AP - 001

# STAGE 1 & 2 REPORTS

DATE:

MAR. 17, 1994

GCL
Environmental Science and Engineering
A BDM International Company

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March 17, 1994

REX52.LTR



Mr. William Olson
Hydrogeologist
New Mexico Oil Conservation Division
P. O. Box 2088
State Land Office Building
Santa Fe, New Mexico 87504

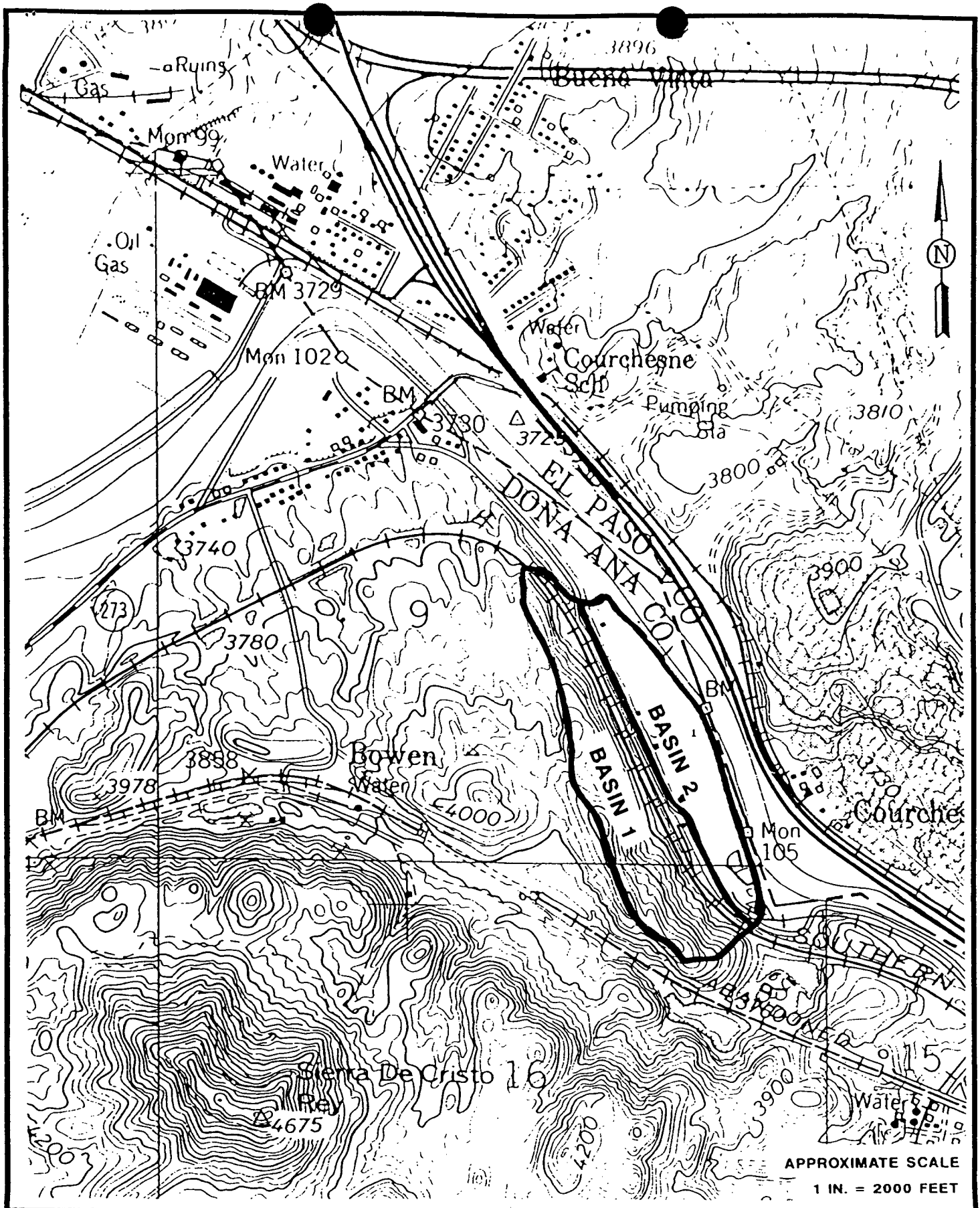
RE: REXENE BRICKLAND REFINERY SITE: PROGRESS REPORT ON STORM WATER INTERIM MEASURES AND REMEDIAL ACTION

Dear Mr. Olson:

Geoscience Consultants, Ltd. (GCL) is pleased to provide NMOCD with an update of the work-in-progress concerning interim remedial measures and storm water controls at the Rexene Corporation Brickland Refinery. While we have made steady progress on the design to mitigate on-site contamination from spreading off-site, new data obtained recently at the site suggests that our previous assumption concerning the extent and magnitude of contamination may be incorrect. This letter will explain our progress to date and provide recommendations for remediation of the Brickland site. Also included are copies of the analytical reports and summary sheets for the off-site monitoring wells that were sampled in December 1993.

## 1. Hydrologic Analyses

Off-site and on-site hydrologic analyses were performed for the old Brickland Refinery site. These hydrologic analyses were performed with the U.S. Army Corps of Engineers HEC-1 Flood Hydrograph Package computer model. The drainage basin boundaries (figure 1) were delineated on the U.S. Geological Survey (USGS) 7.5 minute quadrangle map for Smeltertown, Texas-New Mexico. The off-site (basin 1) and on-site (basin 2) drainage basin areas are approximately 0.067 square miles and 0.037 square miles, respectively. The runoff volume, peak flow rate, and time to peak were derived for 10-year 6-hour, 5-year 6-hour, 2-year 6-hour, and 2-year 24-hour storms. Realistic 6-hour and 24-hour rainfall distributions were generated from depth-duration data presented in the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), Precipitation-Frequency Atlas for New Mexico. A synthetic unit hydrograph was generated by the Snyder method in accordance with procedures presented in the U.S. Army Corps of Engineers, "Flood Hydrograph Analysis and Computations," Engineering Manual 1110-2-1405, August 1959. Snyder unit hydrograph parameters Ct and Cp640 were obtained from "Report on Hydrologic Investigations, Flood Insurance Study, Northeast and Central El Paso, Texas," February 1978, using the curve for undeveloped areas. Infiltration loss rates were obtained from the Las Cruces Flood Insurance Study. An initial loss of 0.7 inches and a constant loss of 0.2 inch/hour were used for all design




GCL

| | |
|---|---|
| CLIENT: REXENE | |
| DATE: 3/7/94 | REV. NO.: 0 |
| AUTHOR: J.L.H. | DRAWN BY: HCC |
| CK'D BY: J.L.H. | FILE: |

**FIGURE 1**
**REXENE BRICKLAND REFINERY**
**HYDROLOGIC ANALYSES**

storms analyzed. The runoff volume, peak flow rate, and time to peak (for basins 1 and 2) for each storm are presented in table 1.

**Table 1**

Brickland Refinery Site - Hydrologic Analyses

Basin 1

| Storm Event | Peak Flow (cfs) | Time to Peak (hr) | Volume (ac-ft) |
|---|---|---|---|
| 2-Year 6-Hour | 29.0 | 0.92 | 0.60 |
| 5-Year 6-Hour | 62.0 | 0.83 | 1.70 |
| 10-Year 6-Hour | 98.0 | 0.75 | 2.64 |
| 2-Year 24-Hour | 41.0 | 0.83 | 1.10 |

Basin 2

| Storm Event | Peak Flow (cfs) | Time to Peak (hr) | Volume (ac-ft) |
|---|---|---|---|
| 2-Year 6-Hour | 12.0 | 1.00 | 0.33 |
| 5-Year 6-Hour | 27.0 | 0.92 | 0.94 |
| 10-Year 6-Hour | 40.0 | 0.83 | 1.47 |
| 2-Year 24-Hour | 18.0 | 0.92 | 0.61 |

**2. Preliminary Design Analysis - On-Site and Off-Site Storm Water Management Systems**

The feasibility of intercepting and detaining the off-site runoff volume (i.e., 2.64 acre-feet) from the 10-year 6-hour storm with a diversion structure constructed along the east side of McNutt Road (adjacent to the western property boundary of the old Brickland Refinery site) was evaluated during GCL's preliminary design analysis for the off-site storm water management system. This diversion structure would collect and convey the off-site storm water runoff into the Rio Grande.

Interception and detention of the off-site runoff volume from the 10-year 6-hour storm would require construction of a diversion structure along the entire length of the western property boundary. Storm water intercepted and detained by the diversion structure would be collected in a drop inlet located at the lowest point along this alignment. The storm water would be conveyed eastward across the site in a closed conduit. This conduit would discharge into an existing culvert that extends through the International Boundary and Water Commission's (IBWC's) levee along the west bank of the Rio Grande. The diversion structure would have a maximum height of 6 feet at the drop inlet. Preliminary calculations indicate that the total off-site runoff volume from the 10-year 6-hour storm would be detained for less than 1 hour.

The preliminary conceptual design for this diversion structure is presented on plate A. Two distinct disadvantages of the structure were discovered during design analysis:

- Detention of runoff from the 10-year 6-hour storm event would inundate McNutt Road and potentially interfere with U.S. Border Patrol operations and other civilian traffic.

- Significant site grading and/or pumping of detained water might be required to convey it to the Rio Grande because of lack of grade at the site.

The New Mexico State Highway and Transportation Department (NMSHTD) offers interim guidelines for runoff volume considerations in their National Pollutant Discharge Elimination System Implementation Package (NMSHTD, June 1993). Direct runoff from both disturbed and undisturbed areas shall be evaluated for a 2-year, 24-hour flood event. In the event that GCL proceeds with the actual design of a storm water diversion system, the 2-year, 24-hour precipitation event will be used as the design basis and should provide a more feasible structure by reducing the amount of runoff that must be detained and subsequently pumped off-site. GCL is proposing that storm water control issues be put on hold until after your site visit and until such time that you can evaluate actual site conditions as far as the need for storm water control systems.

**3. Free-Phase Product Investigation**

A preliminary well point investigation was conducted at the Brickland Refinery site in late September. The primary objective of the investigation was to verify the presence and extent of free-phase floating product originally projected by Eder & Associates (1990) that was documented in their Phase I Site Investigation Report. GCL installed well points at on-site locations where Eder had predicted floating product would occur (plate B). The findings of this investigation indicated that the occurrence of free-phase floating product may not be as prevalent or widespread as once believed and is probably confined to localized areas at the site. The hydrogeologic regime is also more complicated than originally envisioned and makes the use of the proposed product recovery system infeasible.

The site is underlain by fine-grained fluvial sediments deposited by the recent and ancestral Rio Grande, which are capped by river dredge spoils, asphalt and concrete. The predominant subsurface lithologies are very fine sands with varying amounts of clay and silt. Interlayered clay and clay-rich silty and/or sandy units occur locally beneath the site.

Shallow groundwater at the site is encountered at depths ranging from 3 to 10 feet beneath the surface. Much of the shallow groundwater is found in thin layers of fine sands and silty sands that occur within finer, clay-rich sands, silty sands and sandy clays. The clay-rich sediments have a relatively low permeability whereas the fine sandy units yield water freely. A more continuous and homogeneous sandy unit occurs beneath much of the site at varying depths below 5 feet. This sandy unit is typically more transmissive than the shallower units.

GCL investigation results determined that free-phase floating product is not as widespread as suggested by the results of the Eder Investigation (Eder 1990). Floating product appeared to occur primarily in the southern portion of the site where the former wastewater ponds were located. Additionally, free product may be trapped in thin lenses of saturated sands throughout portions of the site. Much of the hydrocarbons that are still present are probably sorbed to the fine grained material that occurs beneath the site. It is possible that much of the product released at the site has been diluted and degraded over time, which may account for the low concentrations of dissolved-phase groundwater contamination found in monitoring wells at the site and the lack of observed contaminant migration into the adjacent Rio Grande.

Potentiometric surfaces were determined using two separate data sets. The first set of groundwater elevations was contoured using only the data from well points completed in the upper three to five feet of the shallow aquifer. This data set was selected to give the best possible interpretation of the surface of groundwater beneath the site that is most likely to control the movement of free-phase floating product. The second data set of groundwater elevations included information from monitor wells completed in the upper ten feet of the shallow aquifer. This data set was selected because the well screens penetrated into the deeper, and more continuous and homogeneous river sediments beneath the site. The potentiometric surface associated with the deeper sand unit is expected to more strongly influence the migration of dissolved-phase contaminants.

Results of the investigation indicate that the hydraulic gradient is very shallow and that two different flow patterns exist ranging from south-southeast to west (plates C and D). Plate C shows that shallow groundwater beneath the site flows toward the southwest in the northern portion of the site. It flows to the west, and directly away from the Rio Grande, in the southern portion of the site. The Rio Grande is a losing stream based on water table configuration. This configuration of the shallow water table would tend to drive any existing free-phase floating product to the south and southwestern portion of the site. This is in fact the location of the site where the largest volume of floating product was confirmed.

Plate D shows that the direction of groundwater flow for the deeper horizon of the shallow aquifer is to the south. It also shows that beneath the eastern site boundary, groundwater flows southeast, toward the river. Deeper waters of the shallow aquifer are recharging the river due to geologic constrictions imposed by the sharp narrowing of the basin near the southern portion of the site.

This new data contradicts GCL's previous assumption that free-phase floating product was a predominant source of contamination at the site. While the information obtained thus far is inconclusive, it suggests the following:

- **Hydrocarbons may not be as readily mobile in their existing undisturbed environment as was initially predicted and probably not an immediate threat to receiving waters as was previously believed.** Data from the Eder investigation suggested that free-phase floating product occurred in recoverable quantities in the fine-grained sediments beneath the site. New data, however, suggests that there may be much less floating product than predicted and that much of the free-phase hydrocarbons may be occurring in fine-grained, silty sands that are interlayered with clay-rich sediments making the hydrocarbon less mobile than originally thought.

- **Extensive free-phase product recovery trenches may prove ineffective.** Recent data suggests that locally confined and semi-confined conditions exist at the site with little floating product except in isolated areas. Therefore, the proposed trench network may not be effective.

## 4. Recommendations

Based upon recent site investigations and subsequent review of newly-acquired data, GCL makes the following recommendations in regards to interim and final remedial action at the Rexene Brickland Refinery Site:

- The design and installation of the off-site storm water diversion system will be postponed and re-evaluated as remediation activities change at the site. The design and installation of any on-site storm water management systems will be postponed

until further data can be obtained and remedial measures proposed to avoid siting conflicts.

- The installation of product recovery trenches will be postponed and re-evaluated as further data is obtained concerning the site geology and presence and extent of contamination.

- A remedial investigation plan will be developed to verify recently collected data and define the presence and extent of contamination and will be submitted for your review and comment.

- The storm water pollution prevention plan will be finalized based on the present undisturbed conditions and published as a working document to be updated as working conditions change at the site.

GCL is committed to providing a well-engineered remedial action plan for the Brickland Refinery Site. With additional data, we believe we can propose an integrated remedial action that will be cost-effective and successful. If you have any questions or comments regarding the contents of this letter, please call us.

As per your request, GCL will implement a quarterly groundwater monitoring sampling plan for selected off- and on-site wells. Specific analytical parameters will include general groundwater chemistry (major cations/anions), BTEX and TPH (Method 8015 modified), PAHs and Phenols (Method 8270), and WQCC metals. The specific monitor wells and analytical parameters that will be included in the quarterly sampling are found in table 2. As the quarterly sampling progresses we will review the analytical results and make recommendations for deleting or maintaining selected wells and analytes in the quarterly sampling program. We will sample monitor wells MW-3S, MW-6S, MW-9S, and MW-11 on March 25, 1994 so that you can collect split samples.

Sincerely,
Geoscience Consultants, Ltd. (GCL)

Trent Thomas
Program Manager

54159/REX52.LTR

Attachments

cc: Todd Carver, Rexene Corporation
Roger Martin, Rexene Corporation
Rob Sutphen, Rexene Corporation
Ned Kendrick, Montgomery & Andrews

## Table 2

## Brickland Refinery Site
## Quarterly[1] Monitor Well Sampling
## and Analytical Parameters

| | Analytical Parameters | | | |
|---|---|---|---|---|
| **Monitor Well** | **BTEX & TPH** | **PAH's & PHENOLS** | **WQCC Metals** | **Major Cations/Anions** |
| | | | | |
| MW-1 | X | X | X | X |
| MW-2 | X | X | X | X |
| MW-3S | X | X | X | X |
| MW-3D | X | X | X | X |
| MW-4 | X | X | X | X |
| MW-5 | X | X | X | X |
| MW-6S | X | X | X | X |
| MW-6D | X | X | X | X |
| MW-7 | X | X | X | X |
| MW-8 | X | X | X | X |
| MW-9S | X | X | X | X |
| MW-9D | X | X | X | X |
| MW-11 | X | X | X | X |
| MW-12 | X | X | X | X |

1 Quarterly sampling will begin on March 23, 1994, although certain wells were previously sampled in Dec. 1993. Where applicable, the results from the December sampling event will be included in the quarterly analytical data.

Rexene: TPH/BTEX (Sampled by: H+GCL, 12/08/93)

| Constituent | Date Sampled | Limits | Units | Method | MW-12 | MW-01 | MW-3S | MW-3D | MW-6S | MW-6D | MW-9S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzene | 12/08/93 | 0.5 | ug/L | 8020 (2) | ND | ND | ND | ND | 71 | ND | ND |
| Toluene | 12/08/93 | 0.5 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Ethyl Benzene | 12/08/93 | 0.5 | ug/L | | ND | ND | ND | ND | 52 | ND | ND |
| Xylenes | 12/08/93 | 0.5 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Total Vol. Petroleum Hydocarbon | 12/08/93 | 0.1 | mg/L (Gasoline) | 8015 (Modified) | 0.1 | 0.1 | 0.1 | 0.1 | 2.9 | 0.1 | 0.1 |

ND = Not Detected

Rexene: VOC'S (Sampled by IT. Corp., April 1990)

| Constituent | Date Sampled | Method | Detection Limits | Units | MW-12 | MW-01 | MW-03S | MW-03D | MW-06S* | MW-06D | MW-09S | MW-09S (Dup.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2-Trichloroethane | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethane | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethylene | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloroethane | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloropropane | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Butanone | 04/90 | Unk. | 100 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Chloroethylvinyl Ether | 04/90 | Unk. | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Hexanone | 04/90 | Unk. | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone | 04/90 | Unk. | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Acetone | 04/90 | Unk. | 100 | ug/L | ND | ND | ND | ND | ND | ND | ND | 110 |
| Benzene | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | 340 | ND | ND | ND |
| Bromoform | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon Disulfide | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon Tetrachloride | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorethane | 04/90 | Unk. | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorobenzene | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorodibromomethane | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroform | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Cis-1,3-Dichloropropane | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Dichlorobromomethane | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Methyl Bromide | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Methyl Chloride | 04/90 | Unk. | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Methylene Chloride | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Styrene | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Tetrachloroethylene | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Toluene | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Trans-1,2-Dichloroethylene | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Trans-1,3-Dichloropropane | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Trichloroethylene | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Acetate | 04/90 | Unk. | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Chloride | 04/90 | Unk. | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Xylenes (Total) | 04/90 | Unk. | 5 | ug/L | ND | ND | ND | 7.3 | 1600 | ND | ND | ND |

ND = Not Detected

* MW-06S diluted by a factor of 10.

Rexene: VOC'S (Sampled by IT. Corp., July 1990)

| Constituent | Date Sampled | Method | Detection Limits | Units | MW-12 | MW-01 | MW-03S | MW-03D | MW-06S* | MW-06S* (Dup.) | MW-06D | MW-09S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2,2-Tetrachloroethane | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1,2-Trichloroethane | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethane | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,1-Dichloroethylene | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloroethane | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichloropropane | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Butanone | 07/90 | Unk. | 100 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Chloroethylvinyl Ether | 07/90 | Unk. | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Hexanone | 07/90 | Unk. | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Methyl-2-Pentanone | 07/90 | Unk. | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Acetone | 07/90 | Unk. | 100 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzene | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | 370 | 440 | ND | ND |
| Bromoform | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon Disulfide | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Carbon Tetrachloride | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorethane | 07/90 | Unk. | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorobenzene | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Chlorodibromomethane | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Chloroform | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Cis-1,3-Dichloropropane | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Dichlorobromomethane | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Ethylbenzene | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | 110 | 450 | ND | ND |
| Methyl Bromide | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Methyl Chloride | 07/90 | Unk. | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Methylene Chloride | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Styrene | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Tetrachloroethylene | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Toluene | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | 19j | 25j | ND | ND |
| Trans-1,2-Dichloroethylene | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Trans-1,3-Dichloropropane | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Trichloroethylene | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Acetate | 07/90 | Unk. | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Vinyl Chloride | 07/90 | Unk. | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Xylenes (Total) | 07/90 | Unk. | 5 | ug/L | ND | ND | ND | ND | 1600 | 1800 | ND | ND |

ND = Not Detected

* MW-06S, and MW-06S (Dup.), were diluted by a factor of 10.

j = estimated value below detection limits.

Rexene: PAH's (Sampled by: H+GCL, 12/08/93)

| Constituent | Date Sampled | Limits | Units | Method | MW-12 | MW-01 | MW-3S | MW-3D | MW-6S | MW-6D | MW-9S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 12/08/93 | 10 | ug/L | 8270(2) | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthylene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Anthracene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Benzo(a)anthracene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Benzo(b)fluoranthene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Benzo(k)fluoranthene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Benzo(ghi)perylene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Benzo(a)pyrene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Chrysene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Dibenzo(a,h)anthracene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Fluoranthene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Fluorene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Indeno(1,2,3-cd)pyrene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Phenanthrene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |
| Pyrene | 12/08/93 | 10 | ug/L | | ND | ND | ND | ND | ND | ND | ND |

ND = Not Detected
* = Used to indicate matrix interference.

Rexene: SVOC's (Sampled by: IT, Corp., April 1990)

| Constituent | Date Sampled | Method | Detection Limits | Units | MW-12 | MW-01 | MW-03S | MW-03D | MW-06S | MW-06D | MW-09S | MW-09S (Dup.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichlorobenzene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,4-Dichlorobenzene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,4,5-Trichlorophenol | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,4,6-Trichlorophenol | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,4-Dichlorophenol | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,4-Dimethylphenol | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | 340 | ND | ND | ND |
| 2,4-Dinitrophenol | 04/90 | GC/MS | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,4-Dinitrotoluene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,6-Dinitrotoluene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Chloronaphthalene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Chlorophenol | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Methylnaphthalene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | 22 | 27j | ND | ND |
| 2-Methylphenol | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Nitroaniline | 04/90 | GC/MS | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Nitrophenol | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 3,3-Dichlorobenzidine | 04/90 | GC/MS | 20 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 3-Nitroaniline | 04/90 | GC/MS | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4,6-Dinitro-2-methylphenol | 04/90 | GC/MS | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Bromophenyl-phenylether | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Chloro-3-methylphenol | 04/90 | GC/MS | 20 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Chloroaniline | 04/90 | GC/MS | 20 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Chlorphenyl-phenylether | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Methylphenol | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Nitroaniline | 04/90 | GC/MS | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Nitrophenol | 04/90 | GC/MS | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthylene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | 51j | ND | ND |
| Anthracene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzo(a)anthracene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzo(a)pyrene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzo(b)fluoranthene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzo(g,h,i)perylene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |

ND = Not Detected
b Value Below Detection Limits
j Estimated Value

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Rexene: SVOC's (Sampled by: IT, Corp., April 1990) cont'd.

| Constituent | Date Sampled | Method | Detection Limits | Units | MW-12 | MW-01 | MW-03S | MW-03D | MW-06S | MW-06D | MW-09S | MW-09S (Dup.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzo(k)fluoranthene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzoic Acid | 04/90 | GC/MS | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzyl Alcohol | 04/90 | GC/MS | 20 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Butylbenzylphthalate | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Chrysene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Di-n-butylphthalate | 04/90 | GC/MS | 10 | ug/L | 4bj | ND | ND | ND | ND | 6jb | 6jb | 4jb |
| Di-n-octylphthalte | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibenzo(a,h)anthracene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibenzofuran | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Diethylphthalate | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Dimethylphthalte | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Fluoranthene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Fluorene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | 2j | ND |
| Hexachlorobenzene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Hexachlorobutadiene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Hexachlorocyclopentadiene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Hexachloroethane | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Indeno(1,2,3-cd)pyrene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Isophorone | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| N-Nitroso-di-n-propylamine | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| N-Nitrosodiphenylamine | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | 45 | 12j | ND | ND |
| Nitrobenzene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Pentachlorophenol | 04/90 | GC/MS | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Phenanthrene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | 5j | ND |
| Phenol | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Pyrene | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | 2j | ND |
| bis(2-Chloroethoxy)methane | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| bis(2-Chloroethyl)ether | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| bis(2-Chloroisopropyl)ether | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| bis(2-Ethylhexyl)phthalate | 04/90 | GC/MS | 10 | ug/L | ND | ND | ND | ND | 23 | ND | ND | 1jb |

ND = Not Detected
b Value Below Detection Limits
j Estimated Value

Rexene: SVOC's (Sampled by: IT, Corp., July 1990)

| Constituent | Date Sampled | Method | Detection Limits | Units | MW-12 | MW-01 | MW-03S | MW-03D | MW-06S* | MW-06Sa (Dup.) | MW-06D | MW-09S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,2-Dichlorobenzene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,3-Dichlorobenzene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 1,4-Dichlorobenzene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,4,5-Trichlorophenol | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,4,6-Trichlorophenol | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,4-Dichlorophenol | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,4-Dimethylphenol | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | 540 | 590 | ND | ND |
| 2,4-Dinitrophenol | 07/90 | 8270 | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,4-Dinitrotoluene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2,6-Dinitrotoluene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Chloronaphthalene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Chlorophenol | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Methylnaphthalene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | 250 | 27j | ND | ND |
| 2-Methylphenol | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Nitroaniline | 07/90 | 8270 | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 2-Nitrophenol | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 3,3-Dichlorobenzidine | 07/90 | 8270 | 20 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 3-Nitroaniline | 07/90 | 8270 | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4,6-Dinitro-2-methylphenol | 07/90 | 8270 | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Bromophenyl-phenylether | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Chloro-3-methylphenol | 07/90 | 8270 | 20 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Chloroaniline | 07/90 | 8270 | 20 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Chlorphenyl-phenylether | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Methylphenol | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Nitroaniline | 07/90 | 8270 | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| 4-Nitrophenol | 07/90 | 8270 | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Acenaphthylene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | 51j | 51j | ND | ND |
| Anthracene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | 75j | ND | ND | ND |
| Benzo(a)anthracene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzo(a)pyrene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzo(b)fluoranthene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzo(g,h,i)perylene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |

ND = Not Detected
* MW-06S diluted by a factor of 20.
a MW-06S (Dup.) diluted by a factor of 5.
b Value Below Detection Limits
j Estimated Value

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Rexene: SVOC's (Sampled by: IT, Corp., July 1990) cont'd.

| Constituent | Date Sampled | Method | Detection Limits | Units | MW-12 | MW-01 | MW-03S | MW-03D | MW-06S* | MW-06Sa (Dup.) | MW-06D | MW-09S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Benzo(k)fluoranthene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzoic Acid | 07/90 | 8270 | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Benzyl Alcohol | 07/90 | 8270 | 20 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Butylbenzylphthalate | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Chrysene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Di-n-butylphthalate | 07/90 | 8270 | 10 | ug/L | 4bj | ND | ND | 3jb | ND | 6jb | 5jb | 4jb |
| Di-n-octylphthalte | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibenzo(a,h)anthracene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Dibenzofuran | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Diethylphthalate | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Dimethylphthalte | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Fluoranthene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Fluorene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | 150j | ND | ND | ND |
| Hexachlorobenzene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Hexachlorobutadiene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Hexachlorocyclopentadiene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Hexachloroethane | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Indeno(1,2,3-cd)pyrene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Isophorone | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| N-Nitroso-di-n-propylamine | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| N-Nitrosodiphenylamine | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Naphthalene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | 98j | 12j | ND | ND |
| Nitrobenzene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Pentachlorophenol | 07/90 | 8270 | 50 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Phenanthrene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | 490 | ND | ND | ND |
| Phenol | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| Pyrene | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | 210 | ND | ND | ND |
| bis(2-Chloroethoxy)methane | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| bis(2-Chloroethyl)ether | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| bis(2-Chloroisopropyl)ether | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | ND | ND | ND | ND | ND |
| bis(2-Ethylhexyl)phthalate | 07/90 | 8270 | 10 | ug/L | ND | ND | ND | 2jb | ND | ND | 1jb | 1jb |

ND = Not Detected
* MW-06S diluted by a factor of 20.
a MW-06S (Dup.) diluted by a factor of 5.
b Value Below Detection Limits
j Estimated Value

Rexene: CAM Metals (Sampled by: H+GCL, 12/08/93)

| Constituent | Date Sampled | Test Method | Detection Limits | Units | MW-12 | MW-01 | MW-3S | MW-3D | MW-6S | MW-6D | MW-9S |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 12/08/93 | 6010 (2) | 0.1 | mg/L | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Arsenic | 12/08/93 | 6010 (2) | 0.05 | mg/L | <0.05 | 0.07 | <0.05 | <0.05 | 0.17 | <0.05 | <0.05 |
| Barium | 12/08/93 | 6010 (2) | 0.01 | mg/L | 0.04 | 0.14 | 0.08 | 0.04 | 0.73 | 0.05 | 0.07 |
| Beryllium | 12/08/93 | 6010 (2) | 0.005 | mg/L | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 | <0.005 |
| Cadmium | 12/08/93 | 6010 (2) | 0.005 | mg/L | 0.005 | <0.005 | <0.005 | <0.005 | <0.005 | 0.029 | 0.014 |
| Chromium | 12/08/93 | 6010 (2) | 0.01 | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 |
| Cobalt | 12/08/93 | 6010 (2) | 0.03 | mg/L | <0.03 | <0.03 | <0.03 | <0.03 | <0.03 | <0.03 | <0.03 |
| Copper | 12/08/93 | 6010 (2) | 0.01 | mg/L | <0.01 | <0.01 | <0.01 | 0.02 | <0.01 | <0.01 | <0.01 |
| Lead | 12/08/93 | 6010 (2) | 0.05 | mg/L | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Mercury | 12/08/93 | 7470 (2) | 0.0002 | mg/L | <0.0002 | <0.0002 | <0.0002 | <0.0002 | <0.0002 | <0.0002 | <0.0002 |
| Molybdenum | 12/08/93 | 6010 (2) | 0.05 | mg/L | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Nickel | 12/08/93 | 6010 (2) | 0.04 | mg/L | 0.05 | <0.04 | <0.04 | 0.04 | <0.04 | 0.04 | <0.04 |
| Selenium | 12/08/93 | 6010 (2) | 0.1 | mg/L | <0.1 | <0.1 | 0.1 | 0.1 | <0.1 | <0.1 | <0.1 |
| Silver | 12/08/93 | 6010 (2) | 0.01 | mg/L | 0.03 | <0.01 | <0.01 | <0.01 | <0.01 | 0.01 | <0.01 |
| Thallium | 12/08/93 | 6010 (2) | 0.1 | mg/L | <0.1 | <0.1 | 0.1 | <0.1 | <0.1 | <0.1 | <0.1 |
| Vanadium | 12/08/93 | 6010 (2) | 0.05 | mg/L | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Zinc | 12/08/93 | 6010 (2) | 0.01 | mg/L | <0.01 | <0.01 | <0.01 | 0.01 | <0.01 | 0.02 | 0.01 |

Rexene: Metals (Sampled by: IT, Corp., April 1990)

| Constituent | Date Sampled | Test Method | Units | MW-12-01 Detection Limits | MW-12-01 Results | MW-01-01 Detection Limits | MW-01-01 Results | MW-3S-01 Detection Limits | MW-3S-01 Results | MW-3D-01 Detection Limits | MW-3D-01 Results |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 04/90 | ICP | mg/L | 0.022 | ND | 0.022 | ND | 0.022 | ND | 0.022 | 0.026 |
| Arsenic | 04/90 | ICP | mg/L | 0.027 | ND | 0.027 | 0.039 | 0.027 | ND | 0.027 | ND |
| Beryllium | 04/90 | ICP | mg/L | 0.00040 | 0.00049 | 0.00040 | ND | 0.00040 | ND | 0.00040 | ND |
| Bicarbonate | 04/90 | UNK | mg/L | 1 | 610 | 1 | 320 | 1 | 630 | 1 | 430 |
| Cadmium | 04/90 | ICP | mg/L | 0.0016 | ND | 0.0016 | ND | 0.0016 | 0.0076 | 0.0016 | ND |
| Calcium | 04/90 | ICP | mg/L | 0.10 | 990 | 0.010 | 79 | 0.010 | 180 | 0.010 | 370 |
| Chloride | 04/90 | UNK | mg/L | 1 | 7900 | 1 | 97 | 1 | 2100 | 1 | [illegible] |
| Chromium | 04/90 | ICP | mg/L | 0.0040 | ND | 0.0040 | ND | 0.0040 | ND | 0.0040 | [illegible] |
| Copper | 04/90 | ICP | mg/L | 0.0020 | ND | 0.0020 | 0.0036 | 0.0020 | 0.011 | 0.0020 | ND |
| Lead | 04/90 | UNK | mg/L | 0.021 | ND | 0.021 | ND | 0.021 | 0.024 | 0.021 | 0.037 |
| Magnesium | 04/90 | ICP | mg/L | 0.00030 | 220 | 0.00030 | 20 | 0.00030 | 82 | 0.00030 | 170 |
| Mercury | 04/90 | UNK | mg/L | 0.0002 | ND | 0.0002 | ND | 0.0002 | ND | 0.0002 | ND |
| Nickel | 04/90 | ICP | mg/L | 0.0080 | ND | 0.0080 | ND | 0.0080 | ND | 0.0080 | ND |
| Potasssium | 04/90 | ICP | mg/L | 0.50 | 29 | 0.50 | 4.8 | 0.50 | 12 | 0.50 | 18 |
| Selenium | 04/90 | ICP | mg/L | 0.026 | ND | 0.026 | ND | 0.026 | ND | 0.026 | ND |
| Silver | 04/90 | ICP | mg/L | 0.0050 | ND | 0.0050 | 0.016 | 0.0050 | 0.032 | 0.0050 | ND |
| Sodium | 04/90 | ICP | mg/L | 0.16 | 4300 | 0.020 | 120 | 0.16 | 1700 | 0.16 | 3400 |
| Sulfate | 04/90 | UNK | mg/L | 50 | 2400 | 10 | 120 | 50 | 960 | 100 | 2500 |
| Thallium | 04/90 | ICP | mg/L | 0.013 | ND | 0.013 | ND | 0.013 | ND | 0.013 | ND |
| Zinc | 04/90 | ICP | mg/L | 0.0013 | 0.031 | 0.0013 | 0.016 | 0.0013 | 0.053 | 0.0013 | 0.035 |

ND = Not Detected

Rexene: Metals (Sampled by: IT, Corp., April 1990)

| Constituent | Date Sampled | Test Method | Units | MW-6S-01 Detection Limits | MW-6S-01 Results | MW-6D-01 Detection Limits | MW-6D-01 Results | MW-9S-01 Detection Limits | MW-9S-01 Results | MW-9S-01 (Dup.) Detection Limits | MW-9S-01 (Dup.) Results |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 04/90 | ICP | mg/L | 0.022 | ND | 0.022 | 0.023 | 0.022 | ND | 0.022 | ND |
| Arsenic | 04/90 | ICP | mg/L | 0.027 | ND | 0.027 | ND | 0.027 | ND | 0.027 | ND |
| Beryllium | 04/90 | ICP | mg/L | 0.00040 | ND | 0.00040 | ND | 0.00040 | ND | 0.00040 | ND |
| Bicarbonate | 04/90 | UNK | mg/L | 1 | 1300 | 1 | 410 | 1 | 530 | 1 | 530 |
| Cadmium | 04/90 | ICP | mg/L | 0.0016 | ND | 0.0016 | ND | 0.0016 | ND | 0.0016 | ND |
| Calcium | 04/90 | ICP | mg/L | 0.010 | 250 | 0.010 | 410 | 0.010 | 200 | 0.010 | 200 |
| Chloride | 04/90 | UNK | mg/L | 1 | 1400 | 1 | 5000 | 1 | 630 | 1 | [illegible] |
| Chromium | 04/90 | ICP | mg/L | 0.0040 | ND | 0.0040 | ND | 0.0040 | ND | 0.0040 | ND |
| Copper | 04/90 | ICP | mg/L | 0.0020 | 0.0034 | 0.0020 | ND | 0.0020 | 0.0024 | 0.0020 | ND |
| Lead | 04/90 | UNK | mg/L | 0.021 | 0.025 | 0.021 | 0.029 | 0.021 | ND | 0.021 | ND |
| Magnesium | 04/90 | ICP | mg/L | 0.00030 | 69 | 0.00030 | 150 | 0.00030 | 69 | 0.00030 | 70 |
| Mercury | 04/90 | UNK | mg/L | 0.0002 | ND | 0.0002 | ND | 0.0002 | ND | 0.0002 | ND |
| Nickel | 04/90 | ICP | mg/L | 0.0080 | ND | 0.0080 | ND | 0.0080 | ND | 0.0080 | ND |
| Potasssium | 04/90 | ICP | mg/L | 0.50 | 14 | 0.50 | 18 | 0.50 | 8.6 | 0.50 | 9.1 |
| Selenium | 04/90 | ICP | mg/L | 0.026 | ND | 0.026 | ND | 0.026 | ND | 0.026 | ND |
| Silver | 04/90 | ICP | mg/L | 0.0050 | 0.0052 | 0.0050 | ND | 0.0050 | 0.015 | 0.0050 | 0.0097 |
| Sodium | 04/90 | ICP | mg/L | 0.16 | 1300 | 0.16 | 3400 | 0.16 | 1200 | 0.16 | 1200 |
| Sulfate | 04/90 | UNK | mg/L | 100 | 410 | 100 | 2400 | 100 | 2200 | 100 | 2100 |
| Thallium | 04/90 | ICP | mg/L | 0.013 | ND | 0.013 | ND | 0.013 | ND | 0.013 | ND |
| Zinc | 04/90 | ICP | mg/L | 0.0013 | 0.014 | 0.0013 | 0.015 | 0.0013 | 0.029 | 0.0013 | 0.012 |

ND = Not Detected

Rexene: Metals (Sampled by: IT, Corp., July 1990)

| Constituent | Date Sampled | Test Method | Units | MW-12-02 Detection Limits | MW-12-02 *Results | MW-1-02 Detection Limits | MW-1-02 *Results | MW-3S-02 Detection Limits | MW-3S-02 *Results | MW-3D-02 Detection Limits | MW-3D-02 *Results |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 07/18/90 | ICP | ug/L | 220 | 220 | 22.0 | 2.30 | 22.0 | 33.0 | 220 | 220 |
| Arsenic | 07/18/90 | FURN. | ug/L | 2.0 | 2.0 | 2.0 | 41.4 | 4.0 | 25.3 | 2.0 | 2.0 |
| Beryllium | 07/18/90 | ICP | ug/L | 4.0 | 4.0 | 0.40 | 0.40 | 0.4 | 0.4 | 4.0 | 4.0 |
| Bicarbonate | 07/18/90 | UNK | mg/L | 1.0 | 510 | 1.0 | 380 | 1.0 | 670 | 1.0 | 410 |
| Cadmium | 07/18/90 | ICP | ug/L | 16.0 | 16.0 | 1.6 | 2.0 | 1.6 | 2.0 | 16.0 | 16.0 |
| Calcium | 07/18/90 | ICP | ug/L | 100 | 989000 | 10.0 | 92900 | 100 | 104000 | 100 | 470000 |
| Chloride | 07/18/90 | UNK | mg/L | 1.0 | 8200 | 1.0 | 94 | 1.0 | 1200 | 1.0 | [illegible] |
| Chromium | 07/18/90 | ICP | ug/L | 40.0 | 40.0 | 4.0 | 4.0 | 4.0 | 4.0 | 40.0 | 40.0 |
| Copper | 07/18/90 | ICP | ug/L | 20.0 | 83.0 | 2.0 | 4.0 | 2.0 | 8.0 | 20.0 | 35.0 |
| Lead | 07/18/90 | FURN. | ug/L | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Magnesium | 07/18/90 | ICP | ug/L | 3.0 | 510000 | 0.30 | 33700 | 0.3 | 57800 | 3.0 | 321000 |
| Mercury | 07/18/90 | UNK | ug/L | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel | 07/18/90 | ICP | ug/L | 80.0 | 80.0 | 8.0 | 8.0 | 8.0 | 8.0 | 80.0 | 80.0 |
| Potassium | 07/18/90 | ICP | ug/L | 30000 | 30000 | 3000 | 3000 | 3000 | 3000 | 30000 | 30000 |
| Selenium | 07/18/90 | FURN. | ug/L | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Silver | 07/18/90 | ICP | ug/L | 50.0 | 75.0 | 5.0 | 5.0 | 5.0 | 5.0 | 50.0 | 50.0 |
| Sodium | 07/18/90 | ICP | ug/L | 160 | 3810000 | 16.0 | 149000 | 16.0 | 1070000 | 160 | 3120000 |
| Sulfate | 07/18/90 | UNK | mg/L | 100 | 2300 | 10 | 100 | 20 | 550 | 100 | 2400 |
| Thallium | 07/18/90 | FURN. | ug/L | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Zinc | 07/18/90 | ICP | ug/L | 13.0 | 59.0 | 1.3 | 2.0 | 1.3 | 1.3 | 13.0 | 13.0 |

* Results reported to Detection Limits.

Rexene: Metals (Sampled by: IT, Corp., July 1990)

| Constituent | Date Sampled | Test Method | Units | MW-6S-02 Detection Limits | MW-6S-02 *Results | MW-6S-02 (Dup.) Detection Limits | MW-6S-02 (Dup.) *Results | MW-6D-02 Detection Limits | MW-6D-02 *Results | MW-9S-02 Detection Limits | MW-9S-02 *Results |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 07/18/90 | ICP | ug/L | 220 | 220 | 220 | 220 | 220 | 220 | 22.0 | 34.0 |
| Arsenic | 07/18/90 | FURN. | ug/L | 10.0 | 49.7 | 10.0 | 42.1 | 2.0 | 2.0 | 2.0 | 2.0 |
| Beryllium | 07/18/90 | ICP | ug/L | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 0.4 | 0.4 |
| Bicarbonate | 07/18/90 | UNK | mg/L | 1.0 | 1900 | 1.0 | 1800 | 1.0 | 550 | 1.0 | 530 |
| Cadmium | 07/18/90 | ICP | ug/L | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 20.0 | 1.6 | 1.6 |
| Calcium | 07/18/90 | ICP | ug/L | 100 | 148000 | 100 | 143000 | 100 | 490000 | 10.0 | 188000 |
| Chloride | 07/18/90 | UNK | mg/L | 1.0 | 1500 | 1.0 | 1500 | 1.0 | 4900 | 1.0 | [illegible]0 |
| Chromium | 07/18/90 | ICP | ug/L | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 4.0 | 4.0 |
| Copper | 07/18/90 | ICP | ug/L | 20.0 | 20.0 | 20.0 | 53.0 | 20.0 | 39.0 | 2.0 | 11.0 |
| Lead | 07/18/90 | FURN. | ug/L | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Magnesium | 07/18/90 | ICP | ug/L | 3.0 | 91700 | 3.0 | 88600 | 3.0 | 271000 | 3.0 | 81500 |
| Mercury | 07/18/90 | UNK | ug/L | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Nickel | 07/18/90 | ICP | ug/L | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 8.0 | 8.0 |
| Potassium | 07/18/90 | ICP | ug/L | 30000 | 30000 | 30000 | 30000 | 30000 | 30000 | 3000 | 3000 |
| Selenium | 07/18/90 | FURN. | ug/L | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Silver | 07/18/90 | ICP | ug/L | 50.0 | 174 | 50.0 | 223 | 50.0 | 50.0 | 5.0 | 5.0 |
| Sodium | 07/18/90 | ICP | ug/L | 160 | 1300 | 160 | 1250000 | 160 | 3130000 | 16.0 | 1170000 |
| Sulfate | 07/18/90 | UNK | mg/L | 10 | 130 | 10 | 130 | 100 | 2500 | 100 | 1900 |
| Thallium | 07/18/90 | FURN. | ug/L | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Zinc | 07/18/90 | ICP | ug/L | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 1.3 | 1.3 |

Western Atlas International

**CORE LABORATORIES**

CORE LABORATORIES
A N A L Y T I C A L  R E P O R T

Job Number: 932392
Prepared For:

HYGIENETICS/GCL

505 MARQUETTE NW STE 1100
ALBUQUERQUE, NM 87102

Date: 01/06/94

Linda L. Benkers
Signature

1-6-94
Date:

Name: Linda L. Benkers

Core Laboratories
10703 East Bethany Drive
Aurora, CO 80014

Title: QA/QA COORDINATOR

H+GCL Environmental Scientists and Engineers

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7293

# Chain of Custody

Date 12/8/93 Page 1 of 1

Lab Name CORE LABORATORIES
Address 10703 East Bethany Drive
Aurora, CO 80014-2696
Telephone 303/751-1780

Samplers (SIGNATURES)

## Analysis Request

| Sample Number | Matrix | Location | Halogenated Volatiles 601/8010 | Aromatic Volatiles 602/8020 | Phenols, Sub Phenols 604/8040 | Pesticides/PCB 608/8080 | Polynuclear Aromatic Hydrocarbons 610/8310 | Volatile Compounds GC/MS 624/8240 | Base/Neu/Acid Compounds GC/MS 625/8270 | Total Organic Carbon (TOC) 415/9060 | Total Organic Halides (TOX) 9020 | Petroleum Hydrocarbons 418.1 | TPH/BTEX Modified 8015 | TCLP- Vol., Semi-Vol. Herbicides, Pesticides | TCLP- Metals | RCRA Metals(8) | Priority Pollutant Metals (13) | CAM Metals (18) TTLC/STLC | Flash Point | Corrosivity | Reactivity | Oil & Grease | Cyanide Total/Amenable | Chemical Oxygen Demand (COD) | Cam Metals | | | | Number of Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9312080700 | $H_2O$ | MW-12 | | | | | | | | | | | * | | | | | | | | | | | | * | | | | 4 |
| 9312080730 | $H_2O$ | MW-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| 9312080800 | $H_2O$ | MW-3S | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| 9312080830 | $H_2O$ | MW-3d | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| 9312080930 | $H_2O$ | MW-6d | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| 9312081000 | $H_2O$ | MW-9S | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |
| 9312081100 | $H_2O$ | MW-6S | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 |

| Project Information | | Sample Receipt | |
|---|---|---|---|
| Project | REGENE | Total No. of Containers | 36 |
| Project Director | Frank T. | Chain of Custody Seals | Y |
| Charge Code No. | 54159.02 | Rec'd Good Condition/Cold | Y |
| Shipping ID. No. | 8909628996 | Conforms to Record | N |
| Via: | Fed X | Lab No. | 932392 |

Special Instructions/Comments:
ALL Samples for Metals Have been Filtered

| Relinquished By 1. | Relinquished By 2. | Relinquished By 3. |
|---|---|---|
| (Signature) 1300 (Time) | (Signature) (Time) | (Signature) (Time) |
| (Printed Name) DAVID NEE 12/8/93 (Date) | (Printed Name) (Date) | (Printed Name) (Date) |
| (Company) H+GCL | (Company) | (Company) |
| **Received By 1.** | **Received By 2.** | **Received By (Laboratory) 3.** |
| (Signature) (Time) | (Signature) (Time) | (Signature) Mary Scott 1000 (Time) |
| (Printed Name) (Date) | (Printed Name) (Date) | (Printed Name) Mary Scott 12-9-93 (Date) |
| (Company) | (Company) | (Laboratory) Core |

DISTRIBUTION: WHITE, CANARY - LABORATORY • PINK, H+GCL

Western Atlas International

# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7293
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 07:00
WORK DESCRIPTION...: 9312080700

MW-12

LABORATORY I.D...: 932392-0001
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| Antimony, Diss. (Sb) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Arsenic, Diss. (As) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Barium, Diss. (Ba) | 0.04 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Beryllium, Diss. (Be) | <0.005 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cadmium, Diss. (Cd) | 0.005 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Chromium, Diss. (Cr) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cobalt, Diss. (Co) | <0.03 | 0.03 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Copper, Diss. (Cu) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Lead, Diss. (Pb) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Mercury, Diss. (Hg) | <0.0002 | 0.0002 | mg/L | 7470 (2) | 12/29/93 | GEF |
| Molybdenum, Diss. (Mo) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Nickel, Diss. (Ni) | 0.05 | 0.04 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Selenium, Diss. (Se) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Silver, Diss. (Ag) | 0.03 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Thallium, Diss. (Tl) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Vanadium, Diss. (V) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Zinc, Diss. (Zn) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| 8020 - AROMATIC VOLATILE ORGANICS | | *1 | | 8020 (2) | 12/17/93 | CLT |
| Benzene | ND | 0.5 | ug/L | | | |
| Toluene | ND | 0.5 | ug/L | | | |
| Ethyl benzene | ND | 0.5 | ug/L | | | |
| Xylenes | ND | 0.5 | ug/L | | | |
| 4-Bromofluorobenzene (surrogate) | 98 | 0 | % Recovery | Limits (85-115) | | |
| Total Vol. Petroleum Hydrocarbon | 0.1 | 0.1 | mg/L Gasoline | 8015 (Modified) (2) | 12/17/93 | CLT |

10703 East Bethany Drive
Aurora, CO 80014
(303) 751-1780

Western Atlas International

# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7293
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 07:30
WORK DESCRIPTION...: 9312080730

LABORATORY I.D...: 932392-0002
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| Antimony, Diss. (Sb) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Arsenic, Diss. (As) | 0.07 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Barium, Diss. (Ba) | 0.14 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Beryllium, Diss. (Be) | <0.005 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cadmium, Diss. (Cd) | <0.005 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Chromium, Diss. (Cr) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cobalt, Diss. (Co) | <0.03 | 0.03 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Copper, Diss. (Cu) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Lead, Diss. (Pb) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Mercury, Diss. (Hg) | <0.0002 | 0.0002 | mg/L | 7470 (2) | 12/29/93 | GEF |
| Molybdenum, Diss. (Mo) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Nickel, Diss. (Ni) | <0.04 | 0.04 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Selenium, Diss. (Se) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Silver, Diss. (Ag) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Thallium, Diss. (Tl) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Vanadium, Diss. (V) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Zinc, Diss. (Zn) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| 8020 - AROMATIC VOLATILE ORGANICS | | *1 | | 8020 (2) | 12/17/93 | CLT |
| Benzene | ND | 0.5 | ug/L | | | |
| Toluene | ND | 0.5 | ug/L | | | |
| Ethyl benzene | ND | 0.5 | ug/L | | | |
| Xylenes | ND | 0.5 | ug/L | | | |
| 4-Bromofluorobenzene (surrogate) | 96 | 0 | % Recovery | Limits (85-115) | | |
| Total Vol. Petroleum Hydrocarbon | 0.1 | 0.1 | mg/L Gasoline | 8015 (Modified) (2) | 12/17/93 | CLT |

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Western Atlas International

# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7293
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 08:00
WORK DESCRIPTION...: 9312080800

MW-35

LABORATORY I.D...: 932392-0003
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| Antimony, Diss. (Sb) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Arsenic, Diss. (As) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Barium, Diss. (Ba) | 0.08 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Beryllium, Diss. (Be) | <0.005 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cadmium, Diss. (Cd) | <0.005 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Chromium, Diss. (Cr) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cobalt, Diss. (Co) | <0.03 | 0.03 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Copper, Diss. (Cu) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Lead, Diss. (Pb) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Mercury, Diss. (Hg) | <0.0002 | 0.0002 | mg/L | 7470 (2) | 12/29/93 | GEF |
| Molybdenum, Diss. (Mo) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Nickel, Diss. (Ni) | <0.04 | 0.04 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Selenium, Diss. (Se) | 0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Silver, Diss. (Ag) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Thallium, Diss. (Tl) | 0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Vanadium, Diss. (V) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Zinc, Diss. (Zn) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| 8020 - AROMATIC VOLATILE ORGANICS | | *1 | | 8020 (2) | 12/17/93 | CLT |
| Benzene | ND | 0.5 | ug/L | | | |
| Toluene | ND | 0.5 | ug/L | | | |
| Ethyl benzene | ND | 0.5 | ug/L | | | |
| Xylenes | ND | 0.5 | ug/L | | | |
| 4-Bromofluorobenzene (surrogate) | 95 | 0 | % Recovery | Limits (85-115) | | |
| Total Vol. Petroleum Hydrocarbon | 0.1 | 0.1 | mg/L Gasoline | 8015 (Modified) (2) | 12/17/93 | CLT |

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Aurora, CO 80014
(303) 751-1780

Western Atlas International

# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7293
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 08:30
WORK DESCRIPTION...: 9312080830

MW-3D

LABORATORY I.D...: 932392-0004
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| Antimony, Diss. (Sb) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Arsenic, Diss. (As) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Barium, Diss. (Ba) | 0.04 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Beryllium, Diss. (Be) | <0.005 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cadmium, Diss. (Cd) | <0.005 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Chromium, Diss. (Cr) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cobalt, Diss. (Co) | <0.03 | 0.03 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Copper, Diss. (Cu) | 0.02 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Lead, Diss. (Pb) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Mercury, Diss. (Hg) | <0.0002 | 0.0002 | mg/L | 7470 (2) | 12/29/93 | GEF |
| Molybdenum, Diss. (Mo) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Nickel, Diss. (Ni) | 0.04 | 0.04 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Selenium, Diss. (Se) | 0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Silver, Diss. (Ag) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Thallium, Diss. (Tl) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Vanadium, Diss. (V) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Zinc, Diss. (Zn) | 0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| 8020 - AROMATIC VOLATILE ORGANICS | | *1 | | 8020 (2) | 12/17/93 | CLT |
| Benzene | ND | 0.5 | ug/L | | | |
| Toluene | ND | 0.5 | ug/L | | | |
| Ethyl benzene | ND | 0.5 | ug/L | | | |
| Xylenes | ND | 0.5 | ug/L | | | |
| 4-Bromofluorobenzene (surrogate) | 96 | 0 | % Recovery | Limits (85-115) | | |
| Total Vol. Petroleum Hydrocarbon | 0.1 | 0.1 | mg/L Gasoline | 8015 (Modified) (2) | 12/17/93 | CLT |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7293
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 09:30
WORK DESCRIPTION...: 9312080930

MW-6D

LABORATORY I.D...: 932392-0005
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| Antimony, Diss. (Sb) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Arsenic, Diss. (As) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Barium, Diss. (Ba) | 0.05 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Beryllium, Diss. (Be) | <0.005 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cadmium, Diss. (Cd) | 0.029 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Chromium, Diss. (Cr) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cobalt, Diss. (Co) | <0.03 | 0.03 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Copper, Diss. (Cu) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Lead, Diss. (Pb) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Mercury, Diss. (Hg) | <0.0002 | 0.0002 | mg/L | 7470 (2) | 12/29/93 | GEF |
| Molybdenum, Diss. (Mo) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Nickel, Diss. (Ni) | 0.04 | 0.04 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Selenium, Diss. (Se) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Silver, Diss. (Ag) | 0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Thallium, Diss. (Tl) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Vanadium, Diss. (V) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Zinc, Diss. (Zn) | 0.02 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| 8020 - AROMATIC VOLATILE ORGANICS | | *1 | | 8020 (2) | 12/17/93 | CLT |
| Benzene | ND | 0.5 | ug/L | | | |
| Toluene | ND | 0.5 | ug/L | | | |
| Ethyl benzene | ND | 0.5 | ug/L | | | |
| Xylenes | ND | 0.5 | ug/L | | | |
| 4-Bromofluorobenzene (surrogate) | 95 | 0 | % Recovery | Limits (85-115) | | |
| Total Vol. Petroleum Hydrocarbon | 0.1 | 0.1 | mg/L Gasoline | 8015 (Modified) (2) | 12/17/93 | CLT |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7293
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 10:00
WORK DESCRIPTION...: 9312081000

LABORATORY I.D...: 932392-0006
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

nw 95

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| Antimony, Diss. (Sb) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Arsenic, Diss. (As) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Barium, Diss. (Ba) | 0.07 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Beryllium, Diss. (Be) | <0.005 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cadmium, Diss. (Cd) | 0.014 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Chromium, Diss. (Cr) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cobalt, Diss. (Co) | <0.03 | 0.03 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Copper, Diss. (Cu) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Lead, Diss. (Pb) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Mercury, Diss. (Hg) | <0.0002 | 0.0002 | mg/L | 7470 (2) | 12/29/93 | GEF |
| Molybdenum, Diss. (Mo) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Nickel, Diss. (Ni) | <0.04 | 0.04 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Selenium, Diss. (Se) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Silver, Diss. (Ag) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Thallium, Diss. (Tl) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Vanadium, Diss. (V) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Zinc, Diss. (Zn) | 0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| 8020 - AROMATIC VOLATILE ORGANICS | | *1 | | 8020 (2) | 12/17/93 | CLT |
| Benzene | ND | 0.5 | ug/L | | | |
| Toluene | ND | 0.5 | ug/L | | | |
| Ethyl benzene | ND | 0.5 | ug/L | | | |
| Xylenes | ND | 0.5 | ug/L | | | |
| 4-Bromofluorobenzene (surrogate) | 95 | 0 | % Recovery | Limits (85-115) | | |
| Total Vol. Petroleum Hydrocarbon | 0.1 | 0.1 | mg/L Gasoline | 8015 (Modified) (2) | 12/17/93 | CLT |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7293
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 11:00
WORK DESCRIPTION...: 9312081100

LABORATORY I.D...: 932392-0007
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

MW-65

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| Antimony, Diss. (Sb) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Arsenic, Diss. (As) | 0.17 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Barium, Diss. (Ba) | 0.73 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Beryllium, Diss. (Be) | <0.005 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cadmium, Diss. (Cd) | <0.005 | 0.005 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Chromium, Diss. (Cr) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Cobalt, Diss. (Co) | <0.03 | 0.03 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Copper, Diss. (Cu) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Lead, Diss. (Pb) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Mercury, Diss. (Hg) | <0.0002 | 0.0002 | mg/L | 7470 (2) | 12/29/93 | GEF |
| Molybdenum, Diss. (Mo) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Nickel, Diss. (Ni) | <0.04 | 0.04 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Selenium, Diss. (Se) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Silver, Diss. (Ag) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Thallium, Diss. (Tl) | <0.1 | 0.1 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Vanadium, Diss. (V) | <0.05 | 0.05 | mg/L | 6010 (2) | 12/22/93 | WGL |
| Zinc, Diss. (Zn) | <0.01 | 0.01 | mg/L | 6010 (2) | 12/22/93 | WGL |
| 8020 - AROMATIC VOLATILE ORGANICS | | *10 | | 8020 (2) | 12/17/93 | CLT |
| Benzene | 71 | 5 | ug/L | | | |
| Toluene | ND | 5 | ug/L | | | |
| Ethyl benzene | 52 | 5 | ug/L | | | |
| Xylenes | ND | 5 | ug/L | | | |
| 4-Bromofluorobenzene (surrogate) | 93 | 0 | % Recovery | Limits (85-115) | | |
| Total Vol. Petroleum Hydrocarbon | 2.9 | 1.0 | mg/L Gasoline | 8015 (Modified) (2) | 12/17/93 | CLT |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7293
DATE SAMPLED.....: / /
TIME SAMPLED.....: :
WORK DESCRIPTION...: TRIP BLANK

LABORATORY I.D...: 932392-0008
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| 8020 - AROMATIC VOLATILE ORGANICS | | *1 | | 8020 (2) | 12/17/93 | CLT |
| Benzene | ND | 0.5 | ug/L | | | |
| Toluene | ND | 0.5 | ug/L | | | |
| Ethyl benzene | ND | 0.5 | ug/L | | | |
| Xylenes | ND | 0.5 | ug/L | | | |
| 4-Bromofluorobenzene (surrogate) | 96 | 0 | % Recovery | Limits (85-115) | | |
| Total Vol. Petroleum Hydrocarbon | <0.1 | 0.1 | mg/L Gasoline | 8015 (Modified) (2) | 12/17/93 | CLT |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....:
DATE SAMPLED.....: / /
TIME SAMPLED.....: :
WORK DESCRIPTION...: METHOD BLANK

LABORATORY I.D...: 932392-0009
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| 8020 - AROMATIC VOLATILE ORGANICS | | *1 | | 8020 (2) | 12/17/93 | CLT |
| Benzene | ND | 0.5 | ug/L | | | |
| Toluene | ND | 0.5 | ug/L | | | |
| Ethyl benzene | ND | 0.5 | ug/L | | | |
| Xylenes | ND | 0.5 | ug/L | | | |
| 4-Bromofluorobenzene (surrogate) | 97 | 0 | % Recovery | Limits (85-115) | | |
| Total Vol. Petroleum Hydrocarbon | <0.1 | 0.1 | mg/L Gasoline | 8015 (Modified) (2) | 12/17/93 | CLT |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....:
DATE SAMPLED.....: / /
TIME SAMPLED.....: :
WORK DESCRIPTION...: SPIKED BLANK

LABORATORY I.D...: 932392-0010
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| BTEX - Surrogate | | *1 | | 8020(2)/602(6) | 12/17/93 | JMC |
| 4-Bromofluorobenzene (surrogate) | 94 | 0 | % Recovery | Limits (85-115) | | |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....:
DATE SAMPLED.....: / /
TIME SAMPLED.....: :
WORK DESCRIPTION...: SPIKED BLANK DUPLICATE

LABORATORY I.D...: 932392-0011
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| BTEX - Surrogate | | *1 | | 8020(2)/602(6) | 12/17/93 | JMC |
| 4-Bromofluorobenzene (surrogate) | 95 | 0 | % Recovery | Limits (85-115) | | |

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# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

| ANALYSIS | | | | DUPLICATES | | REFERENCE STANDARDS | | MATRIX SPIKES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ANALYSIS TYPE | ANALYSIS SUB-TYPE | ANALYSIS I.D. | ANALYZED VALUE (A) | DUPLICATE VALUE (B) | RPD or (\|A-B\|) | TRUE VALUE | PERCENT RECOVERY | ORIGINAL VALUE | SPIKE ADDED | PERCENT RECOVERY |
| PARAMETER:Silver, Diss. (Ag) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285520 |
| REPORTING LIMIT/DF: 0.01 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.01 | | | | | | | |
| BLANK | MB | MWMP | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| STANDARD | CCV | 1007E | 2.63 | | | 2.50 | 105 | | | |
| STANDARD | ISB | 0907K | 0.93 | | | 1.00 | 93 | | | |
| STANDARD | CCV | 1007E | 2.74 | | | 2.50 | 110 | | | |
| STANDARD | ISB | 0907K | 0.93 | | | 1.00 | 93 | | | |
| STANDARD | CCV | 1007E | 2.72 | | | 2.50 | 109 | | | |
| STANDARD | CCV | 1007E | 2.52 | | | 2.50 | 101 | | | |
| STANDARD | CCV | 1007E | 2.50 | | | 2.50 | 100 | | | |
| STANDARD | CCV | 1007E | 2.50 | | | 2.50 | 100 | | | |
| STANDARD | ISB | 0907K | 0.83 | | | 1.00 | 83 | | | |
| STANDARD | ICV | 0415B | 2.00 | | | 2.00 | 100 | | | |
| SPIKE | PDS | 932309-031 | 0.98 | | | | | <0.01 | 1.00 | 98 |
| SPIKE | PDS | 932390-001 | 0.95 | | | | | <0.01 | 1.00 | 95 |
| SPIKE | PDS | 932410-008 | 0.90 | | | | | <0.01 | 1.00 | 90 |
| DUPLICATE | MD | 932309-035 | <0.01 | <0.01 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.01 | <0.01 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.01 | <0.01 | NC | | | | | |
| PARAMETER:Arsenic, Diss. (As) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285522 |
| REPORTING LIMIT/DF: 0.05 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.05 | | | | | | | |
| BLANK | MB | MWMP | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| STANDARD | CCV | 1110D | 2.54 | | | 2.50 | 102 | | | |
| STANDARD | ISB | 0907K | 0.86 | | | 1.00 | 86 | | | |
| STANDARD | CCV | 1110D | 2.50 | | | 2.50 | 100 | | | |
| STANDARD | ICV | 0820E | 2.02 | | | 2.00 | 101 | | | |
| STANDARD | ISB | 0907K | 1.11 | | | 1.00 | 111 | | | |
| STANDARD | CCV | 1110D | 2.48 | | | 2.50 | 99 | | | |
| STANDARD | CCV | 1110D | 2.34 | | | 2.50 | 94 | | | |
| STANDARD | CCV | 1110D | 2.40 | | | 2.50 | 96 | | | |

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# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

| ANALYSIS | | | | DUPLICATES | | REFERENCE STANDARDS | | MATRIX SPIKES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ANALYSIS TYPE | ANALYSIS SUB-TYPE | ANALYSIS I.D. | ANALYZED VALUE (A) | DUPLICATE VALUE (B) | RPD or (\|A-B\|) | TRUE VALUE | PERCENT RECOVERY | ORIGINAL VALUE | SPIKE ADDED | PERCENT RECOVERY |
| PARAMETER:Arsenic, Diss. (As) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285522 |
| REPORTING LIMIT/DF: 0.05 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| STANDARD | CCV | 1110D | 2.35 | | | 2.50 | 94 | | | |
| STANDARD | ISB | 0907K | 1.07 | | | 1.00 | 107 | | | |
| STANDARD | CCV | 1110D | 2.30 | | | 2.50 | 92 | | | |
| SPIKE | PDS | 932390-001 | 0.90 | | | | | <0.05 | 1.00 | 90 |
| SPIKE | PDS | 932309-031 | 0.91 | | | | | <0.05 | 1.00 | 91 |
| SPIKE | PDS | 932410-008 | 0.91 | | | | | <0.05 | 1.00 | 91 |
| DUPLICATE | MD | 932309-035 | <0.05 | <0.05 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.05 | <0.05 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.05 | <0.05 | NC | | | | | |
| PARAMETER:Barium, Diss. (Ba) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285524 |
| REPORTING LIMIT/DF: 0.01 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.01 | | | | | | | |
| BLANK | MB | MWMP | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| STANDARD | CCV | 1110D | 5.19 | | | 5.00 | 104 | | | |
| STANDARD | ISB | 0907K | 0.49 | | | 0.50 | 98 | | | |
| STANDARD | CCV | 1110D | 5.10 | | | 5.00 | 102 | | | |
| STANDARD | ISB | 0907K | 0.50 | | | 0.50 | 100 | | | |
| STANDARD | CCV | 1110D | 5.13 | | | 5.00 | 103 | | | |
| STANDARD | CCV | 1110D | 4.77 | | | 5.00 | 95 | | | |
| STANDARD | CCV | 1110D | 5.02 | | | 5.00 | 100 | | | |
| STANDARD | CCV | 1110D | 4.81 | | | 5.00 | 96 | | | |
| STANDARD | ISB | 0907K | 0.46 | | | 0.50 | 92 | | | |
| STANDARD | CCV | 1110D | 4.66 | | | 5.00 | 93 | | | |
| STANDARD | ICV | 0415B | 2.05 | | | 2.00 | 102 | | | |
| SPIKE | PDS | 932309-031 | 1.02 | | | | | 0.08 | 1.00 | 94 |
| SPIKE | PDS | 932390-001 | 0.97 | | | | | <0.01 | 1.00 | 97 |
| SPIKE | PDS | 932410-008 | 1.02 | | | | | 0.06 | 1.00 | 96 |
| DUPLICATE | MD | 932309-035 | 0.13 | 0.13 | 0 | | | | | |
| DUPLICATE | MD | 932390-001 | <0.01 | <0.01 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | 0.06 | 0.07 | 15 | | | | | |
| PARAMETER:Beryllium, Diss. (Be) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285525 |
| REPORTING LIMIT/DF: 0.005 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.005 | | | | | | | |
| BLANK | MB | MWMP | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |

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Western Atlas International

# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

| ANALYSIS | | | | DUPLICATES | | REFERENCE STANDARDS | | MATRIX SPIKES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ANALYSIS TYPE | ANALYSIS SUB-TYPE | ANALYSIS I.D. | ANALYZED VALUE (A) | DUPLICATE VALUE (B) | RPD or (\|A-B\|) | TRUE VALUE | PERCENT RECOVERY | ORIGINAL VALUE | SPIKE ADDED | PERCENT RECOVERY |
| PARAMETER:Beryllium, Diss. (Be) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285525 |
| REPORTING LIMIT/DF: 0.005 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| STANDARD | CCV | 1110D | 2.66 | | | 2.50 | 106 | | | |
| STANDARD | ISB | 0907K | 0.536 | | | 0.500 | 107 | | | |
| STANDARD | CCV | 1110D | 2.66 | | | 2.50 | 106 | | | |
| STANDARD | ICV | 0820E | 2.04 | | | 2.00 | 102 | | | |
| STANDARD | ISB | 0907K | 0.565 | | | 0.500 | 113 | | | |
| STANDARD | CCV | 1110D | 2.66 | | | 2.50 | 106 | | | |
| STANDARD | CCV | 1110D | 2.46 | | | 2.50 | 98 | | | |
| STANDARD | CCV | 1110D | 2.59 | | | 2.50 | 104 | | | |
| STANDARD | CCV | 1110D | 2.46 | | | 2.50 | 98 | | | |
| STANDARD | ISB | 0907K | 0.511 | | | 0.500 | 102 | | | |
| STANDARD | CCV | 1110D | 2.39 | | | 2.50 | 96 | | | |
| SPIKE | PDS | 932390-001 | 1.04 | | | | | <0.005 | 1.00 | 104 |
| SPIKE | PDS | 932309-031 | 0.974 | | | | | <0.005 | 1.00 | 97 |
| SPIKE | PDS | 932410-008 | 1.05 | | | | | <0.005 | 1.00 | 105 |
| DUPLICATE | MD | 932309-035 | <0.005 | <0.005 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.005 | <0.005 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.005 | <0.005 | NC | | | | | |
| PARAMETER:Cadmium, Diss. (Cd) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285528 |
| REPORTING LIMIT/DF: 0.005 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.005 | | | | | | | |
| BLANK | MB | MWMP | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| BLANK | CCB | 1210E | <0.005 | | | | | | | |
| STANDARD | CCV | 1110D | 2.61 | | | 2.50 | 104 | | | |
| STANDARD | ISB | 0907K | 0.917 | | | 1.00 | 92 | | | |
| STANDARD | CCV | 1110D | 2.57 | | | 2.50 | 103 | | | |
| STANDARD | ICV | 0820E | 2.08 | | | 2.00 | 104 | | | |
| STANDARD | ISB | 0907K | 0.948 | | | 1.00 | 95 | | | |
| STANDARD | CCV | 1110D | 2.56 | | | 2.50 | 102 | | | |
| STANDARD | CCV | 1110D | 2.46 | | | 2.50 | 98 | | | |
| STANDARD | CCV | 1110D | 2.51 | | | 2.50 | 100 | | | |
| STANDARD | CCV | 1110D | 2.47 | | | 2.50 | 99 | | | |
| STANDARD | ISB | 0907K | 0.885 | | | 1.00 | 88 | | | |

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# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

| ANALYSIS | | | | DUPLICATES | | REFERENCE STANDARDS | | MATRIX SPIKES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ANALYSIS TYPE | ANALYSIS SUB-TYPE | ANALYSIS I.D. | ANALYZED VALUE (A) | DUPLICATE VALUE (B) | RPD or (\|A-B\|) | TRUE VALUE | PERCENT RECOVERY | ORIGINAL VALUE | SPIKE ADDED | PERCENT RECOVERY |
| PARAMETER:Cadmium, Diss. (Cd) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285528 |
| REPORTING LIMIT/DF: 0.005 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| STANDARD | CCV | 1110D | 2.40 | | | 2.50 | 96 | | | |
| SPIKE | PDS | 932390-001 | 1.02 | | | | | <0.005 | 1.00 | 102 |
| SPIKE | PDS | 932309-031 | 0.955 | | | | | <0.005 | 1.00 | 96 |
| SPIKE | PDS | 932410-008 | 1.00 | | | | | <0.005 | 1.00 | 100 |
| DUPLICATE | MD | 932309-035 | <0.005 | <0.005 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.005 | <0.005 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.005 | <0.005 | NC | | | | | |
| PARAMETER:Cobalt, Diss. (Co) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285529 |
| REPORTING LIMIT/DF: 0.03 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.03 | | | | | | | |
| BLANK | MB | MWMP | <0.03 | | | | | | | |
| BLANK | CCB | 1210E | <0.03 | | | | | | | |
| BLANK | CCB | 1210E | <0.03 | | | | | | | |
| BLANK | CCB | 1210E | <0.03 | | | | | | | |
| BLANK | CCB | 1210E | <0.03 | | | | | | | |
| BLANK | CCB | 1210E | <0.03 | | | | | | | |
| BLANK | CCB | 1210E | <0.03 | | | | | | | |
| BLANK | CCB | 1210E | <0.03 | | | | | | | |
| STANDARD | CCV | 1110D | 2.60 | | | 2.50 | 104 | | | |
| STANDARD | ISB | 0907K | 0.49 | | | 0.50 | 98 | | | |
| STANDARD | CCV | 1110D | 2.58 | | | 2.50 | 103 | | | |
| STANDARD | ICV | 0820E | 2.11 | | | 2.00 | 106 | | | |
| STANDARD | ISB | 0907K | 0.52 | | | 0.50 | 104 | | | |
| STANDARD | CCV | 1110D | 2.59 | | | 2.50 | 104 | | | |
| STANDARD | CCV | 1110D | 2.42 | | | 2.50 | 97 | | | |
| STANDARD | CCV | 1110D | 2.51 | | | 2.50 | 100 | | | |
| STANDARD | CCV | 1110D | 2.42 | | | 2.50 | 97 | | | |
| STANDARD | ISB | 0907K | 0.46 | | | 0.50 | 92 | | | |
| STANDARD | CCV | 1110D | 2.35 | | | 2.50 | 94 | | | |
| SPIKE | PDS | 932390-001 | 1.02 | | | | | <0.03 | 1.00 | 102 |
| SPIKE | PDS | 932309-031 | 0.95 | | | | | <0.03 | 1.00 | 95 |
| SPIKE | PDS | 932410-008 | 1.00 | | | | | <0.03 | 1.00 | 100 |
| DUPLICATE | MD | 932309-035 | <0.03 | <0.03 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.03 | <0.03 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.03 | <0.03 | NC | | | | | |
| PARAMETER:Chromium, Diss. (Cr) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285530 |
| REPORTING LIMIT/DF: 0.01 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.01 | | | | | | | |
| BLANK | MB | MWMP | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |

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# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

| ANALYSIS | | | | DUPLICATES | | REFERENCE STANDARDS | | MATRIX SPIKES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ANALYSIS TYPE | ANALYSIS SUB-TYPE | ANALYSIS I.D. | ANALYZED VALUE (A) | DUPLICATE VALUE (B) | RPD or (\|A-B\|) | TRUE VALUE | PERCENT RECOVERY | ORIGINAL VALUE | SPIKE ADDED | PERCENT RECOVERY |
| PARAMETER:Chromium, Diss. (Cr) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285530 |
| REPORTING LIMIT/DF: 0.01 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| STANDARD | CCV | 1110D | 2.50 | | | 2.50 | 100 | | | |
| STANDARD | ISB | 0907K | 0.47 | | | 0.50 | 94 | | | |
| STANDARD | CCV | 1110D | 2.50 | | | 2.50 | 100 | | | |
| STANDARD | ICV | 0820E | 1.92 | | | 2.00 | 96 | | | |
| STANDARD | ISB | 0907K | 0.49 | | | 0.50 | 98 | | | |
| STANDARD | CCV | 1110D | 2.50 | | | 2.50 | 100 | | | |
| STANDARD | CCV | 1110D | 2.35 | | | 2.50 | 94 | | | |
| STANDARD | CCV | 1110D | 2.44 | | | 2.50 | 98 | | | |
| STANDARD | CCV | 1110D | 2.36 | | | 2.50 | 94 | | | |
| STANDARD | ISB | 0907K | 0.45 | | | 0.50 | 90 | | | |
| STANDARD | CCV | 1110D | 2.30 | | | 2.50 | 92 | | | |
| SPIKE | PDS | 932390-001 | 0.96 | | | | | <0.01 | 1.00 | 96 |
| SPIKE | PDS | 932309-031 | 0.89 | | | | | <0.01 | 1.00 | 89 |
| SPIKE | PDS | 932410-008 | 0.95 | | | | | <0.01 | 1.00 | 95 |
| DUPLICATE | MD | 932309-035 | <0.01 | <0.01 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.01 | <0.01 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.01 | <0.01 | NC | | | | | |
| PARAMETER:Copper, Diss. (Cu) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285531 |
| REPORTING LIMIT/DF: 0.01 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.01 | | | | | | | |
| BLANK | MB | MWMP | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| STANDARD | CCV | 1110D | 2.60 | | | 2.50 | 104 | | | |
| STANDARD | ISB | 0907K | 0.46 | | | 0.50 | 92 | | | |
| STANDARD | CCV | 1110D | 2.51 | | | 2.50 | 100 | | | |
| STANDARD | ICV | 0820E | 2.09 | | | 2.00 | 104 | | | |
| STANDARD | ISB | 0907K | 0.47 | | | 0.50 | 94 | | | |
| STANDARD | CCV | 1110D | 2.51 | | | 2.50 | 100 | | | |
| STANDARD | CCV | 1110D | 2.51 | | | 2.50 | 100 | | | |
| STANDARD | CCV | 1110D | 2.61 | | | 2.50 | 104 | | | |
| STANDARD | CCV | 1110D | 2.49 | | | 2.50 | 100 | | | |
| STANDARD | ISB | 0907K | 0.47 | | | 0.50 | 94 | | | |
| STANDARD | CCV | 1110D | 2.42 | | | 2.50 | 97 | | | |
| SPIKE | PDS | 932390-001 | 0.97 | | | | | <0.01 | 1.00 | 97 |

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# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

| ANALYSIS | | | | DUPLICATES | | REFERENCE STANDARDS | | MATRIX SPIKES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ANALYSIS TYPE | ANALYSIS SUB-TYPE | ANALYSIS I.D. | ANALYZED VALUE (A) | DUPLICATE VALUE (B) | RPD or (\|A-B\|) | TRUE VALUE | PERCENT RECOVERY | ORIGINAL VALUE | SPIKE ADDED | PERCENT RECOVERY |
| PARAMETER:Copper, Diss. (Cu) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285531 |
| REPORTING LIMIT/DF: 0.01 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| SPIKE | PDS | 932309-031 | 0.98 | | | | | <0.01 | 1.00 | 98 |
| SPIKE | PDS | 932410-008 | 1.03 | | | | | <0.01 | 1.00 | 103 |
| DUPLICATE | MD | 932309-035 | <0.01 | <0.01 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.01 | <0.01 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.01 | <0.01 | NC | | | | | |
| PARAMETER:Molybdenum, Diss. (Mo) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285538 |
| REPORTING LIMIT/DF: 0.05 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.05 | | | | | | | |
| BLANK | MB | MWMP | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| STANDARD | CCV | 1110D | 2.68 | | | 2.50 | 107 | | | |
| STANDARD | ISB | 0907K | 0.90 | | | 1.00 | 90 | | | |
| STANDARD | CCV | 1110D | 2.67 | | | 2.50 | 107 | | | |
| STANDARD | ICV | 0820E | 2.04 | | | 2.00 | 102 | | | |
| STANDARD | ISB | 0907K | 0.93 | | | 1.00 | 93 | | | |
| STANDARD | CCV | 1110D | 2.66 | | | 2.50 | 106 | | | |
| STANDARD | CCV | 1110D | 2.48 | | | 2.50 | 99 | | | |
| STANDARD | CCV | 1110D | 2.58 | | | 2.50 | 103 | | | |
| STANDARD | CCV | 1110D | 2.48 | | | 2.50 | 99 | | | |
| STANDARD | ISB | 0907K | 0.89 | | | 1.00 | 89 | | | |
| STANDARD | CCV | 1110D | 2.39 | | | 2.50 | 96 | | | |
| SPIKE | PDS | 932390-001 | 0.98 | | | | | <0.05 | 1.00 | 98 |
| SPIKE | PDS | 932309-031 | 0.95 | | | | | <0.05 | 1.00 | 95 |
| SPIKE | PDS | 932410-008 | 0.98 | | | | | <0.05 | 1.00 | 98 |
| DUPLICATE | MD | 932309-035 | <0.05 | <0.05 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.05 | <0.05 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.05 | <0.05 | NC | | | | | |
| PARAMETER:Nickel, Diss. (Ni) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285541 |
| REPORTING LIMIT/DF: 0.04 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.04 | | | | | | | |
| BLANK | MB | MWMP | <0.04 | | | | | | | |
| BLANK | CCB | 1210E | <0.04 | | | | | | | |
| BLANK | CCB | 1210E | <0.04 | | | | | | | |
| BLANK | CCB | 1210E | <0.04 | | | | | | | |
| BLANK | CCB | 1210E | <0.04 | | | | | | | |
| BLANK | CCB | 1210E | <0.04 | | | | | | | |

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# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

| ANALYSIS | | | | DUPLICATES | | REFERENCE STANDARDS | | MATRIX SPIKES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ANALYSIS TYPE | ANALYSIS SUB-TYPE | ANALYSIS I.D. | ANALYZED VALUE (A) | DUPLICATE VALUE (B) | RPD or (\|A-B\|) | TRUE VALUE | PERCENT RECOVERY | ORIGINAL VALUE | SPIKE ADDED | PERCENT RECOVERY |
| PARAMETER:Nickel, Diss. (Ni) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285541 |
| REPORTING LIMIT/DF: 0.04 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | CCB | 1210E | <0.04 | | | | | | | |
| BLANK | CCB | 1210E | <0.04 | | | | | | | |
| STANDARD | CCV | 1110D | 2.68 | | | 2.50 | 107 | | | |
| STANDARD | ISB | 0907K | 0.96 | | | 1.00 | 96 | | | |
| STANDARD | CCV | 1110D | 2.71 | | | 2.50 | 108 | | | |
| STANDARD | ICV | 0820E | 2.07 | | | 2.00 | 103 | | | |
| STANDARD | ISB | 0907K | 0.98 | | | 1.00 | 98 | | | |
| STANDARD | CCV | 1110D | 2.68 | | | 2.50 | 107 | | | |
| STANDARD | CCV | 1110D | 2.52 | | | 2.50 | 101 | | | |
| STANDARD | CCV | 1110D | 2.62 | | | 2.50 | 105 | | | |
| STANDARD | CCV | 1110D | 2.57 | | | 2.50 | 103 | | | |
| STANDARD | ISB | 0907K | 0.94 | | | 1.00 | 94 | | | |
| STANDARD | CCV | 1110D | 2.48 | | | 2.50 | 99 | | | |
| SPIKE | PDS | 932390-001 | 1.04 | | | | | <0.04 | 1.00 | 104 |
| SPIKE | PDS | 932309-031 | 0.99 | | | | | <0.04 | 1.00 | 99 |
| SPIKE | PDS | 932410-008 | 1.03 | | | | | <0.04 | 1.00 | 103 |
| DUPLICATE | MD | 932309-035 | <0.04 | <0.04 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.04 | <0.04 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.04 | <0.04 | NC | | | | | |
| PARAMETER:Lead, Diss. (Pb) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285542 |
| REPORTING LIMIT/DF: 0.05 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.05 | | | | | | | |
| BLANK | MB | MWMP | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| STANDARD | CCV | 1110D | 2.56 | | | 2.50 | 102 | | | |
| STANDARD | ISB | 0907K | 1.07 | | | 1.00 | 107 | | | |
| STANDARD | CCV | 1110D | 2.57 | | | 2.50 | 103 | | | |
| STANDARD | ICV | 0820E | 2.08 | | | 2.00 | 104 | | | |
| STANDARD | ISB | 0907K | 1.09 | | | 1.00 | 109 | | | |
| STANDARD | CCV | 1110D | 2.57 | | | 2.50 | 103 | | | |
| STANDARD | CCV | 1110D | 2.44 | | | 2.50 | 98 | | | |
| STANDARD | CCV | 1110D | 2.47 | | | 2.50 | 99 | | | |
| STANDARD | CCV | 1110D | 2.41 | | | 2.50 | 96 | | | |
| STANDARD | ISB | 0907K | 0.94 | | | 1.00 | 94 | | | |
| STANDARD | CCV | 1110D | 2.36 | | | 2.50 | 94 | | | |
| SPIKE | PDS | 932390-001 | 1.02 | | | | | <0.05 | 1.00 | 102 |
| SPIKE | PDS | 932309-031 | 0.96 | | | | | <0.05 | 1.00 | 96 |
| SPIKE | PDS | 932410-008 | 0.96 | | | | | <0.05 | 1.00 | 96 |

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# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

| ANALYSIS | | | | DUPLICATES | | REFERENCE STANDARDS | | MATRIX SPIKES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ANALYSIS TYPE | ANALYSIS SUB-TYPE | ANALYSIS I.D. | ANALYZED VALUE (A) | DUPLICATE VALUE (B) | RPD or (\|A-B\|) | TRUE VALUE | PERCENT RECOVERY | ORIGINAL VALUE | SPIKE ADDED | PERCENT RECOVERY |
| PARAMETER:Lead, Diss. (Pb) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285542 |
| REPORTING LIMIT/DF: 0.05 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| DUPLICATE | MD | 932309-035 | <0.05 | <0.05 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.05 | <0.05 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.05 | <0.05 | NC | | | | | |
| PARAMETER:Antimony, Diss. (Sb) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285543 |
| REPORTING LIMIT/DF: 0.1 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.1 | | | | | | | |
| BLANK | MB | MWMP | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| STANDARD | CCV | 1110D | 2.3 | | | 2.5 | 92 | | | |
| STANDARD | ISB | 0907K | 1.0 | | | 1.0 | 100 | | | |
| STANDARD | CCV | 1110D | 2.5 | | | 2.5 | 100 | | | |
| STANDARD | ICV | 0820E | 2.1 | | | 2.0 | 105 | | | |
| STANDARD | ISB | 0907K | 1.0 | | | 1.0 | 100 | | | |
| STANDARD | CCV | 1110D | 2.5 | | | 2.5 | 100 | | | |
| STANDARD | CCV | 1110D | 2.4 | | | 2.5 | 96 | | | |
| STANDARD | CCV | 1110D | 2.4 | | | 2.5 | 96 | | | |
| STANDARD | CCV | 1110D | 2.4 | | | 2.5 | 96 | | | |
| STANDARD | ISB | 0907K | 1.1 | | | 1.0 | 110 | | | |
| STANDARD | CCV | 1110D | 2.3 | | | 2.5 | 92 | | | |
| SPIKE | PDS | 932390-001 | 1.0 | | | | | <0.1 | 1.0 | 100 |
| SPIKE | PDS | 932309-031 | 0.9 | | | | | <0.1 | 1.0 | 90 |
| SPIKE | PDS | 932410-008 | 0.9 | | | | | <0.1 | 1.0 | 90 |
| DUPLICATE | MD | 932309-035 | <0.1 | <0.1 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.1 | <0.1 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.1 | <0.1 | NC | | | | | |
| PARAMETER:Selenium, Diss. (Se) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285544 |
| REPORTING LIMIT/DF: 0.1 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.1 | | | | | | | |
| BLANK | MB | MWMP | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |

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# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

| ANALYSIS | | | | DUPLICATES | | REFERENCE STANDARDS | | MATRIX SPIKES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ANALYSIS TYPE | ANALYSIS SUB-TYPE | ANALYSIS I.D. | ANALYZED VALUE (A) | DUPLICATE VALUE (B) | RPD or (\|A-B\|) | TRUE VALUE | PERCENT RECOVERY | ORIGINAL VALUE | SPIKE ADDED | PERCENT RECOVERY |
| PARAMETER:Selenium, Diss. (Se) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285544 |
| REPORTING LIMIT/DF: 0.1 | UNITS:mg/L | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| STANDARD | CCV | 1110D | 2.5 | | | 2.5 | 100 | | | |
| STANDARD | ISB | 0907K | 1.0 | | | 1.0 | 100 | | | |
| STANDARD | CCV | 1110D | 2.5 | | | 2.5 | 100 | | | |
| STANDARD | ICV | 0820E | 2.0 | | | 2.0 | 100 | | | |
| STANDARD | ISB | 0907K | 0.8 | | | 1.0 | 80 | | | |
| STANDARD | CCV | 1110D | 2.4 | | | 2.5 | 96 | | | |
| STANDARD | CCV | 1110D | 2.3 | | | 2.5 | 92 | | | |
| STANDARD | CCV | 1110D | 2.4 | | | 2.5 | 96 | | | |
| STANDARD | CCV | 1110D | 2.3 | | | 2.5 | 92 | | | |
| STANDARD | ISB | 0907K | 1.1 | | | 1.0 | 110 | | | |
| STANDARD | CCV | 1110D | 2.5 | | | 2.5 | 100 | | | |
| SPIKE | PDS | 932390-001 | 1.0 | | | | | 0.1 | 1.0 | 90 |
| SPIKE | PDS | 932309-031 | 2.7 | | | | | 1.9 | 1.0 | 80 |
| SPIKE | PDS | 932410-008 | 1.0 | | | | | <0.1 | 1.0 | 100 |
| DUPLICATE | MD | 932309-035 | 1.5 | 1.5 | 0 | | | | | |
| DUPLICATE | MD | 932390-001 | 0.1 | <0.1 | 0.1 | | | | | |
| DUPLICATE | MD | 932410-008 | <0.1 | <0.1 | NC | | | | | |
| PARAMETER:Thallium, Diss. (Tl) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285548 |
| REPORTING LIMIT/DF: 0.1 | UNITS:mg/L | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.1 | | | | | | | |
| BLANK | MB | MWMP | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| BLANK | CCB | 1210E | <0.1 | | | | | | | |
| STANDARD | CCV | 1110D | 2.7 | | | 2.5 | 108 | | | |
| STANDARD | ISB | 0907K | 0.8 | | | 1.0 | 80 | | | |
| STANDARD | CCV | 1110D | 2.5 | | | 2.5 | 100 | | | |
| STANDARD | ICV | 0820E | 2.0 | | | 2.0 | 100 | | | |
| STANDARD | ISB | 0907K | 0.8 | | | 1.0 | 80 | | | |
| STANDARD | CCV | 1110D | 2.5 | | | 2.5 | 100 | | | |
| STANDARD | CCV | 1110D | 2.4 | | | 2.5 | 96 | | | |
| STANDARD | CCV | 1110D | 2.5 | | | 2.5 | 100 | | | |
| STANDARD | CCV | 1110D | 2.5 | | | 2.5 | 100 | | | |
| STANDARD | ISB | 0907K | 1.0 | | | 1.0 | 100 | | | |
| STANDARD | CCV | 1110D | 2.6 | | | 2.5 | 104 | | | |
| SPIKE | PDS | 932390-001 | 1.1 | | | | | <0.1 | 1.0 | 110 |
| SPIKE | PDS | 932309-031 | 1.0 | | | | | <0.1 | 1.0 | 100 |
| SPIKE | PDS | 932410-008 | 0.9 | | | | | <0.1 | 1.0 | 90 |
| DUPLICATE | MD | 932309-035 | <0.1 | <0.1 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.1 | <0.1 | NC | | | | | |

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# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

| ANALYSIS | | | | DUPLICATES | | REFERENCE STANDARDS | | MATRIX SPIKES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ANALYSIS TYPE | ANALYSIS SUB-TYPE | ANALYSIS I.D. | ANALYZED VALUE (A) | DUPLICATE VALUE (B) | RPD or (\|A-B\|) | TRUE VALUE | PERCENT RECOVERY | ORIGINAL VALUE | SPIKE ADDED | PERCENT RECOVERY |
| PARAMETER:Thallium, Diss. (Tl) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285548 |
| REPORTING LIMIT/DF: 0.1 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| DUPLICATE | MD | 932410-008 | <0.1 | <0.1 | NC | | | | | |
| PARAMETER:Vanadium, Diss. (V) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285549 |
| REPORTING LIMIT/DF: 0.05 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.05 | | | | | | | |
| BLANK | MB | MWMP | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| BLANK | CCB | 1210E | <0.05 | | | | | | | |
| STANDARD | CCV | 1110D | 2.67 | | | 2.50 | 107 | | | |
| STANDARD | ISB | 0907K | 0.48 | | | 0.50 | 96 | | | |
| STANDARD | CCV | 1110D | 2.64 | | | 2.50 | 106 | | | |
| STANDARD | ICV | 0820E | 2.14 | | | 2.00 | 107 | | | |
| STANDARD | ISB | 0907K | 0.47 | | | 0.50 | 94 | | | |
| STANDARD | CCV | 1110D | 2.63 | | | 2.50 | 105 | | | |
| STANDARD | CCV | 1110D | 2.44 | | | 2.50 | 98 | | | |
| STANDARD | CCV | 1110D | 2.53 | | | 2.50 | 101 | | | |
| STANDARD | CCV | 1110D | 2.43 | | | 2.50 | 97 | | | |
| STANDARD | ISB | 0907K | 0.40 | | | 0.50 | 80 | | | |
| STANDARD | CCV | 1110D | 2.34 | | | 2.50 | 94 | | | |
| SPIKE | PDS | 932390-001 | 1.01 | | | | | <0.05 | 1.00 | 101 |
| SPIKE | PDS | 932309-031 | 0.97 | | | | | <0.05 | 1.00 | 97 |
| SPIKE | PDS | 932410-008 | 0.99 | | | | | <0.05 | 1.00 | 99 |
| DUPLICATE | MD | 932309-035 | <0.05 | <0.05 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.05 | <0.05 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.05 | <0.05 | NC | | | | | |
| PARAMETER:Zinc, Diss. (Zn) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285550 |
| REPORTING LIMIT/DF: 0.01 UNITS:mg/L | | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| BLANK | ICB | 1210E | <0.01 | | | | | | | |
| BLANK | MB | MWMP | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| BLANK | CCB | 1210E | <0.01 | | | | | | | |
| STANDARD | CCV | 1110D | 2.57 | | | 2.50 | 103 | | | |
| STANDARD | ISB | 0907K | 0.89 | | | 1.00 | 89 | | | |

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# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

| ANALYSIS | | | | DUPLICATES | | REFERENCE STANDARDS | | MATRIX SPIKES | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ANALYSIS TYPE | ANALYSIS SUB-TYPE | ANALYSIS I.D. | ANALYZED VALUE (A) | DUPLICATE VALUE (B) | RPD or (\|A-B\|) | TRUE VALUE | PERCENT RECOVERY | ORIGINAL VALUE | SPIKE ADDED | PERCENT RECOVERY |
| PARAMETER:Zinc, Diss. (Zn) | | | | DATE/TIME ANALYZED:12/22/93 12:05 | | | | | | QC BATCH NUMBER:285550 |
| REPORTING LIMIT/DF: 0.01 | UNITS:mg/L | | | METHOD REFERENCE :6010 (2) | | | | | | TECHNICIAN:WGL |
| STANDARD | CCV | 1110D | 2.55 | | | 2.50 | 102 | | | |
| STANDARD | ICV | 0820E | 2.05 | | | 2.00 | 102 | | | |
| STANDARD | ISB | 0907K | 0.92 | | | 1.00 | 92 | | | |
| STANDARD | CCV | 1110D | 2.54 | | | 2.50 | 102 | | | |
| STANDARD | CCV | 1110D | 2.41 | | | 2.50 | 96 | | | |
| STANDARD | CCV | 1110D | 2.48 | | | 2.50 | 99 | | | |
| STANDARD | CCV | 1110D | 2.38 | | | 2.50 | 95 | | | |
| STANDARD | ISB | 0907K | 0.87 | | | 1.00 | 87 | | | |
| STANDARD | CCV | 1110D | 2.40 | | | 2.50 | 96 | | | |
| SPIKE | PDS | 932390-001 | 0.98 | | | | | <0.01 | 1.00 | 98 |
| SPIKE | PDS | 932309-031 | 0.92 | | | | | <0.01 | 1.00 | 92 |
| SPIKE | PDS | 932410-008 | 0.97 | | | | | 0.01 | 1.00 | 96 |
| DUPLICATE | MD | 932309-035 | <0.01 | <0.01 | NC | | | | | |
| DUPLICATE | MD | 932390-001 | <0.01 | <0.01 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | 0.01 | 0.01 | 0.00 | | | | | |
| PARAMETER:Mercury, Diss. (Hg) | | | | DATE/TIME ANALYZED:12/29/93 16:50 | | | | | | QC BATCH NUMBER:285783 |
| REPORTING LIMIT/DF: 0.0002 | UNITS:mg/L | | | METHOD REFERENCE :7470 (2) | | | | | | TECHNICIAN:GEF |
| BLANK | ICB | 12293 | <0.0002 | | | | | | | |
| BLANK | CCB | 12293 | <0.0002 | | | | | | | |
| BLANK | CCB | 12293 | <0.0002 | | | | | | | |
| BLANK | CCB | 12293 | <0.0002 | | | | | | | |
| BLANK | CCB | 12293 | <0.0002 | | | | | | | |
| BLANK | CCB | 12293 | <0.0002 | | | | | | | |
| BLANK | CCB | 12293 | <0.0002 | | | | | | | |
| STANDARD | ICV | 1201B | 0.0037 | | | 0.0040 | 92 | | | |
| STANDARD | CCV | 1228Q | 0.0025 | | | 0.0025 | 100 | | | |
| STANDARD | CCV | 1228Q | 0.0026 | | | 0.0025 | 104 | | | |
| STANDARD | CCV | 1228Q | 0.0024 | | | 0.0025 | 96 | | | |
| STANDARD | CCV | 1228Q | 0.0025 | | | 0.0025 | 100 | | | |
| STANDARD | CCV | 1228Q | 0.0024 | | | 0.0025 | 96 | | | |
| STANDARD | CCV | 1228Q | 0.0025 | | | 0.0025 | 100 | | | |
| SPIKE | MS | 932392-002 | 0.0053 | | | | | <0.0002 | 0.0050 | 106 |
| SPIKE | MS | 932410-009 | 0.0045 | | | | | <0.0002 | 0.0050 | 90 |
| DUPLICATE | MD | 932302-018 | <0.0002 | <0.0002 | NC | | | | | |
| DUPLICATE | MD | 932392-003 | <0.0002 | <0.0002 | NC | | | | | |
| DUPLICATE | MD | 932410-008 | <0.0002 | <0.0002 | NC | | | | | |

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# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/06/94

JOB NUMBER: 932392 CUSTOMER: HYGIENETICS/GCL ATTN:

BTEX SPIKED ANALYSIS-WATER DATE ANALYZED: 12/17/93 TIME ANALYZED: 14:59 METHOD: 8020 (2) QC NUMBER:285193

### REFERENCE STANDARDS

| TEST DESCRIPTION | ANALYSIS SUB-TYPE | ANALYSIS I. D. | DILUTION FACTOR | ANALYZED VALUE | TRUE VALUE | PERCENT RECOVERY | DETECTION LIMITS | UNITS OF MEASURE |
|---|---|---|---|---|---|---|---|---|
| Benzene | SB | V931217C | 1 | 19.2 | 20.0 | 96 | 0.5 | ug/L |
| | SBD | V931217C | 1 | 19.9 | 20.0 | 99 | 0.5 | ug/L |
| Toluene | SB | V931217C | 1 | 18.8 | 20.0 | 94 | 0.5 | ug/L |
| | SBD | V931217C | 1 | 19.2 | 20.0 | 96 | 0.5 | ug/L |
| Ethylbenzene | SB | V931217C | 1 | 19.5 | 20.0 | 98 | 0.5 | ug/L |
| | SBD | V931217C | 1 | 19.0 | 20.0 | 95 | 0.5 | ug/L |

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# CORE LABORATORIES

## QUALITY CONTROL FOOTER

### METHOD REFERENCES


(1) EPA 600/4-79-020, Methods For Chemical Analysis Of Water And Wastes, March 1983

(2) EPA SW-846, Test Methods For Evaluating Solid Waste, Third Edition, November 1986

(3) Standard Methods For The Examination Of Water And Wastewater, 17th Edition, 1989

(4) EPA 600/4-80-032, Prescribed Procedures For Measurement Of Radioactivity In Drinking Water, August 1980

(5) EPA 600/8-78-017, Microbiological Methods For Monitoring The Environment, December 1978

(6) Federal Register, July 1, 1990 (40 CFR Part 136)

(7) EPA 600/4-88-039, Methods For The Determination Of Organics Compounds In Drinking Water, December 1988

(8) U.S.G.S. Methods For The Determination Of Inorganic Substances In Water And Fluvial Sediments, Book 5, Chapter A1, 1985

(9) Federal Register, Friday, June 7, 1991, (40 CFR Parts 141 and 142)

(10) Standard Methods For The Examination Of Water And Wastewater, 16th Edition, 1985

(11) ASTM, Section 11 Water And Environmental Technology, Volume 11.01 Water (1), 1991

(12) Methods Of Soil Analysis, American Society Of Agronomy, Agronomy No. 9, 1965

(13) EPA SW-846, Test Methods For Evaluating Solid Waste, Third Edition, Revision 1, November 1990

(14) ASTM, Section 5, Petroleum Products, Lubricants, and Fossil Fuels, Volume 05.05, Gaseous Fuels, Coal and Coke

(15) EPA 600/2-78-054, Field and Laboratory Methods Applicable To Overburdens and Mine Soils, March 1978

(16) ASTM, Part 19, Soils and Rock; Building Stones, 1981


COMMENTS: Data in QA report may differ from final results due to digestion and/or dilution of sample into analytical ranges.

The "Time Analyzed" in the QA report refers to the start time of the analytical batch which may not reflect the actual time of each analysis. The "Date Analyzed" is the actual date of analysis.

NC = Not Calculable Due To Value(s) Lower Than The Detection Limit.

Analyses performed by a subcontract laboratory are indicated on the analytical and/or quality control reports under "Technician" using the following codes:

| Subcontract Laboratory | Code | |
|---|---|---|
| Core Laboratories - Anaheim, CA | *AN | |
| Core Laboratories - Casper, WY | *CA | |
| Core Laboratories - Corpus Christi, TX | *CC | |
| Core Laboratories - Houston, TX | *HP | |
| Core Laboratories - Lake Charles, LA | *LC | |
| Core Laboratories - Long Beach, CA | *LB | |
| Other Subcontract Laboratories | *XX | Laboratory ID Provided Upon Request |

* The asterisk in the "Technician" data field signifies that the analysis was performed by a subcontract laboratory.


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**CORE LABORATORIES**

CORE LABORATORIES
A N A L Y T I C A L  R E P O R T

Job Number: 932391
Prepared For:

HYGIENETICS/GCL

505 MARQUETTE NW STE 1100
ALBUQUERQUE, NM 87102

Date: 01/12/94

Linda L. Benkers
Signature

1-12-94
Date:

Name: Linda L. Benkers

Core Laboratories
10703 East Bethany Drive
Aurora, CO 80014

Title: QA/QC COORDINATOR

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7294

# Chain of Custody

Date 12-8-93 Page 1 Of 1

Lab Name CORE LABORATORIES
Address 10703 East Bethany Drive
Aurora, CO 80014-2696
Telephone 303/751-1780

Samplers (SIGNATURES)

## Analysis Request

| Sample Number | Matrix | Location | Halogenated Volatiles 601/8010 | Aromatic Volatiles 602/8020 | Phenols, Sub Phenols 604/8040 | Pesticides/PCB 608/8080 | Polynuclear Aromatic Hydrocarbons 610/8310 | Volatile Compounds GC/MS 624/8240 | Base/Neu/Acid Compounds GC/MS 625/8270 | Total Organic Carbon (TOC) 415/9060 | Total Organic Halides (TOX) 9020 | Petroleum Hydrocarbons 418.1 | TPH/BTEX Modified 8015 | TCLP- Vol. Semi-Vol. Herbicides, Pesticides | TCLP- Metals | RCRA Metals(8) | Priority Pollutant Metals (13) | CAM Metals (18) TTLC/STLC | Flash Point | Corrosivity | Reactivity | Oil & Grease | Cyanide Total/Amenable | Chemical Oxygen Demand (COD) | Number Containers |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9312080700 | $H_2O$ | MW 12 | | | | | x | | | | | | | | | | | | | | | | | | 1 |
| 9312080730 | $H_2O$ | MW-1 | | | | | x | | | | | | | | | | | | | | | | | | 1 |
| 9312080800 | $H_2O$ | MW-3s | | | | | x | | | | | | | | | | | | | | | | | | 1 |
| 9312080830 | $H_2O$ | MW-3d | | | | | x | | | | | | | | | | | | | | | | | | 1 |
| 9312080930 | $H_2O$ | MW-6d | | | | | x | | | | | | | | | | | | | | | | | | 1 |
| 9312081000 | $H_2O$ | MW-9s | | | | | x | | | | | | | | | | | | | | | | | | 1 |
| 9312081100 | $H_2O$ | MW-6s | | | | | x | | | | | | | | | | | | | | | | | | 1 |

| Project Information | | Sample Receipt | |
|---|---|---|---|
| Project | REXENE | Total No. of Containers | 7 |
| Project Director | TRENT T. | Chain of Custody Seals | Y |
| Charge Code No. | 54159.02 | Rec'd Good Condition/Cold | Y |
| Shipping ID. No. | 8609629000 | Conforms to Record | Y |
| Via: | Fedx | Lab No. | 932391 |

Special Instructions/Comments:

| Relinquished By 1. | Relinquished By 2. | Relinquished By 3. |
|---|---|---|
| (Signature) 1300 (Time) | (Signature) (Time) | (Signature) (Time) |
| (Printed Name) DAVID NEE 12/8/93 (Date) | (Printed Name) (Date) | (Printed Name) (Date) |
| (Company) H+GCL | (Company) | (Company) |

| Received By 1. | Received By 2. | Received By (Laboratory) 3. |
|---|---|---|
| (Signature) (Time) | (Signature) (Time) | (Signature) Mary Scott 1000 (Time) |
| (Printed Name) (Date) | (Printed Name) (Date) | (Printed Name) Mary Scott 12-9-93 (Date) |
| (Company) | (Company) | (Laboratory) Core |

DISTRIBUTION: WHITE, CANARY - LABORATORY • PINK, H+GCL

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CORE LABORATORIES

## EXPLANATION OF DATA FLAGS

B - This flag is used to indicate that an analyte is present in the method blank as well as in the sample. It indicates that the user should consider this when evaluating the results.

D - This flag indicates that surrogates were diluted out of calibration range and cannot be quantified.

E - This data flag indicates that a sample result is an estimate because the concentration exceeded the calibration range of the instrument.

J - Indicates that a value is an estimate. It is used when a compound is determined to be present based on the mass spectral data, but at a concentration less than the practical quantitation limit of the method. This flag is also used when estimating the concentration of a tentatively identified compound.

X - This flag refers the client to an included case narrative for additional information which may be useful in data evaluation.

* - Used to indicate matrix interference.

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/12/94

JOB NUMBER: 932391 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7294
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 07:00
WORK DESCRIPTION...: 9312080700

MW-12

LABORATORY I.D...: 932391-0001
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| 610 - PAH'S BY 8270 | | *1 | | 8270 (2) | 12/21/93 | DMJ |
| Acenaphthene | ND | 10 | ug/L | | | |
| Acenaphthylene | ND | 10 | ug/L | | | |
| Anthracene | ND | 10 | ug/L | | | |
| Benzo(a)anthracene | ND | 10 | ug/L | | | |
| Benzo(b)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(k)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(ghi)perylene | ND | 10 | ug/L | | | |
| Benzo(a)pyrene | ND | 10 | ug/L | | | |
| Chrysene | ND | 10 | ug/L | | | |
| Dibenzo(a,h)anthracene | ND | 10 | ug/L | | | |
| Fluoranthene | ND | 10 | ug/L | | | |
| Fluorene | ND | 10 | ug/L | | | |
| Indeno(1,2,3-cd)pyrene | ND | 10 | ug/L | | | |
| Naphthalene | ND | 10 | ug/L | | | |
| Phenanthrene | ND | 10 | ug/L | | | |
| Pyrene | ND | 10 | ug/L | | | |
| Nitrobenzene-d5 | 63 | 0 | % Recovery | 35-114% Limit | | |
| 2-Fluorobiphenyl | 62 | 0 | % Recovery | 43-116% Limit | | |
| 4-Terphenyl-d14 | 60 | 0 | % Recovery | 33-141% Limit | | |
| Phenol-d6 | 24 | 0 | % Recovery | 10-94% Limit | | |
| 2-Fluorophenol | *5 | 0 | % Recovery | 21-100% Limit | | |
| 2,4,6-Tribromophenol | 44 | 0 | % Recovery | 10-123% Limit | | |
| Time Analyzed | 1904 | 0 | | | | |
| Date Extracted | 12/14/93 | 0 | | | | |
| Semi-Volatile Organic - Surrogates | | *1 | | 8270(2)/625(6) | 01/04/94 | JMC |
| Nitrobenzene-d5 | 65 | 0 | % Recovery | 35-114% Limit | | |
| 2-Fluorobiphenyl | 63 | 0 | % Recovery | 43-116% Limit | | |
| 4-Terphenyl-d14 | 58 | 0 | % Recovery | 33-141% Limit | | |
| Phenol-d6 | 24 | 0 | % Recovery | 10-94% Limit | | |
| 2-Fluorophenol | *5 | 0 | % Recovery | 21-100% Limit | | |
| 2,4,6-Tribromophenol | 41 | 0 | % Recovery | 10-123% Limit | | |
| Date Extracted | 12/14/93 | 0 | | | | |
| Time Analyzed | 1336 | 0 | | | | |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/12/94

JOB NUMBER: 932391 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7294
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 07:30
WORK DESCRIPTION...: 9312080730

MW-01

LABORATORY I.D...: 932391-0002
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| 610 - PAH'S BY 8270 | | *1 | | 8270 (2) | 12/21/93 | DMJ |
| Acenaphthene | ND | 10 | ug/L | | | |
| Acenaphthylene | ND | 10 | ug/L | | | |
| Anthracene | ND | 10 | ug/L | | | |
| Benzo(a)anthracene | ND | 10 | ug/L | | | |
| Benzo(b)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(k)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(ghi)perylene | ND | 10 | ug/L | | | |
| Benzo(a)pyrene | ND | 10 | ug/L | | | |
| Chrysene | ND | 10 | ug/L | | | |
| Dibenzo(a,h)anthracene | ND | 10 | ug/L | | | |
| Fluoranthene | ND | 10 | ug/L | | | |
| Fluorene | ND | 10 | ug/L | | | |
| Indeno(1,2,3-cd)pyrene | ND | 10 | ug/L | | | |
| Naphthalene | ND | 10 | ug/L | | | |
| Phenanthrene | ND | 10 | ug/L | | | |
| Pyrene | ND | 10 | ug/L | | | |
| Nitrobenzene-d5 | 71 | 0 | % Recovery | 35-114% Limit | | |
| 2-Fluorobiphenyl | 77 | 0 | % Recovery | 43-116% Limit | | |
| 4-Terphenyl-d14 | 60 | 0 | % Recovery | 33-141% Limit | | |
| Phenol-d6 | 78 | 0 | % Recovery | 10-94% Limit | | |
| 2-Fluorophenol | 54 | 0 | % Recovery | 21-100% Limit | | |
| 2,4,6-Tribromophenol | 98 | 0 | % Recovery | 10-123% Limit | | |
| Time Analyzed | 2016 | 0 | | | | |
| Date Extracted | 12/14/93 | 0 | | | | |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/12/94

JOB NUMBER: 932391 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7294
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 08:00
WORK DESCRIPTION...: 9312080800

MW-05S

LABORATORY I.D...: 932391-0003
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| 610 - PAH'S BY 8270 | | *1 | | 8270 (2) | 12/21/93 | DMJ |
| Acenaphthene | ND | 10 | ug/L | | | |
| Acenaphthylene | ND | 10 | ug/L | | | |
| Anthracene | ND | 10 | ug/L | | | |
| Benzo(a)anthracene | ND | 10 | ug/L | | | |
| Benzo(b)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(k)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(ghi)perylene | ND | 10 | ug/L | | | |
| Benzo(a)pyrene | ND | 10 | ug/L | | | |
| Chrysene | ND | 10 | ug/L | | | |
| Dibenzo(a,h)anthracene | ND | 10 | ug/L | | | |
| Fluoranthene | ND | 10 | ug/L | | | |
| Fluorene | ND | 10 | ug/L | | | |
| Indeno(1,2,3-cd)pyrene | ND | 10 | ug/L | | | |
| Naphthalene | ND | 10 | ug/L | | | |
| Phenanthrene | ND | 10 | ug/L | | | |
| Pyrene | ND | 10 | ug/L | | | |
| Nitrobenzene-d5 | 70 | 0 | % Recovery | 35-114% Limit | | |
| 2-Fluorobiphenyl | 75 | 0 | % Recovery | 43-116% Limit | | |
| 4-Terphenyl-d14 | 63 | 0 | % Recovery | 33-141% Limit | | |
| Phenol-d6 | 47 | 0 | % Recovery | 10-94% Limit | | |
| 2-Fluorophenol | 21 | 0 | % Recovery | 21-100% Limit | | |
| 2,4,6-Tribromophenol | 87 | 0 | % Recovery | 10-123% Limit | | |
| Time Analyzed | 2128 | 0 | | | | |
| Date Extracted | 12/14/93 | 0 | | | | |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/12/94

JOB NUMBER: 932391 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7294
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 08:30
WORK DESCRIPTION...: 9312080830

MW-03D

LABORATORY I.D...: 932391-0004
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| 610 - PAH'S BY 8270 | | *1 | | 8270 (2) | 12/21/93 | DMJ |
| Acenaphthene | ND | 10 | ug/L | | | |
| Acenaphthylene | ND | 10 | ug/L | | | |
| Anthracene | ND | 10 | ug/L | | | |
| Benzo(a)anthracene | ND | 10 | ug/L | | | |
| Benzo(b)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(k)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(ghi)perylene | ND | 10 | ug/L | | | |
| Benzo(a)pyrene | ND | 10 | ug/L | | | |
| Chrysene | ND | 10 | ug/L | | | |
| Dibenzo(a,h)anthracene | ND | 10 | ug/L | | | |
| Fluoranthene | ND | 10 | ug/L | | | |
| Fluorene | ND | 10 | ug/L | | | |
| Indeno(1,2,3-cd)pyrene | ND | 10 | ug/L | | | |
| Naphthalene | ND | 10 | ug/L | | | |
| Phenanthrene | ND | 10 | ug/L | | | |
| Pyrene | ND | 10 | ug/L | | | |
| Nitrobenzene-d5 | 63 | 0 | % Recovery | 35-114% Limit | | |
| 2-Fluorobiphenyl | 68 | 0 | % Recovery | 43-116% Limit | | |
| 4-Terphenyl-d14 | 63 | 0 | % Recovery | 33-141% Limit | | |
| Phenol-d6 | 47 | 0 | % Recovery | 10-94% Limit | | |
| 2-Fluorophenol | 23 | 0 | % Recovery | 21-100% Limit | | |
| 2,4,6-Tribromophenol | 74 | 0 | % Recovery | 10-123% Limit | | |
| Time Analyzed | 2240 | 0 | | | | |
| Date Extracted | 12/14/93 | 0 | | | | |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/12/94

JOB NUMBER: 932391 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7294
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 09:30
WORK DESCRIPTION...: 9312080930

MW-06D

LABORATORY I.D...: 932391-0005
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| 610 - PAH'S BY 8270 | | *1 | | 8270 (2) | 12/21/93 | DMJ |
| Acenaphthene | ND | 10 | ug/L | | | |
| Acenaphthylene | ND | 10 | ug/L | | | |
| Anthracene | ND | 10 | ug/L | | | |
| Benzo(a)anthracene | ND | 10 | ug/L | | | |
| Benzo(b)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(k)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(ghi)perylene | ND | 10 | ug/L | | | |
| Benzo(a)pyrene | ND | 10 | ug/L | | | |
| Chrysene | ND | 10 | ug/L | | | |
| Dibenzo(a,h)anthracene | ND | 10 | ug/L | | | |
| Fluoranthene | ND | 10 | ug/L | | | |
| Fluorene | ND | 10 | ug/L | | | |
| Indeno(1,2,3-cd)pyrene | ND | 10 | ug/L | | | |
| Naphthalene | ND | 10 | ug/L | | | |
| Phenanthrene | ND | 10 | ug/L | | | |
| Pyrene | ND | 10 | ug/L | | | |
| Nitrobenzene-d5 | 67 | 0 | % Recovery | 35-114% Limit | | |
| 2-Fluorobiphenyl | 65 | 0 | % Recovery | 43-116% Limit | | |
| 4-Terphenyl-d14 | 55 | 0 | % Recovery | 33-141% Limit | | |
| Phenol-d6 | 65 | 0 | % Recovery | 10-94% Limit | | |
| 2-Fluorophenol | 40 | 0 | % Recovery | 21-100% Limit | | |
| 2,4,6-Tribromophenol | 87 | 0 | % Recovery | 10-123% Limit | | |
| Time Analyzed | 2352 | 0 | | | | |
| Date Extracted | 12/14/93 | 0 | | | | |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/12/94

JOB NUMBER: 932391 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7294
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 10:00
WORK DESCRIPTION...: 9312081000

μW-95

LABORATORY I.D...: 932391-0006
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| 610 - PAH'S BY 8270 | | *1 | | 8270 (2) | 01/04/94 | DMJ |
| Acenaphthene | ND | 10 | ug/L | | | |
| Acenaphthylene | ND | 10 | ug/L | | | |
| Anthracene | ND | 10 | ug/L | | | |
| Benzo(a)anthracene | ND | 10 | ug/L | | | |
| Benzo(b)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(k)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(ghi)perylene | ND | 10 | ug/L | | | |
| Benzo(a)pyrene | ND | 10 | ug/L | | | |
| Chrysene | ND | 10 | ug/L | | | |
| Dibenzo(a,h)anthracene | ND | 10 | ug/L | | | |
| Fluoranthene | ND | 10 | ug/L | | | |
| Fluorene | ND | 10 | ug/L | | | |
| Indeno(1,2,3-cd)pyrene | ND | 10 | ug/L | | | |
| Naphthalene | ND | 10 | ug/L | | | |
| Phenanthrene | ND | 10 | ug/L | | | |
| Pyrene | ND | 10 | ug/L | | | |
| Nitrobenzene-d5 | 76 | 0 | % Recovery | 35-114% Limit | | |
| 2-Fluorobiphenyl | 83 | 0 | % Recovery | 43-116% Limit | | |
| 4-Terphenyl-d14 | 52 | 0 | % Recovery | 33-141% Limit | | |
| Phenol-d6 | 57 | 0 | % Recovery | 10-94% Limit | | |
| 2-Fluorophenol | 29 | 0 | % Recovery | 21-100% Limit | | |
| 2,4,6-Tribromophenol | 95 | 0 | % Recovery | 10-123% Limit | | |
| Time Analyzed | 1449 | 0 | | | | |
| Date Extracted | 12/14/93 | 0 | | | | |

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# CORE LABORATORIES

LABORATORY TESTS RESULTS
01/12/94

JOB NUMBER: 932391 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....: REXENE COC #7294
DATE SAMPLED.....: 12/08/93
TIME SAMPLED.....: 11:00
WORK DESCRIPTION...: 9312081100

MW-6S

LABORATORY I.D...: 932391-0007
DATE RECEIVED....: 12/09/93
TIME RECEIVED....: 10:00
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| 610 - PAH'S BY 8270 | | *1 | | 8270 (2) | 12/22/93 | DMJ |
| Acenaphthene | ND | 10 | ug/L | | | |
| Acenaphthylene | ND | 10 | ug/L | | | |
| Anthracene | ND | 10 | ug/L | | | |
| Benzo(a)anthracene | ND | 10 | ug/L | | | |
| Benzo(b)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(k)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(ghi)perylene | ND | 10 | ug/L | | | |
| Benzo(a)pyrene | ND | 10 | ug/L | | | |
| Chrysene | ND | 10 | ug/L | | | |
| Dibenzo(a,h)anthracene | ND | 10 | ug/L | | | |
| Fluoranthene | ND | 10 | ug/L | | | |
| Fluorene | ND | 10 | ug/L | | | |
| Indeno(1,2,3-cd)pyrene | ND | 10 | ug/L | | | |
| Naphthalene | ND | 10 | ug/L | | | |
| Phenanthrene | ND | 10 | ug/L | | | |
| Pyrene | ND | 10 | ug/L | | | |
| Nitrobenzene-d5 | 88 | 0 | % Recovery | 35-114% Limit | | |
| 2-Fluorobiphenyl | 70 | 0 | % Recovery | 43-116% Limit | | |
| 4-Terphenyl-d14 | *22 | 0 | % Recovery | 33-141% Limit | | |
| Phenol-d6 | *0 | 0 | % Recovery | 10-94% Limit | | |
| 2-Fluorophenol | 68 | 0 | % Recovery | 21-100% Limit | | |
| 2,4,6-Tribromophenol | 93 | 0 | % Recovery | 10-123% Limit | | |
| Time Analyzed | 0216 | 0 | | | | |
| Date Extracted | 12/14/93 | 0 | | | | |
| Semi-Volatile Organic - Surrogates | | *1 | | 8270(2)/625(6) | 12/30/93 | JMC |
| Nitrobenzene-d5 | 86 | 0 | % Recovery | 35-114% Limit | | |
| 2-Fluorobiphenyl | 71 | 0 | % Recovery | 43-116% Limit | | |
| 4-Terphenyl-d14 | *18 | 0 | % Recovery | 33-141% Limit | | |
| Phenol-d6 | *0 | 0 | % Recovery | 10-94% Limit | | |
| 2-Fluorophenol | 29 | 0 | % Recovery | 21-100% Limit | | |
| 2,4,6-Tribromophenol | 83 | 0 | % Recovery | 10-123% Limit | | |
| Date Extracted | 12/14/93 | 0 | | | | |
| Time Analyzed | 1612 | 0 | | | | |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/12/94

JOB NUMBER: 932391 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....:
DATE SAMPLED.....: / /
TIME SAMPLED.....: :
WORK DESCRIPTION...: METHOD BLANK

LABORATORY I.D...: 932391-0008
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| 610 - PAH'S BY 8270 | | *1 | | 8270 (2) | 12/21/93 | DMJ |
| Acenaphthene | ND | 10 | ug/L | | | |
| Acenaphthylene | ND | 10 | ug/L | | | |
| Anthracene | ND | 10 | ug/L | | | |
| Benzo(a)anthracene | ND | 10 | ug/L | | | |
| Benzo(b)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(k)fluoranthene | ND | 10 | ug/L | | | |
| Benzo(ghi)perylene | ND | 10 | ug/L | | | |
| Benzo(a)pyrene | ND | 10 | ug/L | | | |
| Chrysene | ND | 10 | ug/L | | | |
| Dibenzo(a,h)anthracene | ND | 10 | ug/L | | | |
| Fluoranthene | ND | 10 | ug/L | | | |
| Fluorene | ND | 10 | ug/L | | | |
| Indeno(1,2,3-cd)pyrene | ND | 10 | ug/L | | | |
| Naphthalene | ND | 10 | ug/L | | | |
| Phenanthrene | ND | 10 | ug/L | | | |
| Pyrene | ND | 10 | ug/L | | | |
| Nitrobenzene-d5 | 65 | 0 | % Recovery | 35-114% Limit | | |
| 2-Fluorobiphenyl | 68 | 0 | % Recovery | 43-116% Limit | | |
| 4-Terphenyl-d14 | 61 | 0 | % Recovery | 33-141% Limit | | |
| Phenol-d6 | 68 | 0 | % Recovery | 10-94% Limit | | |
| 2-Fluorophenol | 48 | 0 | % Recovery | 21-100% Limit | | |
| 2,4,6-Tribromophenol | 80 | 0 | % Recovery | 10-123% Limit | | |
| Time Analyzed | 1752 | 0 | | | | |
| Date Extracted | 12/14/93 | 0 | | | | |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/12/94

JOB NUMBER: 932391 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....:
DATE SAMPLED.....: / /
TIME SAMPLED.....: :
WORK DESCRIPTION...: SPIKED BLANK

LABORATORY I.D...: 932391-0009
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| Semi-Volatile Organic - Surrogates | | *1 | | 8270(2)/625(6) | 12/21/93 | JMC |
| Nitrobenzene-d5 | 70 | 0 | % Recovery | 35-114% Limit | | |
| 2-Fluorobiphenyl | 69 | 0 | % Recovery | 43-116% Limit | | |
| 4-Terphenyl-d14 | 66 | 0 | % Recovery | 33-141% Limit | | |
| Phenol-d6 | 66 | 0 | % Recovery | 10-94% Limit | | |
| 2-Fluorophenol | 41 | 0 | % Recovery | 21-100% Limit | | |
| 2,4,6-Tribromophenol | 71 | 0 | % Recovery | 10-123% Limit | | |
| Date Extracted | 12/14/93 | 0 | | | | |
| Time Analyzed | 0643 | 0 | | | | |

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS
01/12/94

JOB NUMBER: 932391 CUSTOMER: HYGIENETICS/GCL ATTN:

CLIENT I.D.....:
DATE SAMPLED.....: / /
TIME SAMPLED.....: :
WORK DESCRIPTION...: SPIKED BLANK DUPLICATE

LABORATORY I.D...: 932391-0010
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

| TEST DESCRIPTION | FINAL RESULT | LIMITS/*DILUTION | UNITS OF MEASURE | TEST METHOD | DATE | TECHN |
|---|---|---|---|---|---|---|
| Semi-Volatile Organic - Surrogates | | *1 | | 8270(2)/625(6) | 12/21/93 | JMC |
| Nitrobenzene-d5 | 70 | 0 | % Recovery | 35-114% Limit | | |
| 2-Fluorobiphenyl | 74 | 0 | % Recovery | 43-116% Limit | | |
| 4-Terphenyl-d14 | 64 | 0 | % Recovery | 33-141% Limit | | |
| Phenol-d6 | 73 | 0 | % Recovery | 10-94% Limit | | |
| 2-Fluorophenol | 54 | 0 | % Recovery | 21-100% Limit | | |
| 2,4,6-Tribromophenol | 84 | 0 | % Recovery | 10-123% Limit | | |
| Date Extracted | 12/14/93 | 0 | | | | |
| Time Analyzed | 0755 | 0 | | | | |

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# CORE LABORATORIES

## QUALITY CONTROL REPORT
01/12/94

JOB NUMBER: 932391 CUSTOMER: HYGIENETICS/GCL ATTN:

BNA SPIKED ANALYSIS-WATER DATE ANALYZED: 12/21/93 TIME ANALYZED: 06:43 METHOD: 8270 (2) QC NUMBER:286175

### REFERENCE STANDARDS

| TEST DESCRIPTION | ANALYSIS SUB-TYPE | ANALYSIS I. D. | DILUTION FACTOR | ANALYZED VALUE | TRUE VALUE | PERCENT RECOVERY | DETECTION LIMITS | UNITS OF MEASURE |
|---|---|---|---|---|---|---|---|---|
| Phenol | SB | B931011D | 1 | 29 | 50 | 58 | 10 | ug/L |
| | SBD | B931011D | 1 | 33 | 50 | 66 | 10 | ug/L |
| 2-Chlorophenol | SB | B931011D | 1 | 30 | 50 | 60 | 10 | ug/L |
| | SBD | B931011D | 1 | 34 | 50 | 68 | 10 | ug/L |
| 1,4-Dichlorobenzene | SB | B931011D | 1 | 21 | 50 | 42 | 10 | ug/L |
| | SBD | B931011D | 1 | 22 | 50 | 44 | 10 | ug/L |
| N-Nitrosodi-n-propylamine | SB | B931011D | 1 | 41 | 50 | 82 | 10 | ug/L |
| | SBD | B931011D | 1 | 42 | 50 | 84 | 10 | ug/L |
| 1,2,4-Trichlorobenzene | SB | B931011D | 1 | 19 | 50 | 38 | 10 | ug/L |
| | SBD | B931011D | 1 | 21 | 50 | 42 | 10 | ug/L |
| 4-Chloro-3-methylphenol | SB | B931011D | 1 | 40 | 50 | 80 | 10 | ug/L |
| | SBD | B931011D | 1 | 42 | 50 | 84 | 10 | ug/L |
| Acenaphthene | SB | B931011D | 1 | 34 | 50 | 68 | 10 | ug/L |
| | SBD | B931011D | 1 | 36 | 50 | 72 | 10 | ug/L |
| 4-Nitrophenol | SB | B931011D | 1 | 33 | 50 | 66 | 50 | ug/L |
| | SBD | B931011D | 1 | 37 | 50 | 74 | 50 | ug/L |
| 2,4-Dinitrotoluene | SB | B931011D | 1 | 43 | 50 | 86 | 10 | ug/L |
| | SBD | B931011D | 1 | 43 | 50 | 86 | 10 | ug/L |
| Pentachlorophenol | SB | B931011D | 1 | 23 | 50 | 46 | 50 | ug/L |
| | SBD | B931011D | 1 | 35 | 50 | 70 | 50 | ug/L |
| Pyrene | SB | B931011D | 1 | 31 | 50 | 62 | 10 | ug/L |
| | SBD | B931011D | 1 | 30 | 50 | 60 | 10 | ug/L |

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# CORE LABORATORIES

## QUALITY CONTROL FOOTER

### METHOD REFERENCES


(1) EPA 600/4-79-020, Methods For Chemical Analysis Of Water And Wastes, March 1983

(2) EPA SW-846, Test Methods For Evaluating Solid Waste, Third Edition, November 1986

(3) Standard Methods For The Examination Of Water And Wastewater, 17th Edition, 1989

(4) EPA 600/4-80-032, Prescribed Procedures For Measurement Of Radioactivity In Drinking Water, August 1980

(5) EPA 600/8-78-017, Microbiological Methods For Monitoring The Environment, December 1978

(6) Federal Register, July 1, 1990 (40 CFR Part 136)

(7) EPA 600/4-88-039, Methods For The Determination Of Organics Compounds In Drinking Water, December 1988

(8) U.S.G.S. Methods For The Determination Of Inorganic Substances In Water And Fluvial Sediments, Book 5, Chapter A1, 1985

(9) Federal Register, Friday, June 7, 1991, (40 CFR Parts 141 and 142)

(10) Standard Methods For The Examination Of Water And Wastewater, 16th Edition, 1985

(11) ASTM, Section 11 Water And Environmental Technology, Volume 11.01 Water (1), 1991

(12) Methods Of Soil Analysis, American Society Of Agronomy, Agronomy No. 9, 1965

(13) EPA SW-846, Test Methods For Evaluating Solid Waste, Third Edition, Revision 1, November 1990

(14) ASTM, Section 5, Petroleum Products, Lubricants, and Fossil Fuels, Volume 05.05, Gaseous Fuels, Coal and Coke

(15) EPA 600/2-78-054, Field and Laboratory Methods Applicable To Overburdens and Mine Soils, March 1978

(16) ASTM, Part 19, Soils and Rock; Building Stones, 1981


COMMENTS: Data in QA report may differ from final results due to digestion and/or dilution of sample into analytical ranges. The "Time Analyzed" in the QA report refers to the start time of the analytical batch which may not reflect the actual time of each analysis. The "Date Analyzed" is the actual date of analysis.

NC = Not Calculable Due To Value(s) Lower Than The Detection Limit.

Analyses performed by a subcontract laboratory are indicated on the analytical and/or quality control reports under "Technician" using the following codes:

| Subcontract Laboratory | Code | |
|---|---|---|
| Core Laboratories - Anaheim, CA | *AN | |
| Core Laboratories - Casper, WY | *CA | |
| Core Laboratories - Corpus Christi, TX | *CC | |
| Core Laboratories - Houston, TX | *HP | |
| Core Laboratories - Lake Charles, LA | *LC | |
| Core Laboratories - Long Beach, CA | *LB | |
| Other Subcontract Laboratories | *XX | Laboratory ID Provided Upon Request |

* The asterisk in the "Technician" data field signifies that the analysis was performed by a subcontract laboratory.


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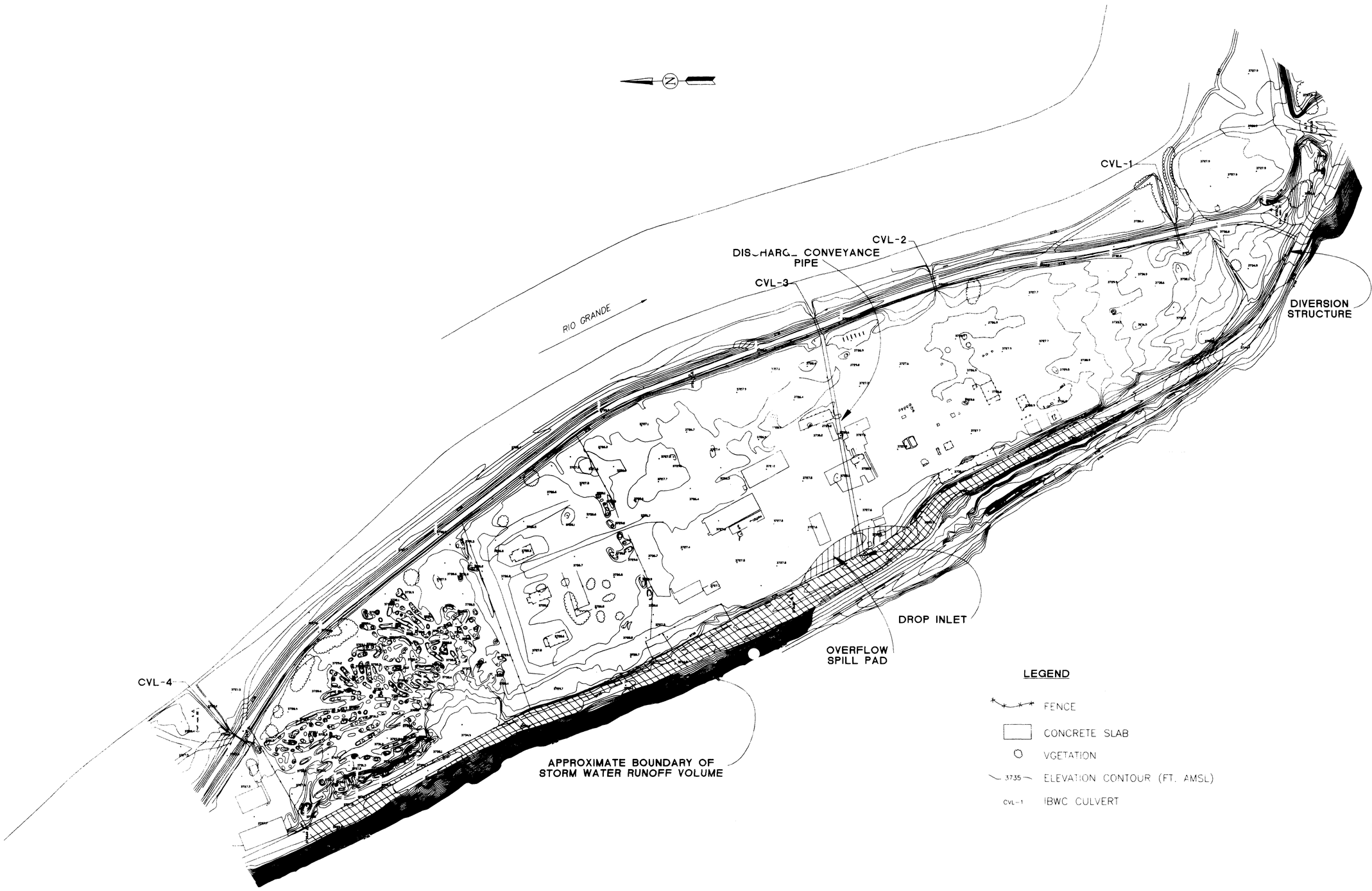


**LEGEND**

- FENCE
- CONCRETE SLAB
- VEGETATION
- 3735 — ELEVATION CONTOUR (FT. AMSL)
- CVL-1 — IBWC CULVERT



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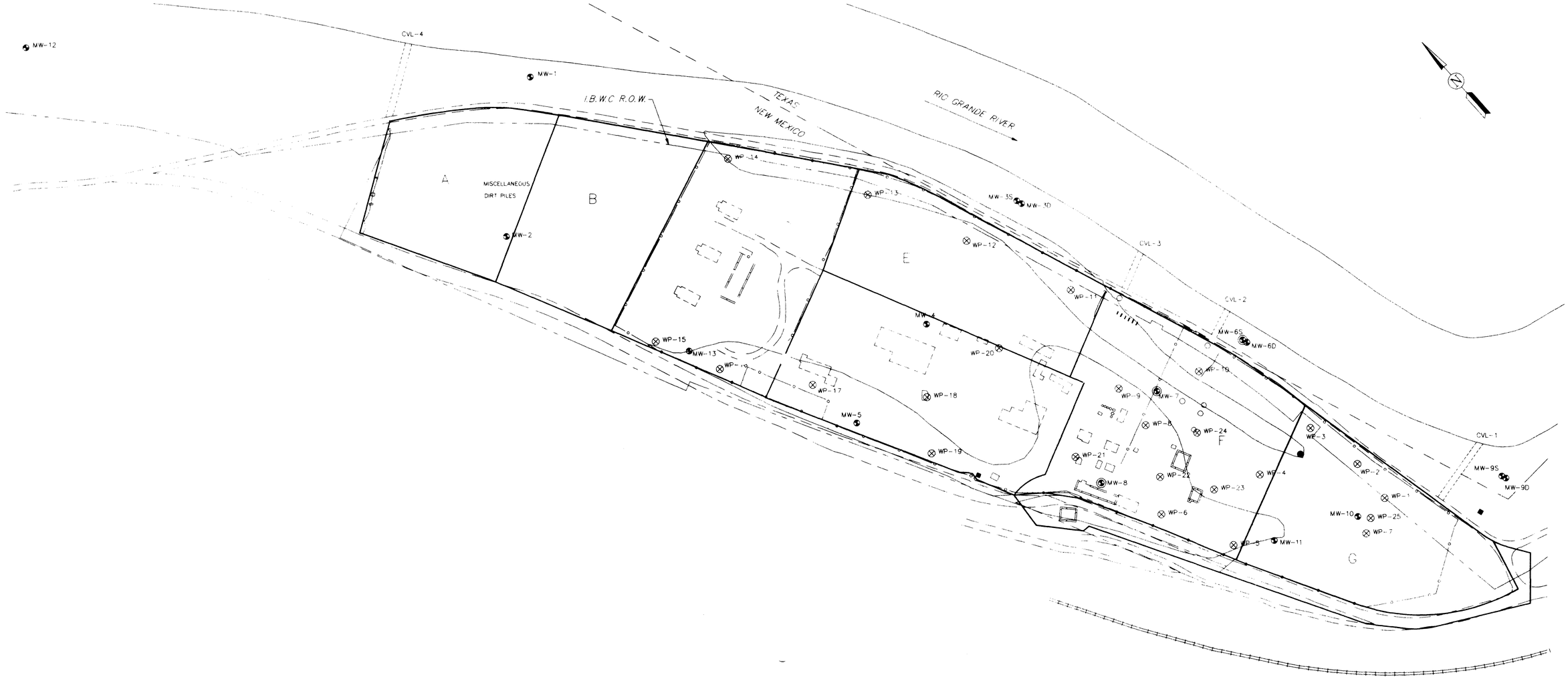
**PLATE A**
**OFF-SITE WATER DIVERSION SYSTEM**
**CONCEPTUAL DESIGN LAYOUT**
**OLD BRICKLAND REFINERY SITE,**
**SUNLAND PARK, NEW MEXICO**

| | |
|---|---|
| CLIENT: | REXENE |
| DATE: | 1-3-93 |
| DRAWN BY: | HCC |
| CHECKED BY: | BAS |
| DWG. NO.: | \REXENE\BASEMAP.DWG |




## LEGEND

- WELL POINT
- MONITOR WELL
- CONCRETE SLAB/PAD – BLDG FOUNDATION
- ROAD GRADED AND DRAINED
- ACTIVE RAILROADS
- WALL – MASONRY
- POST
- FENCE – CHAINLINK
- INTERMITTENT STREAM
- POLE
- 1990 EDER ESTIMATE OF FLOATING PRODUCT
- WATER LEVEL DATA LOGGER
- STORM WATER SAMPLER

80 40 0 200
100 60 20 100
SCALE: 1" = 100'

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SANTA FE

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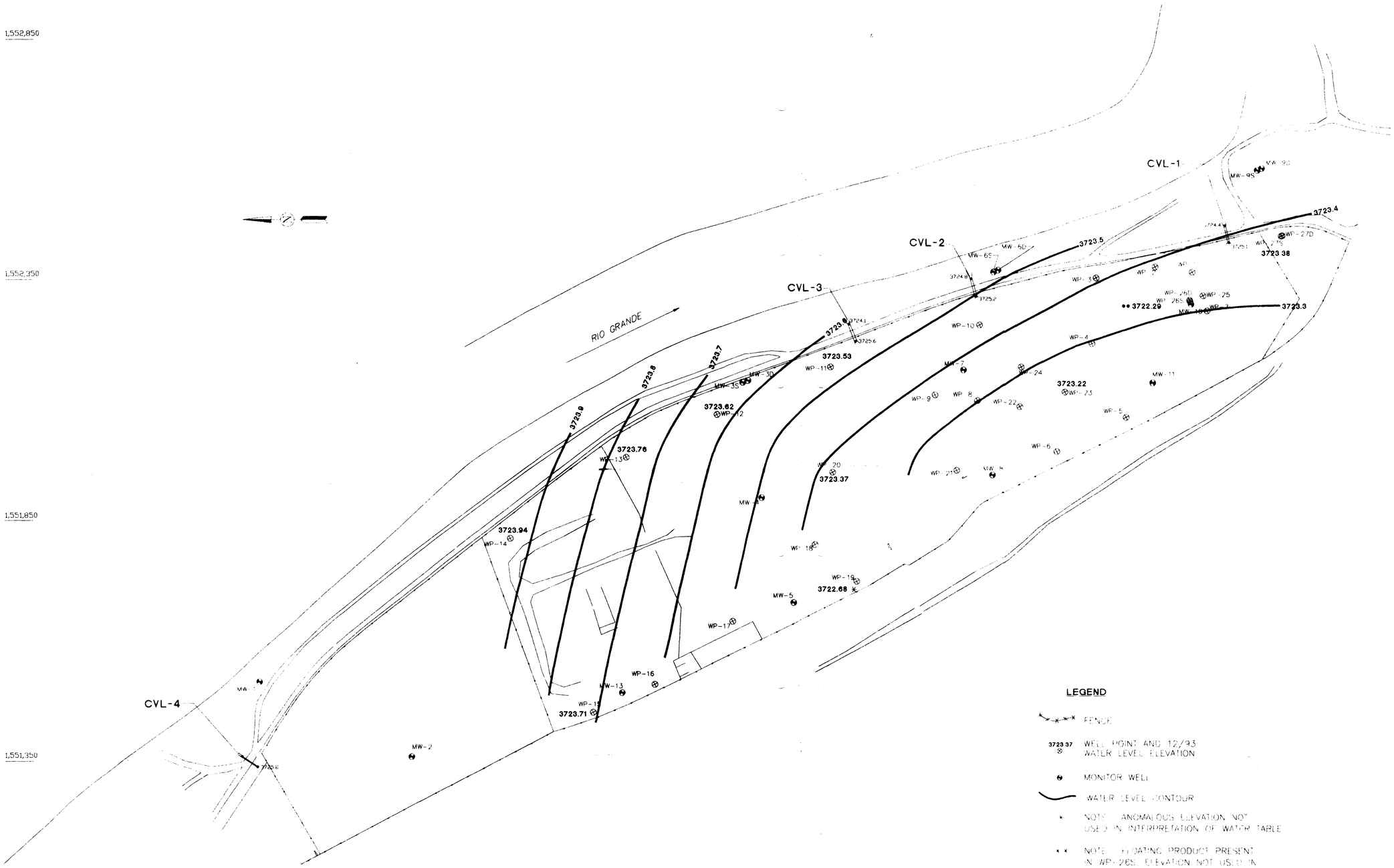
**PLATE B**
**PRELIMINARY SITE INVESTIGATION**
**(SEPTEMBER/OCTOBER 1993)**
**OLD BRICKLAND REFINERY SITE,**
**SUNLAND PARK, NEW MEXICO**

| | |
|---|---|
| CLIENT: | REXENE |
| DATE: | 10-7-93 |
| DRAWN BY: | HCC |
| CHECKED BY: | BAS |
| DWG. NO.: | \REXENE\PRPWLLDP.DWG |

290,600 290,100 289,600 289,100 288,600 288,100 287,600

1,552,850 1,552,350 1,551,850 1,551,350 1,550,850




## LEGEND

- FENCE
- 3723.37 WELL POINT AND 12/93 WATER LEVEL ELEVATION
- MONITOR WELL
- WATER LEVEL CONTOUR
- * NOTE - ANOMALOUS ELEVATION, NOT USED IN INTERPRETATION OF WATER TABLE
- ** NOTE - FLOATING PRODUCT PRESENT IN WP-26S, ELEVATION NOT USED IN INTERPRETATION OF WATER TABLE

NOTE: ALL POINTS FOR THIS PROJECT ARE LOCATED IN NEW MEXICO CENTRAL ZONE (NAD83) OF THE NEW MEXICO STATE PLANE COORDINATE SYSTEM. $\Delta_{GX} = 0°9'01''$ MAP FACTOR = 0.9997 3050

80 40 0 200
100 60 20 100
SCALE: 1" = 100'

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**PLATE C**

**GROUND WATER TABLE MAP BASED ON SHALLOW WELLPOINT DATA**

| | |
|---|---|
| CLIENT: | REXENE |
| DATE: | 3/10/94 |
| DRAWN BY: | HCC |
| CHECKED BY: | BAS |
| DWG. NO. | \REXENE\BRCKFNCE.DWG |

290,600 290,100 289,600 289,100 288,600 288,100 287,600

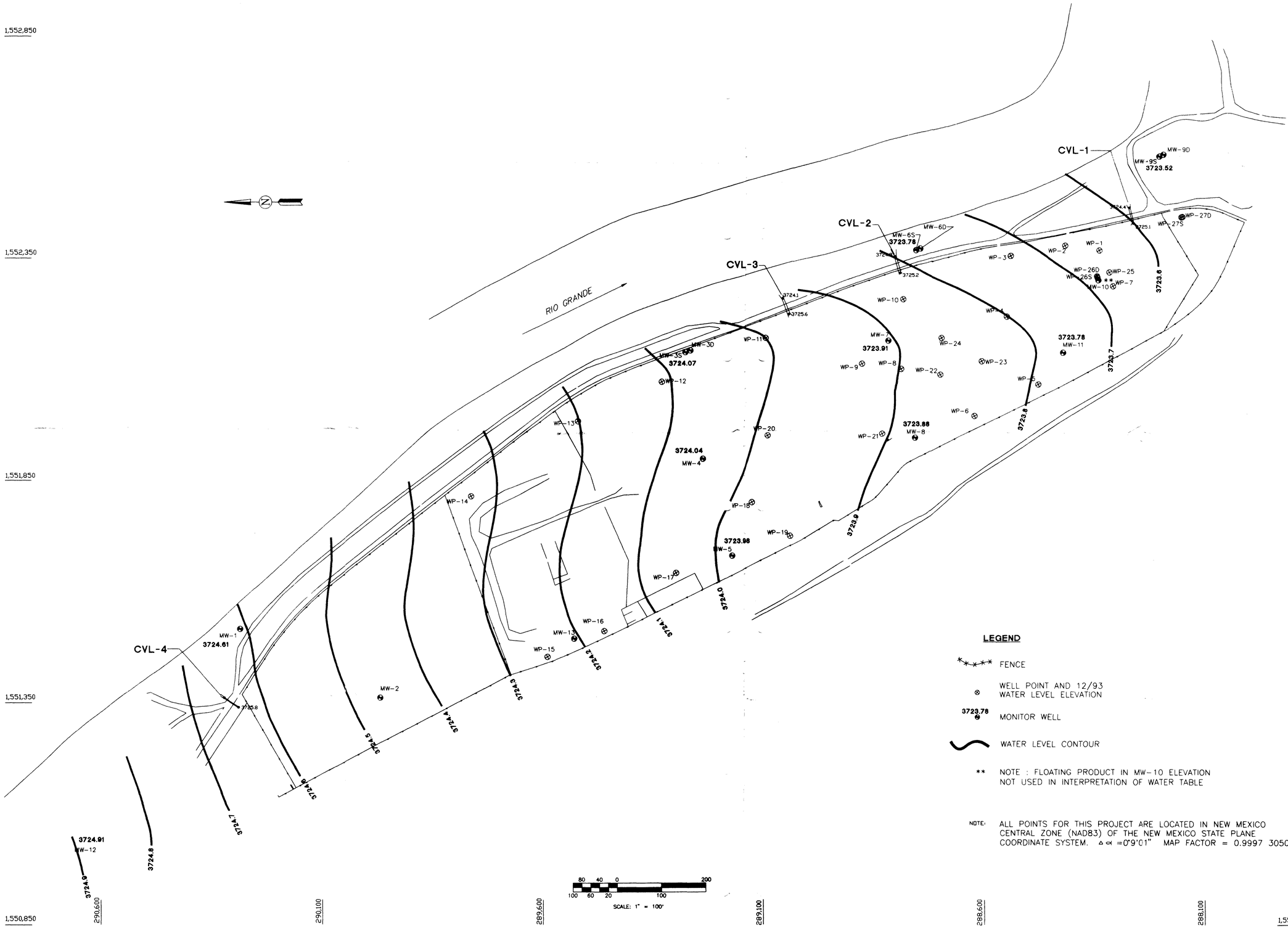
1,552,850

1,552,350

1,551,850

1,551,350

1,550,850




**LEGEND**

- FENCE
- WELL POINT AND 12/93 WATER LEVEL ELEVATION
- 3723.78 MONITOR WELL
- WATER LEVEL CONTOUR
- ** NOTE : FLOATING PRODUCT IN MW-10 ELEVATION NOT USED IN INTERPRETATION OF WATER TABLE

NOTE: ALL POINTS FOR THIS PROJECT ARE LOCATED IN NEW MEXICO CENTRAL ZONE (NAD83) OF THE NEW MEXICO STATE PLANE COORDINATE SYSTEM. $\Delta\alpha$ =0°9'01" MAP FACTOR = 0.9997 3050

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**PLATE D**

**WATER TABLE MAP BASED ON MONITOR WELL DATA**

| | |
|---|---|
| CLIENT: | REXENE |
| DATE: | 3/10/94 |
| DRAWN BY: | HCC |
| CHECKED BY: | BAS |
| DWG. NO.: | \REXENE\BRCKFNCE.DWG |

290,600 290,100 289,600 289,100 288,600 288,100 287,600

1,552,850 1,552,350 1,551,850 1,551,350 1,550,850

N

RIO GRANDE

CVL-1 CVL-2 CVL-3 CVL-4

MW-9D MW-9S MW-6D MW-6S MW-3D MW-3S MW-1 MW-2 MW-4 MW-5 MW-7 MW-8 MW-11 MW-12 MW-13

WP-1 WP-2 WP-3 WP-4 WP-5 WP-6 WP-7 WP-8 WP-9 WP-10 WP-11 WP-12 WP-13 WP-14 WP-15 WP-16 WP-17 WP-18 WP-19 WP-20 WP-21 WP-22 WP-23 WP-24 WP-25 WP-26D WP-26S WP-27D WP-27S

3723.4 3723.5 3723.38 3723.3 3722.29 3723.53 3723.8 3723.9 3723.62 3723.76 3723.22 3723.37 3723.94 3722.68 3723.71 3725.8

3724.4 3725.1 3724.8 3725.2 3724.1 3725.6

SCALE: 1" = 100'

## LEGEND

- FENCE
- 3723.37 WELL POINT AND 12/93 WATER LEVEL ELEVATION
- MONITOR WELL
- WATER LEVEL CONTOUR
- * NOTE : ANOMALOUS ELEVATION NOT USED IN INTERPRETATION OF WATER TABLE
- ** NOTE : FLOATING PRODUCT PRESENT IN WP-26S, ELEVATION NOT USED IN INTERPRETATION OF WATER TABLE

NOTE: ALL POINTS FOR THIS PROJECT ARE LOCATED IN NEW MEXICO CENTRAL ZONE (NAD83) OF THE NEW MEXICO STATE PLANE COORDINATE SYSTEM. $\Delta\alpha$ =0°9'01" MAP FACTOR = 0.9997 3050

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**PLATE A**

**GROUND WATER TABLE MAP BASED ON SHALLOW WELLPOINT DATA**

CLIENT: REXENE
DATE: 3/10/94
DRAWN BY: HCC
CHECKED BY: BAS
DWG. NO.: \REXENE\BRCKFNCE.DWG

290,600 290,100 289,600 289,100 288,600 288,100 287,600

1,552,850 1,552,350 1,551,850 1,551,350 1,550,850

N

RIO GRANDE

CVL-1 CVL-2 CVL-3 CVL-4

MW-9D MW-9S 3723.52 3724.1 3725.1 WP-27D WP-27S

MW-6D MW-6S 3723.78 3724.2 3725.2 WP-3 WP-2 WP-1

WP-26D WP-26S WP-25 MW-10 WP-7 3723.6

MW-3D MW-3S 3724.1 3725.6 WP-10 WP-4

WP-11 3724.07 WP-12 MW-7 3723.91 WP-9 WP-8 WP-24 WP-22 WP-23 WP-5 3723.78 MW-11 3723.7

WP-13 WP-20 WP-21 3723.88 MW-8 WP-6 3723.8

3724.04 MW-4 WP-14 WP-18 WP-19 3723.98 MW-5 3723.9

WP-17 3724.0 3724.1

MW-1 3724.61 3725.8 WP-16 MW-13 WP-15 3724.2 3724.3 3724.4 3724.5 3724.6 3724.7

MW-2

3724.91 MW-12 3724.8 3724.9

80 40 0 200
100 60 20 100
SCALE: 1" = 100'

## LEGEND

FENCE

WELL POINT AND 12/93 WATER LEVEL ELEVATION

3723.78 MONITOR WELL

WATER LEVEL CONTOUR

** NOTE : FLOATING PRODUCT IN MW-10 ELEVATION NOT USED IN INTERPRETATION OF WATER TABLE

NOTE: ALL POINTS FOR THIS PROJECT ARE LOCATED IN NEW MEXICO CENTRAL ZONE (NAD83) OF THE NEW MEXICO STATE PLANE COORDINATE SYSTEM. $\Delta\alpha$ =0°9'01" MAP FACTOR = 0.9997 3050

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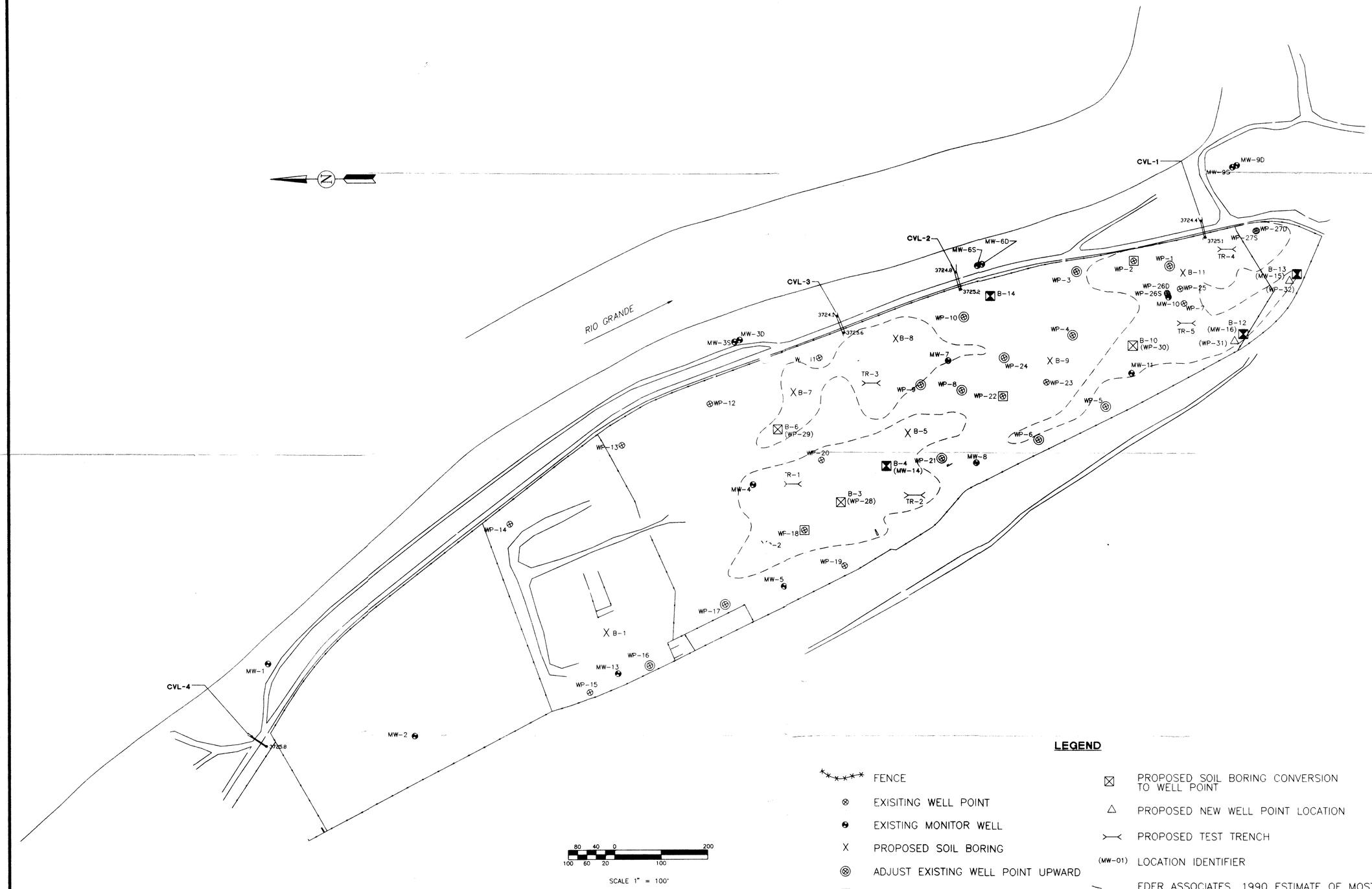
**PLATE B**

**WATER TABLE MAP BASED ON MONITOR WELL DATA**

| |
|---|
| CLIENT: REXENE |
| DATE: 3/10/94 |
| DRAWN BY: HCC |
| CHECKED BY: BAS |
| DWG. NO.: \REXENE\BRCKFNCE.DWG |




## LEGEND

- FENCE
- EXISITING WELL POINT
- EXISTING MONITOR WELL
- PROPOSED SOIL BORING
- ADJUST EXISTING WELL POINT UPWARD
- ADJUST EXISTING WELL POINT DEEPER
- PROPOSED SOIL BORING CONVERSION TO MONITOR WELL
- PROPOSED SOIL BORING CONVERSION TO WELL POINT
- PROPOSED NEW WELL POINT LOCATION
- PROPOSED TEST TRENCH
- (MW-01) LOCATION IDENTIFIER
- EDER ASSOCIATES, 1990 ESTIMATE OF MOST SIGNIFICANT SOIL CONTAMINATION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OIL CONSERVATION DIV
SANTA FE


GCL

**PLATE C**
**PROPOSED SUBSURFACE REMEDIAL INVESTIGATION FOR THE FORMER BRICKLAND REFINERY SITE**

| | |
|---|---|
| CLIENT: | REXENE |
| DATE: | 3/21/94 |
| DRAWN BY: | HCC |
| CHECKED BY: | BAS |
| DWG. NO.: | \REXENE\RMDLINVS.DWG |