBA-2~~B~~A	1-28-92 1145	✓		40z 55um	Soil	4°C	✓					
09806	~~MBA~~ & MBA-2B	1-28-92 1150	✓		40z 55um	Soil	4°C	✓					
09807	Sump-1B	1-28-92 1410	✓		40z 55um	Soil	4°C	✓					
09808	Sump-2B	1-28-92 1430	✓		40z 55um	Soil	4°C	✓					
													DUE: 2-5-92 INV. #2118

Relinquished by: (Signature) J S Kendall	Date: 1/28 Time: ~~1600~~	Received By: (Signature)	Date: 1/30 Time: 1030	Intact
Relinquished by: (Signature)	Date: 1600 Time:	Received By: (Signature)	Date: Time:	Intact

AnalytiKEM *An American NuKEM Company*

AnalytiKEM Inc.
2925 Richmond Avenue
Houston, TX 77098
713/520-1495
713/520-9900
Fax: 713/523-7107

February 13, 1992

ENSR
3000 Richmond
Houston,, Tx 77098

Attention: Cindy Overton

Attached are reports of chemical analyses of samples received January 30, 1992. These analyses are:

Count	Test Code	Test Name	Test Method	Sampled	Matrix
1	Ag - - -HOU	SILVER	EPA SW-846: 7760, ATOMIC ABSORPTION	01/28/92	WATER
35	Ag -S- -HOU	SILVER ON SOLID	EPA SW-846: 3050, 7760, AA	01/23/92	SOIL
				01/24/92	
				01/27/92	
				01/28/92	
1	As - -GFA-HOU	ARSENIC	EPA SW-846: 7060, GRAPHITE FURNACE	01/28/92	WATER
35	As -S-GFA-HOU	ARSENIC ON SOLID	EPA SW-846: 7060, GRAPHITE FURNACE	01/23/92	SOIL
				01/24/92	
				01/27/92	
				01/28/92	
1	BNA - - -HOU	SEMIVOLATILE ORGANICS	EPA SW-846: 3520,8270, LLE,GC/MS	01/28/92	WATER
1	BNA -S- -HOU	SEMIVOLATILE ORGANICS/SOLID	EPA SW-846: 3550,8270, SON.,GC/MS	01/28/92	SOIL
1	Ba - -ICP-HOU	BARIUM	EPA SW-846: 6010, ICP	01/28/92	WATER
35	Ba -S-ICP-HOU	BARIUM ON SOLID	EPA SW-846: 3050,6010, ICP	01/23/92	SOIL
				01/24/92	
				01/27/92	
				01/28/92	
1	Cd - -ICP-HOU	CADMIUM	EPA SW-846: 6010, ICP	01/28/92	WATER
35	Cd -S-ICP-HOU	CADMIUM ON SOLID	EPA SW-846: 3050,6010, ICP	01/23/92	SOIL
				01/24/92	
				01/27/92	
				01/28/92	
1	Cr - -ICP-HOU	CHROMIUM	EPA SW-846: 6010, ICP	01/28/92	WATER
35	Cr -S-ICP-HOU	CHROMIUM ON SOLID	EPA SW-846: 3050,6010, ICP	01/23/92	SOIL
				01/24/92	
				01/27/92	
				01/28/92	
1	Hg - - -HOU	MERCURY	EPA SW-846: 7470, COLD VAPOR	01/28/92	WATER
35	Hg -S- -HOU	MERCURY ON SOLID	EPA SW-846: 7471, COLD VAPOR	01/23/92	SOIL
				01/24/92	
				01/27/92	

						01/28/92	
1	Pb	- -ICP-HOU	LEAD	EPA SW-846: 6010, ICP		01/28/92	WATER
35	Pb	-S-ICP-HOU	LEAD ON SOLID	EPA SW-846: 3050,6010, ICP		01/23/92	SOIL
						01/24/92	
						01/27/92	
						01/28/92	
1	Se	- -GFA-HOU	SELENIUM	EPA SW-846: 7740, GRAPHITE FURNACE		01/28/92	WATER
35	Se	-S-GFA-HOU	SELENIUM ON SOLID	EPA SW-846: 7740, GRAPHITE FURNACE		01/23/92	SOIL
						01/24/92	
						01/27/92	
						01/28/92	
2	VOA	- - -HOU	VOLATILE ORGANIC ANALYSES	EPA SW-846: 8240, GC/MS		01/28/92	WATER
1	VOA	-S- -HOU	VOLATILE ORGANICS ON SOLID	EPA SW-846: 8240, GC/MS		01/28/92	SOIL
1	pH	- - -HOU	pH (HYDROGEN ION)	EPA SW-846: 9040, ELECTRODE		01/28/92	WATER
35	pH	-S- -HOU	pH ON SOLID	EPA SW-846: 9045		01/23/92	SOIL
						01/24/92	
						01/27/92	
						01/28/92	

Data contained in this report reflect a full quality control review and have met all applicable standards established by AnalytiKEM. AnalytiKEM quality assurance protocols are in accordance with EPA guidelines.

Should you have any questions, do not hesitate to contact me at (713) 520-1495.

Very Truly Yours,

AnalytiKEM

Bo Blankfield

Bo Blankfield
Lab Director

BB/lis

Enclosures: Analytical Summary, Analytical Report, Chain of Custody, Sample Receipt Checklist, Quality Control Logs, ANALYTIKEM ID #7864-33, ANALYTIKEM ID #A7864-30, ANALYTIKEM ID #A7864-33, ANALYTIKEM ID #A7864-37

LAB NO. A7864
PROJECT 1009-001-154 Brown Maroney-Hobbs-Dal Paso

AnalytiKEM *An American NuKEM Company*

SAMPLE DISPOSAL LETTER

AnalytiKEM Inc.
2925 Richmond Avenue
Houston, TX 77098
713/520-1495
713/520-9900
Fax: 713/523-7107

DATE: 02/13/92

TO: Cindy Overton

FROM: Bo Blankfield, Lab Director

PROJ. NO.: 1009-001-154 LAB NO.: A7864 RECEIVED:01/30/92
Brown Maroney-Hobbs-Dal Paso

It is the policy of AnalytiKEM Laboratories to dispose of unanalyzed portions of samples thirty days following submittal of the hard copy data package. Samples from lab number A7864 are due for disposal on March 19, 1992.

Please indicate your preference for disposal below and return this form to Lab Receiving personnel by March 5, 1992. **No response will be interpreted as permission to dispose of the samples on March 19, 1992 and charge your project accordingly.**

( )A. AnalytiKEM's preferred policy for disposal is to dispose of unused samples, including samples not analyzed, by drumming and transporting by a federally licensed hazardous waste transportation firm at a cost of $6.50/Field ID. **In an effort to present all relative charges in a timely manner, disposal charges will appear upon this project's billing summary unless this letter is returned with instructions indicating otherwise.**

( )B. AnalytiKEM will return remaining samples, including samples not authorized for analysis to the originating site at our expense.
ADDRESS OF THE
ORIGINATING SITE: _____

_____

( )C. AnalytiKEM will hold your sample at a cost of $20.00/Field ID per quarter for refrigerated storage or $6.50/Field ID per quarter for ambient storage. The project will be billed in advance each quarter based upon the number of samples in storage at the beginning of the quarter. The minimum storage fee per project will be $50.00 to cover administrative costs.

( ) Refrigerated ( ) Ambient ____ Number of Samples or ALL

Should you have any questions, do not hesitate to contact me at (713) 520-1495.
SIGNATURE: _____
BB/lis

LAB NO. A7864
PROJECT 1009-001-154 Brown Maroney-Hobbs-Dal Paso

AnalytiKEM

An American NuKEM Company

2925 RICHMOND AVENUE HOUSTON, TX 77098 (713) 520-1495 FAX: (713) 523-7107

Analysis Request and Chain of Custody Record

Project no.: 1009-001-154

Client/Project Name: Brown Maronet (Exxon)

Project Location: Hobbs - Dal Paso

Lab ID No	Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid Sludge, Etc.)	Preservative	ANALYSIS REQUESTED	LABORATORY REMARKS
1	4S-1A	1-23-92 1430	✓		160z 55 um	Soil	4°C	Oh/RCRA METALS	
2	4S-2A	1-23-92 1430	✓		160z 55 um	Soil	4°C	Oh/RCRA METALS	
3	4S-3A	1-23-92 1445	✓		160z 55um	Soil	4°C	Oh/RCRA METALS	
4	4S-4A	1-23-92 1445	✓		160z 55 um	Soil	4°C	Oh/RCRA METALS	
5	4S-5A	1-23-92 1450	✓		160z 55um	Soil	4°C	Oh/RCRA METALS	
6	4S-6A	1-23-92 1450	✓		160z 55um	Soil	4°C	Oh/RCRA METALS	
7	4S-7A	1-23-92 1500	✓		160z 55um	Soil	4°C	Oh/RCRA METALS	
8	4S-8A	1-23-92 1500	✓		160z 55um	Soil	4°C	Oh/RCRA METALS	
9	4S-9A	1-23-92 1510	✓		160z 55 um	Soil	4°C	Oh/RCRA METALS	
10	4S-10A	1-23-92 1510	✓		160z 55um	Soil	4°C	Oh/RCRA METALS	

Sampler: (Signature) DS Zehfeldt

Affiliation: ENSR C&E

Relinquished by: (Signature) DS Zehfeldt — Date: 1-28-92 Time: 1600

Relinquished by: (Signature) — Date: Time:

Relinquished by: (Signature) — Date: Time:

Received by: (Signature) — Date: Time:

Received by: (Signature) — Date: Time:

Received by Laboratory: (Signature) Sonia West — Date: 1-30-92 Time: 1110

COC Seal No. — Intact:

REMARKS: Scott Kuykendall

Data Results To: 1. Cindy Overton 2.

Laboratory No. A7864

AnalytiKEM

An American NuKEM Company

2925 RICHMOND AVENUE HOUSTON, TX 77098 (713) 520-1495 FAX: (713) 523-7107

Analysis Request and Chain of Custody Record

Project no.: 1009-001-154

Client/Project Name: Brown Maroney (Exxon)

Project Location: Hobbs - Dal Paso

Lab ID No	Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid Sludge, Etc.)	Preservative	ANALYSIS REQUESTED	LABORATORY REMARKS
11	4S-11A	1-23-92 1520	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
12	4S-12A	1-23-92 1520	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
13	4S-13A	1-23-92 1535	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
14	4S-18A	1-23-92 1535	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
15	4S-15A	1-24-92 0800	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
16	4S-15X	1-24-92 0800	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
17	4S-17A	1-24-92 0810	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
18	4S-19A	1-24-92 0800	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
19	4S-20A	1-24-92 0810	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
20	4S-21A	1-24-92 0815	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	

Sampler: (Signature) D S Kimball

Affiliation: EASR COE

Relinquished by: (Signature) D S Kimball — Date: 1-28-92 Time: 1600

Relinquished by: (Signature) — Date: Time:

Relinquished by: (Signature) — Date: Time:

Received by: (Signature) — Date: Time:

Received by: (Signature) — Date: Time:

Received by Laboratory: (Signature) Sonia West — Date: 1-30-92 Time: 1110

COC Seal No.

Intact:

REMARKS:

Data Results To:

1. CINDY OVERTON

2.

Laboratory No. A7864

AnalytiKEM
An American NuKEM Company
2925 RICHMOND AVENUE HOUSTON, TX 77098 (713) 520-1495 FAX: (713) 523-7107

Analysis Request and Chain of Custody Record

Project no.: 1007-201-154
Client/Project Name: Brown Maroney (Exxon)
Project Location: Hobbs - Dal Paso

Lab ID No	Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid Sludge, Etc.)	Preservative	ANALYSIS REQUESTED	LABORATORY REMARKS
21	YS-22A	1-24-92 0820	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
22	YS-22X	1-24-92 0820	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
23	YS-14A	1-27-92 1600	✓		160z SSwm	Soil	4°C	Oh/RCRA METAL	
24	YS-16A	1-27-92 1030	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	~~HOLD~~
↓	YS-16A	1-27-92 1030	✓		160z Amb wm	Soil	4°C	TOTAL SEMI-VOLATILES	HOLD
↓	YS-16A	1-27-92 1030	✓		40z TALL	Soil	4°C	TOTAL VOLATILES	HOLD
25	YS-23A	1-27-92 1100	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
26	YS-24A	1-27-92 1130	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
27	LD-1A	1-27-92 1345	✓		160z SSwm	Soil	4°C	Oh/RCRA METALS	
↓	LD-1A	1-27-92 ~~1350~~ 1345	✓		40z TALL	Soil	4°C	TOTAL VOLATILES	HOLD

Samplers (Signature): [signature]
Affiliation: ENSR CME

Relinquished by: (Signature) [signature] Date: 1-28-92 Time: 1600
Relinquished by: (Signature) Date: Time:
Relinquished by: (Signature) Date: Time:

Received by: (Signature) Date: Time:
Received by: (Signature) Date: Time:
Received by Laboratory: (Signature) Tonia West Date: 1-30-92 Time: 1110

COC Seal No.
Intact:

REMARKS:

Data Results To:
1. CINDY OVERTON
2.

Laboratory No.
A7864

AnalytiKEM
An American NuKEM Company
2925 RICHMOND AVENUE HOUSTON, TX 77098 (713) 520-1495 FAX: (713) 523-7107

Analysis Request and Chain of Custody Record

Project no.: 1009-021-154
Client/Project Name: Brown Maroney (Exxon)
Project Location: Hobbs - Dal Paso

Lab ID No	Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid Sludge, Etc.)	Preservative	ANALYSIS REQUESTED	LABORATORY REMARKS
27	LD-1A	1-27-92 1345	✓		16oz Amb SM	Soil	4°C	TOTAL Semi-Volatiles	Hold
28	ASI-1A	1-27-92 1430	✓		16oz SSWM	Soil	4°C	ph/RCRA METALS	
29	SPT-1A	1-28-92 1115	✓		16oz SSWM	Soil	4°C	ph/RCRA METALS	~~Hold~~
30	Trip Blank-2	1-28-92	✓		40ml VOA x2	H_2O	4°C	TOTAL Volatiles	~~Hold~~
31	MBH-1A	1-28-92 1130	✓		16oz SSWM	Soil	4°C	ph/RCRA METALS	
32	MBH-1B	1-28-92 1135	✓		16oz SSWM	Soil	4°C	ph/RCRA METALS	
33	MBH-2A	1-28-92 1145	✓		16oz SSWM	Soil	4°C	ph/RCRA METALS	
33	MBH-2A	1-28-92 1145	✓		40ml VOA	Soil	4°C	TOTAL Volatiles per Scott K 24 TIC takeoff	Hold
33	MBA-2A	1-28-92 1145	✓		16oz Amb WM	Soil	4°C	TOTAL Semi-Volatiles Hold	Hold
34	MBH-2B	1-28-92 1150	✓		16oz SSWM	Soil	4°C	ph/RCRA METALS	

Samplers (Signature): [signature]
Affiliation: ENSR C&E

Relinquished by: (Signature) [signature] Date: 1-28-92 Time: 1600
Relinquished by: (Signature) Date: Time:
Relinquished by: (Signature) Date: Time:

Received by: (Signature) Date: Time:
Received by: (Signature) Date: Time:
Received by Laboratory: (Signature) [signature] Date: 1-30-92 Time: 1110

COC Seal No.
Intact:

REMARKS:

Data Results To:
1. Cindy Overton
2.

Laboratory No.
A7864

AnalytiKEM

An American NuKEM Company

2925 RICHMOND AVENUE HOUSTON, TX 77098 (713) 520-1495 FAX: (713) 523-7107

Analysis Request and Chain of Custody Record

Project no.: 1009-001-154

Client/Project Name: Brown Macrone (Exxon)

Project Location: Hobbs - Dal Paso

Lab ID No	Field Sample No./ Identification	Date and Time	Grab	Comp	Sample Container (Size/Mat'l)	Sample Type (Liquid Sludge, Etc.)	Preservative	ANALYSIS REQUESTED	LABORATORY REMARKS
35 36	Sump-1B	1-28-92 1410	✓		160z SSWM	Soil	4°C	Pb / RCRA METALS	
36 37	Sump-2B	1-28-92 1430	✓		160z SSWM	Soil	4°C	Pb / RCRA METALS	
37 38	Equip Blank-2	1-28-92 1500	✓		320z PLASTIC (4 oml)	H_2O	HNO_3	Pb / RCRA METALS	
↓	Equip Blank-2	1-28-92 1500	✓		VOA x2	H_2O	4°C	TOTAL VOLATILES	
↓	Equip Blank-2	1-28-92 1500	✓		32 oz Amb	H_2O	4°C	TOTAL SEMI-VOLATILES	

Sampler: (Signature)	Relinquished by: (Signature)	Date: 1-28-92 Time: 1600	Received by: (Signature)	Date: Time:
Affiliation: ENSR CE	Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:
	Relinquished by: (Signature)	Date: Time:	Received by Laboratory: (Signature)	Date: 1-30-92 Time: 1110

COC Seal No.

Intact:

REMARKS:

Data Results To:

1. CINDY OVERTON

2.

Laboratory No.

AT864

(2) FEDERAL EXPRESS 946 3529 406 CUSTOMER PACKAGE TRACKING NUMBER — PULL UP PURPLE TAB

(3) FEDERAL EXPRESS 946 3529 415 CUSTOMER PACKAGE TRACKING NUMBER — PULL UP PURPLE TAB

ANALYTIKEM LABORATORIES
SAMPLE RECEIPT CHECKLIST

Client Brown Maroney Project Number 1009-001-154 Laboratory Number A7864

1. ✓	Shipped	Notes: Fed Ex
	Hand Delivered	
2. ✓	COC Present on Receipt	Notes:
	No COC	
3. ✓	COC Tape on Shipping Container	Notes: ① #42326 ②
	No COC Tape on Shipping Container	Notes:
4.	Samples Broken/Leaking	Notes:
✓	Sample Intact on Receipt	
	Other (See Notes)	
5.	Ambient on Receipt	Notes:
✓	Chilled on Receipt	① 11°C ② 12°C ③ 12°C
6. ✓	Samples Preserved Correctly	Notes:
	Improper Preservatives	
	N/A (None Recommended)	
	Other (See Notes)	
7. ✓	Received Within Holding Time	Notes:
	Not Received Within Holding Time	
	N/A (None Recommended)	
	Other (See Notes)	
8.	COC Tapes on Samples	Notes:
✓	No COC Tapes on Samples	
9. ✓	Discrepancies Between COC and Sample Labels	Notes: See Below
✓	No Discrepancies Noted	
	N/A (No COC Received)	

Additional Comments: Sample SPT-1A was labeled as SPT-1B. Label was changed to match COC. S. Kuykendall was out. 1-30-92 SW.

Inspected and Logged in by: Sonia West Date/Time 1-30-92 1110

AnalytiKEM—Houston

Analytical Summary
02/14/92 13:44

Lab Number: A7864
Project: 1009-001-154
Brown Maroney-Hobbs-Dal Paso

Lab ID / *Field ID* / *Test /Matrix*	1 YS-1A SOIL	2 YS-2A SOIL	3 YS-3A SOIL	4 YS-4A SOIL	5 YS-5A SOIL	6 YS-6A SOIL	7 YS-7A SOIL	8 YS-8A SOIL
Ag -S- -HOU	<1.1 MG/KG	<1.1 MG/KG	<1.1 MG/KG	<1.2 MG/KG	<1.1 MG/KG	<1.1 MG/KG	<1.1 MG/KG	<1.1 MG/KG
(MDL)	*(1.1)*	*(1.1)*	*(1.1)*	*(1.2)*	*(1.1)*	*(1.1)*	*(1.1)*	*(1.1)*
As -S-GFA-HOU	9.8 MG/KG	9.9 MG/KG	3.1 MG/KG	2.4 MG/KG	1.1 MG/KG	1.1 MG/KG	1.2 MG/KG	1.0 MG/KG
(MDL)	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*
Ba -S-ICP-HOU	89 MG/KG	120 MG/KG	120 MG/KG	110 MG/KG	73 MG/KG	110 MG/KG	63 MG/KG	58 MG/KG
(MDL)	*(2.2)*	*(2.3)*	*(2.3)*	*(2.4)*	*(2.2)*	*(2.3)*	*(2.2)*	*(2.2)*
Cd -S-ICP-HOU	<2.2 MG/KG	<2.3 MG/KG	<2.3 MG/KG	<2.4 MG/KG	<2.2 MG/KG	<2.3 MG/KG	<2.2 MG/KG	<2.2 MG/KG
(MDL)	*(2.2)*	*(2.3)*	*(2.3)*	*(2.4)*	*(2.2)*	*(2.3)*	*(2.2)*	*(2.2)*
Cr -S-ICP-HOU	8.0 MG/KG	7.0 MG/KG	6.2 MG/KG	15 MG/KG	7.8 MG/KG	6.6 MG/KG	7.9 MG/KG	7.6 MG/KG
(MDL)	*(2.2)*	*(2.3)*	*(2.3)*	*(2.4)*	*(2.2)*	*(2.3)*	*(2.2)*	*(2.2)*
Hg -S- -HOU	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG
(MDL)	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*
Pb -S-ICP-HOU	31 MG/KG	<5.7 MG/KG	24 MG/KG	9.9 MG/KG	8.0 MG/KG	21 MG/KG	6.0 MG/KG	<5.6 MG/KG
(MDL)	*(5.6)*	*(5.7)*	*(5.7)*	*(6.0)*	*(5.6)*	*(5.7)*	*(5.6)*	*(5.6)*
Se -S-GFA-HOU	0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG	<0.9 MG/KG	<0.9 MG/KG	<0.9 MG/KG	<0.3 MG/KG	<0.3 MG/KG
(MDL)	*(0.3)*	*(0.3)*	*(0.3)*	*(0.9)*	*(0.9)*	*(0.9)*	*(0.3)*	*(0.3)*
pH -S- -HOU	7.99 UNITS	8.12 UNITS	7.84 UNITS	7.85 UNITS	7.87 UNITS	7.72 UNITS	7.98 UNITS	7.99 UNITS
(MDL)	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*

Signatures of approval indicate quality assurance-quality control verification of analytical results, billing and enclosed documentation.

Approvals: _____ Date: _____ Brenda L. Lasiter Date: 2/14/92

***** CONTINUED *****

AnalytiKEM—Houston

Analytical Summary
02/14/92 13:45

Lab Number: A7864
Project: 1009-001-154
Brown Maroney-Hobbs-Dal Paso

Lab ID / *Field ID* / *Test /Matrix*	9 YS-9A SOIL	10 YS-10A SOIL	11 YS-11A SOIL	12 YS-12A SOIL	13 YS-13A SOIL	14 YS-18A SOIL	15 YS-15A SOIL	16 YS-15X SOIL
Ag -S- -HOU	<1.1 MG/KG	<1.1 MG/KG	<1.1 MG/KG	<1.2 MG/KG	<1.2 MG/KG	<1.2 MG/KG	<1.2 MG/KG	<1.2 MG/KG
(MDL)	*(1.1)*	*(1.1)*	*(1.1)*	*(1.2)*	*(1.2)*	*(1.2)*	*(1.2)*	*(1.2)*
As -S-GFA-HOU	1.6 MG/KG	0.8 MG/KG	0.8 MG/KG	4.0 MG/KG	2.0 MG/KG	4.1 MG/KG	1.2 MG/KG	1.2 MG/KG
(MDL)	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*
Ba -S-ICP-HOU	100 MG/KG	71 MG/KG	91 MG/KG	3800 MG/KG	330 MG/KG	3100 MG/KG	130 MG/KG	110 MG/KG
(MDL)	*(2.2)*	*(2.2)*	*(2.2)*	*(2.4)*	*(2.5)*	*(2.3)*	*(2.3)*	*(2.3)*
Cd -S-ICP-HOU	<2.2 MG/KG	<2.2 MG/KG	<2.2 MG/KG	<2.4 MG/KG	<2.5 MG/KG	<2.3 MG/KG	<2.3 MG/KG	<2.3 MG/KG
(MDL)	*(2.2)*	*(2.2)*	*(2.2)*	*(2.4)*	*(2.5)*	*(2.3)*	*(2.3)*	*(2.3)*
Cr -S-ICP-HOU	6.1 MG/KG	5.9 MG/KG	5.7 MG/KG	15 MG/KG	16 MG/KG	24 MG/KG	7.4 MG/KG	8.0 MG/KG
(MDL)	*(2.2)*	*(2.2)*	*(2.2)*	*(2.4)*	*(2.5)*	*(2.3)*	*(2.3)*	*(2.3)*
Hg -S- -HOU	<0.05 MG/KG	<0.05 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG
(MDL)	*(0.05)*	*(0.05)*	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*
Pb -S-ICP-HOU	8.4 MG/KG	8.2 MG/KG	14 MG/KG	37 MG/KG	33 MG/KG	110 MG/KG	24 MG/KG	20 MG/KG
(MDL)	*(5.4)*	*(5.4)*	*(5.6)*	*(5.9)*	*(6.2)*	*(5.8)*	*(5.8)*	*(5.8)*
Se -S-GFA-HOU	<0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG	0.4 MG/KG	<0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG
(MDL)	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*
pH -S- -HOU	7.84 UNITS	8.07 UNITS	7.97 UNITS	7.77 UNITS	7.57 UNITS	7.85 UNITS	7.79 UNITS	7.80 UNITS
(MDL)	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*

Signatures of approval indicate quality assurance-quality control verification of analytical results, billing and enclosed documentation.

Approvals: _____ Date: _____ Brenda F. Grisie Date: 2/14/92

***** CONTINUED *****

AnalytiKEM—Houston

Analytical Summary
02/14/92 13:45

Lab Number: A7864
Project: 1009-001-154
Brown Maroney-Hobbs-Dal Paso

Lab ID / *Field ID* / *Test /Matrix*	17 YS-17A SOIL	18 YS-19A SOIL	19 YS-20A SOIL	20 YS-21A SOIL	21 YS-22A SOIL	22 YS-22X SOIL	23 YS-14A SOIL	24 YS-16A SOIL
Ag -S- -HOU	<1.2 MG/KG	<1.2 MG/KG	<1.2 MG/KG	<1.1 MG/KG	<1.2 MG/KG	<1.2 MG/KG	<1.1 MG/KG	<1.1 MG/KG
(MDL)	*(1.2)*	*(1.2)*	*(1.2)*	*(1.1)*	*(1.2)*	*(1.2)*	*(1.1)*	*(1.1)*
As -S-GFA-HOU	1.3 MG/KG	1.8 MG/KG	2.1 MG/KG	1.7 MG/KG	2.4 MG/KG	2.5 MG/KG	1.4 MG/KG	12 MG/KG
(MDL)	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*
Ba -S-ICP-HOU	160 MG/KG	140 MG/KG	170 MG/KG	220 MG/KG	180 MG/KG	180 MG/KG	140 MG/KG	110 MG/KG
(MDL)	*(2.3)*	*(2.5)*	*(2.5)*	*(2.2)*	*(2.5)*	*(2.5)*	*(2.3)*	*(2.2)*
Cd -S-ICP-HOU	<2.3 MG/KG	<2.5 MG/KG	<2.5 MG/KG	<2.2 MG/KG	<2.5 MG/KG	<2.5 MG/KG	<2.3 MG/KG	<2.2 MG/KG
(MDL)	*(2.3)*	*(2.5)*	*(2.5)*	*(2.2)*	*(2.5)*	*(2.5)*	*(2.3)*	*(2.2)*
Cr -S-ICP-HOU	8.0 MG/KG	10 MG/KG	8.4 MG/KG	9.8 MG/KG	14 MG/KG	14 MG/KG	8.1 MG/KG	10 MG/KG
(MDL)	*(2.3)*	*(2.5)*	*(2.5)*	*(2.2)*	*(2.5)*	*(2.5)*	*(2.3)*	*(2.2)*
Hg -S- -HOU	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.05 MG/KG
(MDL)	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*	*(0.05)*
Pb -S-ICP-HOU	35 MG/KG	21 MG/KG	38 MG/KG	86 MG/KG	45 MG/KG	46 MG/KG	21 MG/KG	120 MG/KG
(MDL)	*(5.8)*	*(6.2)*	*(6.2)*	*(5.6)*	*(6.2)*	*(6.2)*	*(5.7)*	*(5.5)*
Se -S-GFA-HOU	<0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG
(MDL)	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*
pH -S- -HOU	7.83 UNITS	7.92 UNITS	7.79 UNITS	8.01 UNITS	7.80 UNITS	7.82 UNITS	7.96 UNITS	7.78 UNITS
(MDL)	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*

Signatures of approval indicate quality assurance-quality control verification of analytical results, billing and enclosed documentation.

Approvals: _____ Date: _____ _____ Date: 2/14/92

***** CONTINUED *****

AnalytiKEM—Houston

Analytical Summary
02/14/92 13:46

Lab Number: A7864
Project: 1009-001-154
Brown Maroney-Hobbs-Dal Paso

Lab ID / *Field ID* / *Test /Matrix*	25 YS-23A SOIL	26 YS-24A SOIL	27 LD-1A SOIL	28 AST-1A SOIL	29 SPT-1A SOIL	30 TRIP BLANK-2 WATER	31 MBA-1A SOIL	32 MBA-1B SOIL
Ag -S- -HOU	<1.2 MG/KG	<1.2 MG/KG	<1.2 MG/KG	<1.1 MG/KG	<1.2 MG/KG	--	1.5 MG/KG	<1.2 MG/KG
(MDL)	*(1.2)*	*(1.2)*	*(1.2)*	*(1.1)*	*(1.2)*		*(1.1)*	*(1.2)*
As -S-GFA-HOU	2.4 MG/KG	2.1 MG/KG	2.7 MG/KG	1.2 MG/KG	2.2 MG/KG	--	6.0 MG/KG	2.7 MG/KG
(MDL)	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*		*(0.3)*	*(0.3)*
Ba -S-ICP-HOU	130 MG/KG	82 MG/KG	250 MG/KG	94 MG/KG	96 MG/KG	--	380 MG/KG	190 MG/KG
(MDL)	*(2.3)*	*(2.4)*	*(2.3)*	*(2.2)*	*(2.3)*		*(2.3)*	*(2.4)*
Cd -S-ICP-HOU	<2.2 MG/KG	<2.4 MG/KG	<2.3 MG/KG	<2.2 MG/KG	<2.3 MG/KG	--	3.6 MG/KG	<2.4 MG/KG
(MDL)	*(2.3)*	*(2.4)*	*(2.3)*	*(2.2)*	*(2.3)*		*(2.3)*	*(2.4)*
Cr -S-ICP-HOU	12 MG/KG	9.8 MG/KG	7.0 MG/KG	7.9 MG/KG	9.5 MG/KG	--	59 MG/KG	5.1 MG/KG
(MDL)	*(2.3)*	*(2.4)*	*(2.3)*	*(2.2)*	*(2.3)*		*(2.3)*	*(2.4)*
Hg -S- -HOU	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	--	0.3 MG/KG	<0.06 MG/KG
(MDL)	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*	*(0.06)*		*(0.06)*	*(0.06)*
Pb -S-ICP-HOU	19 MG/KG	9.9 MG/KG	130 MG/KG	8.3 MG/KG	<5.8 MG/KG	--	1500 MG/KG	<6.0 MG/KG
(MDL)	*(5.8)*	*(6.1)*	*(5.8)*	*(5.6)*	*(5.8)*		*(5.7)*	*(6.0)*
Se -S-GFA-HOU	<0.3 MG/KG	<0.3 MG/KG	0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG	--	<0.3 MG/KG	0.8 MG/KG
(MDL)	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*		*(0.3)*	*(0.3)*
VOA - - -HOU	--	--	--	--	--	ATTACHED UG/L	--	--
(MDL)						*()**		

* Please see attached Analytical Report for remarks.

Signatures of approval indicate quality assurance-quality control verification of analytical results, billing and enclosed documentation.

Approvals: _____ Date: 2/13/92 _____ Date: 2/14/92

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AnalytiKEM—Houston

Analytical Summary
02/14/92 13:47

Lab Number: A7864
Project: 1009-001-154
Brown Maroney-Hobbs-Dal Paso

Lab ID / *Field ID* / *Test /Matrix*	25 YS-23A SOIL	26 YS-24A SOIL	27 LD-1A SOIL	28 AST-1A SOIL	29 SPT-1A SOIL	30 TRIP BLANK-2 WATER	31 MBA-1A SOIL	32 MBA-1B SOIL
pH -S- -HOU	8.18 UNITS	8.06 UNITS	8.99 UNITS	7.59 UNITS	8.31 UNITS	--	8.47 UNITS	8.76 UNITS
(MDL)	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*	*(0.01)*		*(0.01)*	*(0.01)*

Signatures of approval indicate quality assurance-quality control verification of analytical results, billing and enclosed documentation.

Approvals: _____ Date: _____ _____ Date: 2/14/92

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AnalytiKEM—Houston

Analytical Summary
02/14/92 13:47

Lab Number: A7864
Project: 1009-001-154
Brown Maroney-Hobbs-Dal Paso

Lab ID / *Field ID* / *Test /Matrix*	33 MBA-2A SOIL	34 MBA-2B SOIL	35 SUMP-1B SOIL	36 SUMP-2B SOIL	37 EQUIP BLANK-2 WATER
Ag - - -HOU *(MDL)*	--	--	--	--	<0.01 MG/L *(0.01)*
Ag -S- -HOU *(MDL)*	<1.1 MG/KG *(1.1)*	<1.1 MG/KG *(1.1)*	<1.2 MG/KG *(1.2)*	<1.2 MG/KG *(1.2)*	--
As - -GFA-HOU *(MDL)*	--	--	--	--	<0.005 MG/L *(0.005)*
As -S-GFA-HOU *(MDL)*	4.4 MG/KG *(0.3)*	1.5 MG/KG *(0.3)*	6.5 MG/KG *(0.3)*	4.3 MG/KG *(0.3)*	--
BNA - - -HOU *(MDL)*	--	--	--	--	ATTACHED UG/L *()**
BNA -S- -HOU *(MDL)*	ATTACHED UG/KG *()**	--	--	--	--
Ba - -ICP-HOU *(MDL)*	--	--	--	--	<0.02 MG/L *(0.02)*
Ba -S-ICP-HOU *(MDL)*	350 MG/KG *(2.2)*	62 MG/KG *(2.2)*	95 MG/KG *(2.3)*	96 MG/KG *(2.3)*	--
Cd - -ICP-HOU *(MDL)*	--	--	--	--	<0.010 MG/L *(0.010)*

* Please see attached Analytical Report for remarks.

Signatures of approval indicate quality assurance-quality control verification of analytical results, billing and enclosed documentation.

Approvals: _____ Date: _____ _____ Date: 2/14/92

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AnalytiKEM—Houston

Analytical Summary
02/14/92 13:47

Lab Number: A7864
Project: 1009-001-154
Brown Maroney-Hobbs-Dal Paso

Lab ID / *Field ID* / *Test /Matrix*	33 MBA-2A SOIL	34 MBA-2B SOIL	35 SUMP-1B SOIL	36 SUMP-2B SOIL	37 EQUIP BLANK-2 WATER
Cd -S-ICP-HOU	2.3 MG/KG	<2.2 MG/KG	<2.3 MG/KG	<2.3 MG/KG	--
(MDL)	*(2.2)*	*(2.2)*	*(2.3)*	*(2.3)*	
Cr - -ICP-HOU	--	--	--	--	<0.02 MG/L
(MDL)					*(0.02)*
Cr -S-ICP-HOU	32 MG/KG	10 MG/KG	13 MG/KG	12 MG/KG	--
(MDL)	*(2.2)*	*(2.2)*	*(2.3)*	*(2.3)*	
Hg - - -HOU	--	--	--	--	<0.001 MG/L
(MDL)					*(0.001)*
Hg -S- -HOU	0.09 MG/KG	<0.06 MG/KG	<0.06 MG/KG	<0.06 MG/KG	--
(MDL)	*(0.05)*	*(0.06)*	*(0.06)*	*(0.06)*	
Pb - -ICP-HOU	--	--	--	--	<0.02 MG/L
(MDL)					*(0.02)*
Pb -S-ICP-HOU	1300 MG/KG	10 MG/KG	<5.8 MG/KG	<5.8 MG/KG	--
(MDL)	*(5.4)*	*(5.6)*	*(5.8)*	*(5.8)*	
Se - -GFA-HOU	--	--	--	--	<0.005 MG/L
(MDL)					*(0.005)*
Se -S-GFA-HOU	<0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG	<0.3 MG/KG	--
(MDL)	*(0.3)*	*(0.3)*	*(0.3)*	*(0.3)*	

Signatures of approval indicate quality assurance-quality control verification of analytical results, billing and enclosed documentation.

Approvals: _____ Date: _____ Brenda T. Grisé Date: 2/14/92

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AnalytiKEM—Houston

Analytical Summary
02/14/92 13:47

Lab Number: A7864
Project: 1009-001-154
Brown Maroney-Hobbs-Dal Paso

Lab ID / *Field ID* / *Test /Matrix*	33 MBA-2A SOIL	34 MBA-2B SOIL	35 SUMP-1B SOIL	36 SUMP-2B SOIL	37 EQUIP BLANK-2 WATER
VOA - - -HOU *(MDL)*	--	--	--	--	ATTACHED UG/L *()**
VOA -S- -HOU *(MDL)*	ATTACHED UG/KG *()**	--	--	--	--
pH - - -HOU *(MDL)*	--	--	--	--	1.64* UNITS *(0.01)**
pH -S- -HOU *(MDL)*	8.71 UNITS *(0.01)*	8.20 UNITS *(0.01)*	8.05 UNITS *(0.01)*	8.22 UNITS *(0.01)*	--

* Please see attached Analytical Report for remarks.

Signatures of approval indicate quality assurance-quality control verification of analytical results, billing and enclosed documentation.

Approvals: _____ Date: _____ _____ Date: 2/14/92

AnalytiKEM—Houston

Analytical Report
02/14/92 13:36

Brown Maroney-Hobbs-Dal Paso	Field ID: YS-1A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 1	Time Sampled: 1430
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	9.8	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	89	MG/KG	2.2	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.2	MG/KG	2.2	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	8.0	MG/KG	2.2	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	31	MG/KG	5.6	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.99	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:36

Brown Maroney-Hobbs-Dal Paso	Field ID: YS-2A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 2	Time Sampled: 1430
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	9.9	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	120	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.3	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	7.0	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	<5.7	MG/KG	5.7	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.12	UNITS	0.01	01/31/92 935

AnalytiKEM-Houston

Analytical Report
02/14/92 13:36

Brown Maroney-Hobbs-Dal Paso	Field ID: YS-3A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 3	Time Sampled: 1445
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	3.1	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	120	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.3	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	6.2	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	24	MG/KG	5.7	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.84	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:36

Brown Maroney-Hobbs-Dal Paso	Field ID: YS-4A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 4	Time Sampled: 1445
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	2.4	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	110	MG/KG	2.4	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.4	MG/KG	2.4	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	15	MG/KG	2.4	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	9.9	MG/KG	6.0	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.9	MG/KG	0.9	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.85	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:36

Brown Maroney-Hobbs-Dal Paso	Field ID: YS-5A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 5	Time Sampled: 1450
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.1	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	73	MG/KG	2.2	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.2	MG/KG	2.2	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	7.8	MG/KG	2.2	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	8.0	MG/KG	5.6	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.9	MG/KG	0.9	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.87	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:37

Brown Maroney-Hobbs-Dal Paso	Field ID: YS-6A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 6	Time Sampled: 1450
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.1	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	110	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.3	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	6.6	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	21	MG/KG	5.7	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.9	MG/KG	0.9	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.72	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:37

Brown Maroney-Hobbs-Dal Paso	Field ID: YS-7A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 7	Time Sampled: 1500
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.2	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	63	MG/KG	2.2	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.2	MG/KG	2.2	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	7.9	MG/KG	2.2	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	6.0	MG/KG	5.6	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.98	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:37

Brown Maroney-Hobbs-Dal Paso	Field ID: YS-8A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 8	Time Sampled: 1500
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.0	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	58	MG/KG	2.2	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.2	MG/KG	2.2	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	7.6	MG/KG	2.2	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	<5.6	MG/KG	5.6	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.99	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-9A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 9	Time Sampled: 1510
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.6	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	100	MG/KG	2.2	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.2	MG/KG	2.2	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	6.1	MG/KG	2.2	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.05	MG/KG	0.05	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	8.4	MG/KG	5.4	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.84	UNITS	0.01	01/31/92 935

AnalytiKEM-Houston

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-10A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 10	Time Sampled: 1510
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	0.8	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	71	MG/KG	2.2	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.2	MG/KG	2.2	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	5.9	MG/KG	2.2	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.05	MG/KG	0.05	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	8.2	MG/KG	5.4	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.07	UNITS	0.01	01/31/92 935

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-11A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 11	Time Sampled: 1520
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	0.8	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	91	MG/KG	2.2	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.2	MG/KG	2.2	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	5.7	MG/KG	2.2	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	14	MG/KG	5.6	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.97	UNITS	0.01	01/31/92 935

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-12A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 12	Time Sampled: 1520
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	4.0	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	3800	MG/KG	2.4	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.4	MG/KG	2.4	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	15	MG/KG	2.4	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	37	MG/KG	5.9	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	0.4	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.77	UNITS	0.01	01/31/92 935

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-13A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 13	Time Sampled: 1535
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	2.0	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	330	MG/KG	2.5	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.5	MG/KG	2.5	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	16	MG/KG	2.5	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	33	MG/KG	6.2	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.57	UNITS	0.01	01/31/92 935

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-18A	Date Sampled: 01/23/92
Proj. No.: 1009-001-154	Lab ID: 14	Time Sampled: 1535
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	4.1	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	3100	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.3	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	24	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	110	MG/KG	5.8	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.85	UNITS	0.01	01/31/92 935

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-15A	Date Sampled: 01/24/92
Proj. No.: 1009-001-154	Lab ID: 15	Time Sampled: 800
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.2	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	130	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.3	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	7.4	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	24	MG/KG	5.8	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.79	UNITS	0.01	01/31/92 935

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-15X	Date Sampled: 01/24/92
Proj. No.: 1009-001-154	Lab ID: 16	Time Sampled: 800
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.2	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	110	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.3	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	8.0	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	20	MG/KG	5.8	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.80	UNITS	0.01	01/31/92 935

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-17A	Date Sampled: 01/24/92
Proj. No.: 1009-001-154	Lab ID: 17	Time Sampled: 810
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.3	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	160	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.3	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	8.0	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	35	MG/KG	5.8	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.83	UNITS	0.01	01/31/92 935

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-19A	Date Sampled: 01/24/92
Proj. No.: 1009-001-154	Lab ID: 18	Time Sampled: 800
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.8	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	140	MG/KG	2.5	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.5	MG/KG	2.5	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	10	MG/KG	2.5	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	21	MG/KG	6.2	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.92	UNITS	0.01	01/31/92 935

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-20A	Date Sampled: 01/24/92
Proj. No.: 1009-001-154	Lab ID: 19	Time Sampled: 810
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	2.1	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	170	MG/KG	2.5	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.5	MG/KG	2.5	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	8.4	MG/KG	2.5	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	38	MG/KG	6.2	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.79	UNITS	0.01	01/31/92 935

AnalytiKEM-Houston

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-21A	Date Sampled: 01/24/92
Proj. No.: 1009-001-154	Lab ID: 20	Time Sampled: 815
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.7	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	220	MG/KG	2.2	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.2	MG/KG	2.2	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	9.8	MG/KG	2.2	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	86	MG/KG	5.6	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.01	UNITS	0.01	01/31/92 935

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-22A	Date Sampled: 01/24/92
Proj. No.: 1009-001-154	Lab ID: 21	Time Sampled: 820
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	2.4	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	180	MG/KG	2.5	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.5	MG/KG	2.5	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	14	MG/KG	2.5	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	45	MG/KG	6.2	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.80	UNITS	0.01	01/31/92 935

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Brown Maroney-Hobbs-Dal Paso	Field ID: YS-22X	Date Sampled: 01/24/92
Proj. No.: 1009-001-154	Lab ID: 22	Time Sampled: 820
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	2.5	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	180	MG/KG	2.5	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.5	MG/KG	2.5	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	14	MG/KG	2.5	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	46	MG/KG	6.2	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.82	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:40

Brown Maroney-Hobbs-Dal Paso	Field ID: YS-14A	Date Sampled: 01/27/92
Proj. No.: 1009-001-154	Lab ID: 23	Time Sampled: 1000
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.4	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	140	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.3	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	8.1	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	21	MG/KG	5.7	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.96	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:40

Brown Maroney-Hobbs-Dal Paso	Field ID: YS-16A	Date Sampled: 01/27/92
Proj. No.: 1009-001-154	Lab ID: 24	Time Sampled: 1030
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	12	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	110	MG/KG	2.2	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.2	MG/KG	2.2	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	10	MG/KG	2.2	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.05	MG/KG	0.05	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	120	MG/KG	5.5	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.78	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:41

Brown Maroney-Hobbs-Dal Paso	Field ID: YS-23A	Date Sampled: 01/27/92
Proj. No.: 1009-001-154	Lab ID: 25	Time Sampled: 1100
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	2.4	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	130	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.2	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	12	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	19	MG/KG	5.8	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.18	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:41

Brown Maroney-Hobbs-Dal Paso	Field ID: YS-24A	Date Sampled: 01/27/92
Proj. No.: 1009-001-154	Lab ID: 26	Time Sampled: 1130
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	2.1	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	82	MG/KG	2.4	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.4	MG/KG	2.4	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	9.8	MG/KG	2.4	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	9.9	MG/KG	6.1	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.06	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:41

Brown Maroney-Hobbs-Dal Paso	Field ID: LD-1A	Date Sampled: 01/27/92
Proj. No.: 1009-001-154	Lab ID: 27	Time Sampled: 1345
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	2.7	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	250	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.3	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	7.0	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	130	MG/KG	5.8	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.99	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:41

Brown Maroney-Hobbs-Dal Paso	Field ID: AST-1A	Date Sampled: 01/27/92
Proj. No.: 1009-001-154	Lab ID: 28	Time Sampled: 1430
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.2	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	94	MG/KG	2.2	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.2	MG/KG	2.2	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	7.9	MG/KG	2.2	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	8.3	MG/KG	5.6	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	7.59	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:41

Brown Maroney-Hobbs-Dal Paso	Field ID: SPT-1A	Date Sampled: 01/28/92
Proj. No.: 1009-001-154	Lab ID: 29	Time Sampled: 1115
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	2.2	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	96	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.3	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	9.5	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	<5.8	MG/KG	5.8	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.31	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:42

Brown Maroney-Hobbs-Dal Paso	Field ID: TRIP BLANK-2	Date Sampled: 01/28/92
Proj. No.: 1009-001-154	Lab ID: 30	Time Sampled:
Lab No.: A7864	Matrix: WATER (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
VOA - - -HOU VOLATILE ORGANIC ANALYSES EPA SW-846: 8240, GC/MS	ATTACHED *1	UG/L		01/30/92

*1 SEE ANALYTIKEM ID #A7864-30

AnalytiKEM—Houston

Analytical Report
02/14/92 13:42

Brown Maroney-Hobbs-Dal Paso	Field ID: MBA-1A	Date Sampled: 01/28/92
Proj. No.: 1009-001-154	Lab ID: 31	Time Sampled: 1130
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	1.5	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	6.0	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	380	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	3.6	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	59	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	0.3	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	1500	MG/KG	5.7	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.47	UNITS	0.01	01/31/92 935

AnalytiKEM-Houston

Analytical Report
02/14/92 13:42

Brown Maroney-Hobbs-Dal Paso	Field ID: MBA-1B	Date Sampled: 01/28/92
Proj. No.: 1009-001-154	Lab ID: 32	Time Sampled: 1135
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	2.7	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	190	MG/KG	2.4	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.4	MG/KG	2.4	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	5.1	MG/KG	2.4	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	<6.0	MG/KG	6.0	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	0.8	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.76	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:42

Brown Maroney-Hobbs-Dal Paso	Field ID: MBA-2A	Date Sampled: 01/28/92
Proj. No.: 1009-001-154	Lab ID: 33	Time Sampled: 1145
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	4.4	MG/KG	0.3	02/05/92 645
BNA -S- -HOU SEMIVOLATILE ORGANICS/SOLID EPA SW-846: 3550,8270, SON.,GC/MS	ATTACHED *1	UG/KG		Ext.: 02/10/92 Anal.:02/11/92
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	350	MG/KG	2.2	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	2.3	MG/KG	2.2	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	32	MG/KG	2.2	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	0.09	MG/KG	0.05	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	1300	MG/KG	5.4	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634

*1 SEE ANALYTIKEM ID #A7864-33

***** CONTINUED *****

AnalytiKEM—Houston

Analytical Report
02/14/92 13:42

Brown Maroney-Hobbs-Dal Paso	Field ID: MBA-2A	Date Sampled: 01/28/92
Proj. No.: 1009-001-154	Lab ID: 33	Time Sampled: 1145
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
VOA -S- -HOU VOLATILE ORGANICS ON SOLID EPA SW-846: 8240, GC/MS	ATTACHED *1	UG/KG		02/07/92
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.71	UNITS	0.01	01/31/92 935

*1 SEE ANALYTIKEM ID #A7864-33

AnalytiKEM—Houston

Analytical Report
02/14/92 13:42

Brown Maroney-Hobbs-Dal Paso	Field ID: MBA-2B	Date Sampled: 01/28/92
Proj. No.: 1009-001-154	Lab ID: 34	Time Sampled: 1150
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.1	MG/KG	1.1	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	1.5	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	62	MG/KG	2.2	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.2	MG/KG	2.2	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	10	MG/KG	2.2	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	10	MG/KG	5.6	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.20	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:43

Brown Maroney-Hobbs-Dal Paso	Field ID: SUMP-1B	Date Sampled: 01/28/92
Proj. No.: 1009-001-154	Lab ID: 35	Time Sampled: 1410
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	6.5	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	95	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.3	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	13	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	<5.8	MG/KG	5.8	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.05	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:43

Brown Maroney-Hobbs-Dal Paso	Field ID: SUMP-2B	Date Sampled: 01/28/92
Proj. No.: 1009-001-154	Lab ID: 36	Time Sampled: 1430
Lab No.: A7864	Matrix: SOIL (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag -S- -HOU SILVER ON SOLID EPA SW-846: 3050, 7760, AA	<1.2	MG/KG	1.2	02/05/92 915
As -S-GFA-HOU ARSENIC ON SOLID EPA SW-846: 7060, GRAPHITE FURNACE	4.3	MG/KG	0.3	02/05/92 645
Ba -S-ICP-HOU BARIUM ON SOLID EPA SW-846: 3050,6010, ICP	96	MG/KG	2.3	02/04/92 659
Cd -S-ICP-HOU CADMIUM ON SOLID EPA SW-846: 3050,6010, ICP	<2.3	MG/KG	2.3	02/04/92 659
Cr -S-ICP-HOU CHROMIUM ON SOLID EPA SW-846: 3050,6010, ICP	12	MG/KG	2.3	02/04/92 659
Hg -S- -HOU MERCURY ON SOLID EPA SW-846: 7471, COLD VAPOR	<0.06	MG/KG	0.06	02/06/92 1040
Pb -S-ICP-HOU LEAD ON SOLID EPA SW-846: 3050,6010, ICP	<5.8	MG/KG	5.8	02/04/92 659
Se -S-GFA-HOU SELENIUM ON SOLID EPA SW-846: 7740, GRAPHITE FURNACE	<0.3	MG/KG	0.3	02/05/92 634
pH -S- -HOU pH ON SOLID EPA SW-846: 9045	8.22	UNITS	0.01	01/31/92 935

AnalytiKEM—Houston

Analytical Report
02/14/92 13:43

Brown Maroney-Hobbs-Dal Paso	Field ID: EQUIP BLANK-2	Date Sampled: 01/28/92
Proj. No.: 1009-001-154	Lab ID: 37	Time Sampled: 1500
Lab No.: A7864	Matrix: WATER (GRAB)	Date Received:01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
Ag - - -HOU SILVER EPA SW-846: 7760, ATOMIC ABSORPTION	<0.01	MG/L	0.01	02/05/92 915
As - -GFA-HOU ARSENIC EPA SW-846: 7060, GRAPHITE FURNACE	<0.005	MG/L	0.005	02/05/92 645
BNA - - -HOU SEMIVOLATILE ORGANICS EPA SW-846: 3520,8270, LLE,GC/MS	ATTACHED *1	UG/L		Ext.: 02/04/92 Anal.:02/06/92
Ba - -ICP-HOU BARIUM EPA SW-846: 6010, ICP	<0.02	MG/L	0.02	02/07/92 725
Cd - -ICP-HOU CADMIUM EPA SW-846: 6010, ICP	<0.010	MG/L	0.010	02/07/92 725
Cr - -ICP-HOU CHROMIUM EPA SW-846: 6010, ICP	<0.02	MG/L	0.02	02/07/92 725
Hg - - -HOU MERCURY EPA SW-846: 7470, COLD VAPOR	<0.001	MG/L	0.001	02/06/92 1040
Pb - -ICP-HOU LEAD EPA SW-846: 6010, ICP	<0.02	MG/L	0.02	02/07/92 725
Se - -GFA-HOU SELENIUM EPA SW-846: 7740, GRAPHITE FURNACE	<0.005	MG/L	0.005	02/05/92 634

*1 SEE ANALYTIKEM ID #A7864-37

***** CONTINUED *****

AnalytiKEM—Houston

Analytical Report
02/14/92 13:43

Brown Maroney-Hobbs-Dal Paso	Field ID: EQUIP BLANK-2	Date Sampled: 01/28/92
Proj. No.: 1009-001-154	Lab ID: 37	Time Sampled: 1500
Lab No.: A7864	Matrix: WATER (GRAB)	Date Received: 01/30/92

Parameter (Test Code) (Test Name) (Test Method)	Concentration	Units	Method Detection Limit	Date/Time Analysis Performed
VOA - - -HOU VOLATILE ORGANIC ANALYSES EPA SW-846: 8240, GC/MS	ATTACHED *1	UG/L		01/30/92
pH - - -HOU pH (HYDROGEN ION) EPA SW-846: 9040, ELECTRODE	1.64* *2	UNITS	0.01	01/31/92 935

*1 SEE ANALYTIKEM ID #A7864-37
*2 *SAMPLE PRESERVED WITH HNO3

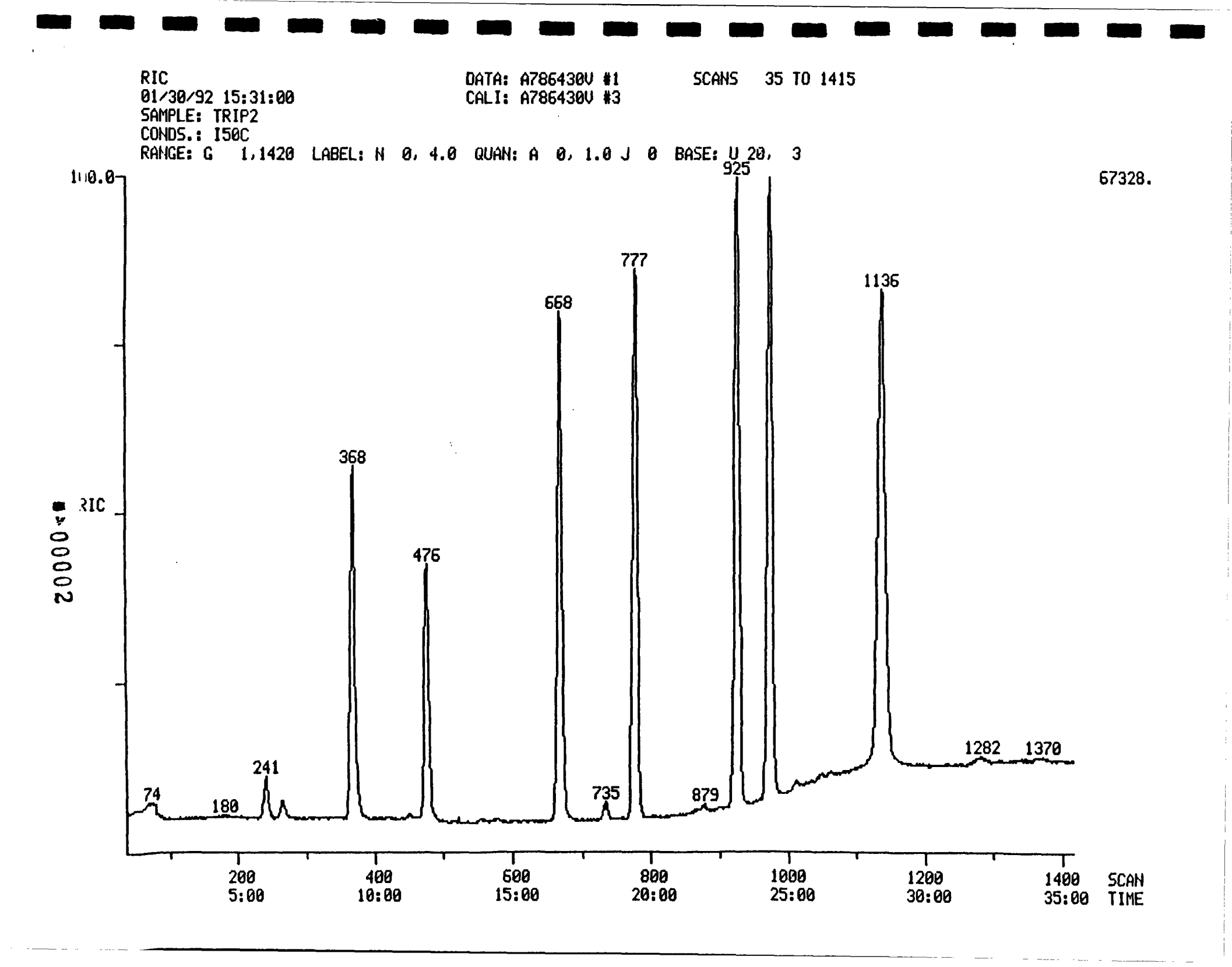
VOLATILE ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	AnalytiKEM-Hou	Concentration:	LOW	Date Extracted:	01/30/92
Lab Sample ID:	A7864-30	Sample Matrix:	WATER	Date Analyzed:	01/30/92
Client Sample ID:	TRIP_BLANK-2	Percent Moisture:	100.0	Dilution Factor:	1.0

VOLATILE COMPOUNDS

CAS Number		ug/L		CAS Number		ug/L	
74-87-3	Chloromethane	10	<	78-87-5	1,2-Dichloropropane	5	<
74-83-9	Bromomethane	10	<	10061-01-5	cis-1,3-Dichloropropene	5	<
75-01-4	Vinyl Chloride	10	<	79-01-6	Trichloroethene	5	<
75-00-3	Chloroethane	10	<	124-48-1	Dibromochloromethane	5	<
75-09-2	Methylene Chloride	5		79-00-5	1,1,2-Trichloroethane	5	<
67-64-1	Acetone	22	B	71-43-2	Benzene	5	<
75-15-0	Carbon Disulfide	5	<	10061-02-6	Trans-1,3-Dichloropropene	5	<
75-35-4	1,1-Dichloroethene	5	<	110-75-8	2-Chloroethylvinyl ether	25	<
75-34-3	1,1-Dichloroethane	5	<	75-25-2	Bromoform	5	<
156-60-5	trans-1,2-Dichloroethene	5	<	108-10-1	4-Methyl-2-Pentanone	5	<
67-66-3	Chloroform	5	<	591-78-6	2-Hexanone	10	<
107-06-2	1,2-Dichloroethane	5	<	127-18-4	Tetrachloroethene	5	<
78-93-3	2-Butanone	10	B<	79-34-5	1,1,2,2-Tetrachloroethane	5	<
71-55-6	1,1,1-Trichloroethane	5	<	108-88-3	Toluene	5	<
56-23-5	Carbon Tetrachloride	5	<	108-90-7	Chlorobenzene	5	<
108-05-4	Vinyl Acetate	10	<	100-41-4	Ethylbenzene	5	<
75-27-4	Bromodichloromethane	5	<	100-42-5	Styrene	5	<
				1330-20-7	Xylene (total)	5	<

The Lab ID for data on this page is A786430V.
B - Compound was detected in the QC blank.
< - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.


RIC
01/30/92 15:31:00
SAMPLE: TRIP2
CONDS.: I50C
DATA: A786430V #1
CALI: A786430V #3
SCANS 35 TO 1415
RANGE: G 1.1420 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
100.0
67328.
RIC
20000
74
180
241
368
476
668
735
777
879
925
1136
1282
1370
200
5:00
400
10:00
600
15:00
800
20:00
1000
25:00
1200
30:00
1400
35:00
SCAN
TIME

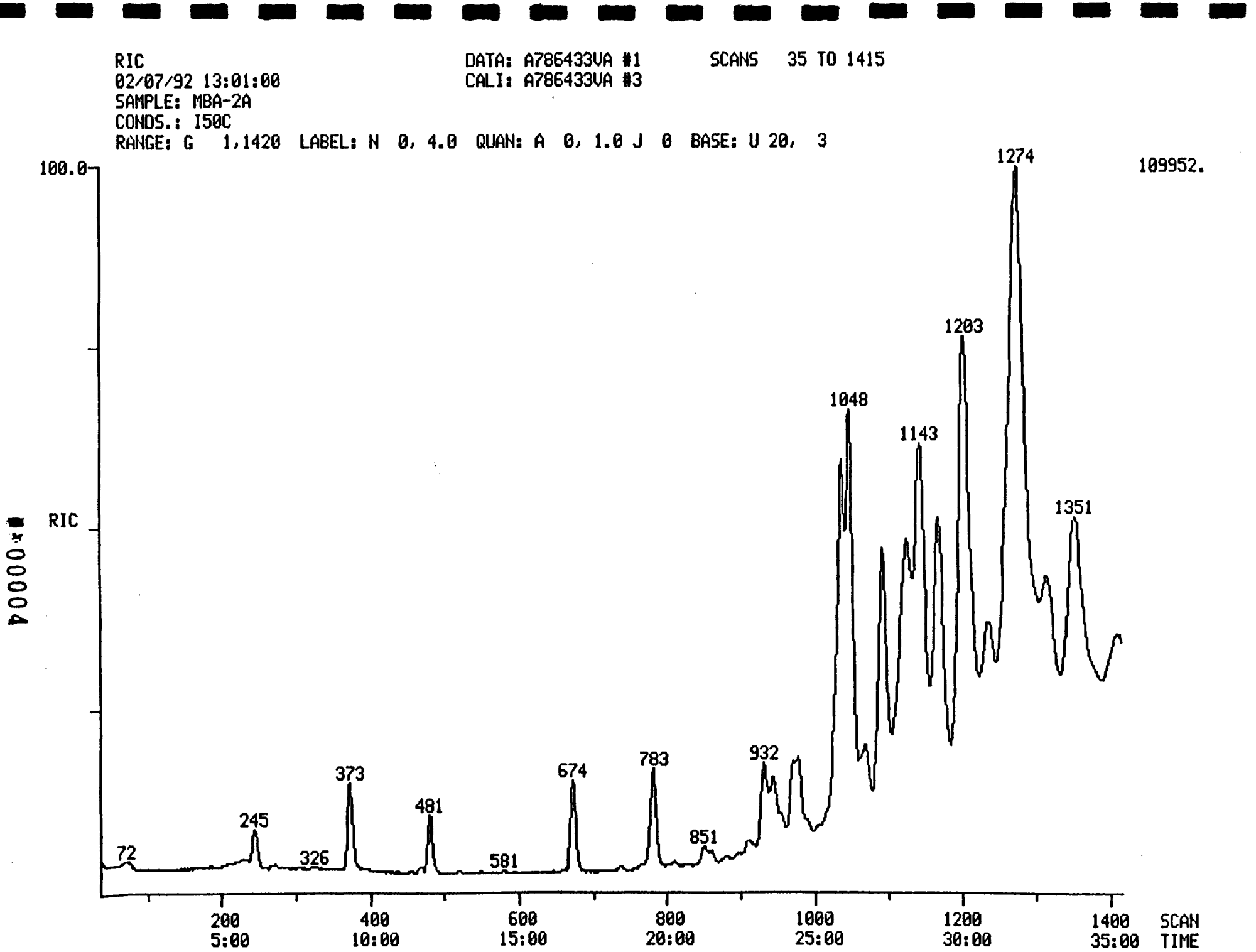
VOLATILE ORGANICS ANALYSIS DATA SHEET

Laboratory Name: AnalytiKEM-Hou | Concentration: LOW | Date Extracted: 02/07/92
Lab Sample ID: A7864-33 | Sample Matrix: SOIL | Date Analyzed: 02/07/92
Client Sample ID: MBA-2A | Percent Moisture: 5.8 | Dilution Factor: 1.0

VOLATILE COMPOUNDS

CAS Number		ug/Kg		CAS Number		ug/Kg	
74-87-3	Chloromethane	11	<	78-87-5	1,2-Dichloropropane	5	<
74-83-9	Bromomethane	11	<	10061-01-5	cis-1,3-Dichloropropene	5	<
75-01-4	Vinyl Chloride	11	<	79-01-6	Trichloroethene	5	<
75-00-3	Chloroethane	11	<	124-48-1	Dibromochloromethane	5	<
75-09-2	Methylene Chloride	16		79-00-5	1,1,2-Trichloroethane	5	<
67-64-1	Acetone	30	B	71-43-2	Benzene	5	<
75-15-0	Carbon Disulfide	5	<	10061-02-6	Trans-1,3-Dichloropropene	5	<
75-35-4	1,1-Dichloroethene	5	<	110-75-8	2-Chloroethylvinyl ether	11	<
75-34-3	1,1-Dichloroethane	5	<	75-25-2	Bromoform	5	<
156-60-5	trans-1,2-Dichloroethene	5	<	108-10-1	4-Methyl-2-Pentanone	18	
67-66-3	Chloroform	5	<	591-78-6	2-Hexanone	11	<
107-06-2	1,2-Dichloroethane	5	<	127-18-4	Tetrachloroethene	5	<
78-93-3	2-Butanone	11	<	79-34-5	1,1,2,2-Tetrachloroethane	5	<
71-55-6	1,1,1-Trichloroethane	5	<	108-88-3	Toluene	5	<
56-23-5	Carbon Tetrachloride	5	<	108-90-7	Chlorobenzene	5	<
108-05-4	Vinyl Acetate	11	<	100-41-4	Ethylbenzene	5	<
75-27-4	Bromodichloromethane	5	<	100-42-5	Styrene	5	<
				1330-20-7	Xylene (total)	34	

The Lab ID for data on this page is A786433VA.
B - Compound was detected in the QC blank.
< - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.


RIC
02/07/92 13:01:00
SAMPLE: MBA-2A
CONDS.: I50C
DATA: A786433VA #1
CALI: A786433VA #3
SCANS 35 TO 1415
RANGE: G 1,1420 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
100.0
109952.
RIC
72
245
326
373
481
581
674
783
851
932
1048
1143
1203
1274
1351
200
5:00
400
10:00
600
15:00
800
20:00
1000
25:00
1200
30:00
1400
35:00
SCAN
TIME

VOLATILE ORGANICS ANALYSIS DATA SHEET

Laboratory Name: AnalytiKEM-Hou
Lab Sample ID: A7864-37
Client Sample ID: EQUIP-BLANK-2

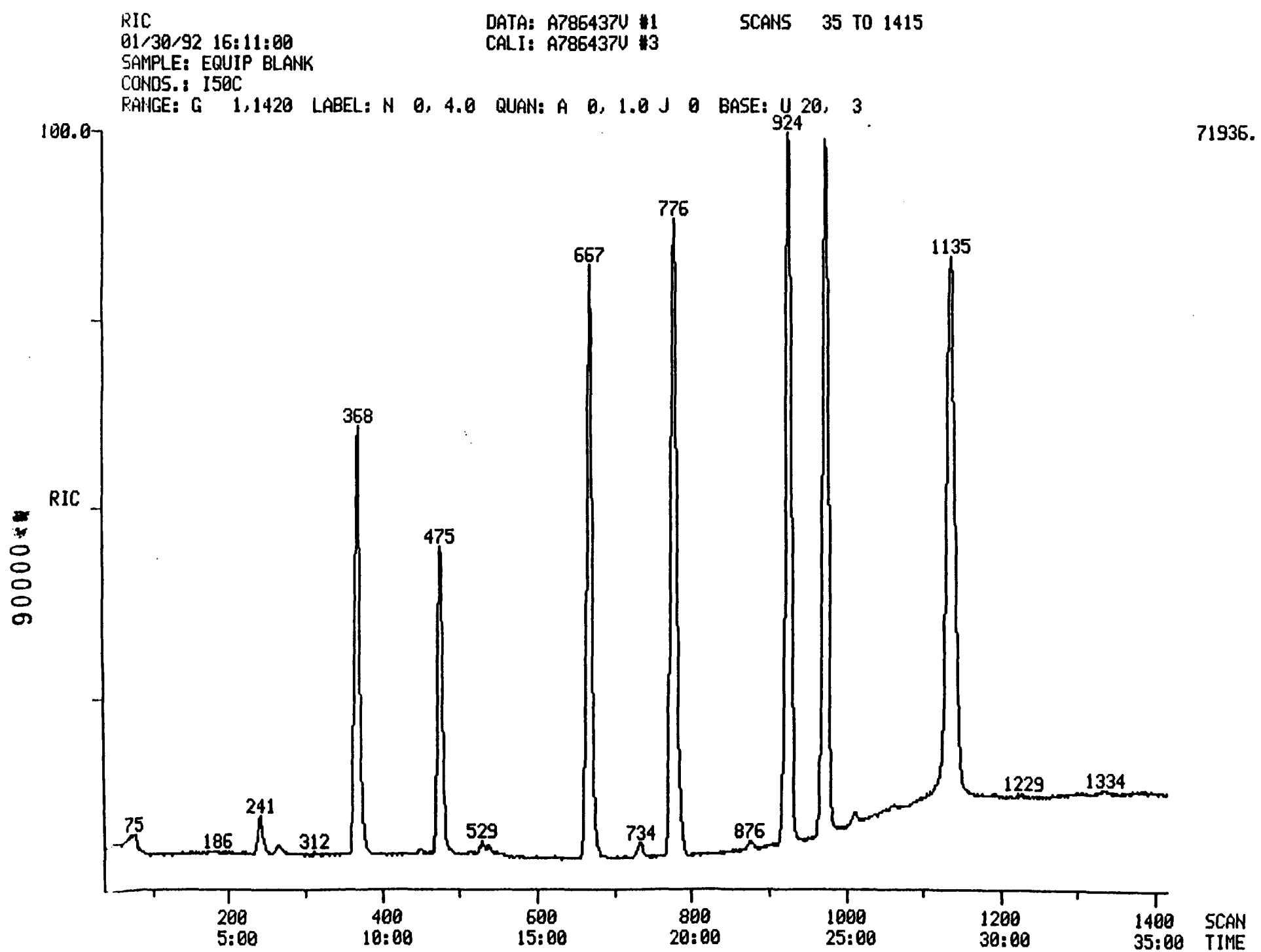
Concentration: LOW
Sample Matrix: WATER
Percent Moisture: 100.0

Date Extracted: 01/30/92
Date Analyzed: 01/30/92
Dilution Factor: 1.0

VOLATILE COMPOUNDS

CAS Number		ug/L		CAS Number		ug/L	
74-87-3	Chloromethane	10	<	78-87-5	1,2-Dichloropropane	5	<
74-83-9	Bromomethane	10	<	10061-01-5	cis-1,3-Dichloropropene	5	<
75-01-4	Vinyl Chloride	10	<	79-01-6	Trichloroethene	5	<
75-00-3	Chloroethane	10	<	124-48-1	Dibromochloromethane	5	<
75-09-2	Methylene Chloride	5	<	79-00-5	1,1,2-Trichloroethane	5	<
67-64-1	Acetone	7	B≈	71-43-2	Benzene	5	<
75-15-0	Carbon Disulfide	5	<	10061-02-6	Trans-1,3-Dichloropropene	5	<
75-35-4	1,1-Dichloroethene	5	<	110-75-8	2-Chloroethylvinyl ether	25	<
75-34-3	1,1-Dichloroethane	5	<	75-25-2	Bromoform	10	
156-60-5	trans-1,2-Dichloroethene	5	<	108-10-1	4-Methyl-2-Pentanone	5	<
67-66-3	Chloroform	5	<	591-78-6	2-Hexanone	10	<
107-06-2	1,2-Dichloroethane	5	<	127-18-4	Tetrachloroethene	5	<
78-93-3	2-Butanone	10	B<	79-34-5	1,1,2,2-Tetrachloroethane	5	<
71-55-6	1,1,1-Trichloroethane	5	<	108-88-3	Toluene	5	<
56-23-5	Carbon Tetrachloride	5	<	108-90-7	Chlorobenzene	5	<
108-05-4	Vinyl Acetate	9	≈	100-41-4	Ethylbenzene	5	<
75-27-4	Bromodichloromethane	5	<	100-42-5	Styrene	5	<
				1330-20-7	Xylene (total)	5	<

The Lab ID for data on this page is A786437V.
B - Compound was detected in the QC blank.
≈ - Reported value is less than the detection limit.
< - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.


RIC
01/30/92 16:11:00
SAMPLE: EQUIP BLANK
CONDS.: I50C
DATA: A786437V #1
CALI: A786437V #3
SCANS 35 TO 1415
RANGE: G 1,1420 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
100.0
71936.
RIC
90000
924
776
667
1135
368
475
75
186
241
312
529
734
876
1229
1334
200
5:00
400
10:00
600
15:00
800
20:00
1000
25:00
1200
30:00
1400
35:00
SCAN
TIME

BROMOFLUOROBENZENE

Tuning Report
01/30/92 10:12:00 + 6:45
Instrument: I50C
#264 to #277 averaged - #296 to #304 - #240 to #248
Case Number:

Data: BF013092C1 # 270
Cali: CALTAB # 3
Analyst: BPB
Laboratory:

Base m/z: 95
RIC: 9440.
Acct. No.: 8506-090
Contract:

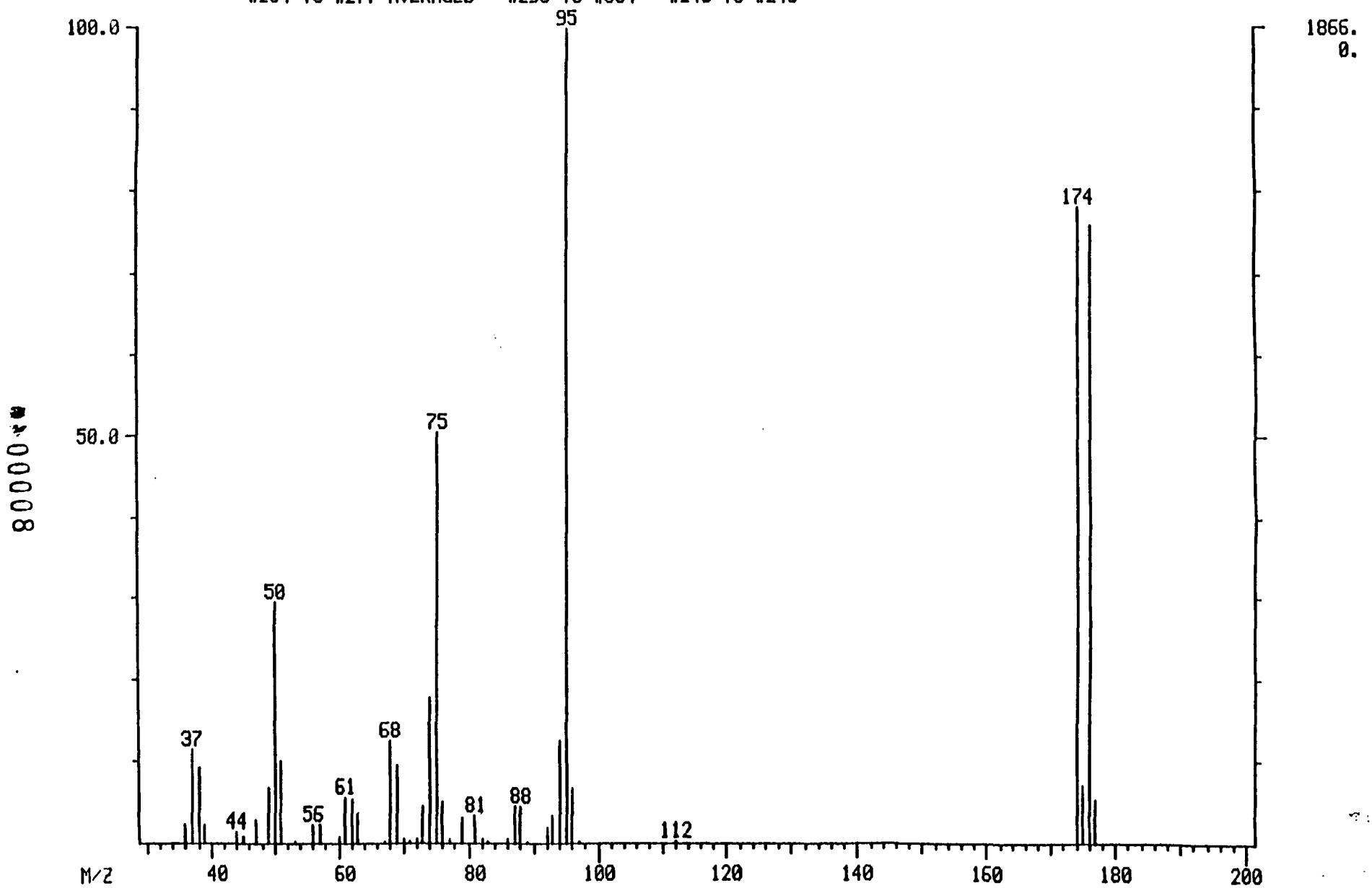
Ion Abundance Criteria

m/z	Intensity	% RA	Min %	Max %	Mass	Actual	Status
50	549.	29.4	15.0	40.0	95	29.4	PASS
75	941.	50.4	30.0	60.0	95	50.4	PASS
95	1866.	100.0	100.0	---	---	100.0	PASS
96	123.	6.6	5.0	9.0	95	6.6	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	1458.	78.1	50.0	---	95	78.1	PASS
175	129.	6.9	5.0	9.0	174	8.8	PASS
176	1420.	76.1	95.0	101.0	174	97.4	PASS
177	100.	5.4	5.0	9.0	176	7.0	PASS

MASS SPECTRUM
01/30/92 10:12:00 + 6:45
SAMPLE: BFB CALIBRATION
CONDS.: I50C
TEMP: 225 DEG. C
#264 TO #277 AVERAGED - #296 TO #304 - #240 TO #248

DATA: BF013092C1 #270
CALI: CALTAB #3

BASE M/Z: 95
RIC: 9440.



Mass List
01/30/92 10:12:00 + 6:45
Sample: BFB CALIBRATION
Conds.: I50C
#264 to #277 averaged - #296 to #304 - #240 to #248

Data: BF013092C1 # 270
Cali: CALTAB # 3

Base m/z: 95
RIC: 9440.

36 0.00 0. Minima Min Inten: 0.
177 Maxima # 0

Mass		% RA	Inten.
36?	S	2.14	40.
37?	S	11.25	210.
38?	S	9.06	169.
39?	S	2.20	41.
44?	S	1.50	28.
45?	S	0.91	17.
47?	S	2.84	53.
48?	S	0.05	1.
49?	S	6.59	123.
50?	S	29.42	549.
51?	S	9.91	185.
53?	S	0.16	3.
56?	S	2.30	43.
57?	S	2.20	41.
58?	S	0.11	2.
60?	S	0.91	17.
61?	S	5.57	104.
62?	S	5.25	98.
63?	S	3.59	67.
67?	S	0.16	3.
68?	S	12.54	234.
69	S	9.43	176.
70	S	0.64	12.
71	S	0.38	7.
72	S	0.43	8.
73	S	4.56	85.
74	S	17.63	329.
75	S	50.43	941.
76	S	4.88	91.
77	S	0.43	8.
79	S	3.05	57.
81	S	3.32	62.
82	S	0.43	8.
83	S	0.27	5.
86	S	0.54	10.
87	S	4.39	82.
88	S	4.50	84.
89	S	0.27	5.
92	S	1.88	35.
93	S	3.38	63.
94	S	12.49	233.
95	S	100.00	1866.
96	S	6.59	123.
97	S	0.38	7.
112	S	0.27	5.
174	S	78.14	1458.
175	S	6.91	129.
176	S	76.10	1420.
177	S	5.36	100.

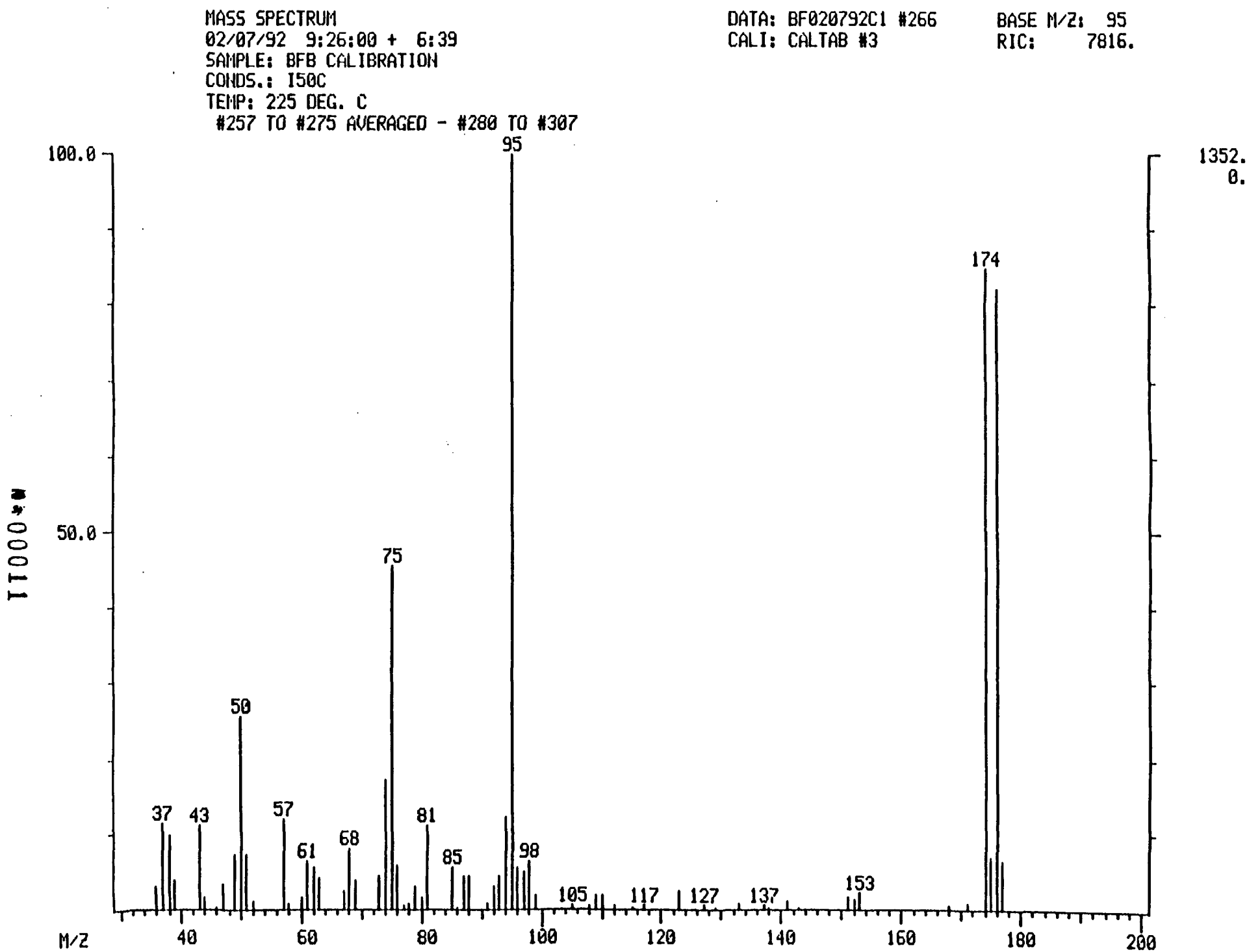
BROMOFLUOROBENZENE

Tuning Report
02/07/92 9:26:00 + 6:39
Instrument: I50C
#257 to #275 averaged - #280 to #307
Case Number:

Data: BF020792C1 # 266
Cali: CALTAB # 3
Analyst: RMS
Laboratory:

Base m/z: 95
RIC: 7816.
Acct. No.: 8506-090
Contract:

m/z	Intensity	% RA	Ion Abundance Criteria Min %	Max %	Mass	Actual	Status
50	349.	25.8	15.0	40.0	95	25.8	PASS
75	618.	45.7	30.0	60.0	95	45.7	PASS
95	1352.	100.0	100.0	---	---	100.0	PASS
96	76.	5.6	5.0	9.0	95	5.6	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	1150.	85.1	50.0	---	95	85.1	PASS
175	93.	6.9	5.0	9.0	174	8.1	PASS
176	1114.	82.4	95.0	101.0	174	96.9	PASS
177	85.	6.3	5.0	9.0	176	7.6	PASS


MASS SPECTRUM
02/07/92 9:26:00 + 6:39
SAMPLE: BFB CALIBRATION
CONDS.: I50C
TEMP: 225 DEG. C
#257 TO #275 AVERAGED - #280 TO #307
DATA: BF020792C1 #266
CALI: CALTAB #3
BASE M/Z: 95
RIC: 7816.
100.0
50.0
1352.
0.
M/Z
40
60
80
100
120
140
160
180
200
95
174
75
50
37
43
57
61
68
81
85
98
105
117
127
137
153

Mass List
02/07/92 9:26:00 + 6:39
Sample: BFB CALIBRATION
Conds.: I50C
#257 to #275 averaged - #280 to #307

Data: BF020792C1 # 266
Cali: CALTAB # 3

Base m/z: 95
RIC: 7816.

36		0.00	0.	Minima	Min	Inten:	0.
177				Maxima	#	0	
Mass		% RA	Inten.	Mass		% RA	Inten.
36?	S	2.96	40.	117	S	0.44	6.
37?	S	11.32	153.	123	S	2.37	32.
38?	S	9.76	132.	127	S	0.52	7.
39?	S	3.99	54.	129	S	0.22	3.
43?	S	11.09	150.	133	S	0.81	11.
44?	S	1.55	21.	137	S	0.52	7.
46?	S	0.22	3.	138	S	0.37	5.
47?	S	3.40	46.	141	S	1.18	16.
49?	S	7.10	96.	143	S	0.22	3.
50?	S	25.81	349.	151	S	1.78	24.
51?	S	7.17	97.	152	S	1.33	18.
52?	S	1.04	14.	153	S	2.14	29.
57?	S	11.76	159.	168	S	0.59	8.
58?	S	0.96	13.	171	S	0.96	13.
59?	S	0.07	1.	174	S	85.06	1150.
60?	S	1.63	22.	175	S	6.88	93.
61?	S	6.36	86.	176	S	82.40	1114.
62?	S	5.55	75.	177	S	6.29	85.
63?	S	4.22	57.				
67?	S	2.37	32.				
68?	S	7.99	108.				
69	S	3.77	51.				
73	S	4.44	60.				
74	S	17.16	232.				
75	S	45.71	618.				
76	S	5.77	78.				
77	S	0.44	6.				
78	S	0.89	12.				
79	S	3.11	42.				
80	S	1.55	21.				
81	S	11.09	150.				
85	S	5.55	75.				
86	S	0.22	3.				
87	S	4.51	61.				
88	S	4.44	60.				
91	S	0.89	12.				
92	S	3.11	42.				
93	S	4.36	59.				
94	S	12.20	165.				
95	S	100.00	1352.				
96	S	5.62	76.				
97	S	5.03	68.				
98	S	6.29	85.				
99	S	2.07	28.				
105	S	0.67	9.				
108	S	0.67	9.				
109	S	2.00	27.				
110	S	1.92	26.				
112	S	0.44	6.				
115	S	0.30	4.				

CONTINUING CALIBRATION CHECK
VOLATILE HSL COMPOUNDS

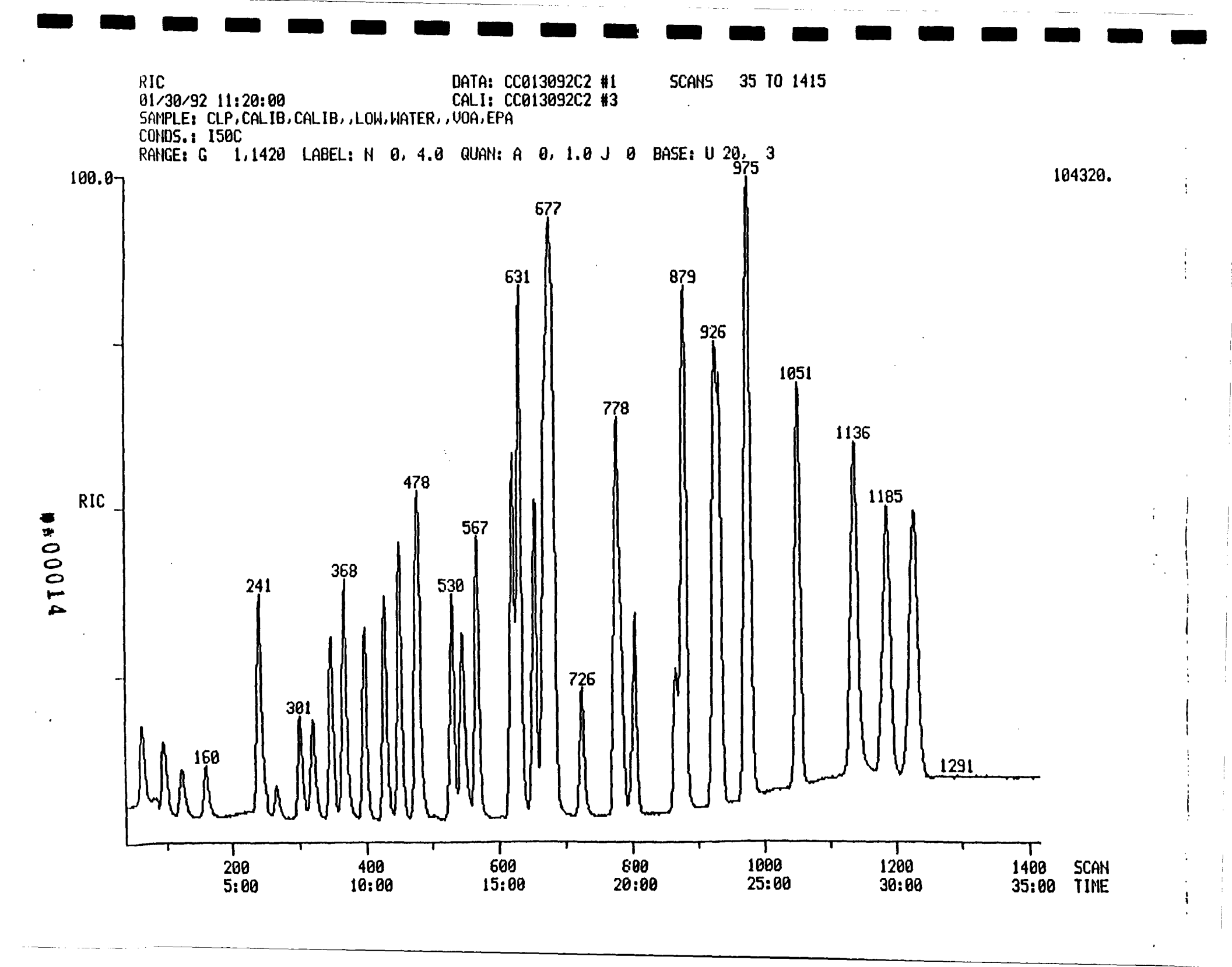
ase No: STAND Region: _____ Calibration Date: 01/30/92
ontractor: AnalytiKEM-Hou Time: 11:20
Contract No: _____ Laboratory ID: CC013092C2
nstrument ID: I50C Initial Cali. Date: 12/31/91

Minimum RF for SPCC is 0.300 (1) Maximum %D for CCC is 25%

ompound	AVE RF	RF(50)	% D	CCC	SPCC
hloromethane	0.919	1.966	-113.9		* *
Bromomethane	1.122	1.160	-3.4		
Vinyl Chloride	1.221	1.252	-2.5	*	
hloroethane	1.114	1.064	4.5		
ethylene Chloride	1.920	1.517	21.0		
Acetone	0.739	0.626	15.3		
arbon Disulfide	3.616	2.950	18.4		
,1-Dichloroethene	1.325	0.998	24.7	*	
1,1-Dichloroethane	3.620	3.473	4.1		* *
trans-1,2-Dichloroethene	1.454	1.519	-4.5		
hloroform	3.371	3.369	0.1	*	
,2-Dichloroethane	2.504	2.362	5.7		
2-Butanone	0.043	0.042	2.3		
,1,1-Trichloroethane	0.514	0.437	15.0		
arbon Tetrachloride	0.408	0.298	27.0		
Vinyl Acetate	0.179	0.096	46.4		
Bromodichloromethane	0.643	0.594	7.6		
,2-Dichloropropane	0.464	0.456	1.7	*	
is-1,3-Dichloropropene	0.620	0.587	5.3		
Trichloroethene	0.357	0.341	4.5		
Dibromochloromethane	0.507	0.461	9.1		
,1,2-Trichloroethane	0.326	0.309	5.2		
enzene	0.943	0.897	4.9		
Trans-1,3-Dichloropropene	0.549	0.509	7.3		
romoform	0.464	0.323	30.4		* *
-Methyl-2-Pentanone	0.439	0.767	-74.7		
2-Hexanone	0.864	0.549	36.5		
Tetrachloroethene	0.351	0.345	1.7		
.1,2,2-Tetrachloroethane	0.786	0.669	14.9		* *
oluene	0.692	0.700	-1.2	*	
Chlorobenzene	0.854	0.884	-3.5		* *
Ethylbenzene	0.425	0.427	-0.5	*	
tyrene	0.822	0.835	-1.6		
ylene (total)	0.483	0.505	-4.6		

RF(50) - Response Factor from daily standard file at 50 ug/l
AVE RF - Average Response Factor from initial calibration Form VI
%D - - - Percent Difference
CCC - - Calibration Check Compounds (*)
SPCC - - System Performance Check Compounds (**)
(1) - - Mininum RF for Bromoform is 0.250

Form VII


RIC
01/30/92 11:20:00
SAMPLE: CLP,CALIB,CALIB,,LOW,WATER,,VOA,EPA
CONDS.: I50C
RANGE: G 1,1420 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: CC013092C2 #1
CALI: CC013092C2 #3
SCANS 35 TO 1415
100.0
104320.
RIC
*00014
160
241
301
368
478
530
567
631
677
726
778
879
926
975
1051
1136
1185
1291
200
5:00
400
10:00
600
15:00
800
20:00
1000
25:00
1200
30:00
1400
35:00
SCAN
TIME

CONTINUING CALIBRATION CHECK
VOLATILE HSL COMPOUNDS

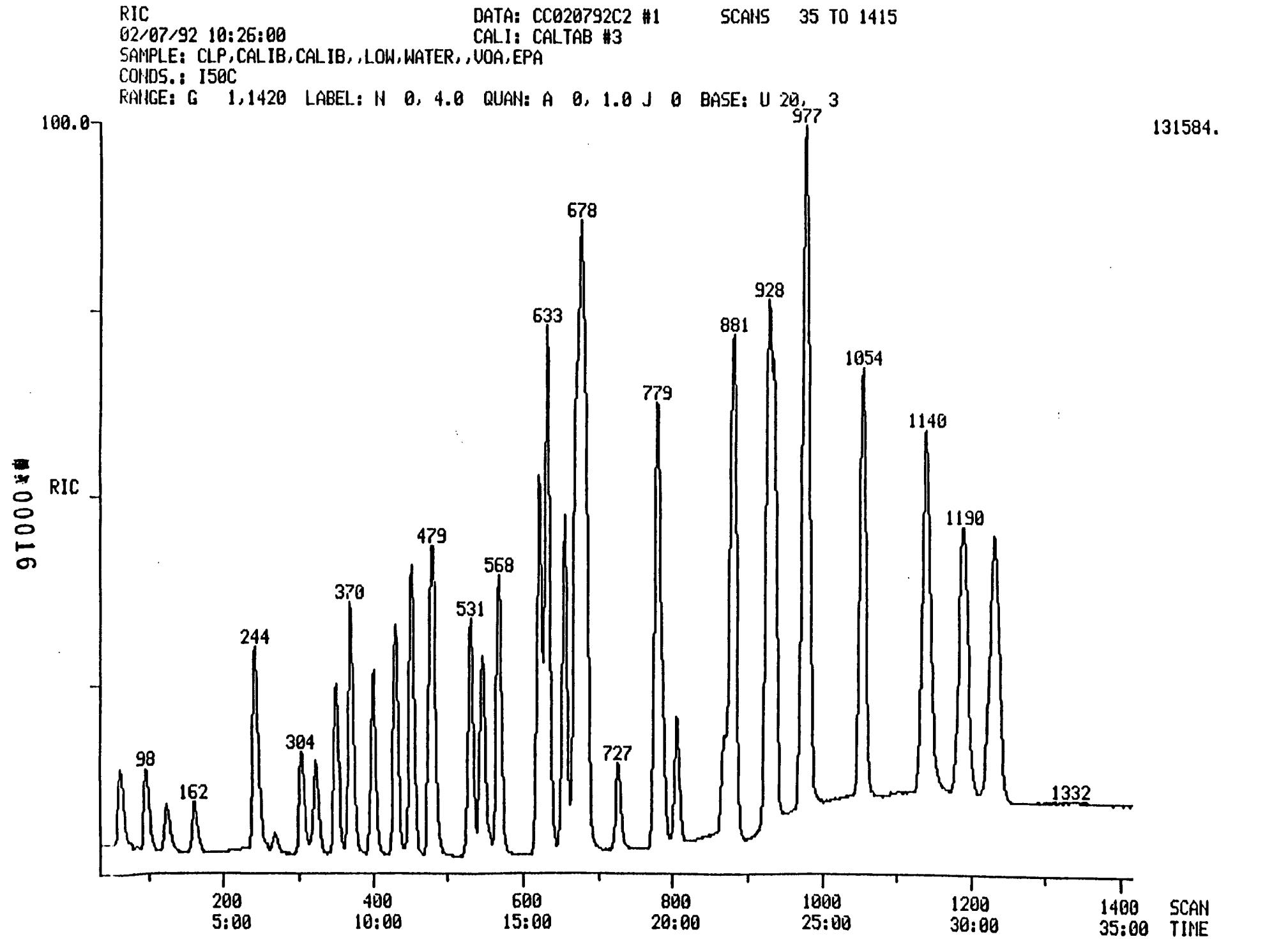
Case No: STAND Region: _____ Calibration Date: 02/07/92
Contractor: AnalytiKEM-Hou Time: 10:26
Contract No: _____ Laboratory ID: CC020792C2
Instrument ID: I50C Initial Cali. Date: 12/31/91

Minimum RF for SPCC is 0.300 (1) Maximum %D for CCC is 25%

Compound	AVE RF	RF(50)	% D	CCC	SPCC
Chloromethane	0.919	1.800	-95.9		* *
Bromomethane	1.122	1.202	-7.1		
Vinyl Chloride	1.221	1.257	-2.9	*	
Chloroethane	1.114	0.995	10.7		
Methylene Chloride	1.920	1.554	19.1		
Acetone	0.739	0.539	27.1		
Carbon Disulfide	3.616	2.922	19.2		
1,1-Dichloroethene	1.325	1.008	23.9	*	
1,1-Dichloroethane	3.620	3.451	4.7		* *
trans-1,2-Dichloroethene	1.454	1.608	-10.6		
Chloroform	3.371	3.679	-9.1	*	
1,2-Dichloroethane	2.504	2.204	12.0		
2-Butanone	0.043	0.027	37.2		
1,1,1-Trichloroethane	0.514	0.421	18.1		
Carbon Tetrachloride	0.408	0.296	27.5		
Vinyl Acetate	0.179	0.067	62.6		
Bromodichloromethane	0.643	0.545	15.2		
1,2-Dichloropropane	0.464	0.401	13.6	*	
cis-1,3-Dichloropropene	0.620	0.530	14.5		
Trichloroethene	0.357	0.335	6.2		
Dibromochloromethane	0.507	0.395	22.1		
1,1,2-Trichloroethane	0.326	0.237	27.3		
Benzene	0.943	0.852	9.7		
trans-1,3-Dichloropropene	0.549	0.413	24.8		
Bromoform	0.464	0.256	44.8		* *
4-Methyl-2-Pentanone	0.439	0.393	10.5		
2-Hexanone	0.864	0.314	63.7		
Tetrachloroethene	0.351	0.354	-0.9		
1,1,2,2-Tetrachloroethane	0.786	0.421	46.4		* *
Toluene	0.692	0.650	6.1	*	
Chlorobenzene	0.854	0.831	2.7		* *
Ethylbenzene	0.425	0.396	6.8	*	
Styrene	0.822	0.741	9.9		
Xylene (total)	0.483	0.464	3.9		

RF(50) - Response Factor from daily standard file at 50 ug/l
AVE RF - Average Response Factor from initial calibration Form VI
%D - - - Percent Difference
CCC - - Calibration Check Compounds (*)
SPCC - - System Performance Check Compounds (**)
(1) - - Mininum RF for Bromoform is 0.250

Form VII


RIC
02/07/92 10:26:00
DATA: CC020792C2 #1
SCANS 35 TO 1415
CALI: CALTAB #3
SAMPLE: CLP,CALIB,CALIB,,LOW,WATER,,VOA,EPA
CONDS.: I50C
RANGE: G 1,1420 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
100.0
131584.
RIC
9100016
977
678
633
928
881
1054
779
1140
1190
479
568
370
531
244
304
98
162
727
1332
200
5:00
400
10:00
600
15:00
800
20:00
1000
25:00
1200
30:00
1400
35:00
SCAN
TIME

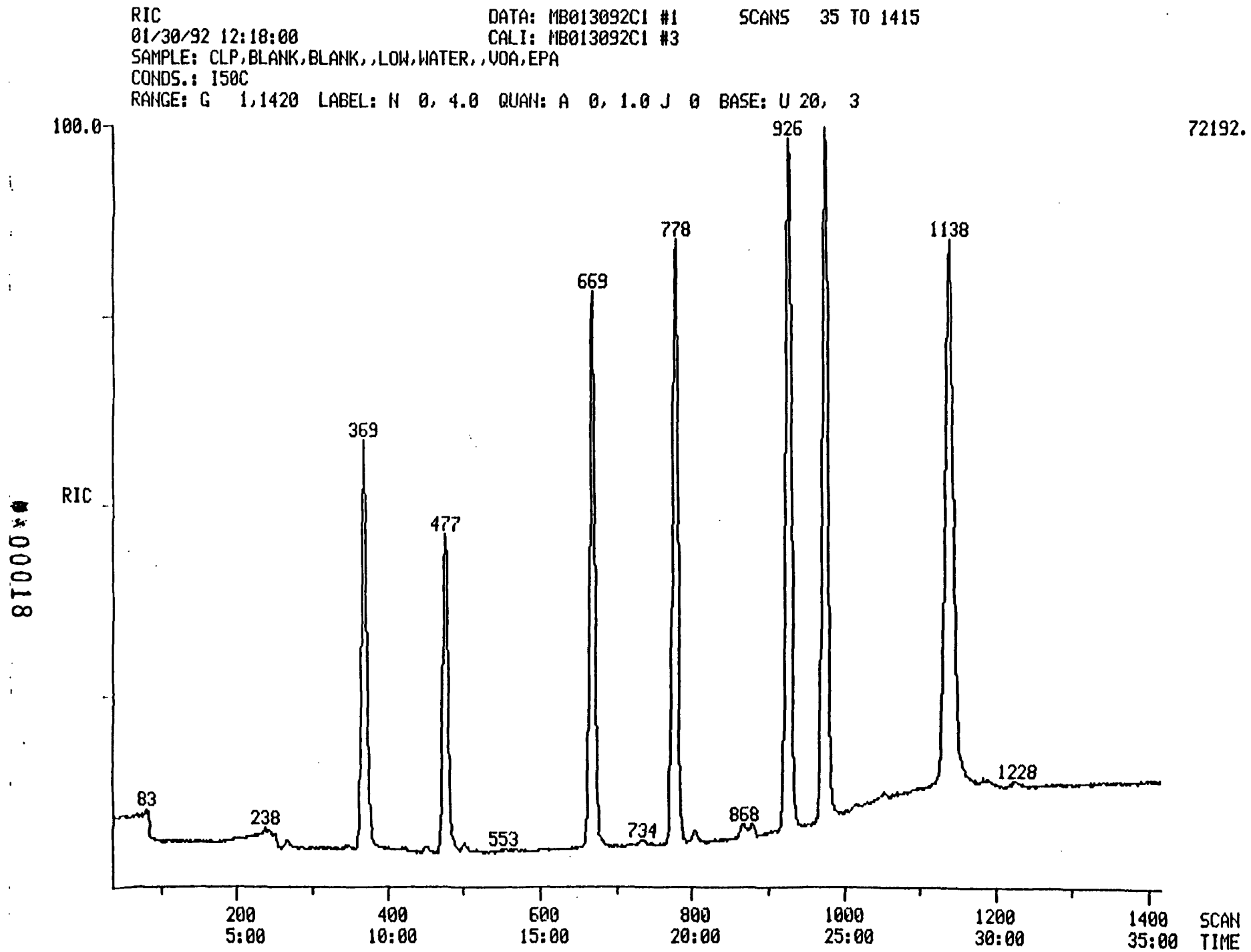
VOLATILE ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	AnalytiKEM-Hou	Concentration:	LOW	Date Extracted:	01/30/92
Lab Sample ID:	MB013092C1	Sample Matrix:	WATER	Date Analyzed:	01/30/92
Client Sample ID:	MB013092C1	Percent Moisture:	100.0	Dilution Factor:	1.0

VOLATILE COMPOUNDS

CAS Number		ug/L		CAS Number		ug/L	
74-87-3	Chloromethane	10	<	78-87-5	1,2-Dichloropropane	5	<
74-83-9	Bromomethane	10	<	10061-01-5	cis-1,3-Dichloropropene	5	<
75-01-4	Vinyl Chloride	10	<	79-01-6	Trichloroethene	5	<
75-00-3	Chloroethane	10	<	124-48-1	Dibromochloromethane	5	<
75-09-2	Methylene Chloride	5	<	79-00-5	1,1,2-Trichloroethane	5	<
67-64-1	Acetone	12		71-43-2	Benzene	5	<
75-15-0	Carbon Disulfide	5	<	10061-02-6	Trans-1,3-Dichloropropene	5	<
75-35-4	1,1-Dichloroethene	5	<	110-75-8	2-Chloroethylvinyl ether	25	<
75-34-3	1,1-Dichloroethane	5	<	75-25-2	Bromoform	5	<
156-60-5	trans-1,2-Dichloroethene	5	<	108-10-1	4-Methyl-2-Pentanone	5	<
67-66-3	Chloroform	5	<	591-78-6	2-Hexanone	10	<
107-06-2	1,2-Dichloroethane	5	<	127-18-4	Tetrachloroethene	5	<
78-93-3	2-Butanone	7	≈	79-34-5	1,1,2,2-Tetrachloroethane	5	<
71-55-6	1,1,1-Trichloroethane	5	<	108-88-3	Toluene	5	<
56-23-5	Carbon Tetrachloride	5	<	108-90-7	Chlorobenzene	5	<
108-05-4	Vinyl Acetate	10	<	100-41-4	Ethylbenzene	5	<
75-27-4	Bromodichloromethane	5	<	100-42-5	Styrene	5	<
				1330-20-7	Xylene (total)	5	<

The Lab ID for data on this page is MB013092C1.
≈ - Reported value is less than the detection limit.
< - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.


RIC
01/30/92 12:18:00
SAMPLE: CLP,BLANK,BLANK,,LOW,WATER,,VOA,EPA
CONDS.: I50C
DATA: MB013092C1 #1
CALI: MB013092C1 #3
SCANS 35 TO 1415
RANGE: G 1,1420 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
100.0
72192.
RIC
926
778
1138
669
369
477
83
238
553
734
868
1228
200
5:00
400
10:00
600
15:00
800
20:00
1000
25:00
1200
30:00
1400
35:00
SCAN
TIME

VOLATILE ORGANICS ANALYSIS DATA SHEET

aboratory Name: AnalytiKEM-Hou
Lab Sample ID: MB020792C1
Client Sample ID: MB020792C1

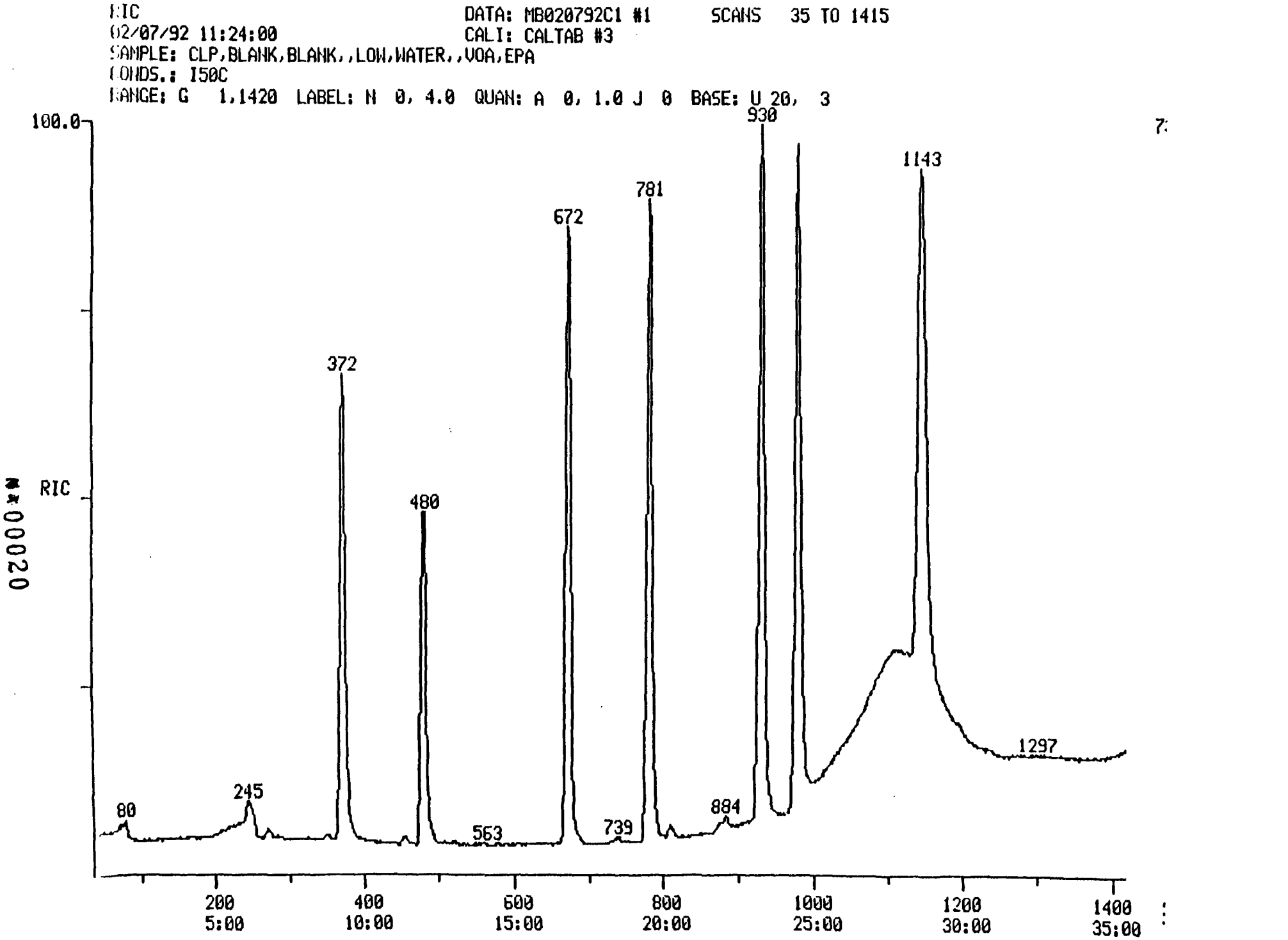
Concentration: LOW
Sample Matrix: WATER
Percent Moisture: 100.0

Date Extracted: 02/07/92
Date Analyzed: 02/07/92
Dilution Factor: 1.0

VOLATILE COMPOUNDS

AS Number		ug/L		CAS Number		ug/L	
4-87-3	Chloromethane	10	<	78-87-5	1,2-Dichloropropane	5	<
74-83-9	Bromomethane	10	<	10061-01-5	cis-1,3-Dichloropropene	5	<
75-01-4	Vinyl Chloride	10	<	79-01-6	Trichloroethene	5	<
5-00-3	Chloroethane	10	<	124-48-1	Dibromochloromethane	5	<
5-09-2	Methylene Chloride	5	<	79-00-5	1,1,2-Trichloroethane	5	<
67-64-1	Acetone	11		71-43-2	Benzene	5	<
5-15-0	Carbon Disulfide	5	<	10061-02-6	Trans-1,3-Dichloropropene	5	<
5-35-4	1,1-Dichloroethene	5	<	110-75-8	2-Chloroethylvinyl ether	25	<
75-34-3	1,1-Dichloroethane	5	<	75-25-2	Bromoform	5	<
156-60-5	trans-1,2-Dichloroethene	5	<	108-10-1	4-Methyl-2-Pentanone	5	<
7-66-3	Chloroform	5	<	591-78-6	2-Hexanone	10	<
07-06-2	1,2-Dichloroethane	5	<	127-18-4	Tetrachloroethene	5	<
78-93-3	2-Butanone	10	<	79-34-5	1,1,2,2-Tetrachloroethane	5	<
1-55-6	1,1,1-Trichloroethane	5	<	108-88-3	Toluene	5	<
6-23-5	Carbon Tetrachloride	5	<	108-90-7	Chlorobenzene	5	<
108-05-4	Vinyl Acetate	10	<	100-41-4	Ethylbenzene	5	<
75-27-4	Bromodichloromethane	5	<	100-42-5	Styrene	5	<
				1330-20-7	Xylene (total)	5	<

The Lab ID for data on this page is MB020792C1.
< - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.


RIC
02/07/92 11:24:00
DATA: MB020792C1 #1
SCANS 35 TO 1415
CALI: CALTAB #3
SAMPLE: CLP,BLANK,BLANK,,LOW,WATER,,VOA,EPA
CONDS.: I50C
RANGE: G 1,1420 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
100.0
RIC
*00020
80
245
372
480
563
672
739
781
884
930
1143
1297
200
5:00
400
10:00
600
15:00
800
20:00
1000
25:00
1200
30:00
1400
35:00

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ANALYTIKEM-HOU Contract: _____

Lab Code: HOUSTON Case No.: A7864 SAS No.: _____ SDG No.: A7864

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	EQUIP-BLANK-	102	100	89	109	0
02	TRIP_BLANK-2	101	98	90	106	0
03	MB013092C1	100	100	100	104	0
04	MB020792C1	100	95	85	106	0

	QC LIMITS
SMC1 (TOL) = Toluene-d8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ANALYTIKEM-HOU Contract: _____

Lab Code: HOUSTON Case No.: A7864 SAS No.: _____ SDG No.: A7864

Level:(low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL)#	SMC2 (BFB)#	SMC3 (DCE)#	OTHER	TOT OUT
01	MBA-2A	113	113	75	113	0

		QC LIMITS
SMC1 (TOL)	= Toluene-d8	(81-117)
SMC2 (BFB)	= Bromofluorobenzene	(74-121)
SMC3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

INITIAL CALIBRATION DATA
VOLATILE HSL COMPOUNDS

ase No: STAND Region: Instrument ID: I50C
Contractor: AnalytiKEM-Hou Calibration Date: 12/31/91
Contract No:

Min AVE RF for SPCC is 0.300 (1) Max %RSD for CCC is 30%

Laboratory ID	IC1231020C1 IC1231050C1	IC1231100C1 IC1231150C1	IC1231200C1				
Compound	RF(20)	RF(50)	RF(100)	RF(150)	RF(200)	AVE RF	% RSD	CCC* SPCC**
Chloromethane	0.710	0.719	1.058	0.973	1.136	0.919	21.3	* *
romomethane	1.310	0.909	1.159	1.033	1.000	1.122	20.9	
inyl Chloride	1.185	1.027	1.384	1.218	1.293	1.221	10.9	*
Chloroethane	1.432	0.913	1.127	1.084	1.014	1.114	17.5	
ethylene Chloride	2.623	1.830	1.940	1.659	1.547	1.920	21.9	
cetone	0.970	1.174	0.432	0.766	0.351	0.739	47.3	
Carbon Disulfide	4.143	2.885	4.346	3.328	3.379	3.616	16.8	
1,1-Dichloroethene	1.726	1.147	1.289	1.251	1.212	1.325	17.4	*
,1-Dichloroethane	4.812	3.112	3.501	3.360	3.317	3.620	18.8	* *
rans-1,2-Dichloroethene	1.752	1.189	1.583	1.406	1.338	1.454	15.0	
Chloroform	4.366	2.930	3.255	3.196	3.107	3.371	16.9	*
,2-Dichloroethane	3.131	2.062	2.783	2.323	2.219	2.504	17.6	
-Butanone	0.053	0.063	0.025	0.050	0.025	0.043	40.0	
1,1,1-Trichloroethane	0.605	0.444	0.593	0.479	0.447	0.514	15.4	
Carbon Tetrachloride	0.478	0.372	0.409	0.407	0.376	0.408	10.4	
inyl Acetate	0.223	0.161	0.184	0.166	0.160	0.179	14.8	
romodichloromethane	0.708	0.570	0.744	0.617	0.574	0.643	12.3	
1,2-Dichloropropane	0.564	0.447	0.455	0.432	0.423	0.464	12.3	*
is-1,3-Dichloropropene	0.709	0.565	0.707	0.573	0.545	0.620	13.1	
richloroethene	0.421	0.343	0.349	0.337	0.335	0.357	10.1	
Dibromochloromethane	0.612	0.483	0.488	0.472	0.482	0.507	11.6	
1,1,2-Trichloroethane	0.408	0.309	0.307	0.302	0.305	0.326	14.0	
enzene	1.083	0.839	1.068	0.888	0.837	0.943	13.0	
rans-1,3-Dichloropropene	0.622	0.494	0.626	0.510	0.491	0.549	12.6	
2-Chloroethylvinyl ether	0.416	0.325	0.318	0.326	0.327	0.342	12.1	
romoform	0.519	0.406	0.509	0.454	0.433	0.464	10.5	* *
-Methyl-2-Pentanone	0.503	0.439	0.411	0.419	0.421	0.439	8.5	
2-Hexanone	1.037	0.870	0.781	0.911	0.722	0.864	14.1	
Tetrachloroethene	0.416	0.336	0.349	0.331	0.322	0.351	10.8	
,1,2,2-Tetrachloroethane	0.867	0.753	0.844	0.749	0.715	0.786	8.4	* *
oluene	0.721	0.628	0.810	0.665	0.637	0.692	10.9	*
Chlorobenzene	0.916	0.825	0.876	0.833	0.819	0.854	4.8	* *
thylbenzene	0.440	0.388	0.493	0.414	0.392	0.425	10.1	*
tyrene	0.814	0.757	0.985	0.774	0.782	0.822	11.3	
Xylene (total)	0.491	0.440	0.586	0.443	0.453	0.483	12.7	
Toluene-d8	0.996	1.117	1.130	1.106	1.121	1.094	5.1	
romofluorobenzene	0.736	0.733	0.724	0.741	0.749	0.737	1.3	
,2-Dichloroethane-d4	2.205	1.970	2.081	2.199	2.268	2.145	5.5	
Benzene-d6	0.764	1.006	0.968	0.977	0.988	0.941	10.6	

Response Factor (number is the amount of ug/L)
AVE RF - Average Response Factor
%RSD - - Percent Relative Standard Deviation
CCC - - Calibration Check Compounds (*)
SPCC - - System Performance Check Compounds (**)
(1) - - Minimum AVE RF for Bromoform is 0.250

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Laboratory Name: AnalytiKEM-Hou
Lab Sample ID: A7864-33
Client Sample ID: MBA-2A

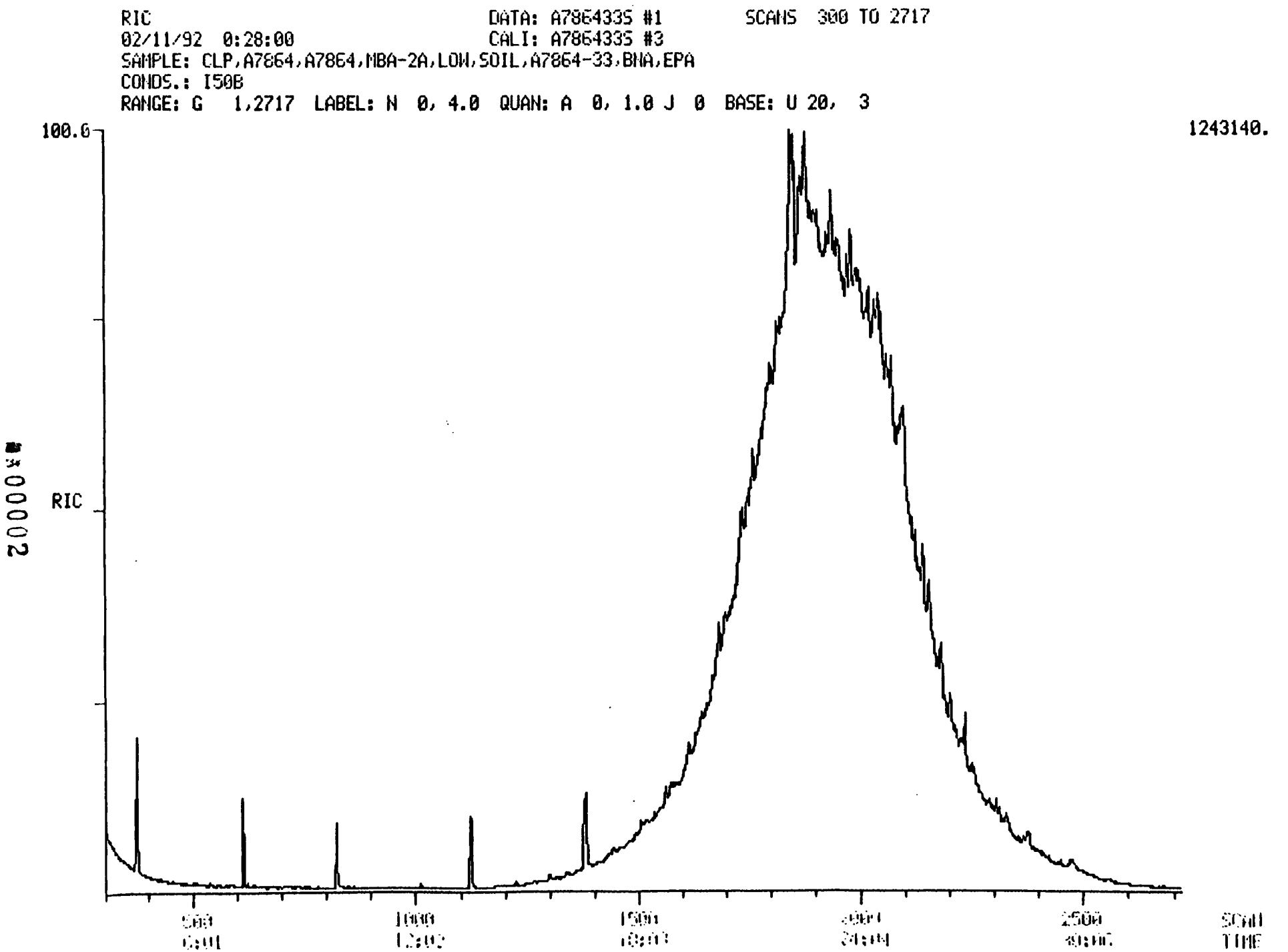
Concentration: LOW
Sample Matrix: SOIL
Percent Moisture: 6.0

Date Extracted: 02/10/92
Date Analyzed: 02/11/92
Dilution Factor: 20

SEMIVOLATILE COMPOUNDS

CAS Number		ug/Kg		CAS Number		ug/Kg	
108-95-2	Phenol	7000	<	606-20-2	2,6-Dinitrotoluene	7000	<
62-53-3	Aniline	7000	<	99-09-2	3-Nitroaniline	34000	<
111-44-4	bis(2-Chloroethyl)Ether	7000	<	83-32-9	Acenaphthene	7000	<
95-57-8	2-Chlorophenol	7000	<	51-28-5	2,4-Dinitrophenol	34000	<
541-73-1	1,3-Dichlorobenzene	7000	<	100-02-7	4-Nitrophenol	34000	<
106-46-7	1,4-Dichlorobenzene	7000	<	132-64-9	Dibenzofuran	7000	<
100-51-6	Benzyl Alcohol	7000	<	121-14-2	2,4-Dinitrotoluene	7000	<
95-50-1	1,2-Dichlorobenzene	7000	<	84-66-2	Diethylphthalate	7000	<
95-48-7	2-Methylphenol	7000	<	7005-72-3	4-Chlorophenyl phenyl ether	7000	<
39638-32-9	bis(2-Chloroisopropyl)Ether	7000	<	86-73-7	Fluorene	7000	<
106-44-5	4-Methylphenol	7000	<	100-01-6	4-Nitroaniline	34000	<
621-64-7	N-Nitroso-Di-n-Propylamine	7000	<	534-52-1	4,6-Dinitro-2-Methylphenol	34000	<
67-72-1	Hexachloroethane	7000	<	86-30-6	N-Nitrosodiphenylamine (1)	7000	<
98-95-3	Nitrobenzene	7000	<	101-55-3	4-Bromophenyl phenyl ether	7000	<
78-59-1	Isophorone	7000	<	118-74-1	Hexachlorobenzene	7000	<
88-75-5	2-Nitrophenol	7000	<	87-86-5	Pentachlorophenol	34000	<
105-67-9	2,4-Dimethylphenol	7000	<	85-01-8	Phenanthrene	7000	<
65-85-0	Benzoic Acid	34000	<	120-12-7	Anthracene	7000	<
111-91-1	bis(2-Chloroethoxy)Methane	7000	<	84-74-2	Di-n-Butylphthalate	7000	<
120-83-2	2,4-Dichlorophenol	7000	<	206-44-0	Fluoranthene	7000	<
120-82-1	1,2,4-Trichlorobenzene	7000	<	129-00-0	Pyrene	7000	<
91-20-3	Naphthalene	7000	<	85-68-7	Butylbenzylphthalate	7000	<
106-47-8	4-Chloroaniline	7000	<	91-94-1	3,3'-Dichlorobenzidine	14000	<
87-68-3	Hexachlorobutadiene	7000	<	56-55-3	Benzo(a)Anthracene	7000	<
59-50-7	4-Chloro-3-Methylphenol	7000	<	117-81-7	bis(2-Ethylhexyl)Phthalate	7000	<
91-57-6	2-Methylnaphthalene	7000	<	218-01-9	Chrysene	7000	<
77-47-4	Hexachlorocyclopentadiene	7000	<	117-84-0	Di-n-Octyl Phthalate	7000	<
88-06-2	2,4,6-Trichlorophenol	7000	<	205-99-2	Benzo(b)Fluoranthene	7000	<
95-95-4	2,4,5-Trichlorophenol	34000	<	207-08-9	Benzo(k)Fluoranthene	7000	<
91-58-7	2-Chloronaphthalene	7000	<	50-32-8	Benzo(a)Pyrene	7000	<
88-74-4	2-Nitroaniline	34000	<	193-39-5	Indeno(1,2,3-cd)Pyrene	7000	<
131-11-3	Dimethyl Phthalate	7000	<	53-70-3	Dibenz(a,h)Anthracene	7000	<
208-96-8	Acenaphthylene	7000	<	191-24-2	Benzo(g,h,i)Perylene	7000	<

The Lab ID for data on this page is A786433S.
< - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.


RIC
02/11/92 0:28:00
DATA: A7864335 #1
CALI: A7864335 #3
SCANS 300 TO 2717
SAMPLE: CLP,A7864,A7864,MBA-2A,LOW,SOIL,A7864-33,BNA,EPA
CONDS.: I50B
RANGE: G 1,2717 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
100.0
1243140.
RIC
20000
SCAN
TIME

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

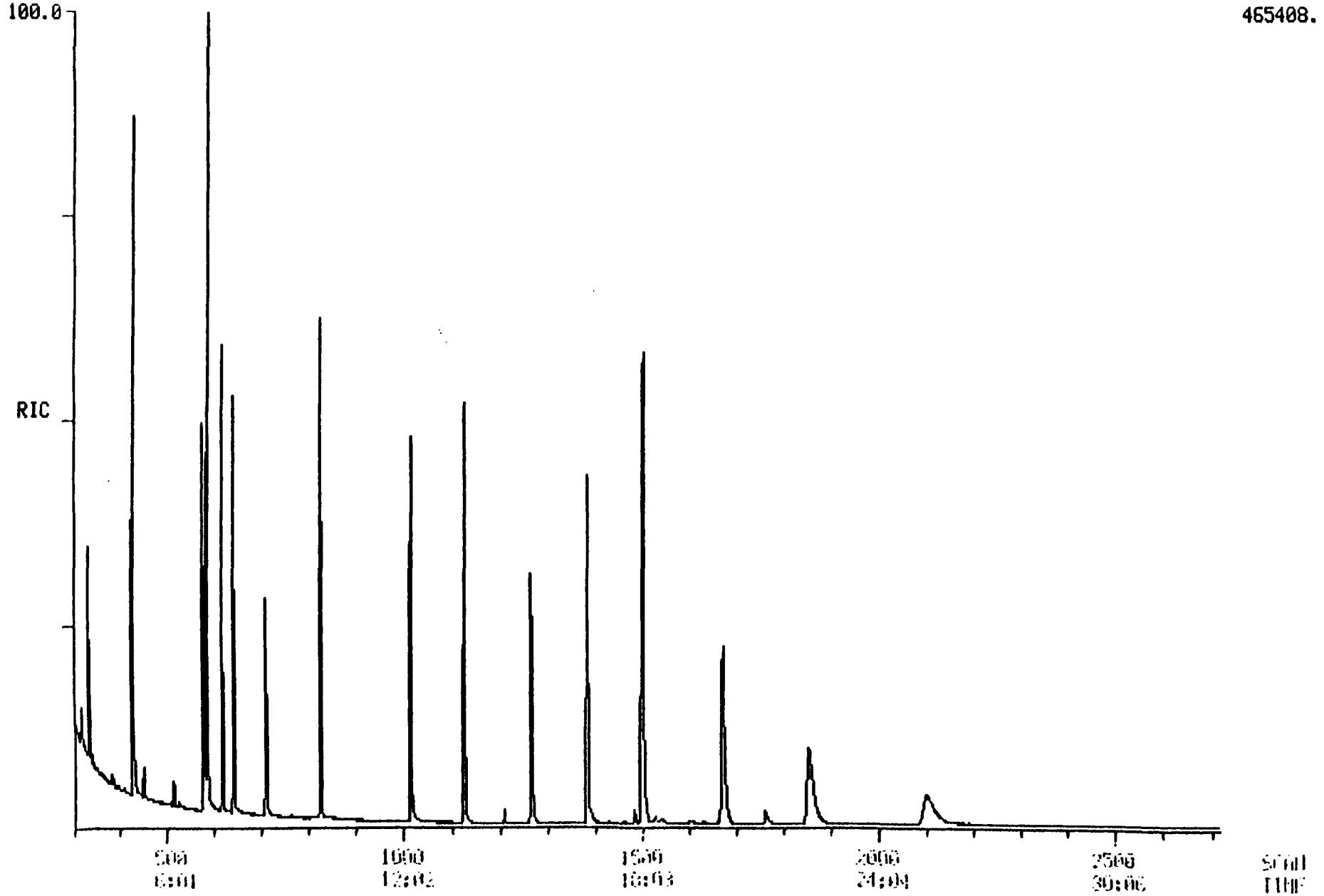
Laboratory Name: AnalytiKEM-Hou | Concentration: LOW | Date Extracted: 02/04/92
Lab Sample ID: A7864-37 | Sample Matrix: WATER | Date Analyzed: 02/06/92
Client Sample ID: EQ BLANK-2 | Percent Moisture: 100.0 | Dilution Factor: 1.0

SEMIVOLATILE COMPOUNDS

CAS Number		ug/L		CAS Number		ug/L	
108-95-2	Phenol	10	<	606-20-2	2,6-Dinitrotoluene	10	<
62-53-3	Aniline	10	<	99-09-2	3-Nitroaniline	52	<
111-44-4	bis(2-Chloroethyl)Ether	10	<	83-32-9	Acenaphthene	10	<
95-57-8	2-Chlorophenol	10	<	51-28-5	2,4-Dinitrophenol	52	<
541-73-1	1,3-Dichlorobenzene	10	<	100-02-7	4-Nitrophenol	52	<
106-46-7	1,4-Dichlorobenzene	10	<	132-64-9	Dibenzofuran	10	<
100-51-6	Benzyl Alcohol	10	<	121-14-2	2,4-Dinitrotoluene	10	<
95-50-1	1,2-Dichlorobenzene	10	<	84-66-2	Diethylphthalate	10	<
95-48-7	2-Methylphenol	10	<	7005-72-3	4-Chlorophenyl phenyl ether	10	<
39638-32-9	bis(2-Chloroisopropyl)Ether	10	<	86-73-7	Fluorene	10	<
106-44-5	4-Methylphenol	10	<	100-01-6	4-Nitroaniline	52	<
621-64-7	N-Nitroso-Di-n-Propylamine	10	<	534-52-1	4,6-Dinitro-2-Methylphenol	52	<
67-72-1	Hexachloroethane	10	<	86-30-6	N-Nitrosodiphenylamine (1)	10	<
98-95-3	Nitrobenzene	10	<	101-55-3	4-Bromophenyl phenyl ether	10	<
78-59-1	Isophorone	10	<	118-74-1	Hexachlorobenzene	10	<
88-75-5	2-Nitrophenol	10	<	87-86-5	Pentachlorophenol	52	<
105-67-9	2,4-Dimethylphenol	10	<	85-01-8	Phenanthrene	10	<
65-85-0	Benzoic Acid	52	<	120-12-7	Anthracene	10	<
111-91-1	bis(2-Chloroethoxy)Methane	10	<	84-74-2	Di-n-Butylphthalate	66	B
120-83-2	2,4-Dichlorophenol	10	<	206-44-0	Fluoranthene	10	<
120-82-1	1,2,4-Trichlorobenzene	10	<	129-00-0	Pyrene	10	<
91-20-3	Naphthalene	10	<	85-68-7	Butylbenzylphthalate	10	B¼
106-47-8	4-Chloroaniline	10	<	91-94-1	3,3'-Dichlorobenzidine	21	<
87-68-3	Hexachlorobutadiene	10	<	56-55-3	Benzo(a)Anthracene	10	<
59-50-7	4-Chloro-3-Methylphenol	10	<	117-81-7	bis(2-Ethylhexyl)Phthalate	10	<
91-57-6	2-Methylnaphthalene	10	<	218-01-9	Chrysene	10	<
77-47-4	Hexachlorocyclopentadiene	10	<	117-84-0	Di-n-Octyl Phthalate	10	<
88-06-2	2,4,6-Trichlorophenol	10	<	205-99-2	Benzo(b)Fluoranthene	10	<
95-95-4	2,4,5-Trichlorophenol	52	<	207-08-9	Benzo(k)Fluoranthene	10	<
91-58-7	2-Chloronaphthalene	10	<	50-32-8	Benzo(a)Pyrene	10	<
88-74-4	2-Nitroaniline	52	<	193-39-5	Indeno(1,2,3-cd)Pyrene	10	<
131-11-3	Dimethyl Phthalate	10	<	53-70-3	Dibenz(a,h)Anthracene	10	<
208-96-8	Acenaphthylene	10	<	191-24-2	Benzo(g,h,i)Perylene	10	<

The Lab ID for data on this page is A786437S.
B - Compound was detected in the QC blank.
¼ - Reported value is less than the detection limit.
< - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

RIC DATA: A7864375 #1 SCANS 300 TO 2717
02/06/92 21:55:00 CALI: A7864375 #3
SAMPLE: CLP,A7864,A7864,EQUIP BLANK-2,LOW,WATER,A7864-37,BHA,EPA
CONDS.: I50B
RANGE: G 1,2717 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



00004

BROMOFLUOROBENZENE

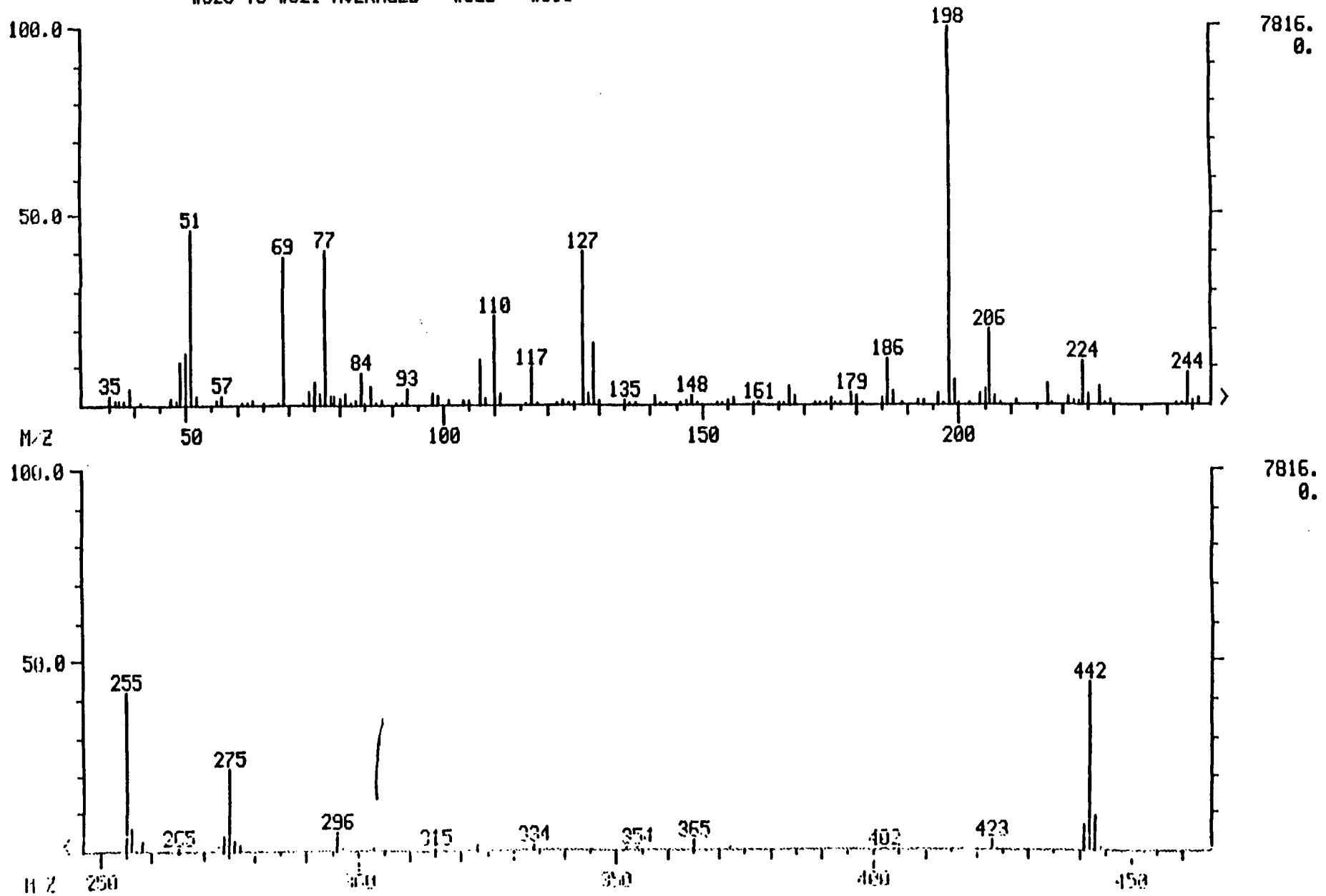
Tuning Report — Data: DF020692E1 # 520 — Base m/z: 198
DF020692 15:09:00 + 6:16 — Cali: CALTAB # 3 — RIC: 58432.
Instrument: I50B — Analyst: BPB — Acct. No.: 8506-091
#520 to #521 averaged - #529
Case Number: ANALYTIKEM — Laboratory: ANALYTIKEM — Contract: -
Comments: SW 846:8270 ION ABUNDANCE CRITERIA

			Ion Abundance Criteria				
m/z	Intensity	% RA	Min %	Max %	Mass	Actual	Status
51	3604.	46.11	30.00	60.00	198	46.11	PASS
68	44.	0.56	---	2.00	69	1.45	PASS
69	3028.	38.74	---	100.00	198	38.74	PASS
70	16.	0.20	---	2.00	69	0.53	PASS
127	3156.	40.38	40.00	60.00	198	40.38	PASS
197	26.	0.33	---	1.00	198	0.33	PASS
198	7816.	100.00	100.0	---	---	100.00	PASS
199	511.	6.54	5.00	9.00	198	6.54	PASS
275	1664.	21.29	10.00	30.00	198	21.29	PASS
365	175.	2.24	1.00	---	198	2.24	PASS
441	492.	6.29	---	100.00	443	72.04	PASS
442	3456.	44.22	40.00	---	198	44.22	PASS
443	683.	8.74	17.00	23.00	442	19.76	PASS

MASS SPECTRUM
02/06/92 15:09:00 + 6:16
SAMPLE: DFTPP 50 NG
CONDS.: I50B
TEMP: 227 DEG. C
#520 TO #521 AVERAGED - #529 - #513

DATA: DF020692E1 #520
CALI: CALTAB #3

BASE M/Z: 198
RIC: 58432.



Mass List Data: DF020692E1 # 520 Base m/z: 198
02/06/92 15:09:00 + 6:16 Cali: CALTAB # 3 RIC: 58432.
Sample: DFTPP 50 NG
Comes.: I50B
#520 to #521 averaged - #529

35 0.00 0. Minima Min Inten: 62.
444 Maxima # 0

Mass		% RA	Inten.	Mass		% RA	Inten.
35?	S	2.61	204.	156	S	1.77	138.
36?	S	1.02	80.	161	S	0.90	70.
37?	S	1.00	78.	167	S	4.81	376.
38?	S	1.42	111.	168	S	2.42	189.
39?	S	4.13	323.	175	S	1.55	121.
47?	S	1.59	124.	177	S	0.86	67.
48?	S	1.24	97.	179	S	2.93	229.
49?	S	11.54	902.	180	S	2.20	172.
50?	S	13.77	1076.	181	S	0.84	66.
51?	S	46.11	3604.	185	S	1.54	120.
52?	S	2.12	166.	186	S	11.76	919.
56?	S	1.10	86.	187	S	3.53	276.
57?	S	2.52	197.	192	S	1.11	87.
63?	S	1.20	94.	193	S	0.93	73.
69	S	38.74	3028.	196	S	2.70	211.
74	S	3.77	295.	198	S	100.00	7816.
75	S	5.74	449.	199	S	6.54	511.
76	S	2.93	229.	204	S	2.78	217.
77	S	40.63	3176.	205	S	4.45	348.
78	S	2.67	209.	206	S	19.60	1532.
79	S	2.49	195.	207	S	2.65	207.
80	S	1.77	138.	211	S	1.01	79.
81	S	2.97	232.	217	S	5.26	411.
83	S	1.09	85.	221	S	5.96	466.
84	S	8.34	652.	222	S	1.39	109.
85	S	0.79	62.	223	S	1.42	111.
86	S	5.00	391.	224	S	11.51	900.
88	S	1.48	116.	225	S	2.80	219.
93	S	4.20	328.	227	S	4.52	353.
98	S	3.25	254.	229	S	1.04	81.
99	S	2.66	208.	244	S	8.58	671.
101	S	1.39	109.	245	S	1.36	106.
104	S	0.95	74.	246	S	1.57	123.
105	S	1.02	80.	255	S	41.97	3280.
107	S	11.87	928.	256	S	5.92	463.
108	S	1.84	144.	258	S	2.41	188.
110	S	23.08	1804.	273	S	1.38	108.
111	S	3.25	254.	274	S	4.30	336.
117	S	9.83	768.	275	S	21.29	1664.
122	S	0.84	66.	276	S	2.96	231.
123	S	1.15	90.	277	S	1.62	127.
127	S	40.38	3156.	296	S	4.72	369.
128	S	3.19	249.	323	S	1.88	147.
129	S	16.45	1286.	334	S	1.04	81.
130	S	1.39	109.	365	S	2.24	175.
135	S	1.39	109.	423	S	2.21	173.
141	S	2.11	165.	441	S	6.29	492.
147	S	1.07	84.	442	S	44.22	3456.
148	S	2.65	207.	443	S	8.74	683.
155	S	1.16	91.	444	S	0.83	65.

BROMOFLUOROBENZENE

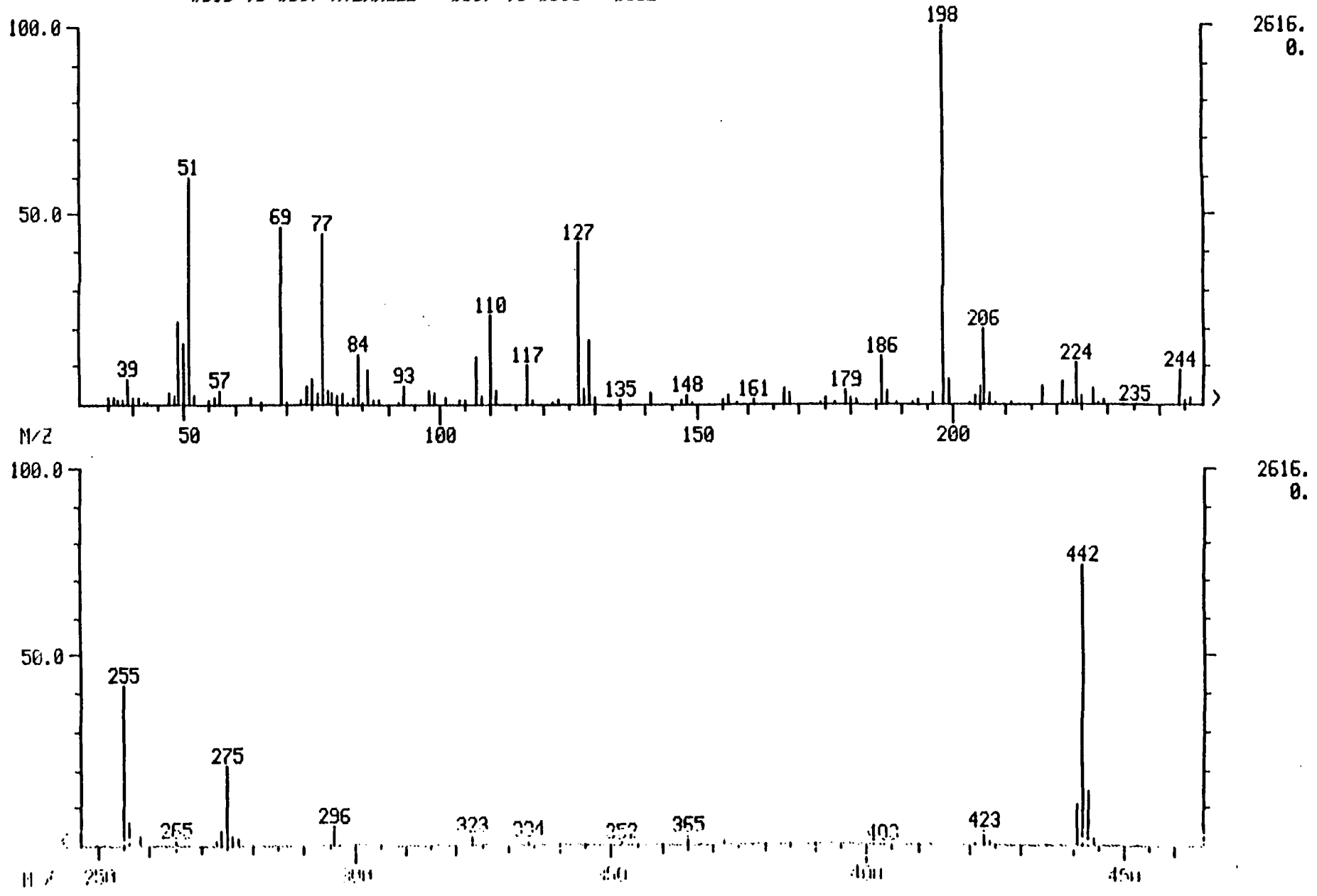
Tuning Report — Data: DF021092B1 # 516 — Base m/z: 198
[illegible]10/92 14:06:00 + 6:13 — Cali: CALTAB # 3 — RIC: 22208.
Instrument: I50B — Analyst: BPB — Acct. No.: 8506-091
#515 to #517 averaged - #517 to #518 - #502
Case Number: ANALYTIKEM — Laboratory: ANALYTIKEM — Contract: -
Comments: SW 846:8270 ION ABUNDANCE CRITERIA

			Ion Abundance Criteria				
m/z	Intensity	% RA	Min %	Max %	Mass	Actual	Status
51	1562.	59.71	30.00	60.00	198	59.71	PASS
68	0.	0.00	---	2.00	69	0.00	PASS
69	1226.	46.87	---	100.00	198	46.87	PASS
70	8.	0.31	---	2.00	69	0.65	PASS
127	1110.	42.43	40.00	60.00	198	42.43	PASS
197	0.	0.00	---	1.00	198	0.00	PASS
198	2616.	100.00	100.0	---	---	100.00	PASS
199	170.	6.50	5.00	9.00	198	6.50	PASS
275	542.	20.72	10.00	30.00	198	20.72	PASS
365	65.	2.48	1.00	---	198	2.48	PASS
441	276.	10.55	---	100.00	443	72.44	PASS
442	1950.	74.54	40.00	---	198	74.54	PASS
443	381.	14.56	17.00	23.00	442	19.54	PASS

MASS SPECTRUM
02/10/92 14:06:00 + 6:13
SAMPLE: DFTPP 50 NG
CONDS.: I50B
TEMP: 227 DEG. C
#515 TO #517 AVERAGED - #517 TO #518 - #502

DATA: DF021092B1 #516
CALI: CALTAB #3

BASE M/Z: 198
RIC: 22208.



Mass List
10/92 14:06:00 + 6:13
Sample: DFTPP 50 NG
Comps.: I50B
#515 to #517 averaged - #517 to #518 - #502

Data: DF021092B1 # 516
Cali: CALTAB # 3

Base m/z: 198
RIC: 22208.

25		0.00	0.	Minima	Min	Inten:	25.
444				Maxima	#	0	
Mass		% RA	Inten.	Mass		% RA	Inten.
35?	S	1.83	48.	155	S	1.49	39.
36?	S	1.95	51.	156	S	2.18	57.
37?	S	1.22	32.	161	S	1.49	39.
38?	S	1.45	38.	167	S	4.24	111.
39?	S	6.42	168.	168	S	2.71	71.
40?	S	1.53	40.	175	S	1.64	43.
41?	S	1.68	44.	179	S	3.40	89.
47?	S	3.21	84.	180	S	1.87	49.
48?	S	2.18	57.	181	S	1.03	27.
49?	S	21.60	565.	185	S	1.34	35.
50?	S	16.28	426.	186	S	12.31	322.
51?	S	59.71	1562.	187	S	3.56	93.
52?	S	2.56	67.	193	S	1.30	34.
55?	S	1.03	27.	196	S	3.10	81.
56?	S	1.87	49.	198	S	100.00	2616.
57?	S	3.33	87.	199	S	6.50	170.
63?	S	1.80	47.	204	S	2.56	67.
69	S	46.87	1226.	205	S	4.70	123.
74	S	5.01	131.	206	S	19.69	515.
75	S	6.65	174.	207	S	3.17	83.
76	S	3.06	80.	217	S	5.08	133.
77	S	45.03	1178.	221	S	5.93	155.
78	S	3.40	89.	223	S	1.26	33.
79	S	2.71	71.	224	S	10.93	286.
80	S	2.52	66.	225	S	2.60	68.
81	S	3.25	85.	227	S	4.20	110.
83	S	1.87	49.	229	S	0.99	26.
84	S	13.15	344.	244	S	8.94	234.
86	S	9.17	240.	245	S	1.11	29.
87	S	0.99	26.	246	S	1.80	47.
93	S	4.93	129.	255	S	41.97	1098.
98	S	3.67	96.	256	S	6.12	160.
99	S	2.79	73.	258	S	2.48	65.
101	S	1.80	47.	265	S	0.99	26.
105	S	1.19	31.	273	S	1.38	36.
107	S	12.31	322.	274	S	4.09	107.
108	S	2.10	55.	275	S	20.72	542.
110	S	23.59	617.	276	S	3.17	83.
111	S	3.33	87.	277	S	1.72	45.
117	S	9.94	260.	296	S	5.08	133.
118	S	1.11	29.	323	S	2.29	60.
123	S	1.19	31.	334	S	1.41	37.
127	S	42.43	1110.	365	S	2.48	65.
128	S	3.94	103.	423	S	3.75	98.
129	S	16.48	431.	441	S	10.55	276.
130	S	1.76	46.	442	S	74.54	1950.
135	S	1.45	38.	443	S	14.56	381.
141	S	2.79	73.	444	S	1.61	42.
147	S	1.22	32.				
148	S	2.37	62.				

CONTINUING CALIBRATION CHECK
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

Case No: STAND Region: _____ Calibration Date: 02/06/92
Contractor: AnalytiKEM-Hou Time: 15:26
Contract No: _____ Laboratory ID: CC020692B1
Instrument ID: I50B Initial Cali. Date: 01/01/92

Minimum RF for SPCC is 0.050 Maximum %D for CCC is 30%

Compound		AVE RF	RF(50)	% D	CCC	SPCC
Phenol		1.876	1.459	22.2	*	
bis(2-Chloroethyl)Ether		1.443	1.208	16.3		
2-Chlorophenol		1.374	1.124	18.2		
1,3-Dichlorobenzene		1.350	1.805	-33.7		
1,4-Dichlorobenzene		1.418	1.713	-20.8	*	
Benzyl Alcohol		0.812	0.662	18.5		
1,2-Dichlorobenzene		1.284	1.607	-25.2		
2-Methylphenol		1.165	1.136	2.5		
bis(2-Chloroisopropyl)Ether		2.130	1.349	36.7		
4-Methylphenol		1.096	1.075	1.9		
N-Nitroso-Di-n-Propylamine		1.113	1.264	-13.6		* *
Hexachloroethane		0.620	0.982	-58.4		
Nitrobenzene		0.454	0.341	24.9		
Isophorone		0.539	0.580	-7.6		
2-Nitrophenol		0.189	0.155	18.0	*	
2,4-Dimethylphenol		0.321	0.271	15.6		
Benzoic Acid	x	0.086	0.028	67.4		
bis(2-Chloroethoxy)Methane		0.501	0.402	19.8		
2,4-Dichlorophenol		0.266	0.228	14.3	*	
1,2,4-Trichlorobenzene		0.294	0.376	-27.9		
Naphthalene		0.937	1.093	-16.6		
4-Chloroaniline		0.175	0.093	46.9		
Hexachlorobutadiene		0.185	0.239	-29.2	*	
4-Chloro-3-Methylphenol		0.282	0.226	19.9	*	
2-Methylnaphthalene		0.536	0.782	-45.9		
Hexachlorocyclopentadiene		0.203	0.193	4.9		* *
2,4,6-Trichlorophenol		0.375	0.274	26.9	*	
2,4,5-Trichlorophenol	x	0.306	0.308	-0.7		
2-Chloronaphthalene		1.037	1.136	-9.5		
2-Nitroaniline	x	0.466	0.233	50.0		
Dimethyl Phthalate		1.081	1.095	-1.3		
Acenaphthylene		1.589	1.555	2.1		
2,6-Dinitrotoluene		0.283	0.331	-17.0		
3-Nitroaniline	x	0.208	0.244	-17.3		
Acenaphthene		1.018	0.962	5.5	*	
2,4-Dinitrophenol	x	0.116	0.088	24.1		* *
4-Nitrophenol	x	0.154	0.057	63.0		* *

RF(50) - Response Factor from daily standard file at concentration indicated (50 total nanograms)
AVE RF - Average Response Factor from initial calibration Form VI
%D - - - Percent Difference
x - - - Due to low response analyze at 80 total nanograms
CCC - - Calibration Check Compounds (*)
SPCC - - System Performance Check Compounds (**)

CONTINUING CALIBRATION CHECK
SEMIVOLATILE HSL COMPOUNDS
(Page 2)

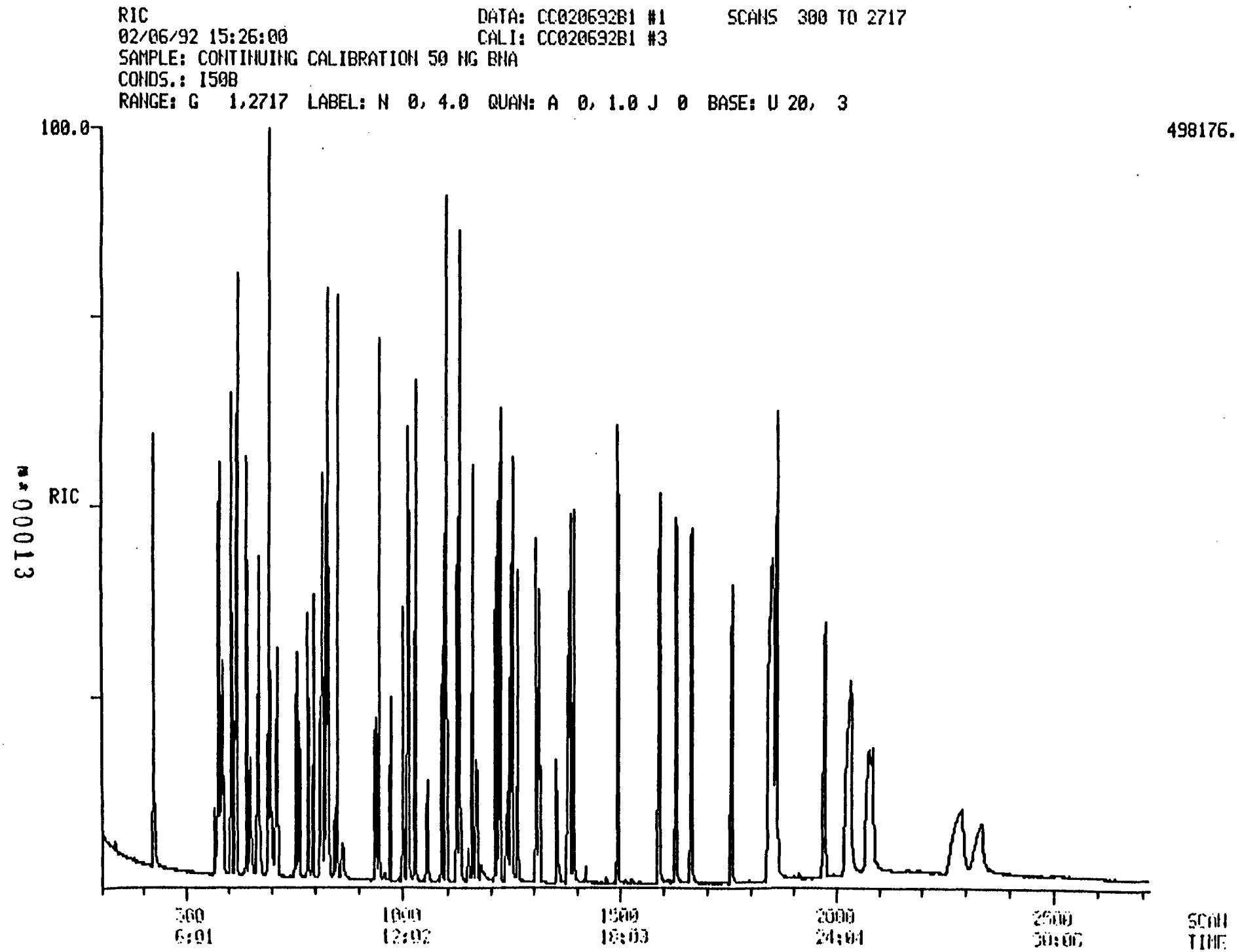
Case No: STAND Region: _____ Calibration Date: 02/06/92
Contractor: AnalytiKEM-Hou Time: 15:26
Contract No: _____ Laboratory ID: CC020692B1
Instrument ID: I50B Initial Cali. Date: 01/01/92

Minimum RF for SPCC is 0.050 Maximum %D for CCC is 30%

Compound		AVE RF	RF(50)	% D	CCC	SPCC
Dibenzofuran		1.372	1.396	-1.7		
2,4-Dinitrotoluene		0.324	0.316	2.5		
Diethylphthalate		1.244	1.084	12.9		
4-Chlorophenyl phenyl ether		0.688	0.617	10.3		
Fluorene		1.262	1.113	11.8		
4-Nitroaniline	x	0.219	0.118	46.1		
4,6-Dinitro-2-Methylphenol	x	0.125	0.099	20.8		
N-Nitrosodiphenylamine (1)		0.455	0.460	-1.1	*	
4-Bromophenyl phenyl ether		0.234	0.230	1.7		
Hexachlorobenzene		0.279	0.290	-3.9		
Pentachlorophenol	x	0.145	0.118	18.6	*	
Phenanthrene		0.985	0.998	-1.3		
Anthracene		0.911	0.946	-3.8		
Di-n-Butylphthalate		1.361	1.466	-7.7		
Fluoranthene		1.046	1.094	-4.6	*	
Pyrene		0.699	1.162	-66.2		
Butylbenzylphthalate		0.435	0.670	-54.0		
3,3'-Dichlorobenzidine		0.249	0.676	-171.5		
Benzo(a)Anthracene		0.896	1.047	-16.9		
Bis(2-Ethylhexyl)Phthalate		0.737	0.983	-33.4		
Chrysene		0.791	1.111	-40.5		
Di-n-Octyl Phthalate		1.316	1.627	-23.6	*	
Benzo(b)Fluoranthene		1.329	2.279	-71.5		
Benzo(k)Fluoranthene		0.773	2.279	-194.8		
Benzo(a)Pyrene		0.850	0.976	-14.8	*	
Indeno(1,2,3-cd)Pyrene		0.580	0.460	20.7		
Dibenz(a,h)Anthracene		0.483	0.508	-5.2		
Benzo(g,h,i)Perylene		0.602	0.500	16.9		

RF(50) - Response Factor from daily standard file at concentration indicated (50 total nanograms)
AVE RF - Average Response Factor from initial calibration Form VI
%D - - - Percent Difference
x - - - Due to low response analyze at 80 total nanograms
CCC - - Calibration Check Compounds (*)
SPCC - - System Performance Check Compounds (**)
(1) - - Cannot be separated from diphenylamine

Form VII


RIC
02/06/92 15:26:00
DATA: CC020692B1 #1
CALI: CC020692B1 #3
SCANS 300 TO 2717
SAMPLE: CONTINUING CALIBRATION 50 NG BNA
CONDS.: I50B
RANGE: G 1,2717 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
100.0
498176.
RIC
*.00013
300
6:01
1000
12:02
1500
18:03
2000
24:04
2500
30:06
SCAN
TIME

CONTINUING CALIBRATION CHECK
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

Case No: STAND Region: _____ Calibration Date: 02/10/92
Contractor: AnalytiKEM-Hou Time: 14:22
Contract No: _____ Laboratory ID: CC021092B1
Instrument ID: I50B Initial Cali. Date: 01/01/92

Minimum RF for SPCC is 0.050 Maximum %D for CCC is 30%

Compound		AVE RF	RF(50)	% D	CCC	SPCC
Phenol		1.876	1.372	26.9	*	
bis(2-Chloroethyl)Ether		1.443	1.324	8.2		
2-Chlorophenol		1.374	1.068	22.3		
1,3-Dichlorobenzene		1.350	1.730	-28.1		
1,4-Dichlorobenzene		1.418	1.801	-27.0	*	
Benzyl Alcohol		0.812	0.613	24.5		
1,2-Dichlorobenzene		1.284	1.604	-24.9		
2-Methylphenol		1.165	1.061	8.9		
bis(2-Chloroisopropyl)Ether		2.130	1.798	15.6		
4-Methylphenol		1.096	1.042	4.9		
N-Nitroso-Di-n-Propylamine		1.113	1.443	-29.6		* *
Hexachloroethane		0.620	0.944	-52.3		
Nitrobenzene		0.454	0.417	8.1		
Isophorone		0.539	0.638	-18.4		
2-Nitrophenol		0.189	0.155	18.0	*	
2,4-Dimethylphenol		0.321	0.281	12.5		
Benzoic Acid	x	0.086	0.085	1.2		
bis(2-Chloroethoxy)Methane		0.501	0.458	8.6		
2,4-Dichlorophenol		0.266	0.222	16.5	*	
1,2,4-Trichlorobenzene		0.294	0.385	-31.0		
Naphthalene		0.937	0.988	-5.4		
4-Chloroaniline		0.175	0.043	75.4		
Hexachlorobutadiene		0.185	0.240	-29.7	*	
4-Chloro-3-Methylphenol		0.282	0.207	26.6	*	
2-Methylnaphthalene		0.536	0.710	-32.5		
Hexachlorocyclopentadiene		0.203	0.197	3.0		* *
2,4,6-Trichlorophenol		0.375	0.264	29.6	*	
2,4,5-Trichlorophenol	x	0.306	0.271	11.4		
2-Chloronaphthalene		1.037	1.104	-6.5		
2-Nitroaniline	x	0.466	0.281	39.7		
Dimethyl Phthalate		1.081	1.062	1.8		
Acenaphthylene		1.589	1.583	0.4		
2,6-Dinitrotoluene		0.283	0.313	-10.6		
3-Nitroaniline	x	0.208	0.178	14.4		
Acenaphthene		1.018	0.962	5.5	*	
2,4-Dinitrophenol	x	0.116	0.055	52.6		* *
4-Nitrophenol	x	0.154	0.057	63.0		* *

RF(50) - Response Factor from daily standard file at concentration indicated (50 total nanograms)
AVE RF - Average Response Factor from initial calibration Form VI
%D - - - Percent Difference
x - - - Due to low response analyze at 80 total nanograms
CCC - - Calibration Check Compounds (*)
SPCC - - System Performance Check Compounds (**)

Form VII

CONTINUING CALIBRATION CHECK
SEMIVOLATILE HSL COMPOUNDS
(Page 2)

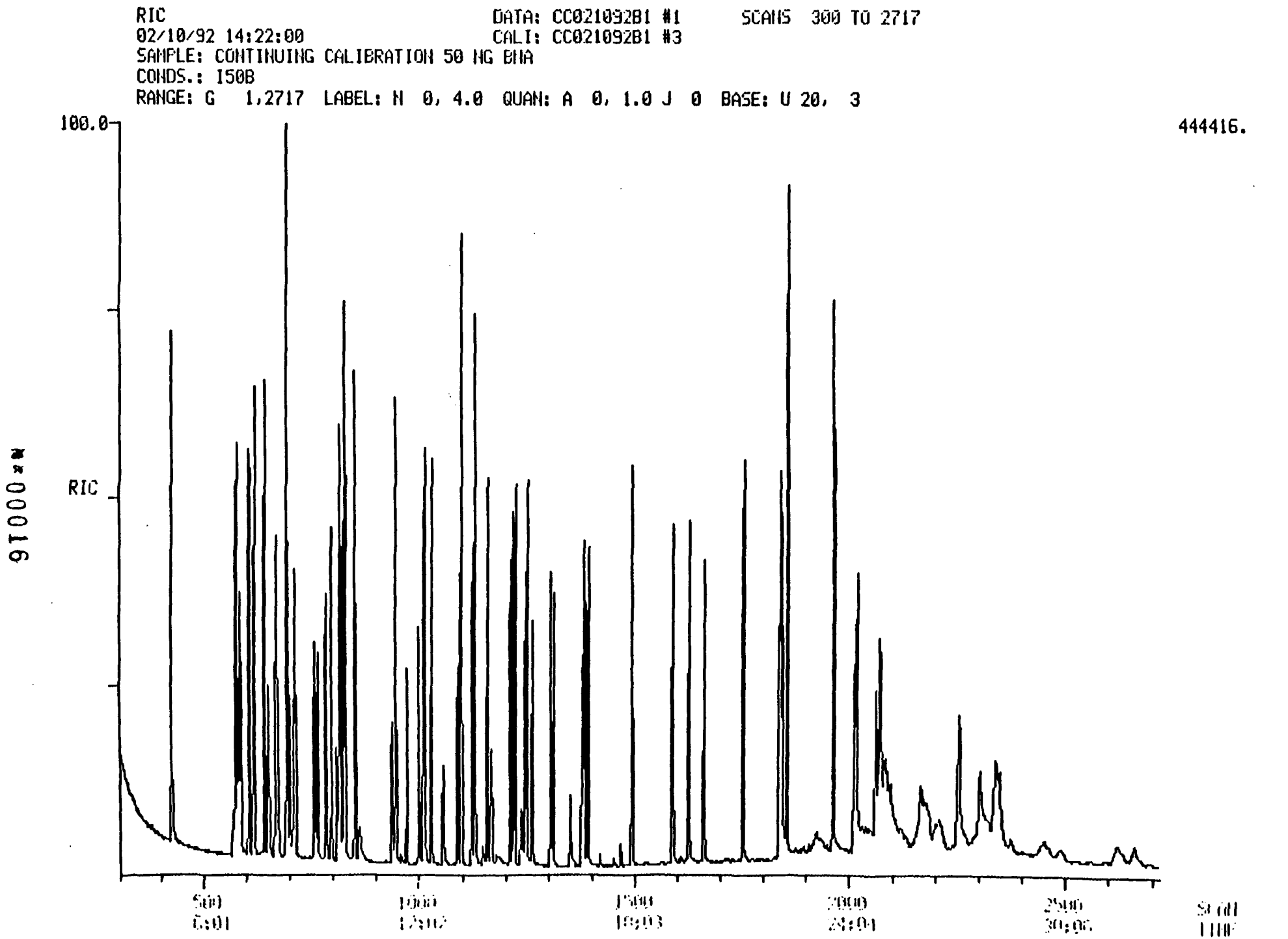
Case No: STAND Region: _____ Calibration Date: 02/10/92
Contractor: AnalytiKEM-Hou Time: 14:22
Contract No: _____ Laboratory ID: CC021092B1
Instrument ID: I50B Initial Cali. Date: 01/01/92

Minimum RF for SPCC is 0.050 Maximum %D for CCC is 30%

Compound		AVE RF	RF(50)	% D	CCC	SPCC
Dibenzofuran		1.372	1.365	0.5		
2,4-Dinitrotoluene		0.324	0.300	7.4		
Diethylphthalate		1.244	1.110	10.8		
4-Chlorophenyl phenyl ether		0.688	0.555	19.3		
Fluorene		1.262	1.025	18.8		
4-Nitroaniline	x	0.219	0.050	77.2		
4,6-Dinitro-2-Methylphenol	x	0.125	0.084	32.8		
N-Nitrosodiphenylamine (1)		0.455	0.457	-0.4	*	
4-Bromophenyl phenyl ether		0.234	0.227	3.0		
Hexachlorobenzene		0.279	0.297	-6.5		
Pentachlorophenol	x	0.145	0.101	30.3	*	
Phenanthrene		0.985	0.987	-0.2		
Anthracene		0.911	0.942	-3.4		
Di-n-Butylphthalate		1.361	1.600	-17.6		
Fluoranthene		1.046	1.141	-9.1	*	
Pyrene		0.699	1.247	-78.4		
Butylbenzylphthalate		0.435	0.757	-74.0		
3,3'-Dichlorobenzidine		0.249	0.477	-91.6		
Benzo(a)Anthracene		0.896	1.008	-12.5		
bis(2-Ethylhexyl)Phthalate		0.737	1.121	-52.1		
Chrysene		0.791	1.033	-30.6		
Di-n-Octyl Phthalate		1.316	1.702	-29.3	*	
Benzo(b)Fluoranthene		1.329	1.195	10.1		
Benzo(k)Fluoranthene		0.773	1.311	-69.6		
Benzo(a)Pyrene		0.850	0.969	-14.0	*	
Indeno(1,2,3-cd)Pyrene		0.580	0.818	-41.0		
Dibenz(a,h)Anthracene		0.483	0.653	-35.2		
Benzo(g,h,i)Perylene		0.602	0.693	-15.1		

RF(50) - Response Factor from daily standard file at concentration indicated (50 total nanograms)
AVE RF - Average Response Factor from initial calibration Form VI
%D - - - Percent Difference
x - - - Due to low response analyze at 80 total nanograms
CCC - - Calibration Check Compounds (*)
SPCC - - System Performance Check Compounds (**)
(1) - - Cannot be separated from diphenylamine

Form VII


RIC
DATA: CC021092B1 #1
SCANS 300 TO 2717
02/10/92 14:22:00
CALI: CC021092B1 #3
SAMPLE: CONTINUING CALIBRATION 50 NG BHA
CONDS.: I50B
RANGE: G 1,2717 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
100.0
444416.
RIC
9T000*N

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

aboratory Name: AnalytiKEM-Hou
Lab Sample ID: MB4659LL
Client Sample ID: MB4659LL

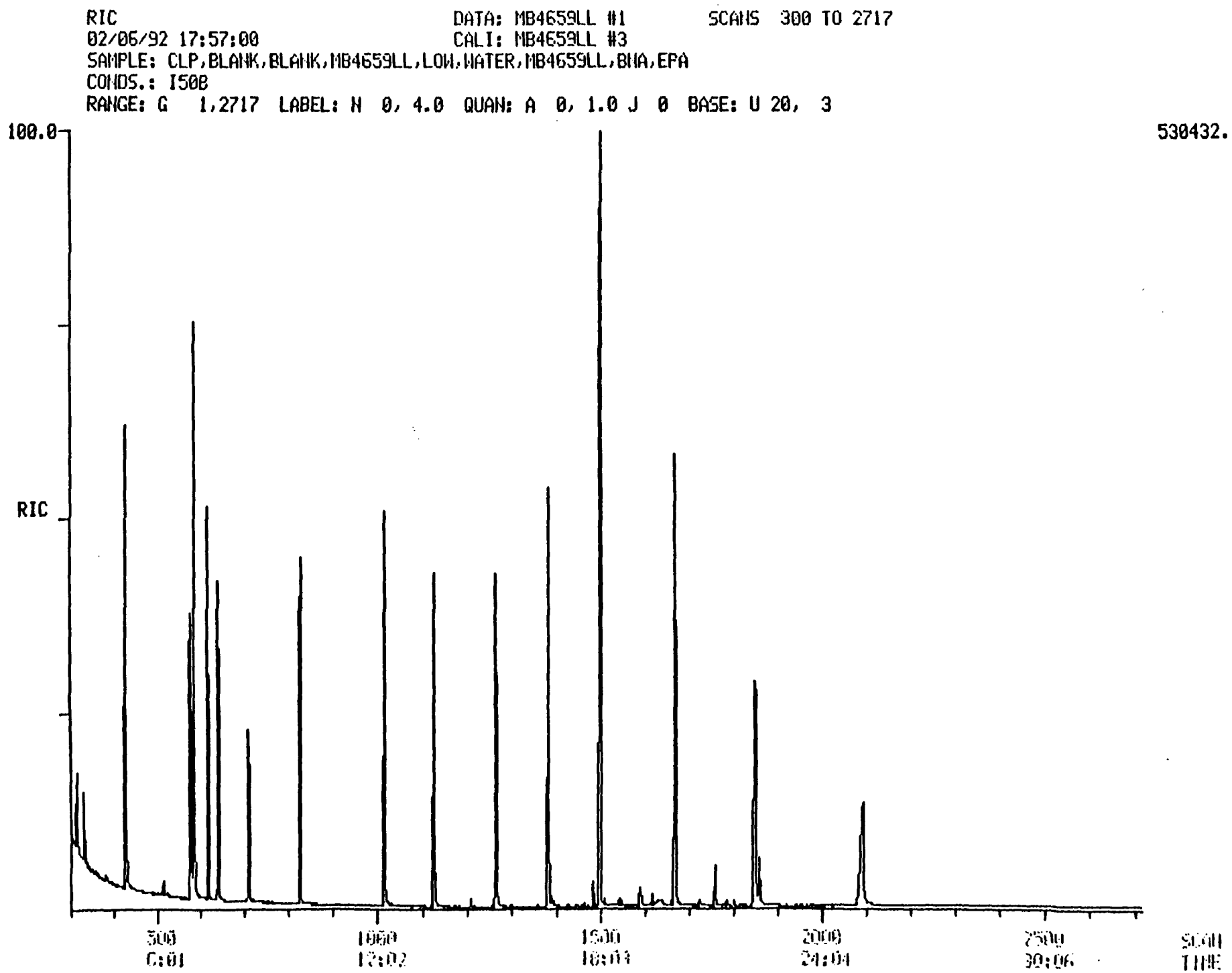
Concentration: LOW
Sample Matrix: WATER
Percent Moisture: 100.0

Date Extracted: 02/04/92
Date Analyzed: 02/06/92
Dilution Factor: 1.0

SEMIVOLATILE COMPOUNDS

CAS Number		ug/L		CAS Number		ug/L	
08-95-2	Phenol	10	<	606-20-2	2,6-Dinitrotoluene	10	<
2-53-3	Aniline	10	<	99-09-2	3-Nitroaniline	50	<
111-44-4	bis(2-Chloroethyl)Ether	10	<	83-32-9	Acenaphthene	10	<
95-57-8	2-Chlorophenol	10	<	51-28-5	2,4-Dinitrophenol	50	<
41-73-1	1,3-Dichlorobenzene	10	<	100-02-7	4-Nitrophenol	50	<
106-46-7	1,4-Dichlorobenzene	10	<	132-64-9	Dibenzofuran	10	<
100-51-6	Benzyl Alcohol	10	<	121-14-2	2,4-Dinitrotoluene	10	<
5-50-1	1,2-Dichlorobenzene	10	<	84-66-2	Diethylphthalate	10	<
5-48-7	2-Methylphenol	10	<	7005-72-3	4-Chlorophenyl phenyl ether	10	<
39638-32-9	bis(2-Chloroisopropyl)Ether	10	<	86-73-7	Fluorene	10	<
106-44-5	4-Methylphenol	10	<	100-01-6	4-Nitroaniline	50	<
21-64-7	N-Nitroso-Di-n-Propylamine	10	<	534-52-1	4,6-Dinitro-2-Methylphenol	50	<
7-72-1	Hexachloroethane	10	<	86-30-6	N-Nitrosodiphenylamine (1)	10	<
98-95-3	Nitrobenzene	10	<	101-55-3	4-Bromophenyl phenyl ether	10	<
78-59-1	Isophorone	10	<	118-74-1	Hexachlorobenzene	10	<
8-75-5	2-Nitrophenol	10	<	87-86-5	Pentachlorophenol	50	<
105-67-9	2,4-Dimethylphenol	10	<	85-01-8	Phenanthrene	10	<
65-85-0	Benzoic Acid	50	<	120-12-7	Anthracene	10	<
11-91-1	bis(2-Chloroethoxy)Methane	10	<	84-74-2	Di-n-Butylphthalate	76	
20-83-2	2,4-Dichlorophenol	10	<	206-44-0	Fluoranthene	10	<
120-82-1	1,2,4-Trichlorobenzene	10	<	129-00-0	Pyrene	10	<
91-20-3	Naphthalene	10	<	85-68-7	Butylbenzylphthalate	8	½
06-47-8	4-Chloroaniline	10	<	91-94-1	3,3'-Dichlorobenzidine	20	<
7-68-3	Hexachlorobutadiene	10	<	56-55-3	Benzo(a)Anthracene	10	<
59-50-7	4-Chloro-3-Methylphenol	10	<	117-81-7	bis(2-Ethylhexyl)Phthalate	10	<
1-57-6	2-Methylnaphthalene	10	<	218-01-9	Chrysene	10	<
7-47-4	Hexachlorocyclopentadiene	10	<	117-84-0	Di-n-Octyl Phthalate	10	<
88-06-2	2,4,6-Trichlorophenol	10	<	205-99-2	Benzo(b)Fluoranthene	10	<
95-95-4	2,4,5-Trichlorophenol	50	<	207-08-9	Benzo(k)Fluoranthene	10	<
1-58-7	2-Chloronaphthalene	10	<	50-32-8	Benzo(a)Pyrene	10	<
8-74-4	2-Nitroaniline	50	<	193-39-5	Indeno(1,2,3-cd)Pyrene	10	<
131-11-3	Dimethyl Phthalate	10	<	53-70-3	Dibenz(a,h)Anthracene	10	<
208-96-8	Acenaphthylene	10	<	191-24-2	Benzo(g,h,i)Perylene	10	<

The Lab ID for data on this page is MB4659LL.
½ - Reported value is less than the detection limit.
< - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.


RIC
DATA: MB4659LL #1
SCANS 300 TO 2717
02/06/92 17:57:00
CALI: MB4659LL #3
SAMPLE: CLP,BLANK,BLANK,MB4659LL,LOW,WATER,MB4659LL,BHA,EPA
CONDS.: I50B
RANGE: G 1,2717 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
100.0
530432.
RIC
500
0:01
1000
12:02
1500
18:03
2000
24:04
2500
30:06
SCAN
TIME

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Laboratory Name: AnalytiKEM-Hou
Lab Sample ID: MB4675LS
Client Sample ID: MB4675LS

Concentration: LOW
Sample Matrix: SOIL
Percent Moisture: _____

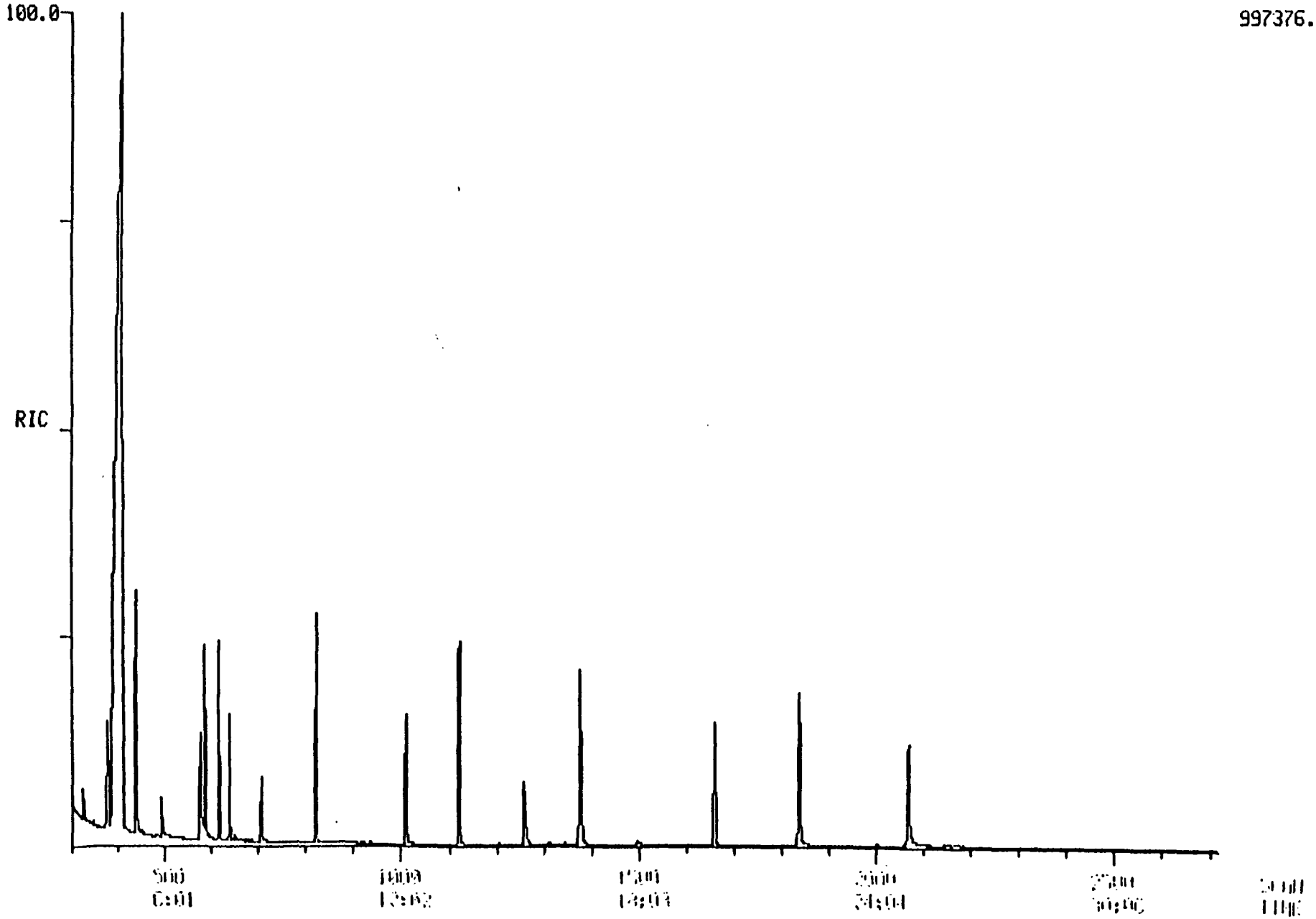
Date Extracted: 02/10/92
Date Analyzed: 02/10/92
Dilution Factor: 1.0

SEMIVOLATILE COMPOUNDS

CAS Number		ug/Kg		CAS Number		ug/Kg	
108-95-2	Phenol	330	<	606-20-2	2,6-Dinitrotoluene	330	<
62-53-3	Aniline	330	<	99-09-2	3-Nitroaniline	1600	<
111-44-4	bis(2-Chloroethyl)Ether	330	<	83-32-9	Acenaphthene	330	<
95-57-8	2-Chlorophenol	330	<	51-28-5	2,4-Dinitrophenol	1600	<
541-73-1	1,3-Dichlorobenzene	330	<	100-02-7	4-Nitrophenol	1600	<
106-46-7	1,4-Dichlorobenzene	330	<	132-64-9	Dibenzofuran	330	<
100-51-6	Benzyl Alcohol	330	<	121-14-2	2,4-Dinitrotoluene	330	<
95-50-1	1,2-Dichlorobenzene	330	<	84-66-2	Diethylphthalate	330	<
95-48-7	2-Methylphenol	330	<	7005-72-3	4-Chlorophenyl phenyl ether	330	<
39638-32-9	bis(2-Chloroisopropyl)Ether	330	<	86-73-7	Fluorene	330	<
106-44-5	4-Methylphenol	330	<	100-01-6	4-Nitroaniline	1600	<
621-64-7	N-Nitroso-Di-n-Propylamine	330	<	534-52-1	4,6-Dinitro-2-Methylphenol	1600	<
67-72-1	Hexachloroethane	330	<	86-30-6	N-Nitrosodiphenylamine (1)	330	<
98-95-3	Nitrobenzene	330	<	101-55-3	4-Bromophenyl phenyl ether	330	<
78-59-1	Isophorone	330	<	118-74-1	Hexachlorobenzene	330	<
88-75-5	2-Nitrophenol	330	<	87-86-5	Pentachlorophenol	1600	<
105-67-9	2,4-Dimethylphenol	330	<	85-01-8	Phenanthrene	330	<
65-85-0	Benzoic Acid	1600	<	120-12-7	Anthracene	330	<
111-91-1	bis(2-Chloroethoxy)Methane	330	<	84-74-2	Di-n-Butylphthalate	330	<
120-83-2	2,4-Dichlorophenol	330	<	206-44-0	Fluoranthene	330	<
120-82-1	1,2,4-Trichlorobenzene	330	<	129-00-0	Pyrene	330	<
91-20-3	Naphthalene	330	<	85-68-7	Butylbenzylphthalate	330	<
106-47-8	4-Chloroaniline	330	<	91-94-1	3,3'-Dichlorobenzidine	660	<
87-68-3	Hexachlorobutadiene	330	<	56-55-3	Benzo(a)Anthracene	330	<
59-50-7	4-Chloro-3-Methylphenol	330	<	117-81-7	bis(2-Ethylhexyl)Phthalate	330	<
91-57-6	2-Methylnaphthalene	330	<	218-01-9	Chrysene	330	<
77-47-4	Hexachlorocyclopentadiene	330	<	117-84-0	Di-n-Octyl Phthalate	330	<
88-06-2	2,4,6-Trichlorophenol	330	<	205-99-2	Benzo(b)Fluoranthene	330	<
95-95-4	2,4,5-Trichlorophenol	1600	<	207-08-9	Benzo(k)Fluoranthene	330	<
91-58-7	2-Chloronaphthalene	330	<	50-32-8	Benzo(a)Pyrene	330	<
88-74-4	2-Nitroaniline	1600	<	193-39-5	Indeno(1,2,3-cd)Pyrene	330	<
131-11-3	Dimethyl Phthalate	330	<	53-70-3	Dibenz(a,h)Anthracene	330	<
208-96-8	Acenaphthylene	330	<	191-24-2	Benzo(g,h,i)Perylene	330	<

The Lab ID for data on this page is MB4675LS.
< - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

RIC DATA: MB4675LS #1 SCANS 300 TO 2717
02/10/92 19:10:00 CALI: MB4675LS #3
SAMPLE: CLP,BLANK,BLANK,MB4675LS,LOW,SOIL,MB4675LS,BNA,EPA
CONDS.: I508
RANGE: G 1,2717 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ANALYTIKEM-HOU Contract: _____

Lab Code: ANALYTI Case No.: A7864 SAS No.: _____ SDG No.: A7864

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	EQ_BLANK-2	72	82	139	66	96	102	0	0	0
02	MB4659LL	74	82	113	75	98	122	0	0	0

		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(35-114)	
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)	
S3 (TPH)	= Terphenyl-d14	(33-141)	
S4 (PHL)	= Phenol-d5	(10-94)	
S5 (2FP)	= 2-Fluorophenol	(21-100)	
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)	
S7 (2CP)	= 2-Chlorophenol-d4	(-)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(-)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ANALYTIKEM-HOU Contract: _____

Lab Code: ANALYTI Case No.: A7864 SAS No.: _____ SDG No.: A7864

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	MBA-2A	0 D	0 D	0 D	0 D	0 D	0 D	0	0	0
02	MB4675LS	52	51	58	44	65	61	0	0	0

		QC LIMITS	
S1 (NBZ)	= Nitrobenzene-d5	(23-120)	
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)	
S3 (TPH)	= Terphenyl-d14	(18-137)	
S4 (PHL)	= Phenol-d5	(24-113)	
S5 (2FP)	= 2-Fluorophenol	(25-121)	
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)	
S7 (2CP)	= 2-Chlorophenol-d4	(-)	(advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(-)	(advisory)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

INITIAL CALIBRATION DATA
SEMIVOLATILE HSL COMPOUNDS
(Page 1)

Case No: STAND Region: Instrument ID: 1508
Contractor: AnalytiKEM-Hou Calibration Date: 01/01/92
Contract No:

Minimum AVE RF for SPCC is 0.050 Maximum %RSD for CCC is 30%

Laboratory ID	IC0101B020 IC0101B050	IC0101B080 IC0101B120	IC0101B160				CCC*
Compound	RF(20)	RF(50)	RF(80)	RF(120)	RF(160)	AVE RF	% RSD	SPCC**
Phenol	1.900	2.056	2.098	1.717	1.609	1.876	11.3	*
bis(2-Chloroethyl)Ether	1.660	1.700	1.297	1.151	1.408	1.443	16.3	
2-Chlorophenol	1.374	1.486	1.538	1.211	1.263	1.374	10.2	
1,3-Dichlorobenzene	1.372	1.461	1.347	1.304	1.264	1.350	5.5	
1,4-Dichlorobenzene	1.416	1.605	1.328	1.390	1.350	1.418	7.8	*
Benzyl Alcohol	0.759	0.779	0.733	0.453	1.338	0.812	39.7	
1,2-Dichlorobenzene	1.289	1.352	1.316	1.239	1.225	1.284	4.1	
2-Methylphenol	1.148	1.334	1.062	0.957	1.323	1.165	14.1	
bis(2-Chloroisopropyl)Ether	2.332	2.597	0.381	2.296	3.045	2.130	48.0	
4-Methylphenol	1.074	1.310	0.943	1.142	1.013	1.096	12.8	
N-Nitroso-Di-n-Propylamine	1.017	1.182	1.122	1.112	1.131	1.113	5.4	* *
Hexachloroethane	0.578	0.663	0.630	0.604	0.626	0.620	5.1	
Nitrobenzene	0.542	0.547	0.434	0.379	0.368	0.454	19.0	
Isophorone	0.886	0.757	0.369	0.188	0.494	0.539	52.7	
2-Nitrophenol	0.176	0.224	0.222	0.163	0.159	0.189	16.9	*
2,4-Dimethylphenol	0.319	0.355	0.363	0.274	0.294	0.321	11.9	
Benzoic Acid	x	0.113	0.083	0.091	0.055	0.086	28.0	
bis(2-Chloroethoxy)Methane	0.545	0.579	0.476	0.453	0.450	0.501	11.6	
2,4-Dichlorophenol	0.253	0.300	0.309	0.233	0.236	0.266	13.5	*
1,2,4-Trichlorobenzene	0.302	0.335	0.302	0.284	0.247	0.294	10.9	
Naphthalene	1.005	1.043	0.917	0.857	0.864	0.937	8.9	
4-Chloroaniline	0.320	0.257	0.096	0.130	0.070	0.175	62.1	
Hexachlorobutadiene	0.199	0.216	0.178	0.165	0.168	0.185	11.8	*
4-Chloro-3-Methylphenol	0.246	0.300	0.319	0.247	0.296	0.282	11.8	*
2-Methylnaphthalene	0.592	0.603	0.503	0.511	0.469	0.536	11.0	
Hexachlorocyclopentadiene	0.303	0.091	0.214	0.247	0.159	0.203	40.2	* *
2,4,6-Trichlorophenol	0.302	0.365	0.483	0.400	0.324	0.375	19.0	*
2,4,5-Trichlorophenol	x	0.356	0.483	0.318	0.324	0.370	20.8	
2-Chloronaphthalene	1.061	1.147	1.114	1.032	0.832	1.037	11.9	
2-Nitroaniline	x	0.549	0.490	0.481	0.344	0.466	18.6	
Dimethyl Phthalate	1.068	1.061	1.118	1.155	1.002	1.081	5.4	
Acenaphthylene	1.608	1.632	1.679	1.722	1.304	1.589	10.4	
2,6-Dinitrotoluene	0.258	0.357	0.336	0.193	0.271	0.283	23.1	
3-Nitroaniline	x	0.243	0.329	0.052	0.208	0.208	55.7	
Acenaphthene	1.012	1.021	1.095	1.080	0.882	1.018	8.3	*
2,4-Dinitrophenol	x	0.054	0.143	0.137	0.129	0.116	35.9	* *
4-Nitrophenol	x	0.134	0.192	0.156	0.135	0.154	17.6	* *

Response Factor (number is the amount of nanograms)
AVE RF - Average Response Factor
%RSD - - Percent Relative Standard Deviation
CCC - - Calibration Check Compounds (*)
SPCC - - System Performance Check Compounds (**)
x - - - Not detectable at 20 ng

Form VI

INITIAL CALIBRATION DATA
SEMIVOLATILE HSL COMPOUNDS
(Page 2)

Case No: STAND Region: _____ Instrument ID: I508
Contractor: AnalytiKEM-Hou Calibration Date: 01/01/92
Contract No: _____

Minimum AVE RF for SPCC is 0.050 Maximum %RSD for CCC is 30%

Laboratory ID	IC0101B020 IC0101B050	IC0101B080 IC0101B120	IC01018160				CCC*
Compound	RF(20)	RF(50)	RF(80)	RF(120)	RF(160)	AVE RF	% RSD	SPCC**
Dibenzofuran	1.480	1.430	1.423	1.449	1.079	1.372	12.1	
2,4-Dinitrotoluene	0.272	0.332	0.345	0.343	0.327	0.324	9.2	
Diethylphthalate	1.064	1.151	1.336	1.496	1.172	1.244	13.8	
4-Chlorophenyl phenyl ether	0.560	0.647	0.804	0.825	0.605	0.688	17.4	
Fluorene	1.061	1.209	1.419	1.483	1.140	1.262	14.4	
4-Nitroaniline	x	0.154	0.233	0.307	0.181	0.219	30.8	
4,6-Dinitro-2-Methylphenol	x	0.086	0.156	0.146	0.112	0.125	25.7	
N-Nitrosodiphenylamine (1)	0.454	0.443	0.502	0.456	0.421	0.455	6.5	*
4-Bromophenyl phenyl ether	0.237	0.278	0.240	0.233	0.180	0.234	15.0	
Hexachlorobenzene	0.263	0.306	0.304	0.300	0.222	0.279	13.0	
Pentachlorophenol	x	0.129	0.178	0.143	0.129	0.145	16.0	*
Phenanthrene	0.992	1.130	1.028	0.981	0.794	0.985	12.4	
Anthracene	0.941	1.026	0.960	0.904	0.723	0.911	12.5	
Di-n-Butylphthalate	1.309	1.650	1.418	1.281	1.148	1.361	13.8	
Fluoranthene	1.008	1.250	1.175	1.105	0.897	1.087	12.8	*
Pyrene	0.787	0.689	0.694	0.635	0.691	0.699	7.8	
Butylbenzylphthalate	0.504	0.471	0.424	0.370	0.406	0.435	12.2	
3,3'-Dichlorobenzidine	0.143	0.232	0.315	0.297	0.257	0.249	27.1	
Benzo(a)Anthracene	0.976	1.010	0.918	0.752	0.823	0.896	12.0	
bis(2-Ethylhexyl)Phthalate	0.826	0.850	0.747	0.674	0.588	0.737	14.7	
Chrysene	1.135	0.930	0.698	0.658	0.535	0.791	30.3	
Di-n-Octyl Phthalate	1.190	1.442	1.438	1.478	1.031	1.316	14.9	*
Benzo(b)Fluoranthene	1.094	1.292	1.700	1.500	1.179	1.353	18.2	
Benzo(k)Fluoranthene	0.972	1.176	0.802	0.502	1.179	0.926	30.7	
Benzo(a)Pyrene	0.931	1.012	0.848	0.784	0.677	0.850	15.2	*
Indeno(1,2,3-cd)Pyrene	0.813	0.833	0.466	0.374	0.416	0.580	38.6	
Dibenz(a,h)Anthracene	0.615	0.703	0.429	0.319	0.347	0.483	35.0	
Benzo(g,h,i)Perylene	0.776	0.824	0.482	0.382	0.544	0.602	31.7	
Nitrobenzene-d5	0.612	0.595	0.424	0.401	0.392	0.485	22.5	
2-Fluorobiphenyl	1.480	1.315	1.143	1.069	0.920	1.185	18.4	
Terphenyl-d14	0.768	0.663	0.589	0.560	0.682	0.652	12.6	
Phenol-d5	1.585	1.714	1.493	1.462	1.545	1.560	6.3	
2-Fluorophenol	1.267	1.283	1.143	1.146	1.093	1.186	7.1	
2,4,6-Tribromophenol	0.145	0.223	0.244	0.246	0.200	0.212	19.7	

Response Factor (number is the amount of nanograms)
AVE RF - Average Response Factor
%RSD - - Percent Relative Standard Deviation
CCC - - Calibration Check Compounds (*)
SPCC - - System Performance Check Compounds (**)
x - - - Not detectable at 20 ng
(1) - - Cannot be separated from diphenylamine

Form VI

ANALYTIKEM – HOUSTON

SILVER QUALITY CONTROL LOG

EPA SW-846:7760, AA

DATE/TIME OF ANALYSIS: 5 Feb 92/0915 PAGE 1 OF 1

LAB NUMBER-SAMPLE		COMMENTS	CHECK STANDARDS	CONCENTRATION FOUND/TRUE
A7877 - 1→2 (L)			SAMPLE BLANK	-0.003 / 0.000
A7864 - 37 (L)			METHOD BLANK (L)	0.000 / 0.000
A7864-(S) 1→29, 31→36			P.E. STD. ERA-2	0.994 / 1.000
A7861 - 1→3 (S)			INTERNAL STD.	0.756 / 0.750
			METHOD BLANK (S)	-0.003 / 0.000

MATRIX SPIKE	PRECISION			MS DUPLICATE	ACCURACY			
LAB NUMBER-SAMPLE	MS % REC.	MSD % REC.	% RPD	SPIKE AMOUNT	MS RESULT	% REC.	MSD RESULT	% REC.
A7877 > MB (L) (A7864)	97			0.100	0.097	97		
A7877-2 (L)	92	97	5.3		0.092	92	0.097	97
A7864-37 (L)	95	97	2.1		0.095	95	0.097	97
A7861-MB (S)	102				0.102	102		
A7861-3 (S)	96	95	1.0		0.096	96	0.095	95
A7864-MB (S)	102				0.102	102		
A7864-5	94	96	2.1		0.094	94	0.096	96
A7864-20	94	98	4.2		0.094	94	0.098	98
A7864-MB (S)	98				0.098	98		
A7864-27	99	101	1.0		0.099	99	0.101	101
A7864-32	97	95	2.1		0.097	97	0.095	95

CONTROL LIMITS: AQUEOUS, ~~70-130~~ (7-13) 9–12 %RPD, 78–116 %REC. (80-115)

SOLIDS, SAME (14-18) %RPD, SAME %REC. (62-120)

0 OUT OF 7 DUPLICATES WERE OUTSIDE OF QC LIMITS

0 OUT OF 18 SPIKE RECOVERIES WERE OUTSIDE OF QC LIMITS

ANALYST: Joann Matthews QA/QC: DeAnna M. Senegal

ANALYTIKEM – HOUSTON

ARSENIC QUALITY CONTROL LOG

EPA SW-846:7060, AA

PE 5100

DATE/TIME OF ANALYSIS: 5 Feb 92 / 0645 PAGE 1 OF 1

LAB NUMBER-SAMPLE	COMMENTS	CHECK STANDARDS	CONCENTRATION FOUND/TRUE
A7861-1→3	matrix interference resulted in the MS + MSD being out of Control for samples A7861-1, A7864-1, + A7864-12, therefore an MOA was Run on each	SAMPLE BLANK	
A7877-1→2		METHOD BLANK	
A7864-1→29,31-36		EPA 378-6 P.E. STD.	0.0245 / 0.023
		INTERNAL STD.	0.0745 / 0.075
		MDL	0.0052 / 0.0050

MATRIX SPIKE PRECISION			MS DUPLICATE	ACCURACY				
LAB NUMBER-SAMPLE	MS % REC.	MSD % REC.	% RPD	SPIKE AMOUNT	MS RESULT	% REC.	MSD RESULT	% REC.
A7861-MB (5)	88	—	—	0.04	0.0353	88	—	—
A7861-1 (3)	*	*	*		*		*	
A7877-MB (5)	86	—	—		0.0343	86	—	—
A7877-1 (4)	87	86	1.16		0.0348	87	0.0343	86
A7864-37 (4)	84	90	7.00		0.0336	84	0.0359	90
A7864-MB #1→20 (5)	88	—	—		0.0350	88	—	—
A7864-1 (5)	*	*	*		*		*	
A7864-12 (5)	*	*	*		*		*	
A7864-MB #21→29,34436 (5)	73	—	—		0.0293	73	—	—
A7864-27 (5)	74	80	7.79		0.0298	74	0.0318	80
A7864-32 (5)	78	87	10.9		0.0314	78	0.0347	87

CONTROL LIMITS: AQUEOUS, 21–28 %RPD, 76–116 %REC * out of control

SOLIDS, SAME %RPD, SAME %REC

3 OUT OF 7 DUPLICATES WERE OUTSIDE OF QC LIMITS

6 OUT OF 18 SPIKE RECOVERIES WERE OUTSIDE OF QC LIMITS

ANALYST: [signature] QA/QC: DeAnna M. Senegal

ANALYTIKEM - HOUSTON
ICAP QUALITY CONTROL LOG

DATE/TIME: 4Feb92/0659 | EPA SW-846:6010 | PAGE 1 OF 2

LAB ID	A7864-1→29, 31→36							
NOs								

PARAMETER		Pb	Cd	Co	Ba							
PE	ERA-3	0.992/1.00	0.994/1.00	0.981/1.00	0.992/1.00							
STDS												

A7864-MB(S) MS/MSD %REC	94	94	96	96							
%RPD											
SPIKE AMT.	1.0	0.1	0.2	2.0							
A7864-5 (S) MS/MSD %REC	96/96	99/100	86/82	84/78							
%RPD	0	1.0	4.8	7.4							
SPIKE AMT.	1.0	0.1	0.2	2.0							
A7864-20 (S) MS/MSD %REC	95/94	90/94	96/82	99/94							
%RPD	1.0 ~~1.0~~ sm	4.3 ~~0.1~~ sm	16 ~~0.2~~ sm	5.2 ~~2.0~~ sm							
SPIKE AMT.	1.0	0.1	0.2	2.0							
A7864-MB(S) MS/MSD %REC	88	95	93	97							
%RPD											
SPIKE AMT.	1.0	0.1	0.2	2.0							

CONTROL LIMITS:

AQUEOUS	%RPD.											
	%REC.											
SOLIDS	%RPD.	17	16	17	14							
	%REC.	117→71	115→74	117→73	121→71							

0 OUT OF 8 DUPLICATES WERE OUTSIDE OF QC LIMITS
0 OUT OF 24 SPIKE RECOVERIES WERE OUTSIDE OF QC LIMITS

COMMENTS: _____

ANALYST: James Mathis QA/QC: Deanna M. Senegal

ANALYTIKEM - HOUSTON
ICAP QUALITY CONTROL LOG

DATE/TIME: 4 Feb 92/0659 EPA SW-846:6010 PAGE 2 OF 2

	Pb	Cd	Cr	Ba							
A7864-27(S) MS/MSD %REC	48*/53*	92/95	78/80	54*/59*							
%RPD	9.9	3.2	2.2	8.8							
SPIKE AMT.	1.0	0.1	0.2	2.0							
A7869-32(S) MS/MSD %REC	79/76	74/74	81/78	78/84							
%RPD	3.9	0	4.1	7.4							
SPIKE AMT.	1.0	0.1	0.2	2.0							
MS/MSD %REC											
%RPD											
SPIKE AMT.											
MS/MSD %REC											
%RPD											
SPIKE AMT.											
MS/MSD %REC											
%RPD											
SPIKE AMT.											
MS/MSD %REC											
%RPD											
SPIKE AMT.											

CONTROL LIMITS:

AQUEOUS	%RPD											
	%REC.											
SOLIDS	%RPD	17	16	17	14							
	%REC.											

0/4 OUT OF 8/16 DUPLICATES WERE OUTSIDE OF QC LIMITS
0/4 OUT OF 0/16 SPIKE RECOVERIES WERE OUTSIDE OF QC LIMITS

COMMENTS: * out of control - MOA performed

ANALYST: James Matthis QA/QC: Felicia M. Senegal

ANALYTIKEM - HOUSTON
ICAP QUALITY CONTROL LOG

DATE/TIME: 7 Feb 92/0725 EPA SW-846:6010 PAGE 1 OF 2

LAB ID	A7855-1T	A7877-1,2	A7864-37	A7884-1→28			
NOs							

PARAMETER		As	Se	Zn	Pb	Cd	Ni	Fe	Cr	Be	Cu	Ba
PE STDS	ERA-3	1.06/1.00	9.48/10.0	1.01/1.00	1.01/1.00	0.982/1.00	0.972/1.00	10.2/10.6	1.02/1.00	1.02/1.00	1.03/1.00	1.00/1.00
A7855-MB(L) S/MSD %REC		82	74		92	87			94			87
%RPD												
SPIKE AMT.		2.0	2.0		1.0	0.1			0.2			2.0
A7855-EXTBLK S/MSD %REC(L)		86	88		93	90			90			67*
%RPD												
SPIKE AMT.		2.0	2.0		1.0	0.1			0.2			2.0
A7855-1T (L) S/MSD %REC		81	91		102 ~~+0~~ JM	88			86			**
%RPD												
SPIKE AMT.		2.0	2.0		1.0	0.1			0.2			2.0
A7877-864> MB (L) S/MSD %REC				94	92	93	96		93	91	107	94
%RPD												
SPIKE AMT.				1.0	1.0	0.1	1.0		0.2	0.1	0.2	2.0

CONTROL LIMITS: 75-120 % Rec 5-12 % RPD

AQUEOUS	%RPD.											
	%REC.											
SOLIDS	%RPD.											
	%REC.											

0/1*+1 OUT OF 0 DUPLICATES WERE OUTSIDE OF QC LIMITS
OUT OF 26 SPIKE RECOVERIES WERE OUTSIDE OF QC LIMITS

COMMENTS: * out of internal control
** spike lost to high concentration

ANALYST: Joanne Mathis FEB 10 A.M. QA/QC: DeAnna M. Senegal

ANALYTIKEM - HOUSTON
ICAP QUALITY CONTROL LOG

DATE/TIME: 1 7Feb92/0725 EPA SW-846:6010 PAGE 2 OF 2

	Zn	Pb	Cd	Ni	Int Fe	Cr	Be	Cu	Ba		
A7877-2 (L) MS/MSD %REC	89/91	84/87	82/88	83/86		100/93	101/107	108/103			
%RPD	2.2	3.5	7.0	3.6		7.2	5.8	4.7			
SPIKE AMT.	1.0	1.0	0.1	1.0		0.2	0.1	0.2			
A7869-37 (L) MS/MSD %REC		92/99	89/90			94/94			92/92		
%RPD		7.3	1.1			0			0		
SPIKE AMT.		1.0	0.1			0.2			2.0		
A7884-MB (L) MS/MSD %REC		98	87		95	97					
%RPD											
SPIKE AMT.		1.0	0.1		1.0	0.2					
A7884-9 (L) MS/MSD %REC		83/87	82/88		107/120	100/100					
%RPD		4.7	7.0		11	0					
SPIKE AMT.		1.0	0.1		1.0	0.2					
A7884-16 (L) MS/MSD %REC		*/*	*/98		91/*	98/94					
%RPD		*	*		*	4.2					
SPIKE AMT.		1.0	0.1		1.0	0.2					
A7884-28 (L) MS/MSD %REC		89/91	88/89		84/87	91/90					
%RPD		2.2	1.1		3.5	1.1					
SPIKE AMT.		1.0	0.1		1.0 2nd 0.7	0.2					

CONTROL LIMITS: 75-120 %Rec 5-12 %RPD

AQUEOUS	%RPD											
	%REC.											
SOLIDS	%RPD											
	%REC.											

3/4 OUT OF 23/50 DUPLICATES WERE OUTSIDE OF QC LIMITS
SPIKE RECOVERIES WERE OUTSIDE OF QC LIMITS

COMMENTS: * out of control - MOA performed

ANALYST: James Mathis FEB 10 A.M. QA/QC: DeAnna M. Benegal

ANALYTIKEM – HOUSTON

MERCURY QUALITY CONTROL LOG

EPA SW-846:7470, 7471 AA

DATE/TIME OF ANALYSIS: 6 FEB92 / 1046 PAGE 1 OF 1

LAB NUMBER-SAMPLE		COMMENTS	CHECK STANDARDS	CONCENTRATION FOUND/TRUE
A7864-1→29, 32→36			SAMPLE BLANK	
A7864-37			METHOD BLANK	
A7877-1, 2			P.E. STD.	0.0092 / 0.0100
A7855-1T			INTERNAL STD.	0.0077 / 0.0075
			MDL	0.0011 / 0.0010

MATRIX SPIKE PRECISION			MS DUPLICATE	ACCURACY				
LAB NUMBER-SAMPLE	MS % REC.	MSD % REC.	% RPD	SPIKE AMOUNT	MS RESULT	% REC.	MSD RESULT	% REC.
BLANK	110	—	—	0.0050	0.0055	110	—	—
A7864-37 (L)	116	116	0		0.0058	116	0.0058	116
A7877-1 (L)	112	112	0		0.0056	112	0.0056	112
A7864-7 (S)	116	122	0.05 / ~~0.84~~		0.0058	116	0.0061	122
A7864-12 (S)	116	120	3.39		0.0058	116	0.0060	120
A7864-27 (S)	120	122	1.65		0.0060	120	0.0061	122
A7864-34 (S)	114	116	1.74		0.0057	114	0.0058	116
A7855-Ext Blk (L)	110	—	—		0.0055	110	—	—
A7855-1T (L)	112	—	—		0.0056	112	—	—

CONTROL LIMITS: AQUEOUS, 11–15 %RPD, 81–123 %REC

SOLIDS, SAME %RPD, SAME %REC

0 OUT OF 6 DUPLICATES WERE OUTSIDE OF QC LIMITS

0 OUT OF 15 SPIKE RECOVERIES WERE OUTSIDE OF QC LIMITS

ANALYST: [signature] QA/QC: Debra M. Senegal

ANALYTIKEM – HOUSTON

SELENIUM QUALITY CONTROL LOG

EPA SW-846:7740, GFAA

PE 23030

DATE/TIME OF ANALYSIS: 5Feb92/0634 PAGE 1 OF 1

LAB NUMBER-SAMPLE		COMMENTS	CHECK STANDARDS	CONCENTRATION FOUND/TRUE
A7877-1,2(L)		*A7864-1, 12, 27, 32 out of control due to matrix interference - MOA performed	SAMPLE BLANK	0.0008/0.0000
A7864-37(L)			METHOD BLANK (L)	0.0001/0.0000
A7864-(S) 1→29, 31→36			P.E. STD. ERA-3 @ 0.05/200	0.0503/0.0500
			INTERNAL STD. 0.0250 PPM	0.0232/0.0250
			method Blank(S)	0.0005/0.0000

MATRIX SPIKE / LAB NUMBER-SAMPLE	PRECISION MS % REC.	PRECISION MSD % REC.	PRECISION % RPD	MS DUPLICATE SPIKE AMOUNT	ACCURACY MS RESULT	ACCURACY MS % REC.	ACCURACY MSD RESULT	ACCURACY MSD % REC.
A7877 A7864 > MB(L)	108			0.02	0.0215	108		
A7877-1	89	92	3.3		0.0178	89	0.0183	92
A7864-37	82	90	9.3		0.0165	82	0.0180	90
A7864-MS(S)	86				0.0173	86		
A7864-1	39*	33*	17*		0.0039	39	0.0033	33
A7864-12	47*	49*	4.2		0.0094 0.0098 jm	47	0.0098	49
A7864-MS	88		9.5		0.0175	88		
A7864-27	70*	77	9.5		0.0141	70	0.0154 0.0175 jm	77
A7864-32	52*	52*	0		0.0104	52	0.0105	52

CONTROL LIMITS: AQUEOUS, 15–20 %RPD, 75–116 %REC.

SOLIDS, SAME %RPD, SAME %REC.

1 OUT OF 6 DUPLICATES WERE OUTSIDE OF QC LIMITS

7 OUT OF 15 SPIKE RECOVERIES WERE OUTSIDE OF QC LIMITS

ANALYST: James Mathis QA/QC: DeAnna M. Senegal

QUALITY CONTROL LOG

Page: 1 of 1

Parameter: pH, Soil, pH

Matrix: Soil/Liquid

Method of Analysis: EPA SW846.9045

Date/Time: 1-31-92/0935

Lab Numbers	Detection Limits
47864-(1-29)	0.01 units
-(31-37)	↓

Calibration Stds./Blk	Absorbance/Conc.
Buffer 10.00	pCal.
4.00	pCal.

Correlation Coefficient:

Comments:

Check Standards	Concentration Found/True
Sample Blank	NA
Method Blank	NA
P.E. Std.	NA
Internal Std. Buffer 7.00	7.03 units NA
Buffer 7.00 ccIs	7.04 units
7.00	7.05 units
7.00	7.05 units
7.00	7.06 units
2.00 7.00 AB	2.11 units

Internal Quality Control Duplicates and Spikes

* Below MDL

Lab No. - Sample ID	Sample Conc.	Duplicate Conc.	Range	Percent RPD	Spiked Result	Sample Result	Spike Added	Percent Recovery
47861-1	7.99	8.00	0.01	0.1				
-11	7.97	7.97	0	0				
-21	7.80	7.82	0.02	0.2				
-31	8.47	8.48	0.01	0.1				

Analyst: [signature]

QA/QC Approval: [signature]

ENSR

ENSR Consulting and Engineering

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Colorado	Fort Collins	(303) 493-8878
Connecticut	Hartford	(203) 657-8910
Illinois	Chicago	(708) 887-1700
Massachusetts	Boston	(508) 635-9500
Minnesota	Minneapolis	(612) 924-0117
New Jersey	Mahwah	(201) 818-0900
	New Brunswick	(908) 560-7323
Pennsylvania	Pittsburgh	(412) 261-2910
South Carolina	Rock Hill	(803) 329-9690
Texas	Dallas	(214) 960-6855
	Houston	(713) 520-9900
Washington	Seattle	(206) 881-7700
Puerto Rico	San Juan	(809) 769-9509