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# **REPORTS**

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**REPORT  
GROUNDWATER QUALITY MONITORING RESULTS  
MAVERIK REFINERY TANK FARM  
KIRTLAND, NEW MEXICO  
MAVERIK COUNTRY STORES, INC.**

January 31, 1995

Prepared by:

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**Ecova Corporation**  
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## 1.0 INTRODUCTION

Maverik Country Stores, Inc. (Maverik) retained Ecova Corporation (Ecova) to conduct reporting and groundwater monitoring activities at its former refinery and tank farm located in Kirtland, New Mexico. Results of monitoring and related activities have been submitted to OCD in several reports since the removal of tanks and ancillary equipment at the refinery and tank farm and construction of the slurry wall. Numerous earlier reports presented results of site investigation dating back to 1987.

In accordance with the scope of work (discussed in Section 2.0) presented in the April 26, 1993 monitoring report and agreed upon in a letter from NMDEQ dated May 17, 1993, this Annual Report presents the results of groundwater monitoring conducted at the site on May 24-25, 1994, and October 2-3, 1994. Results of the May 1994 sampling event were also presented in a brief letter report submitted June 21, 1994.

## 2.0 SCOPE OF WORK

### 2.1 General

The agreed Scope of Work for the site involves the following:

1. Perform groundwater monitoring (groundwater quality sampling and ground water level measurements) twice per year. Groundwater monitoring is to be conducted once at the beginning of the primary biodegradation season (May or June) and once at the end of the season (October or November).
2. Both monitoring events are to include the following wells:  
  
MW-10, MW-19, MW-20 (on-site, down-gradient of the slurry wall impoundment)  
  
MW-18 (up-gradient of the slurry wall impoundment)  
  
MW-21 (outside of slurry wall impoundment, down-gradient of MW-18)  
  
MW-17, MW-22 (within the confines of the slurry wall impoundment)
3. During one of the two semi-annual sampling events (in addition to the measurements and samples required under item 2 above) groundwater monitoring will include off-site monitoring wells MW-9, MW-13, MW-14, MW-15, and MW-16.
4. On an annual basis, add nutrients to the area within the confines of the slurry wall impoundment to enhance in-situ biodegradation of remaining hydrocarbons.

### 3.0 GROUNDWATER MONITORING

Groundwater monitoring at the site included well gauging and sampling of the wells listed in Section 2.0 during the respective May and October groundwater monitoring events. Groundwater monitoring was conducted on May 24-25, 1994 and October 2-3, 1994. Ecova (GeoWest) personnel conducted both sampling events.

Groundwater monitoring activities were conducted in accordance with standard United States Environmental Protection Agency (EPA) sampling protocol. For all wells, depth to water and total depth measurements were taken using a Keck electronic water level measuring device or a Marine Moisture Company Oil-Water Interface probe. Measurements were utilized to calculate well evacuation requirements. Wells were evacuated using a disposable weighted HDPE bailer until a minimum of three casing volumes of water were removed, and pH and specific conductance measurements stabilized. In an attempt to minimize the impact of free-phase hydrocarbon on analytical results, wells exhibiting a hydrocarbon sheen (MW-17, MW-22) were purged utilizing a peristaltic pump during the October 1994 sampling event. Field parameter measurements and water quality observations were recorded on monitoring well field data forms. After well evacuation, samples which did not exhibit free-phase hydrocarbon were collected using a disposable bailer and poured into three clean, preserved 40 ml vials supplied by the analytical laboratory.

In an effort to avoid the potential source of analytical error associated with the presence of free-phase hydrocarbon, wells exhibiting a hydrocarbon sheen were sampled using a sampling device consisting of a disposable 50 ml syringe mounted at the end of a length of decontaminated 1-inch diameter PVC, which could be activated from the surface. Samples were removed from about half way down the water column in these wells.

To further test the possible sampling methods which would best avoid the analytical error associated with the presence of free-phase hydrocarbon in certain wells, one duplicate sample was collected during each sampling event using an alternative sampling method. This method involved the use of a disposable VOC sampler mounted on the bottom of the standard disposable bailer utilized for sampling.

Although not required by the OCD, piezometers installed near the inside corners of the slurry wall were again sampled and analyzed to provide further insight into the contaminant concentrations inside the slurry wall (other than that which is provided by MW-17 and MW-22). These 2-inch diameter piezometers are completed as monitor wells to a total depth of 8 feet below grade and are screened from 3 to 8 feet below grade.

#### 4.0 BIOREMEDIATION

As requested in the May 17, 1993 letter from OCD to Maverik, nutrient addition operations to stimulate hydrocarbon biodegradation was again conducted within the area enclosed by the slurry wall. The nutrient addition activities were conducted by Flint Engineering in early June 1994. The area was leveled using a dozer blade and the ground surface ripped using a dozer equipped with 3.5 foot long ripping teeth. Some 4,000 lbs of 16-20-0 ammonium phosphate granular fertilizer was applied to the area and disked into the soil; this fertilizer formulation and application rate had been determined during the 1990 nutrient addition study to be appropriate to supply the essential nutrients (nitrogen and phosphorus) to stimulate microbial activity at the site. The fertilizer was watered in over a three-day period using a commercial, impulse-type water applicator. Approximately 150,000 gallons of water was applied during this period.

## 5.0 RESULTS

### 5.1 Static Water Level Evaluation

Water level evaluation data, collected as part of semiannual groundwater monitoring activities performed at the site are presented in Tables 1 through 3. Table 1 summarizes groundwater elevation data (relative to mean sea level) since January 1992. Table 2 summarizes the level of groundwater relative to the ground surface. Groundwater gradients between selected wells are summarized in Table 3. Groundwater monitoring wells and piezometers are located on Figure 1.

The water level data illustrate the same pattern which has been evident during several years of investigations at this site. The direction of flow is toward the southwest, the water table is typically 1-4 feet below grade, and the groundwater level normally fluctuates 2-3 feet over an annual cycle reaching its maximum elevation in mid-winter. The shallow groundwater has been shown in the past to be significantly influenced by the operation of the Farmers' Mutual Irrigation Ditch located along the northern property boundary.

The water level data during the present and previous reporting periods indicates an overall shallow groundwater gradient to the southwest of about 1 ft/100 ft between the north and south property boundaries, steepening somewhat adjacent to and down-gradient of the slurry wall. Previous measurements indicated the presence of a gradient within the slurry wall not too dissimilar to that outside the slurry wall. The four piezometers installed within the slurry wall boundaries were installed specifically to provide further insight into this observation.

Distances between various pairs of wells/piezometers were measured in the field or determined from the surveyed coordinates and the gradients determined for the last eight monitoring events (Table 3). The water level data were evaluated to assess temporal groundwater level and gradient fluctuations in wells representative of conditions inside of the slurry wall vs. those outside of the slurry wall.

Using the data in Table 4, the average gradient between wells/piezometers located inside the slurry wall during the eight comparison periods has been 0.695/100 ft while the gradient between wells located outside the slurry wall has been 0.961/100 ft.

As was explained in some detail in the April 26, 1993 report, the differential between the gradients inside and outside the slurry wall is apparently due to the differential evapotranspiration rates between the up-gradient and down-gradient portion of the area within the confines of the slurry wall. It is likely that the presence of a gradient within the confines of the slurry wall will continue on a permanent basis since it appears to be the result of natural climatic phenomena. It can be safely concluded on the basis of both the hydrologic data and the water quality results that the slurry wall is maintaining its integrity and is performing its function of containing the contaminated groundwater.

## 5.2 Water Quality Analyses

Water quality monitoring results for the May and October 1994 sampling events are summarized in Table 5 along with results from the eight previous sampling events which have taken place in most wells since the slurry wall was installed in June, 1990. The laboratory data sheets for the two 1994 events are included as Appendix A.

Figures 1 and 2 show the concentrations of DCA, benzene, and total BTEX detected in each well sampled during the May and October 1994 sampling events.

The five off-site monitor wells (MW-9, 13, 14, 15 and 16) were sampled only during the November sampling event. With the exception of a report of 1.2  $\mu\text{g/l}$  DCA in MW-9, 1.9  $\mu\text{g/l}$  DCA in MW-14, all samples were reported as having DCA and BTEX in concentrations below 1  $\mu\text{g/l}$  detection limits. This is consistent with recent findings in these wells.

Five on-site wells were sampled during both periods which were outside the confines of the slurry wall. In the three down-gradient wells (MW-10, 19 and 20) the samples were below detection limits for BTEX. The MW-10 sample was also below detection limits for DCA. DCA was detected at concentrations of 8.0 and 7.9  $\mu\text{g/l}$  in MW-19 during the May and October periods, respectively, and 2.1

μg/l in MW-20 during the October sampling event. These values are consistent with the results of previous recent sampling events.

In well MW-21, adjacent to but outside the slurry wall, only DCA was detected at 8.3 and 5.5 μg/l during the May and October sampling periods, respectively. This is also consistent with previous values.

In the other on-site well, MW-18, located up-gradient of the slurry wall, no DCA was detected but relatively low concentrations of BTEX constituents were detected. While benzene (at 51 and 210 μg/l during the two sampling events) was in excess of drinking water standards, toluene, ethylbenzene and xylenes were below EPA MCL's. The non-detection of BTEX components in MW-21 down-gradient of MW-18 and the reverse situation regarding DCA, suggests that the BTEX constituents in groundwater sampled by MW-18 are attenuated or biodegraded in transit around the east side of the slurry wall before they reach the area sampled by MW-21 and do not pose an off-site threat.

The two monitor wells located within the confines of the slurry wall (MW-17 and 22) are designed primarily to assess the progress of biodegradation taking place within the highly contaminated portion of the site. The original MW-17 was destroyed during removal of the tankage during the fall of 1991 and was replaced by an identical well during June 1992.

The concentration of BTEX and DCA have been high in both interior wells. Previous sulfate analyses showed low levels of sulfate in interior wells vs. much higher levels in exterior wells. This difference is indicative of ongoing biodegradation inside the slurry wall. Time series plots of organic constituents (Figures 3 and 4) show erratic trends.

The variability in contaminant concentrations over short distances is evident by comparison of concentrations in MW-17 and MW-22 to those in the piezometers located in the corners of the impoundment. Two of the piezometers (P-1 and P-4) were not sampled during the May 1994 sampling event because of the lack of sufficient water volume. Piezometer P-4 was not sampled during the October 1994 sampling event because of the presence of free product.

Concentrations of DCA were much lower in the piezometers than in the wells located within the impoundment. DCA concentrations ranged from  $<1$  to  $12.6 \mu\text{g/l}$  in the piezometers.

BTEX concentrations in the piezometers ranged from  $<1$  to  $8.9 \mu\text{g/l}$  benzene and  $1$  to  $22.60 \mu\text{g/l}$  total BTEX. The up-gradient peizometers however, were not sampled in May 1994 because of insufficient water volume nor in October because of the presence of free product.

Overall, concentrations of organic constituents have been highly variable. This variability has been attributed to the inclusion of free-phase droplets into the analytical samples. Alternative sampling techniques have been attempted, including the use of "drop-pipes" and syringe samples to sample below the free-phase layer.

During the May and October 1994 sampling periods, another alternative sampling technique incorporating use of a VOC sampler attached to a disposable bailer (discussed previously in Section 3.0) was utilized in addition to the sample collected using the syringe sampling method. Results from this trial (run on well MW-17), showed a decrease in organic constituents using the VOC sampler during the October 1994 sampling event. Benzene concentrations dropped from  $5,130$  to  $2,070 \mu\text{g/l}$  benzene and from  $9,517$  to  $5,240 \mu\text{g/l}$  total BTEX using the syringe and VOC sampler methods, respectively. Results from the May 1994 trial were consistent with the syringe sampling method.

Because of the high variability in sample results, analytic results from MW-17 and MW-22 are still not considered a reliable indicator by which to estimate the progress of hydrocarbon biodegradation within the slurry wall. Comparison sampling using the syringe and VOC sampling techniques will be continued in 1995. Because it is easier to perform, the VOC sampling method will be utilized if analytical results indicate that organic constituents are lower (or equal) to those utilizing the syringe method.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

All data indicate that the slurry wall has maintained its integrity and is performing its function of containing the contaminated groundwater. Groundwater samples from all monitor wells downgradient from the slurry wall exhibit concentrations of BTEX and DCA either below the detection limit or below New Mexico drinking water standards.

There is evidence that the organic contaminants in the groundwater within the slurry wall are undergoing biodegradation, but the rate at which this is occurring is slow.

Maverik recommends that the current Scope of Work as described in Section 2.0 at the facility be continued. This approach includes: semi-annual water quality and water level monitoring of on-site wells; annual monitoring of off-site wells; and, annual addition of nutrients to the contaminated area within the slurry wall.

Maverik proposes that, as per the 1993 Scope of Work, results of the first sampling of the year be transmitted to OCD within 4 weeks of receipt of final laboratory results via a transmittal letter and a summary table in the format of Table 5. The results of the second sampling will be transmitted in a more formal interpretive report by February 15 of the following year. This annual report will also include the previously collected data. Maverik will notify OCD at least one week in advance of sampling activities.

## TABLES

TABLE 1

**GROUNDWATER ELEVATIONS**  
Former Maverik Refinery, Kirtland, NM

| Well  | Ground<br>Elevation | Datum<br>Elevation | GWE<br>1/92 | GWE<br>6/92 | GWE<br>8/92 | GWE<br>12/92 | GWE<br>3/93 | GWE<br>5/93 | GWE<br>11/93 | GWE<br>5/94 | GWE<br>10/94 |
|-------|---------------------|--------------------|-------------|-------------|-------------|--------------|-------------|-------------|--------------|-------------|--------------|
| MW-1  | 5205.75             | 5207.24            | 5194.89     | 5197.38     | 5199.8      | 5197.81      | 5193.54     | NM          |              |             |              |
| MW-2  | 5195.25             | 5196.93            | 5191.49     | 5190.88     | 5191.46     | 5192.73      | 5190.75     | NM          |              |             |              |
| MW-9  | 5189.33             | 5191.22            | 5188.03     | 5187.25     | 5187.7      | 5188.87      | 5187.64     | NM          | 5188.13      |             | 5187.30      |
| MW-10 | 5187.47             | 5189.30            | 5185.87     | 5184.74     | 5184.59     | 5186.63      | 5185.94     | 5184.77     | 5185.76      | 5183.00     | 5184.50      |
| MW-13 | 5194.62             | 5187.76            |             | 5184.74     | 5184.83     | 5186.45      | 5185.88     | NM          | 5186.19      |             | 5184.65      |
| MW-14 | 5190.70             | 5194.47            | 5188.58     | 5186.6      | 5186.48     | 5189.99      | 5188.49     | NM          | 5188.99      |             | 5186.43      |
| MW-15 | 5185.40             | 5188.80            | 5184.64     | 5183.19     | 5182.99     | 5185.26      | 5184.73     | NM          | 5184.47      |             | 5183.54      |
| MW-16 | 5193.74             | 5194.98            | 5190.33     | 5188.47     | 5190.4      | 5191.79      | 5189.69     | NM          | 5190.65      |             | 5189.21      |
| MW-17 | 5193.43             | 5195.91            |             | 5190.84     | 5188.77     | 5190.05      | 5189.06     | 5188.22     | 5189.23      | 5187.72     | 5187.96      |
| MW-18 | 5199.14             | 5201.75            |             | 5186.37     | 5192.9      | 5193.44      | 5191.25     | 5190.84     | 5192.75      | 5189.56     | 5190.54      |
| MW-19 | 5188.58             | 5189.54            | 5187.33     | 5186.57     | 5186.47     | 5188.07      | 5187.12     | 5186.12     | 5187.34      | 5185.15     | 5186.10      |
| MW-20 | 5190.10             | 5191.05            | 5187.47     | 5189.32     | 5186.53     | 5188.22      | 5187.33     | 5186.32     | 5187.42      | 5184.34     | 5186.27      |
| MW-21 | 5193.62             | 5194.81            | 5190.81     | 5189.28     | 5188.98     | 5191.36      | 5190.34     | 5188.86     | 5190.21      | 5187.62     | 5188.58      |
| MW-22 | 5194.58             | 5195.86            | 5190.07     | 5190.36     | 5189.88     | 5191.06      | 5189.56     | 5188.86     | 5190.14      | 5186.96     | 5188.68      |
| P-1   | 5195.74             | 5197.66            |             | 5190.36     | 5191.57     | 5192.48      | 5190.31     | 5189.70     | 5191.43      | 5188.53     | 5190.09      |
| P-2   | 5190.50             | 5192.32            |             | 5187.4      | 5188.2      | 5189.47      | 5188.27     | 5187.33     | 5188.54      | 5186.30     | 5187.51      |
| P-3   | 5191.44             | 5193.21            |             | 5188.04     | 5187.81     | 5189.78      | 5188.75     | 5187.80     | 5188.81      | 5186.58     | 5187.44      |
| P-4   | 5197.06             | 5198.82            |             | 5190.06     | 5190.89     | 5191.99      | 5190.01     | 5189.49     | 5189.88      | 5188.97     |              |

TABLE 2

**DEPTH TO GROUNDWATER BELOW SURFACE (FT.)**  
Former Maverik Refinery, Kirtland, NM

| Location            | Jan.<br>1992 | June<br>1992 | Aug.<br>1992 | Dec.<br>1992 | Mar.<br>1993 | May<br>1993 | Nov.<br>1993 | May<br>1994 | Oct.<br>1994 |
|---------------------|--------------|--------------|--------------|--------------|--------------|-------------|--------------|-------------|--------------|
| Inside Slurry Wall  |              |              |              |              |              |             |              |             |              |
| MW-17               |              | 3.7          | 3.4          | 2.1          | 3.1          | 3.9         | 2.9          | 5.71        | 5.47         |
| MW-22               | 4.5          | 5.3          | 4.7          | 3.5          | 5.0          | 5.7         | 4.4          | 7.62        |              |
| P-1                 |              | 5.4          | 4.2          | 3.3          | 5.5          | 6.1         | 4.4          | 7.21        |              |
| P-2                 |              | 3.1          | 2.3          | 1.0          | 2.2          | 3.1         | 1.9          | 4.20        |              |
| P-3                 |              | 3.4          | 3.6          | 1.6          | 2.6          | 3.6         | 2.6          | 4.86        |              |
| P-4                 |              | 7.0          | 6.2          | 5.1          | 7.1          | 7.6         | 6.1          | 8.09        |              |
| Outside Slurry Wall |              |              |              |              |              |             |              |             |              |
| MW-1                | 10.9         | 8.4          | 6.0          | 8.0          | 12.3         | NM          | NM           | NM          | NM           |
| MW-2                | 3.8          | 4.4          | 3.8          | 2.5          | 4.5          | NM          | NM           | NM          | NM           |
| MW-9                | 1.5          | 2.3          | 1.8          | 0.6          | 1.8          | NM          | 1.3          | NM          | 2.03         |
| MW-10               | 1.6          | 2.7          | 2.9          | 0.9          | 1.6          | 2.8         | 1.8          | 4.47        | 2.97         |
| MW-13               |              | 2.8          | 2.7          | 1.1          | 1.7          | NM          | 1.4          | NM          | 2.91         |
| MW-14               | 2.1          | 4.1          | 4.2          | 0.7          | 2.2          | NM          | 1.7          | NM          | 4.27         |
| MW-15               | 0.8          | 2.2          | 2.4          | 0.1          | 0.6          | NM          | 0.6          | NM          | 1.86         |
| MW-16               | 3.4          | 4.5          | 3.3          | 1.9          | 4.0          | NM          | 3.0          | NM          | 4.53         |
| MW-18               |              | 7.1          | 5.0          | 4.5          | 6.7          | 7.1         | 5.2          | 9.58        | 8.60         |
| MW-19               | 1.0          | 2.0          | 1.9          | 0.3          | 1.2          | 2.2         | 1.0          | 3.43        | 2.48         |
| MW-20               | 2.6          | 3.5          | 3.5          | 1.8          | 2.7          | 3.7         | 2.6          | 5.76        | 3.83         |
| MW-21               | 2.8          | 4.3          | 4.6          | 2.2          | 3.2          | 4.7         | 3.3          | 6.00        | 5.04         |

- NOTES: 1) NM = Not Measured  
 2) Groundwater elevation in P-4 (for the Oct. 1994 sampling event) corrected for the presence of 0.26 inches of product using a product density of 0.8.

TABLE 3

**GROUNDWATER GRADIENTS**  
Former Maverik Refinery, Kirtland, NM

| Wells and Date            | Distance (ft) | Elevation<br>Difference (ft) | Gradient<br>(ft/100 ft) | Mean Gradient<br>(ft/100 ft) |
|---------------------------|---------------|------------------------------|-------------------------|------------------------------|
| <b>Inside Slurry Wall</b> |               |                              |                         |                              |
| P4 → P3                   | 338           |                              |                         |                              |
| Jun 92                    |               | 2.02                         | 0.598                   |                              |
| Aug 92                    |               | 3.08                         | 0.911                   |                              |
| Dec 92                    |               | 2.21                         | 0.654                   |                              |
| Mar 93                    |               | 1.26                         | 0.372                   |                              |
| May 93                    |               | 1.69                         | 0.500                   |                              |
| Nov 93                    |               | 2.14                         | 0.633                   |                              |
| May 94                    |               | 2.39                         | 0.707                   |                              |
| Oct 94                    |               | 2.44                         | 0.722                   | 0.637                        |
| P4 → P2                   | 360           |                              |                         |                              |
| Jun 92                    |               | 2.66                         | 0.739                   |                              |
| Aug 92                    |               | 2.69                         | 0.747                   |                              |
| Dec 92                    |               | 2.52                         | 0.700                   |                              |
| Mar 93                    |               | 1.74                         | 0.483                   |                              |
| May 93                    |               | 2.16                         | 0.600                   |                              |
| Nov 93                    |               | 2.41                         | 0.669                   |                              |
| May 94                    |               | 2.67                         | 0.742                   |                              |
| Oct 94                    |               | 2.37                         | 0.658                   | 0.667                        |
| P1 → P2                   | 393           |                              |                         |                              |
| Jun 92                    |               | 2.96                         | 0.753                   |                              |
| Aug 92                    |               | 3.36                         | 0.855                   |                              |
| Dec 92                    |               | 3.01                         | 0.766                   |                              |
| Mar 93                    |               | 2.04                         | 0.519                   |                              |
| May 93                    |               | 2.37                         | 0.603                   |                              |
| Nov 93                    |               | 2.89                         | 0.735                   |                              |
| May 94                    |               | 2.23                         | 0.567                   |                              |
| Oct 94                    |               | 2.50                         | 0.656                   | 0.682                        |
| P4 → MW22                 | 106           |                              |                         |                              |
| Jun 92                    |               | 0.78                         | 0.736                   |                              |
| Aug 92                    |               | 1.01                         | 0.953                   |                              |
| Dec 92                    |               | 0.93                         | 0.877                   |                              |
| Mar 93                    |               | 0.45                         | 0.424                   |                              |
| May 93                    |               | 0.63                         | 0.594                   |                              |
| Nov 93                    |               | 0.81                         | 0.764                   |                              |
| May 94                    |               | 2.01                         | 1.896                   |                              |
| Oct 94                    |               | 1.20                         | 1.132                   | 0.922                        |

TABLE 3 (Continued)

**GROUNDWATER GRADIENTS**  
Former Maverik Refinery, Kirtland, NM

| Wells and Date             | Distance (ft) | Elevation<br>Difference (ft) | Gradient<br>(ft/100 ft) | Mean Gradient<br>(ft/100 ft) |
|----------------------------|---------------|------------------------------|-------------------------|------------------------------|
| MW22 → MW17                | 153           |                              |                         |                              |
| Jun 92                     |               | 0.81                         | 0.529                   |                              |
| Aug 92                     |               | 1.11                         | 0.725                   |                              |
| Dec 92                     |               | 1.01                         | 0.660                   |                              |
| Mar 93                     |               | 0.50                         | 0.326                   |                              |
| May 93                     |               | 0.64                         | 0.594                   |                              |
| Nov 93                     |               | 0.91                         | 0.764                   |                              |
| May 94                     |               | 0.76                         | -0.497*                 |                              |
| Oct 94                     |               | 0.72                         | 0.471                   | 0.581                        |
| MW-17 → P2                 | 118           |                              |                         |                              |
| Jun 92                     |               | 1.07                         | 0.906                   |                              |
| Aug 92                     |               | 0.57                         | 0.483                   |                              |
| Dec 92                     |               | 0.58                         | 0.491                   |                              |
| Mar 93                     |               | 0.79                         | 0.669                   |                              |
| May 93                     |               | 0.89                         | 0.754                   |                              |
| Nov 93                     |               | 0.69                         | 0.585                   |                              |
| May 94                     |               | 1.42                         | 1.203                   |                              |
| Oct 94                     |               | 0.45                         | 0.381                   | 0.684                        |
| <u>Outside Slurry Wall</u> |               |                              |                         |                              |
| MW21 → MW20                | 300           |                              |                         |                              |
| Jun 92                     |               | 2.75                         | 0.917                   |                              |
| Aug 92                     |               | 2.45                         | 0.817                   |                              |
| Dec 92                     |               | 3.14                         | 1.047                   |                              |
| Mar 93                     |               | 3.01                         | 1.003                   |                              |
| May 93                     |               | 2.54                         | 0.847                   |                              |
| Nov 93                     |               | 2.79                         | 0.930                   |                              |
| May 94                     |               | 3.28                         | 1.093                   |                              |
| Oct 94                     |               | 2.31                         | 0.770                   | 0.928                        |
| MW16 → MW13                | 420           |                              |                         |                              |
| Jun 92                     |               | 4.51                         | 1.070                   |                              |
| Aug 92                     |               | 5.57                         | 1.326                   |                              |
| Dec 92                     |               | 5.34                         | 1.271                   |                              |
| Mar 93                     |               | 3.81                         | 0.907                   |                              |
| May 93                     |               | NM                           | ----                    |                              |
| Nov 93                     |               | 4.46                         | 1.062                   |                              |
| May 94                     |               | NM                           | ----                    |                              |
| Oct 94                     |               | 4.56                         | 1.086                   | 1.120                        |

TABLE 3 (Continued)

**GROUNDWATER GRADIENTS**  
Former Maverik Refinery, Kirtland, NM

| Wells and Date | Distance (ft) | Elevation<br>Difference (ft) | Gradient<br>(ft/100 ft) | Mean Gradient<br>(ft/100 ft) |
|----------------|---------------|------------------------------|-------------------------|------------------------------|
| MW16 → MW9     | 275           |                              |                         |                              |
| Jun 92         |               | 2.88                         | 1.047                   |                              |
| Aug 92         |               | 2.70                         | 0.982                   |                              |
| Dec 92         |               | 2.92                         | 1.062                   |                              |
| Mar 93         |               | 2.05                         | 0.745                   |                              |
| May 93         |               | NM                           | -----                   |                              |
| Nov 93         |               | 2.52                         | 0.916                   |                              |
| May 94         |               | NM                           | -----                   |                              |
| Oct 94         |               | 1.91                         | 0.695                   | 0.908                        |
| MW21 → MW10    | 370           |                              |                         |                              |
| Jun 92         |               | 4.58                         | 1.238                   |                              |
| Aug 92         |               | 4.39                         | 1.186                   |                              |
| Dec 92         |               | 4.73                         | 1.278                   |                              |
| Mar 93         |               | 4.40                         | 1.189                   |                              |
| May 93         |               | 4.09                         | 1.105                   |                              |
| Nov 93         |               | 4.45                         | 1.202                   |                              |
| May 94         |               | 4.62                         | 1.249                   |                              |
| Oct 94         |               | 4.08                         | 1.103                   | 1.194                        |
| MW18 → MW21    | 331           |                              |                         |                              |
| Jun 92         |               | 1.52                         | 0.459                   |                              |
| Aug 92         |               | 3.92                         | 1.184                   |                              |
| Dec 92         |               | 2.58                         | 0.779                   |                              |
| Mar 93         |               | 0.91                         | 0.275                   |                              |
| May 93         |               | 1.98                         | 0.598                   |                              |
| Nov 93         |               | 2.54                         | 0.767                   |                              |
| May 94         |               | 1.94                         | 0.586                   |                              |
| Oct 94         |               | 1.96                         | 0.592                   | 0.655                        |

NOTE: 1) \*Anomalous value not utilized in calculation of mean gradient.

TABLE 4

**SUMMARY OF GROUNDWATER QUALITY MONITORING RESULTS  
(SINCE INSTALLATION OF SLURRY WALL)  
Former Maverik Refinery, Kirtland, NM**

| Location                               | Sampling Period | DCA    | B       | T       | E      | X       | Total BTEX | pH   | SC     |
|----------------------------------------|-----------------|--------|---------|---------|--------|---------|------------|------|--------|
| <u>Within Slurry Wall</u><br><br>MW-17 | 1 (9/90)        | 360*   | 11,000* | 15,000* | 1,160* | 13,000* | 40,000     | 7.01 | 2,500  |
|                                        | 2 (3/91)        | 400*   | 11,000* | 10,000* | 1,900* | 15,000* | 37,900     | 7.04 | 2,700  |
|                                        | 3 (6/91)        | 420*   | 9,800*  | 6,300*  | 1,800* | 16,000* | 33,900     | 7.04 | 2,650  |
|                                        | 4 (1/92)        | MSG    | MSG     | MSG     | MSG    | MSG     | MSG        | MSG  | MSG    |
|                                        | 5 (6/92)        | 45*    | 9,240*  | 7,580*  | 1,150* | 7,190*  | 25,160     | 7.26 | 2,730  |
|                                        | 6 (8/92)        | 27*    | 7,710*  | 1,920*  | 669    | 5,130*  | 15,429     | 7.23 | 2,810  |
|                                        | 7 (12/92)       | 17.3*  | 7,990*  | 4,740*  | 638    | 4,600*  | 17,968     | 7.54 | 2,970  |
|                                        | 8 (3/93)        | 16.8*  | 13,800* | 6,830*  | 1,110* | 6,930*  | 28,670     | 7.37 | 2,610  |
|                                        | 9 (5/93)        | 12.5*  | 13,700* | 6,360*  | 993*   | 10,530* | 31,583     | 7.33 | 2,470  |
|                                        | 10 (11/93)      | 30.9*  | 8,590*  | 2,820*  | 636    | 4,880*  | 16,926     | 7.39 | 2,360  |
|                                        | 11 (5/94)       | 8.3    | 10,900  | 4,340   | 823    | 5,660   | 21,723     | 7.30 | 2,830  |
|                                        | 12a (10/94)     | 4.9    | 5,130   | 1,160   | 409    | 2,818   | 9,517      | 7.04 | 2,470  |
|                                        | 12b (10/94)     | <1     | 2,070   | 807     | 350    | 2,013   | 5,240      | 7.04 | 2,470  |
| MW-22                                  | 1 (9/90)        | 7,200* | 21,000* | 20,000* | 1,100* | 8,300*  | 50,400     | 7.00 | 1,500  |
|                                        | 2 (3/91)        | 2,200* | 17,000* | 9,500*  | 910*   | 6,600*  | 34,010     | 6.87 | 1,900  |
|                                        | 3 (6/91)        | 3,600* | 15,000* | 3,200*  | 760*   | 3,000*  | 21,960     | 7.06 | 1,700  |
|                                        | 4 (1/92)        | 5,400* | 36,000* | 27,000* | 1,900* | 13,500* | 78,400     | 6.86 | 1,600  |
|                                        | 5 (6/92)        | 3,170* | 21,200* | 7,540*  | 1,040* | 5,730*  | 35,510     | 7.13 | 1,690  |
|                                        | 6 (8/92)        | 568*   | 20,500* | 4,610*  | 588    | 3,280*  | 28,978     | 7.28 | 1,545  |
|                                        | 7 (12/92)       | 908*   | 12,100* | 4,220*  | 514    | 3,254*  | 20,088     | 7.43 | 1,508  |
|                                        | 8 (3/93)        | 1,930* | 29,800* | 14,100* | 1,170* | 7,030*  | 52,100     | 7.26 | 1,408  |
|                                        | 9 (5/93)        | 28*    | 17,000* | 6,520*  | 1,100* | 6,150*  | 30,770     | 7.61 | 6,550  |
|                                        | 10 (11/93)      | 2,780* | 18,400* | 8,480*  | 1,150* | 7,300*  | 35,330     | 8.01 | 1,610  |
|                                        | 11 (5/94)       | 379    | 9,340   | 2,250   | 845    | 3,725   | 16,160     | 7.15 | 1,505  |
|                                        | 12 (10/94)      | 566    | 10,500  | 5,890   | 1,390  | 8,350   | 26,330     | 7.24 | 1,710  |
| P-1                                    | 9 (5/93)        | <1     | 4,110*  | 18.8    | 361    | 2,522*  | 7,012      | 7.04 | 2,290  |
|                                        | 10 (11/93)      | <1     | 3,580*  | 10.2    | 506    | 3,215*  | 7,311      | 7.22 | 1,460  |
|                                        | 11 (Dry)        | NS     | NS      | NS      | NS     | NS      | NS         | NS   | NS     |
|                                        | 12 (10/94)      | <1     | 8.9     | <1      | 1.9    | 11.8    | 22.60      | 7.04 | 2,210  |
| P-2                                    | 9 (5/93)        | 3.2    | 5.2*    | <1      | <1     | <1      | 5.2        | 7.36 | 3,910  |
|                                        | 10 (11/93)      | <1     | <1      | <1      | <1     | <1      | <1         | 7.92 | 3,540  |
|                                        | 11 (5/94)       | 1.3    | <1      | <1      | <1     | <1      | <1         | 7.48 | 3,980  |
|                                        | 12 (10/94)      | 3.6    | <1      | <1      | <1     | <1      | <1         | 7.12 | 3,480  |
| P-3                                    | 9 (5/93)        | 10.6*  | <1      | <1      | <1     | <1      | <1         | 7.24 | 11,160 |
|                                        | 10 (11/93)      | 11.5*  | <1      | <1      | <1     | <1      | <1         | 7.31 | 9,140  |
|                                        | 11 (5/94)       | 12.1   | <1      | <1      | <1     | <1      | <1         | 7.28 | 8,070  |
|                                        | 12 (10/94)      | 12.6   | <1      | <1      | <1     | <1      | <1         | 7.06 | 5,550  |
| P-4                                    | 9 (5/93)        | 8.3    | 6,690*  | 4,090*  | 559    | 6,260*  | 17,599     | NA   | NA     |
|                                        | 10 (11/93)      | 2.1    | 6,400*  | 4,420*  | 900*   | 7,700*  | 19,420     | NA   | NA     |
|                                        | 11 (Dry)        | NS     | NS      | NS      | NS     | NS      | NS         | NS   | NS     |
|                                        | 12 (10/94)      | NS     | NS      | NS      | NS     | NS      | NS         | NS   | NS     |

TABLE 4 (continued)

**SUMMARY OF GROUNDWATER QUALITY MONITORING RESULTS  
(SINCE INSTALLATION OF SLURRY WALL)**

Former Maverik Refinery, Kirtland, NM

| Location       | Sampling Period | DCA   | B    | T    | E    | X      | Total BTEX | pH   | SC    |
|----------------|-----------------|-------|------|------|------|--------|------------|------|-------|
| <u>On-Site</u> |                 |       |      |      |      |        |            |      |       |
| MW-10          | 1 (9/90)        | 1.4   | <0.5 | <0.5 | <0.5 | <1     | <1         | 6.95 | 1,550 |
|                | 2 (3/91)        | <1    | <0.5 | <0.5 | <0.5 | <0.5   | <0.5       | 7.29 | 1,700 |
|                | 3 (6/91)        | NA    | NA   | NA   | NA   | NA     | NA         | NA   | NA    |
|                | 4 (1/92)        | <5    | <5   | <5   | <5   | <5     | <5         | 7.31 | 1,840 |
|                | 5 (6/92)        | 1.6   | <1   | <1   | <1   | <1     | 1.6        | 7.65 | 1,400 |
|                | 6 (8/92)        | <1    | <1   | <1   | <1   | <1     | <1         | 7.85 | 1,160 |
|                | 7 (12/92)       | <1    | <1   | <1   | <1   | <1     | <1         | 7.64 | 6,110 |
|                | 8 (3/93)        | <1    | <1   | <1   | <1   | <1     | <1         | 7.22 | 9,060 |
|                | 9 (5/93)        | 1     | <1   | <1   | <1   | <1     | <1         | 7.93 | 2,320 |
|                | 10 (11/93)      | <1    | <1   | <1   | <1   | <1     | <1         | 7.73 | 1,320 |
|                | 11 (5/94)       | <1    | <1   | <1   | <1   | <1     | <1         | 7.75 | 1,335 |
|                | 12 (10/94)      | 2.1   | <1   | <1   | <1   | <1     | <1         | 7.56 | 1,159 |
| MW-18          | 1 (9/90)        | <1    | 17*  | <12  | 84   | 880*   | 981        | 7.00 | 1,500 |
|                | 2 (3/91)        | <1    | 26*  | <12  | 85   | 770*   | 881        | 7.24 | 1,200 |
|                | 3 (6/91)        | <1    | <25  | <25  | 78   | 930*   | 1,008      | 6.77 | 1,200 |
|                | 4 (1/92)        | MSG   | MSG  | MSG  | MSG  | MSG    | MSG        | MSG  | MSG   |
|                | 5 (6/92)        | <1    | 313* | 1.1  | 200  | 1,710* | 2,224      | 7.07 | 1,480 |
|                | 6 (8/92)        | <1    | 527* | 10.8 | 258  | 2,075* | 2,871      | 7.26 | 2,100 |
|                | 7 (12/92)       | <25   | 294* | <25  | 224  | 1,460* | 1,978      | 7.31 | 1,930 |
|                | 8 (3/93)        | <1    | 117* | 8    | 96   | 226    | 447        | 7.07 | 2,780 |
|                | 9 (5/93)        | <1    | 73*  | <1   | 31.2 | 259    | 363        | 7.15 | 2,220 |
|                | 10 (11/93)      | <1    | 337* | 4.9  | 261  | 1,352* | 1,955      | 7.00 | 1,870 |
|                | 11 (5/94)       | <1    | 51*  | 10.0 | 7    | 99     | 167        | 7.00 | 1,510 |
|                | 12 (10/94)      | <1    | 210* | 10.9 | 46   | 482.8  | 749.7      | 7.10 | 1,530 |
| MW-19          | 1 (9/90)        | 45*   | <0.5 | <0.5 | 1.1  | 1.9    | 3          | 6.95 | 3,000 |
|                | 2 (3/91)        | 35*   | <0.5 | <0.5 | <0.5 | <0.5   | <0.5       | 7.22 | 2,500 |
|                | 3 (6/91)        | 44*   | <0.5 | <0.5 | 5.9  | <0.5   | 5.9        | 7.10 | 2,400 |
|                | 4 (1/92)        | 14*   | <5   | <5   | <5   | <5     | <5         | 7.66 | 460   |
|                | 5 (6/92)        | 11.4* | <1   | <1   | <1   | <1     | <1         | 7.76 | 1,970 |
|                | 6 (8/92)        | 9.0   | <1   | <1   | <1   | <1     | <1         | 7.72 | 1,320 |
|                | 7 (12/92)       | 6.6   | <1   | <1   | <1   | <1     | <1         | 7.70 | 1,620 |
|                | 8 (3/93)        | 2.4   | <1   | <1   | <1   | <1     | <1         | 7.74 | 1,750 |
|                | 9 (5/93)        | 7.9   | <1   | <1   | <1   | <1     | <1         | 7.73 | 1,630 |
|                | 10 (11/93)      | 6.6   | <1   | <1   | <1   | <1     | <1         | 7.78 | 1,380 |
|                | 11 (5/94)       | 8.0   | <1   | <1   | <1   | <1     | <1         | 7.65 | 1,762 |
|                | 12 (10/94)      | 7.9   | <1   | <1   | <1   | <1     | <1         | 7.44 | 1,258 |

TABLE 4 (continued)

**SUMMARY OF GROUNDWATER QUALITY MONITORING RESULTS  
(SINCE INSTALLATION OF SLURRY WALL)  
Former Maverik Refinery, Kirtland, NM**

| Location        | Sampling Period | DCA   | B    | T    | E    | X    | Total BTEX | pH   | SC    |
|-----------------|-----------------|-------|------|------|------|------|------------|------|-------|
| MW-20           | 1 (9/90)        | <1    | <0.5 | <0.5 | <0.5 | <1   | <1         | 7.01 | 1,350 |
|                 | 2 (3/91)        | 2.0   | <0.5 | <0.5 | <0.5 | 0.7  | 1          | 7.39 | 3,000 |
|                 | 3 (6/91)        | NA    | NA   | NA   | NA   | NA   | NA         | NA   | NA    |
|                 | 4 (1/92)        | <5    | <5   | <5   | <5   | <5   | <5         | 7.54 | 3,750 |
|                 | 5 (6/92)        | <1    | <1   | <1   | <1   | <1   | <1         | 7.62 | 1,600 |
|                 | 6 (8/92)        | <1    | <1   | <1   | <1   | <1   | <1         | 6.97 | 1,310 |
|                 | 7 (12/92)       | <1    | <1   | <1   | <1   | <1   | <1         | 7.87 | 1,340 |
|                 | 8 (3/93)        | 2.1   | <1   | <1   | <1   | <1   | 2          | 7.10 | 6,740 |
|                 | 9 (5/93)        | <1    | <1   | <1   | <1   | <1   | <1         | 7.86 | 1,430 |
|                 | 10 (11/93)      | <1    | <1   | <1   | <1   | <1   | <1         | 7.69 | 1,230 |
|                 | 11 (5/94)       | <1    | <1   | <1   | <1   | <1   | <1         | 7.38 | 1,292 |
|                 | 12 (10/94)      | <1    | <1   | <1   | <1   | <1   | <1         | 7.57 | 1,308 |
| MW-21           | 1 (9/90)        | 67*   | <0.5 | 1.5  | 1.1  | 5    | 8          | 7.01 | 1,500 |
|                 | 2 (3/91)        | 44*   | <0.5 | <0.5 | <0.5 | <0.5 | <0.5       | 7.62 | 1,700 |
|                 | 3 (6/91)        | 40*   | <0.5 | <0.5 | <0.5 | <0.5 | <0.5       | 7.44 | 1,700 |
|                 | 4 (1/92)        | 8.8   | <5   | <5   | <5   | <5   | <5         | 8.31 | 5,110 |
|                 | 5 (6/92)        | 21.9* | <1   | <1   | <1   | <1   | <1         | 7.37 | 2,400 |
|                 | 6 (8/92)        | 8.3   | <1   | <1   | <1   | <1   | <1         | 6.96 | 1,730 |
|                 | 7 (12/92)       | 1.7   | <1   | <1   | <1   | <1   | <1         | 7.69 | 2,030 |
|                 | 8 (3/93)        | 5.9   | <1   | <1   | <1   | <1   | <1         | 7.58 | 1,590 |
|                 | 9 (5/93)        | 14.8* | <1   | <1   | <1   | <1   | <1         | 7.63 | 2,530 |
|                 | 10 (11/93)      | 3.7   | <1   | <1   | <1   | <1   | <1         | 7.58 | 1,580 |
|                 | 11 (5/94)       | 8.3   | <1   | <1   | <1   | <1   | <1         | 7.66 | 1,592 |
|                 | 12 (10/94)      | 5.5   | <1   | <1   | <1   | <1   | <1         | 7.55 | 1,760 |
| <u>Off-Site</u> |                 |       |      |      |      |      |            |      |       |
| MW-9            | 1 (9/90)        | 2.1   | <0.5 | <0.5 | <0.5 | <1   | <1         | 6.97 | 1,550 |
|                 | 2 (3/91)        | 1.8   | <0.5 | <0.5 | <0.5 | 1.2  | 1.2        | 7.57 | 2,000 |
|                 | 3 (6/91)        | NA    | NA   | NA   | NA   | NA   | NA         | NA   | NA    |
|                 | 4 (1/92)        | <5    | <5   | <5   | <5   | <5   | <5         | 7.31 | 4,360 |
|                 | 5 (6/92)        | 1.5   | <1   | <1   | <1   | <1   | <1         | 7.58 | 1,680 |
|                 | 6 (8/92)        | <1    | <1   | <1   | <1   | <1   | <1         | 7.81 | 1,325 |
|                 | 7 (12/92)       | <1    | <1   | <1   | <1   | <1   | <1         | 7.33 | 1,827 |
|                 | 8 (3/93)        | 1.5   | <1   | <1   | <1   | <1   | <1         | 7.63 | 1,640 |
|                 | 9 (5/93)        | NA    | NA   | NA   | NA   | NA   | NA         | NA   | NA    |
|                 | 10 (11/93)      | <1    | <1   | <1   | <1   | <1   | <1         | 7.62 | 1,460 |
|                 | 11 (5/94)       | NS    | NS   | NS   | NS   | NS   | NS         | NS   | NS    |
|                 | 12 (10/94)      | 1.2   | <1   | <1   | <1   | <1   | <1         | 7.80 | 1,610 |

TABLE 4 (continued)

**SUMMARY OF GROUNDWATER QUALITY MONITORING RESULTS  
(SINCE INSTALLATION OF SLURRY WALL)**

Former Maverik Refinery, Kirtland, NM

| Location | Sampling Period | DCA | B    | T    | E    | X    | Total BTEX | pH   | SC     |
|----------|-----------------|-----|------|------|------|------|------------|------|--------|
| MW-13    | 1 (9/90)        | <1  | <0.5 | 1.5  | <0.5 | <1   | 1.5        | 7.02 | 2,950  |
|          | 2 (3/91)        | <1  | <0.5 | <0.5 | <0.5 | <0.5 | <0.5       | 7.84 | 3,250  |
|          | 3 (6/91)        | NA  | NA   | NA   | NA   | NA   | NA         | NA   | NA     |
|          | 4 (1/92)        | NA  | NA   | NA   | NA   | NA   | NA         | NA   | NA     |
|          | 5 (6/92)        | <1  | <1   | <1   | <1   | <1   | <1         | 7.11 | 4,260  |
|          | 6 (8/92)        | <1  | <1   | <1   | <1   | <1   | <1         | 7.06 | 2,910  |
|          | 7 (12/92)       | NA  | NA   | NA   | NA   | NA   | NA         | NA   | NA     |
|          | 8 (3/93)        | <1  | <1   | <1   | <1   | <1   | <1         | 7.72 | 3,410  |
|          | 9 (5/93)        | NA  | NA   | NA   | NA   | NA   | NA         | NA   | NA     |
|          | 10 (9/93)       | <1  | <1   | <1   | <1   | <1   | <1         | 7.45 | 4,150  |
|          | 11 (5/94)       | NS  | NS   | NS   | NS   | NS   | NS         | NS   | NS     |
|          | 12 (10/94)      | <1  | <1   | <1   | <1   | <1   | <1         | 7.38 | 3,160  |
| MW-14    | 1 (9/90)        | 2.0 | <0.5 | <0.5 | <0.5 | <1   | <1         | 6.97 | 5,450  |
|          | 2 (3/91)        | <1  | <0.5 | <0.5 | <0.5 | 1.7  | <0.5       | 7.51 | 8,400  |
|          | 3 (6/91)        | NA  | NA   | NA   | NA   | NA   | NA         | NA   | NA     |
|          | 4 (1/92)        | <5  | <5   | <5   | <5   | <5   | <5         | 7.20 | 19,380 |
|          | 5 (6/92)        | 2.3 | <1   | <1   | <1   | <1   | <1         | 7.62 | 4,520  |
|          | 6 (8/92)        | <1  | <1   | <1   | <1   | <1   | <1         | 7.38 | 5,760  |
|          | 7 (12/92)       | <1  | <1   | <1   | <1   | <1   | <1         | 7.40 | 9,090  |
|          | 8 (3/93)        | <1  | <1   | <1   | <1   | <1   | <1         | 7.02 | 15,280 |
|          | 9 (5/93)        | NA  | NA   | NA   | NA   | NA   | NA         | NA   | NA     |
|          | 10 (11/93)      | 1.2 | <1   | <1   | <1   | <1   | <1         | 7.61 | 6,030  |
|          | 11 (5/94)       | NS  | NS   | NS   | NS   | NS   | NS         | NS   | NS     |
|          | 12 (10/94)      | 1.9 | <1   | <1   | <1   | <1   | <1         | 7.34 | 4,560  |
| MW-15    | 1 (9/90)        | <1  | <0.5 | <0.5 | <0.5 | <1   | <1         | 7.00 | 3,250  |
|          | 2 (3/91)        | <1  | <0.5 | <0.5 | <0.5 | <0.5 | <0.5       | 7.02 | 8,500  |
|          | 3 (6/91)        | NA  | NA   | NA   | NA   | NA   | NA         | NA   | NA     |
|          | 4 (1/92)        | <5  | <5   | <5   | <5   | <5   | <5         | 7.15 | 12,120 |
|          | 5 (6/92)        | <1  | <1   | <1   | <1   | <1   | <1         | 7.27 | 3,430  |
|          | 6 (8/92)        | <1  | <1   | <1   | <1   | <1   | <1         | 7.39 | 2,450  |
|          | 7 (12/92)       | NA  | NA   | NA   | NA   | NA   | NA         | NA   | NA     |
|          | 8 (3/93)        | <1  | <1   | <1   | <1   | <1   | <1         | 7.42 | 9,810  |
|          | 9 (5/93)        | NA  | NA   | NA   | NA   | NA   | NA         | NA   | NA     |
|          | 10 (11/93)      | <1  | <1   | <1   | <1   | <1   | <1         | 8.01 | 1,630  |
|          | 11 (5/94)       | NS  | NS   | NS   | NS   | NS   | NS         | NS   | NS     |
|          | 12 (10/94)      | <1  | <1   | <1   | <1   | <1   | <1         | 7.54 | 2,500  |

TABLE 4 (continued)

**SUMMARY OF GROUNDWATER QUALITY MONITORING RESULTS  
(SINCE INSTALLATION OF SLURRY WALL)  
Former Maverik Refinery, Kirtland, NM**

| Location                   | Sampling Period | DCA | B    | T     | E    | X      | Total BTEX | pH   | SC    |
|----------------------------|-----------------|-----|------|-------|------|--------|------------|------|-------|
| MW-16                      | 1 (9/90)        | <1  | <0.5 | <0.5  | <0.5 | <1     | <1         | 6.97 | 1,370 |
|                            | 2 (3/91)        | <1  | <0.5 | <0.5  | <0.5 | <0.5   | <0.5       | 7.57 | 1,200 |
|                            | 3 (6/91)        | NA  | NA   | NA    | NA   | NA     | NA         | NA   | NA    |
|                            | 4 (1/92)        | <5  | <5   | <5    | <5   | <5     | <5         | 7.30 | 2,050 |
|                            | 5 (6/92)        | <1  | <1   | <1    | <1   | <1     | <1         | 7.50 | 1,430 |
|                            | 6 (8/92)        | <1  | <1   | <1    | <1   | <1     | <1         | 7.76 | 1,230 |
|                            | 7 (12/92)       | <1  | <1   | <1    | <1   | <1     | <1         | 7.12 | 1,735 |
|                            | 8 (3/93)        | <1  | <1   | <1    | <1   | <1     | <1         | 7.23 | 2,400 |
|                            | 9 (5/93)        | NA  | NA   | NA    | NA   | NA     | NA         | NA   | NA    |
|                            | 10 (11/93)      | <1  | <1   | <1    | <1   | <1     | <1         | 7.31 | 1,760 |
|                            | 11 (5/94)       | NS  | NS   | NS    | NS   | NS     | NS         | NS   | NS    |
|                            | 12 (10/94)      | <1  | <1   | <1    | <1   | <1     | <1         | 7.44 | 1,253 |
| <u>Water Quality Stds.</u> |                 |     |      |       |      |        |            |      |       |
| New Mexico                 |                 | 10  | 10   | 750   | 750  | 620    |            | 6-9  | ----  |
| EPA MCL                    |                 | 5   | 5    | 1,000 | 700  | 10,000 |            | ---- | ----  |

**NOTES:**

Abbreviations: DCA = 1,2-dichloroethane; B = benzene; T = toluene; E = ethylbenzene; X = xylenes; SC = specific conductivity; TDS = total dissolved solids; MSG = well missing; NA = not analyzed; NS = not sampled

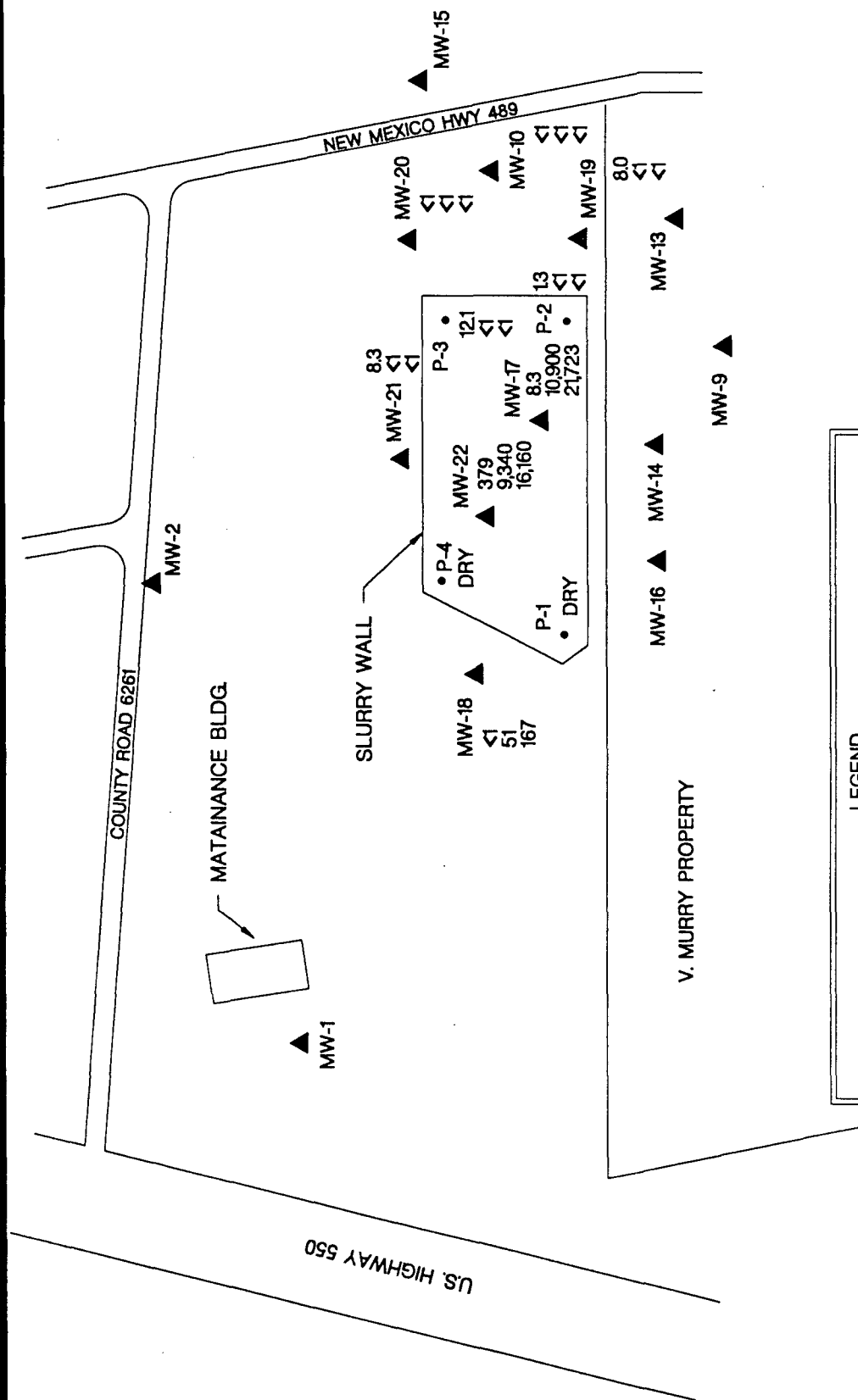
Organic values in  $\mu\text{g/l}$ ; pH in standard units; SC in  $\mu\text{mhos/cm}$

Sampling dates: 1 = Sept. 13 & 14, 1990; 2 = March 18 & 19, 1991; 3 = June 13, 1991; 4 = January 20 & 21, 1992; 5 = June 9 & 12, 1992; 6 = August 19 & 20, 1992; 7 = December 16, 1992; 8 = March 30, 1993; 9 = May 23, 1993; 10 = November 29 & 30, 1993; 11 = May 25, 1994; 12 = October, 1994

\* = exceeds New Mexico MCL for drinking water

From sampling period 5 onward, samples were obtained from replacement wells at MW-17 and MW-18

**FIGURES**



## LEGEND

| MW-16 |                  |
|-------|------------------|
| ▲     | MONITORING WELL  |
|       | DCA ( ug/l )     |
|       | 379              |
|       | BENZENE ( ug/l ) |
|       | 9,340            |
| ● P-1 | PIEZOMETER       |
|       | BTEX ( ug/l )    |
|       | 16,160           |

1994 Annual Report

**ORGANICS IN  
GROUND WATER  
MAY, 1994**

**Kirtland Refinery**  
**Kirtland, NM**

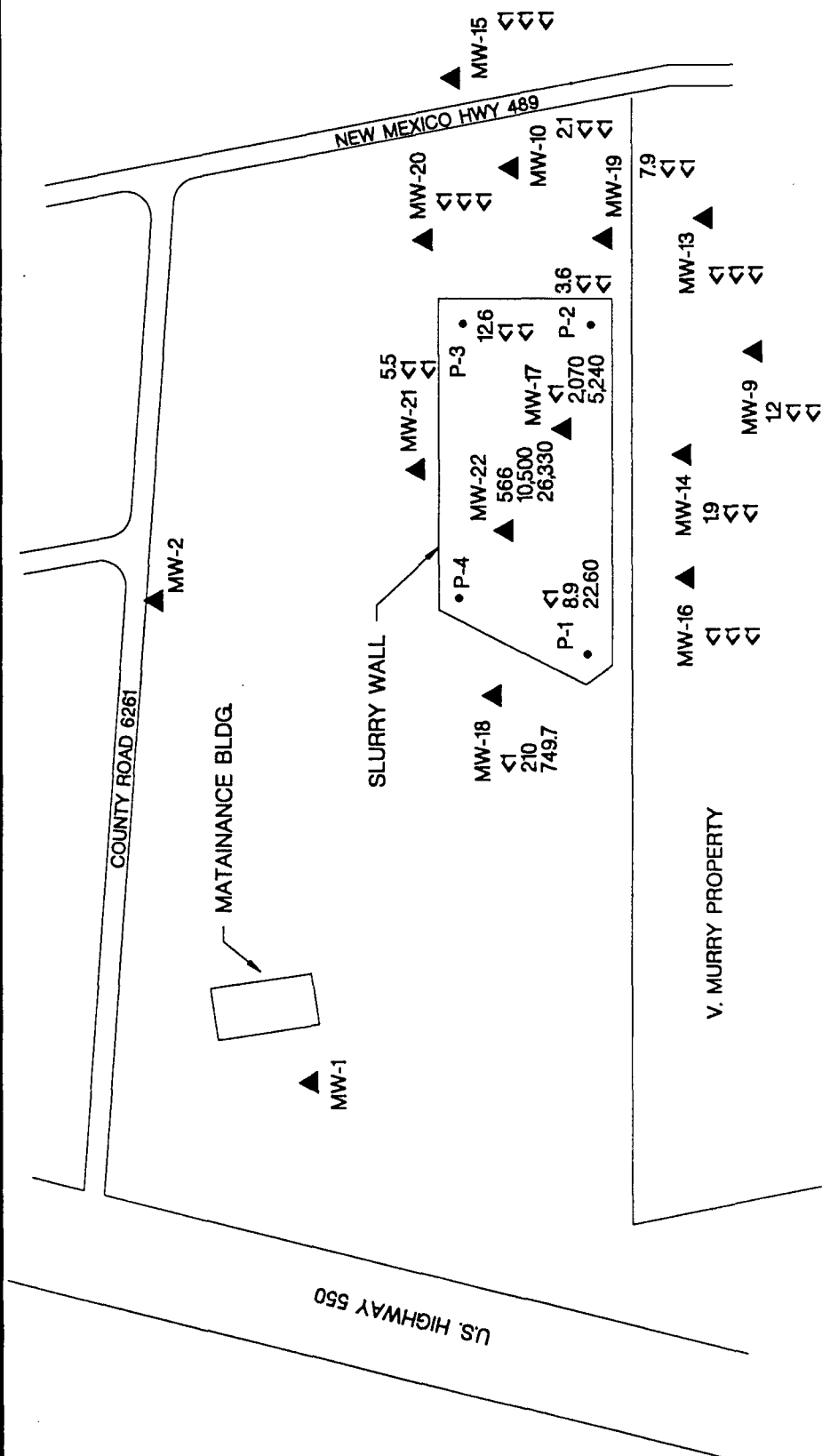
**FIGURE 1**



Scale in feet

North

**ECOVA**

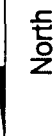


## LEGEND

| MW-16 |                         |
|-------|-------------------------|
| ▲     | MONITORING WELL         |
|       | 566 DCA ( ug/l )        |
|       | 10,500 BENZENE ( ug/l ) |
| ● P-1 | PIEZOMETER              |
|       | 26230 BTEX ( ug/l )     |



Scale in feet



1994 Annual Report

# ORGANICS IN GROUNDWATER OCTOBER, 1994

**Kirtland Refinery**  
**Kirtland, NM**

## FIGURE 2

**ECOVA**

Concentrations of BTEX and Benzene in  
MW-17 Since Slurry Wall Installation

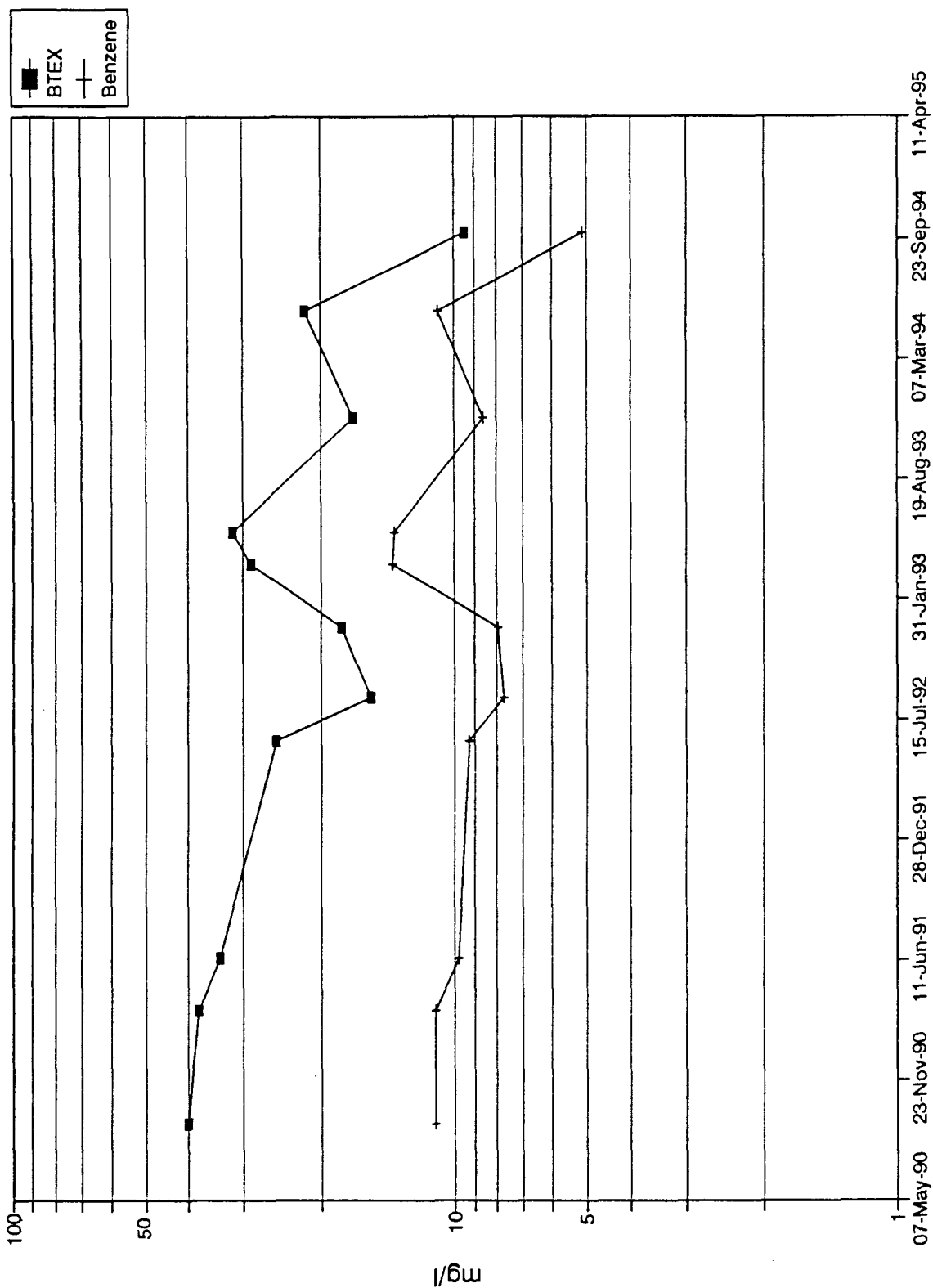


Figure 3

Concentrations of BTEX and Benzene in  
MW-22 Since Slurry Wall Installation

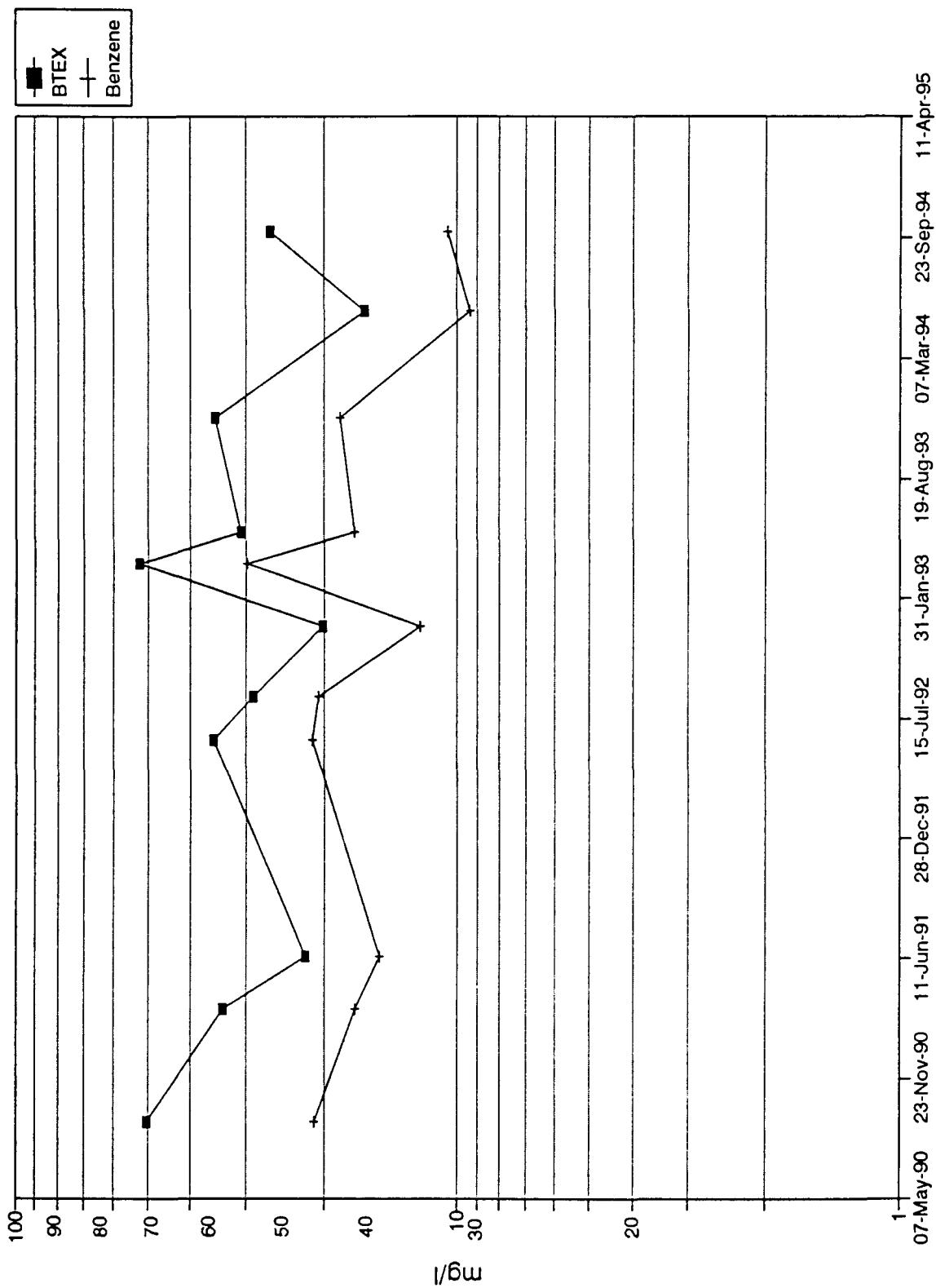


Figure 4

**APPENDIX A**  
**LABORATORY ANALYTICAL REPORTS**  
**MAY 1994**  
**OCTOBER 1994**



## Mountain States Analytical

June 9, 1994

Mr. Paul Weissenborn  
Geowest Golden, Inc. Salt Lake Office  
175 West 200 South  
Suite # 2006  
Salt Lake City, Ut 84101

Reference:

Project: Maverik - Kirtland NM  
MSAI Group: 4781

Dear Mr. Weissenborn:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

|                 |               |        |
|-----------------|---------------|--------|
| MW-10           | MW-17         | MW-17B |
| MW-18           | MW-19         | MW-20  |
| MW-21           | MW-22         | MW-25  |
| Equipment Blank | Trip Blank #2 |        |

All holding times were met for the tests performed on these samples except:

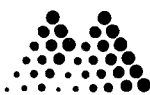
| Sample - (Sample Date)          | Expiration Date | Date Analyzed | Days Past Holding Time |
|---------------------------------|-----------------|---------------|------------------------|
| Trip Blank #2 - (05/16/94)      |                 |               |                        |
| Purgeable Aromatics/Halocarbons | 05/23/94        | 06/02/94      | 10                     |

Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

Glenn A. Sorensen  
Project Manager



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: Trip Blank #2  
 Matrix: Waste Water

MSAI Sample: 19479  
 MSAI Group: 4781  
 Date Reported: 06/09/94

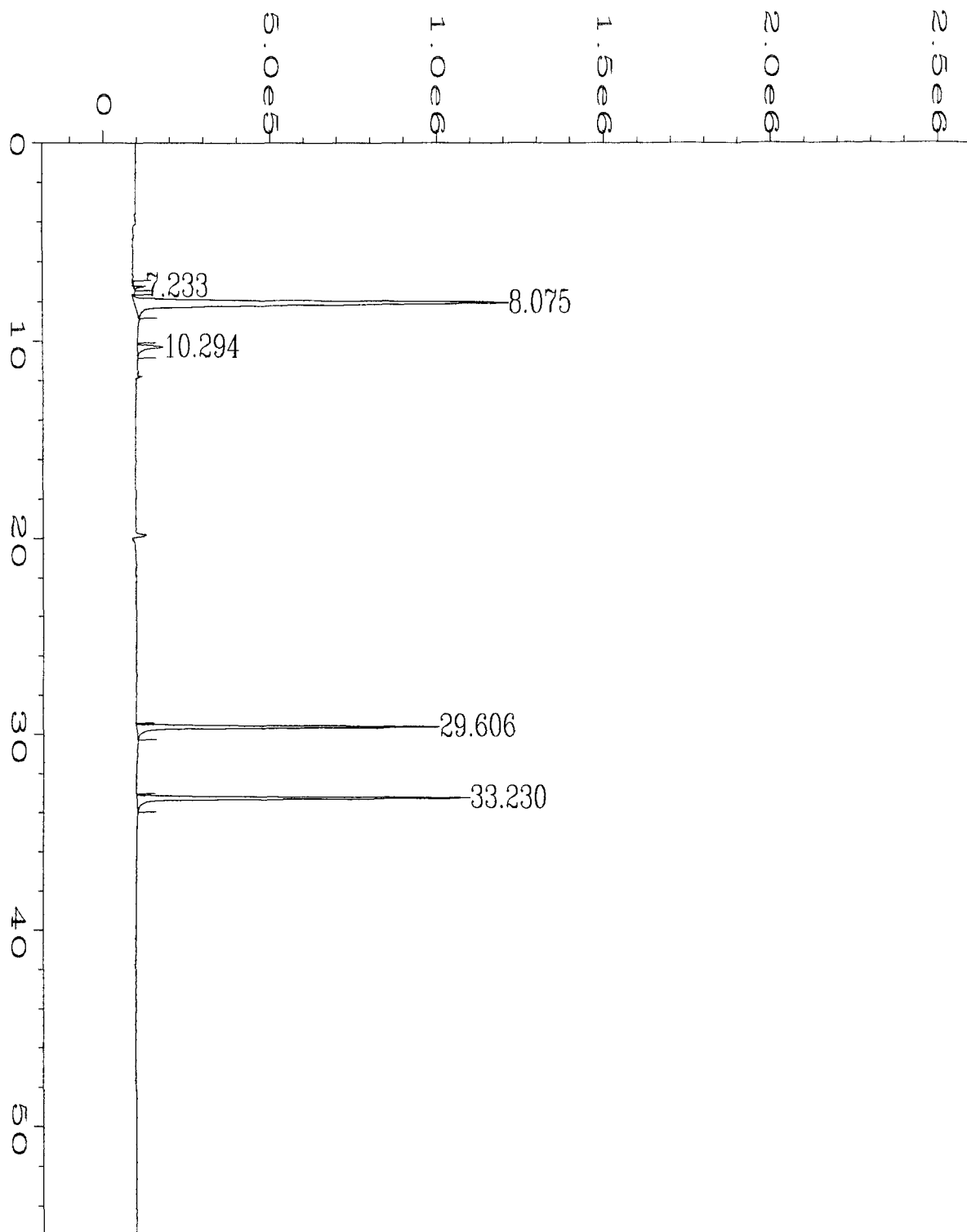
Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/16/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

| Test  | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|-------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| ----- | -----                                                         | -----                  | ----- | -----                    |
| 5515  | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|       | 1,2-Dichloroethane                                            | < 1.0                  | ug/l  | 1.0                      |
|       | Benzene                                                       | < 1.0                  | ug/l  | 1.0                      |
|       | Toluene                                                       | < 1.0                  | ug/l  | 1.0                      |
|       | Ethylbenzene                                                  | < 1.0                  | ug/l  | 1.0                      |
|       | m,p-Xylene                                                    | < 1.0                  | ug/l  | 1.0                      |
|       | o-Xylene                                                      | < 1.0                  | ug/l  | 1.0                      |
| 6159  | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

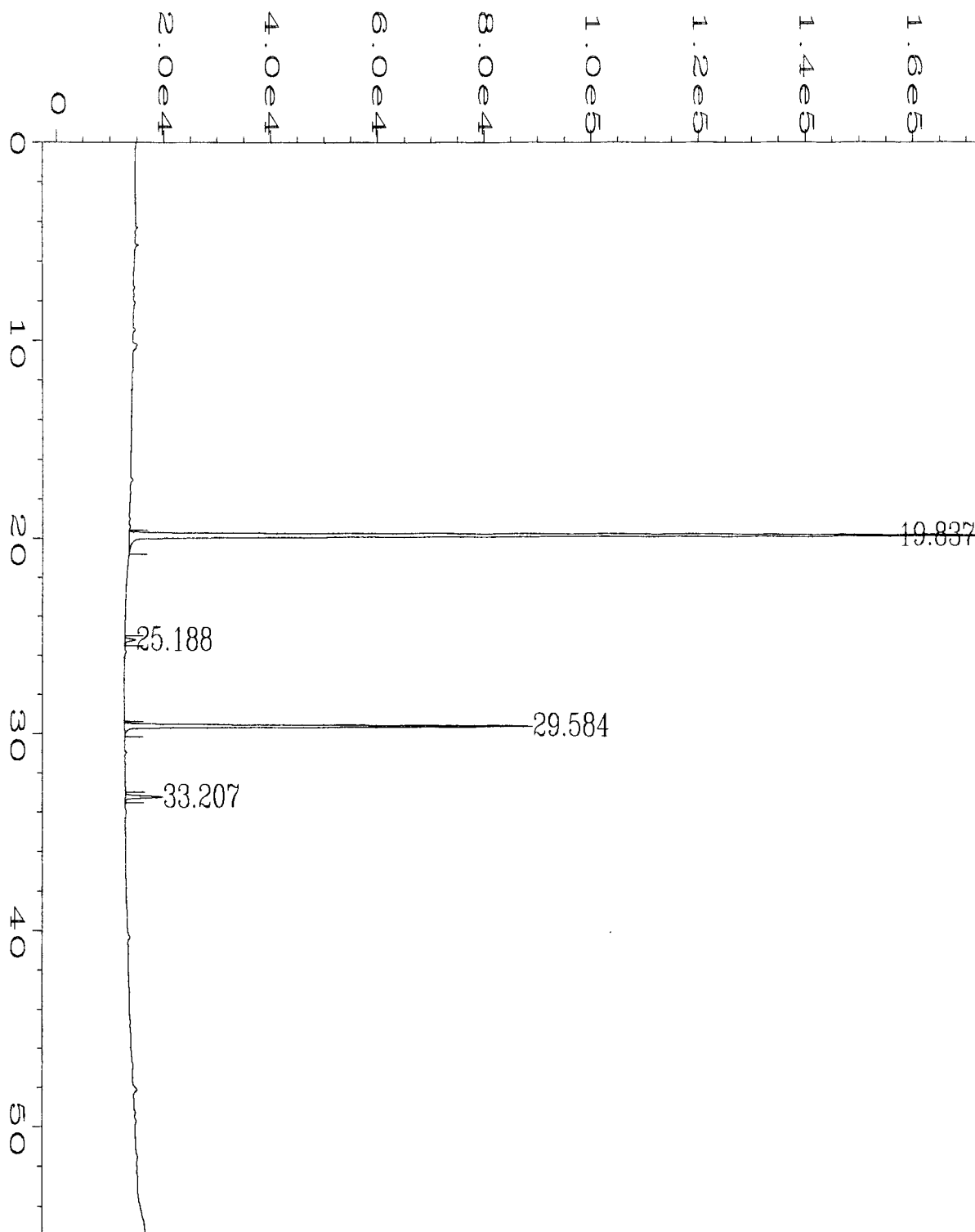
Respectfully Submitted,  
 Reviewed and Approved by:

*Glenn A. Sorensen*  
 Glenn A. Sorensen  
 Project Manager



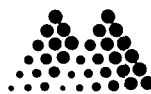


|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\079F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 79          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19479 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 02:24 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 09:02 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\079R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 79          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19479 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 02:24 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 07:17 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |

Invoice No. 203652  
 Invoice Date 06/10/94  
 Page: 1 of 1



## Mountain States Analytical

The Quality Solution

Mr. Paul Weissenborn  
 Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Salt Lake City, Ut 84101  
 Suite # 2006

Project Name: Maverik - Kirtland NM  
 Project Number:  
 Purchase Order: 9131.01  
 Samples Received: 05/27/94  
 Date Reported: 06/09/94  
 Turnaround Time: 13 days  
 Reported To: Mr. Paul Weissenborn

MSAI Group Number: 4781  
 Analyses Performed  
 See Analysis Reference Table Below

| Sample I.D.           | Date Sampled | Analyses  | List Price | Rush Charges | Discount | Extended Price |
|-----------------------|--------------|-----------|------------|--------------|----------|----------------|
| 19461 MW-10           | 05/25/94     | 5515 6159 | 132.00     |              | 19.80    | 112.20         |
| 19462 MW-17           | 05/25/94     | 5515 6159 | 132.00     |              | 19.80    | 112.20         |
| 19463 MW-17B          | 05/25/94     | 5515 6159 | 132.00     |              | 19.80    | 112.20         |
| 19464 MW-18           | 05/25/94     | 5515 6159 | 132.00     |              | 19.80    | 112.20         |
| 19465 MW-19           | 05/25/94     | 5515 6159 | 132.00     |              | 19.80    | 112.20         |
| 19466 MW-20           | 05/25/94     | 5515 6159 | 132.00     |              | 19.80    | 112.20         |
| 19467 MW-21           | 05/25/94     | 5515 6159 | 132.00     |              | 19.80    | 112.20         |
| 19468 MW-22           | 05/25/94     | 5515 6159 | 132.00     |              | 19.80    | 112.20         |
| 19469 MW-25           | 05/25/94     | 5515 6159 | 132.00     |              | 19.80    | 112.20         |
| 19478 Equipment Blank | 05/25/94     | 5515 6159 | 132.00     |              | 19.80    | 112.20         |
| 19479 Trip Blank #2   | 05/16/94     | 5515 6159 | 132.00     |              | 19.80    | 112.20         |

Total Price \$ 1,234.20

### Analysis Reference Table

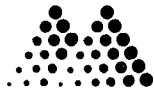
| Analysis |                                 | Matrix | Method             | # of Tests | Unit       |              |                 |           |                |
|----------|---------------------------------|--------|--------------------|------------|------------|--------------|-----------------|-----------|----------------|
| No.      | Analysis Name                   |        |                    |            | List Price | Rush Charges | Discount Amount | Net Price | Extended Price |
| 5515     | Purgeable Aromatics/Halocarbons | WW     | 600 SERIES 601/602 | 11         | 125.00     |              | 18.75           | 106.25    | 1,168.75       |
| 6159     | Chromatograms/Etc. GC           |        | IN HOUSE MSAI      | 11         | 7.00       |              | 1.05            | 5.95      | 65.45          |

Total Price \$ 1,234.20

### Pricing Summary

Extended List Price \$ 1,452.00  
 Total Rush Charges \$ 0.00  
 Total Discount \$( 217.80)

TOTAL AMOUNT DUE \$ 1,234.20



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: MW-10  
 Matrix: Waste Water

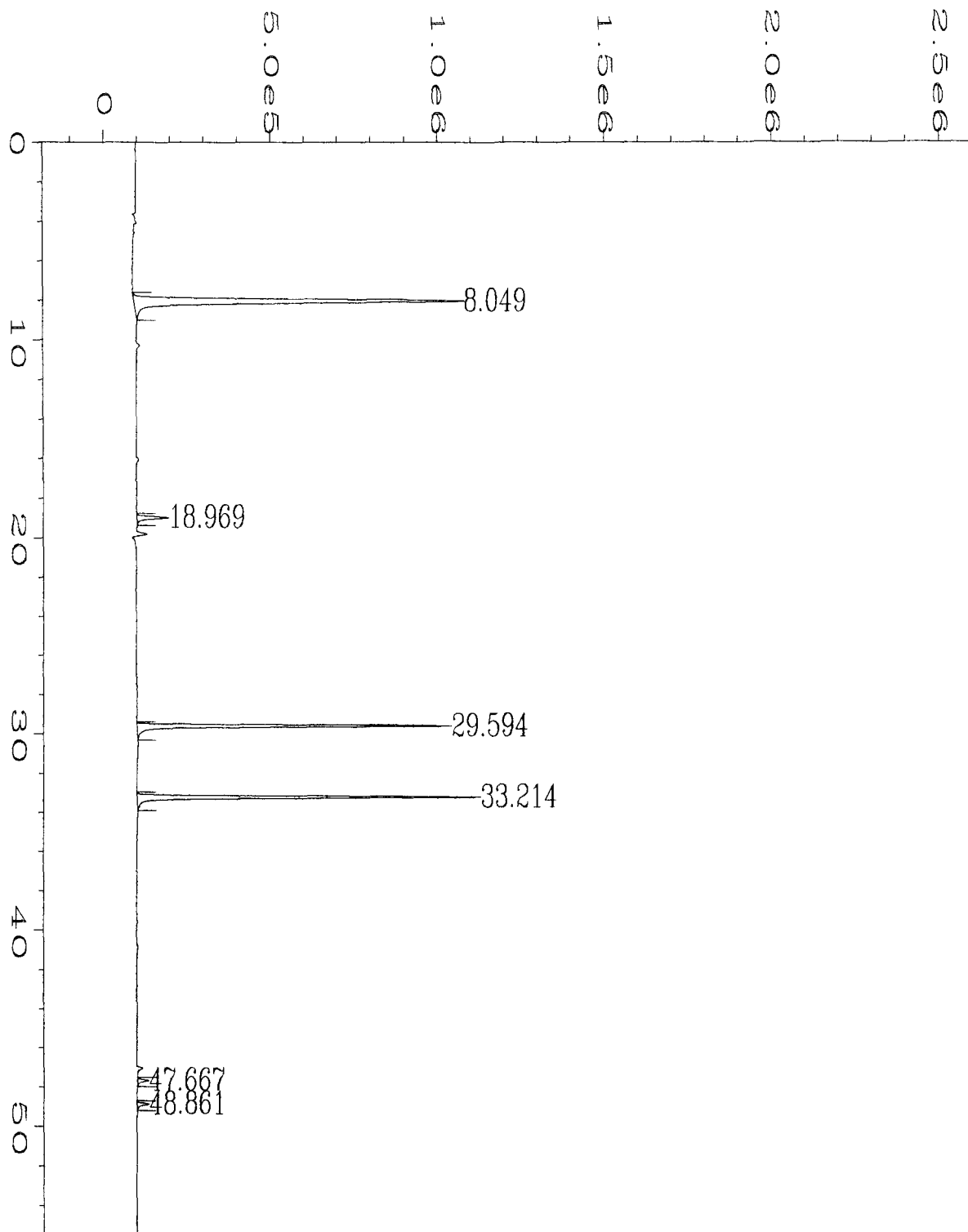
MSAI Sample: 19461  
 MSAI Group: 4781  
 Date Reported: 06/09/94  
 Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/25/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | < 1.0                  | ug/l  | 1.0                      |
|      | Benzene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Toluene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | < 1.0                  | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | < 1.0                  | ug/l  | 1.0                      |
|      | o-Xylene                                                      | < 1.0                  | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

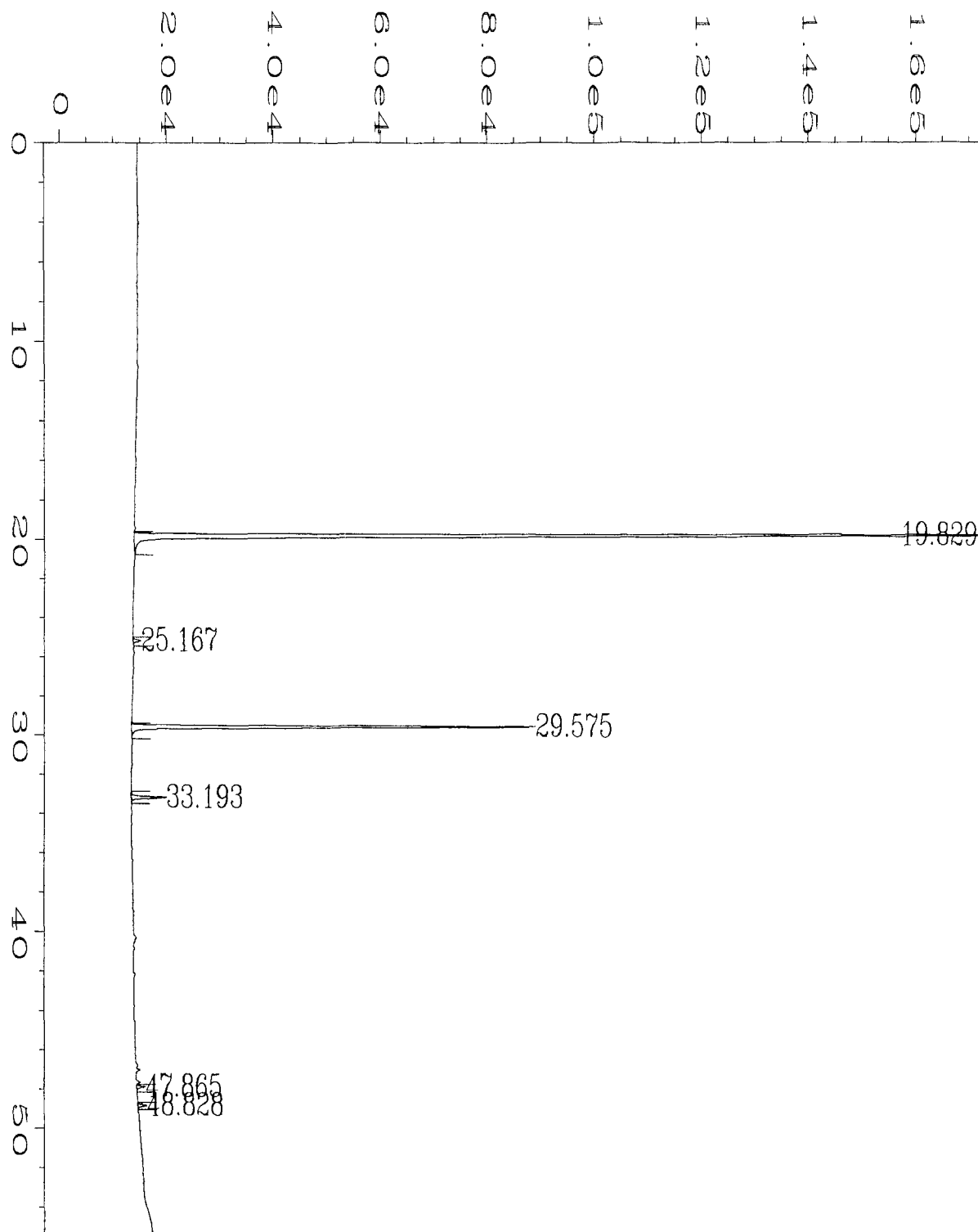
Respectfully Submitted,  
 Reviewed and Approved by:

Glenn A. Sorensen  
 Project Manager

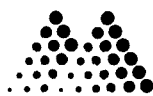




|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\086F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 86          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19461 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 01 Jun 94 09:56 AM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on  | : 08 Jun 94 08:57 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\086R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 86          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19461 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 09:56 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 07:10 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: MW-17  
 Matrix: Waste Water

MSAI Sample: 19462  
 MSAI Group: 4781  
 Date Reported: 06/09/94

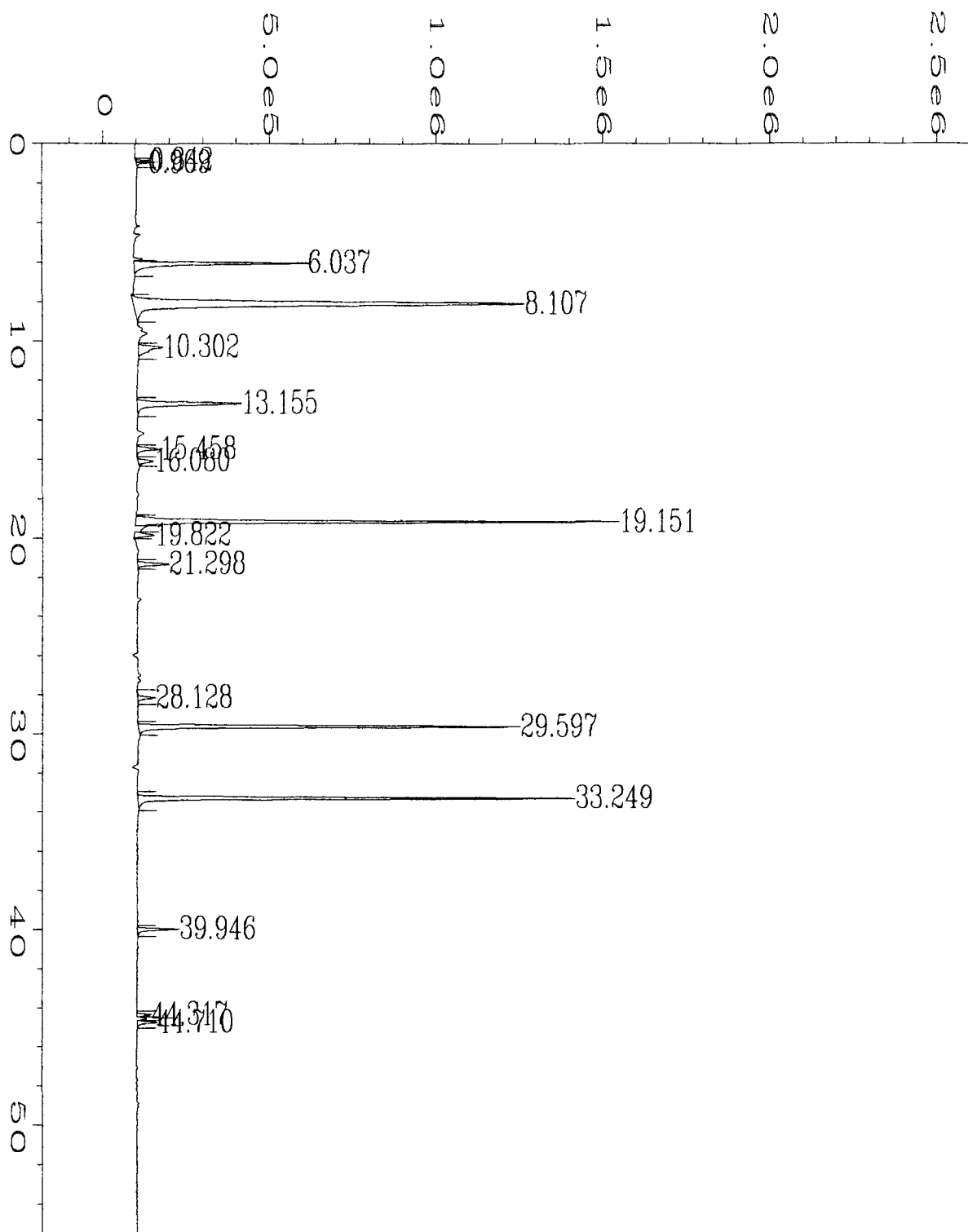
Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/25/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 8.3                    | ug/l  | 1.0                      |
|      | Benzene                                                       | 10,900                 | ug/l  | 1,000                    |
|      | Toluene                                                       | 4,340                  | ug/l  | 200                      |
|      | Ethylbenzene                                                  | 823                    | ug/l  | 200                      |
|      | m,p-Xylene                                                    | 4,120                  | ug/l  | 200                      |
|      | o-Xylene                                                      | 1,540                  | ug/l  | 200                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

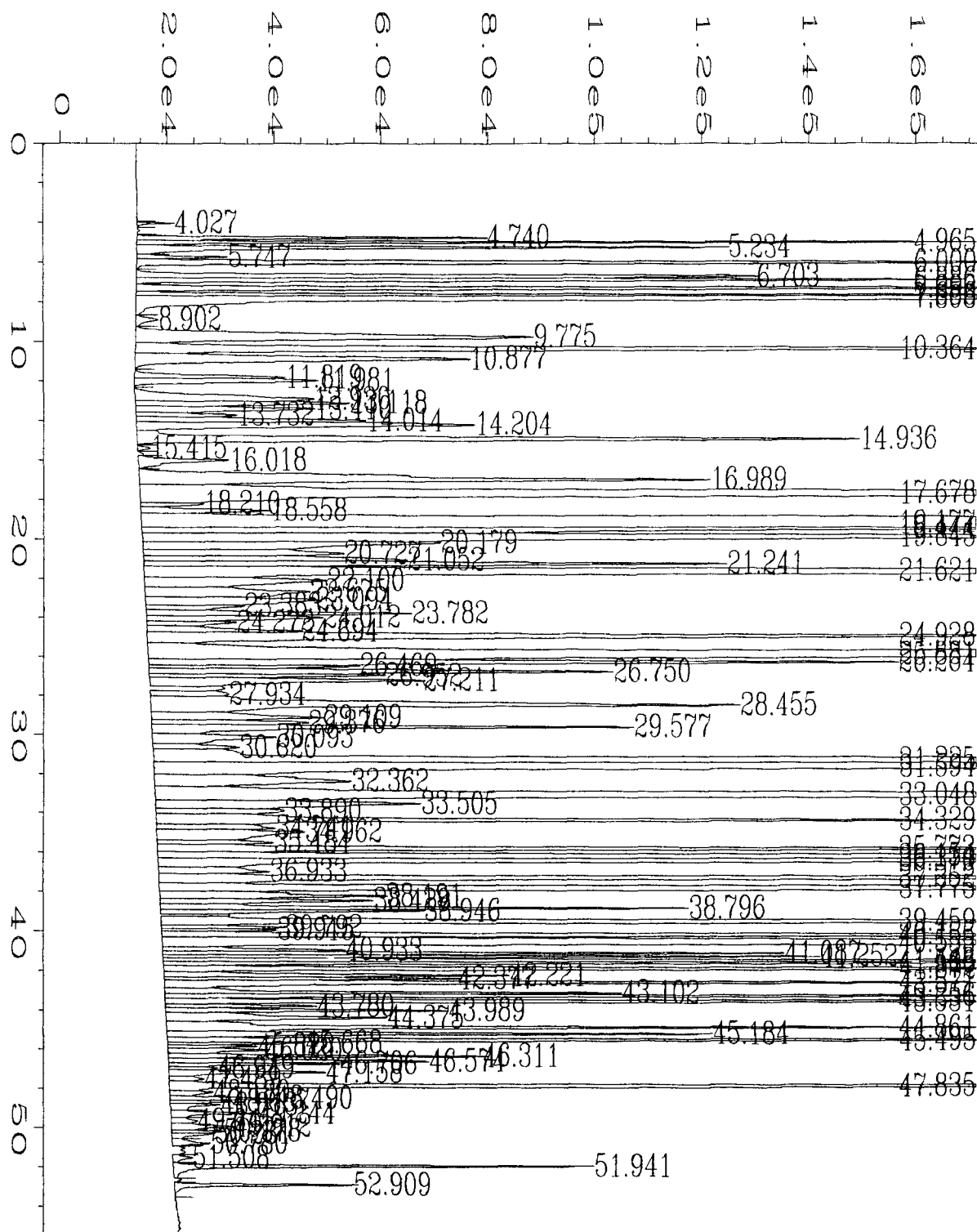
Respectfully Submitted,  
 Reviewed and Approved by:

*Glenn A. Sorensen*  
 Glenn A. Sorensen  
 Project Manager

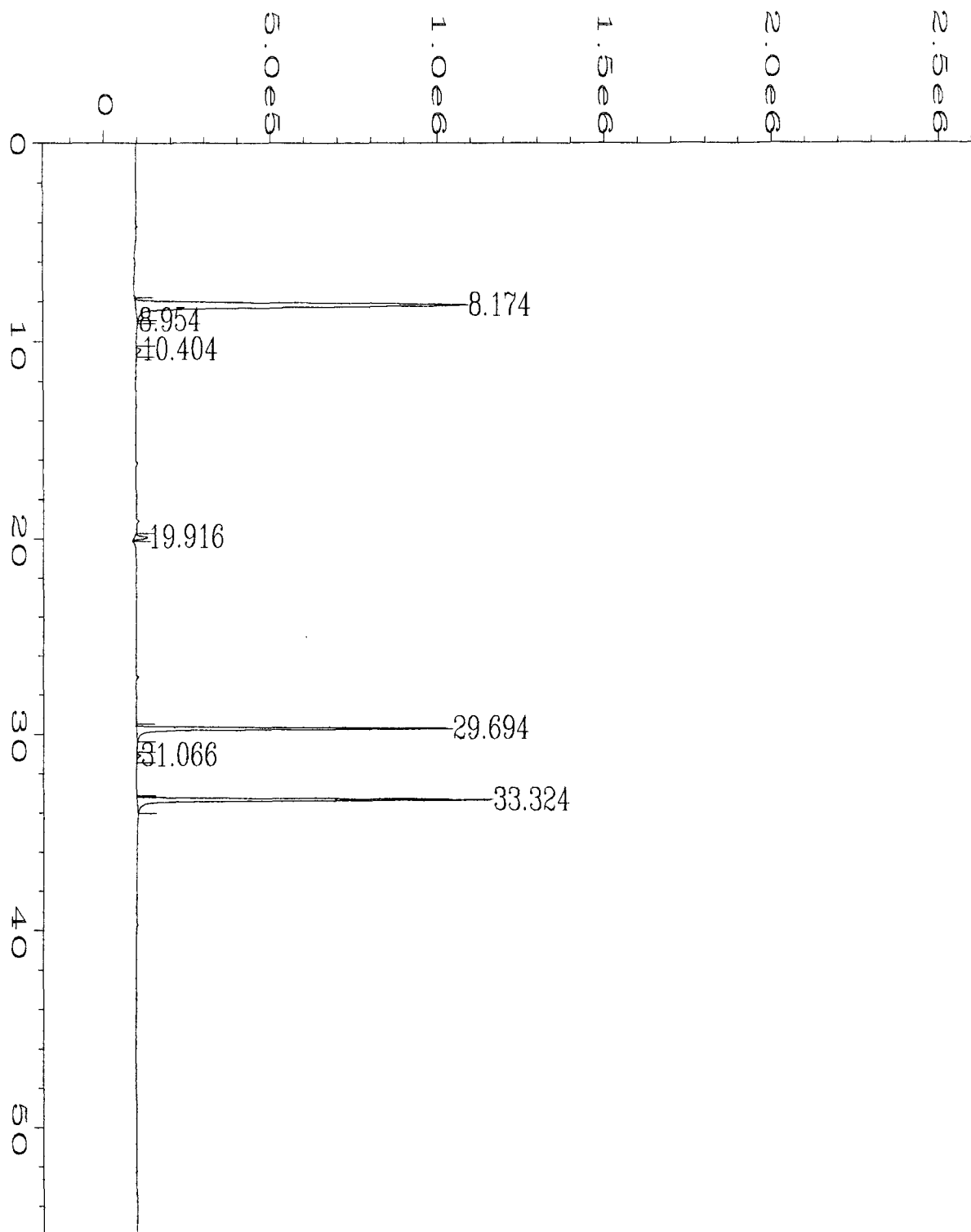




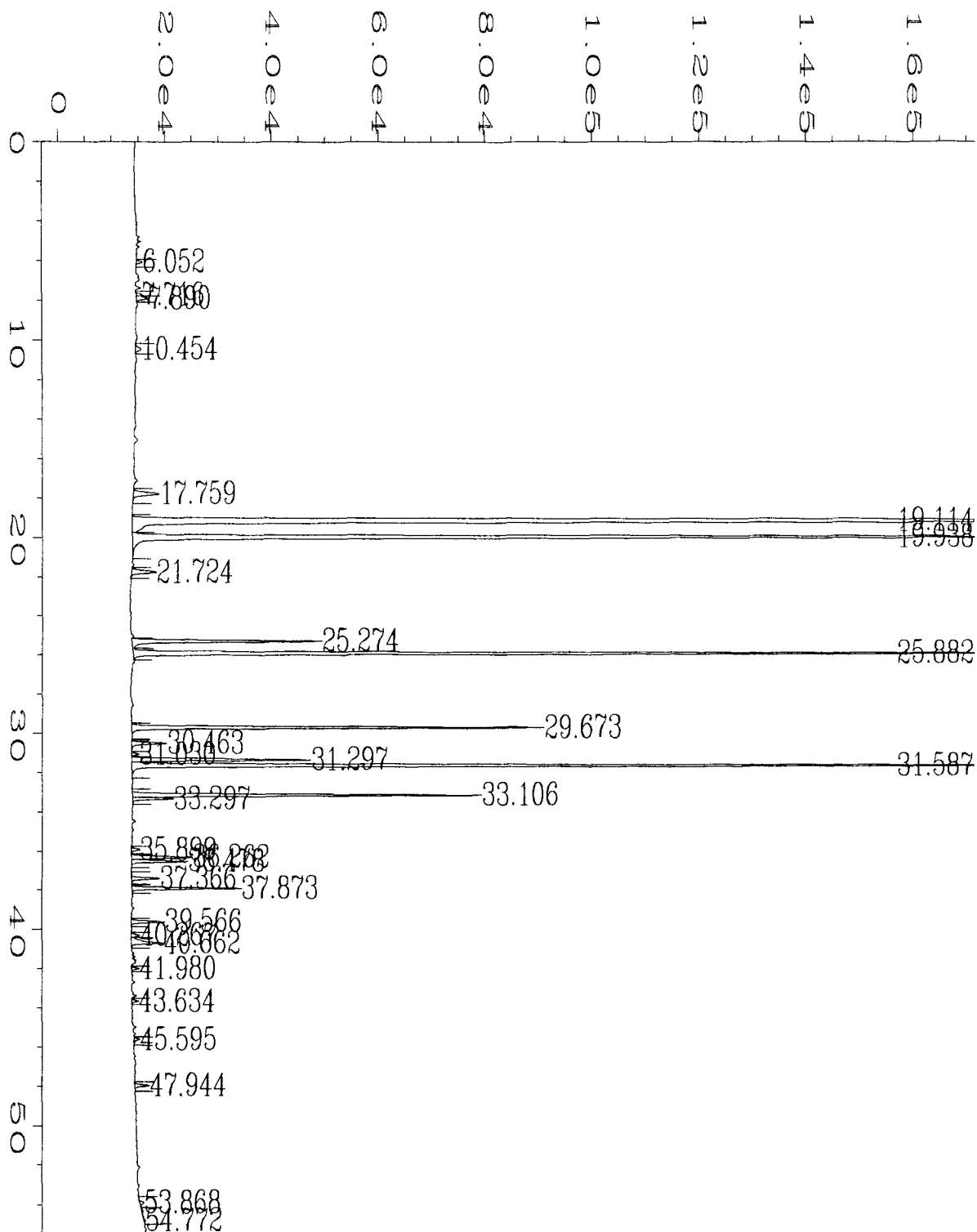
|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
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| Operator           | : PWK                                  | Vial Number        | : 87          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19462 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 10:59 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 08:57 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



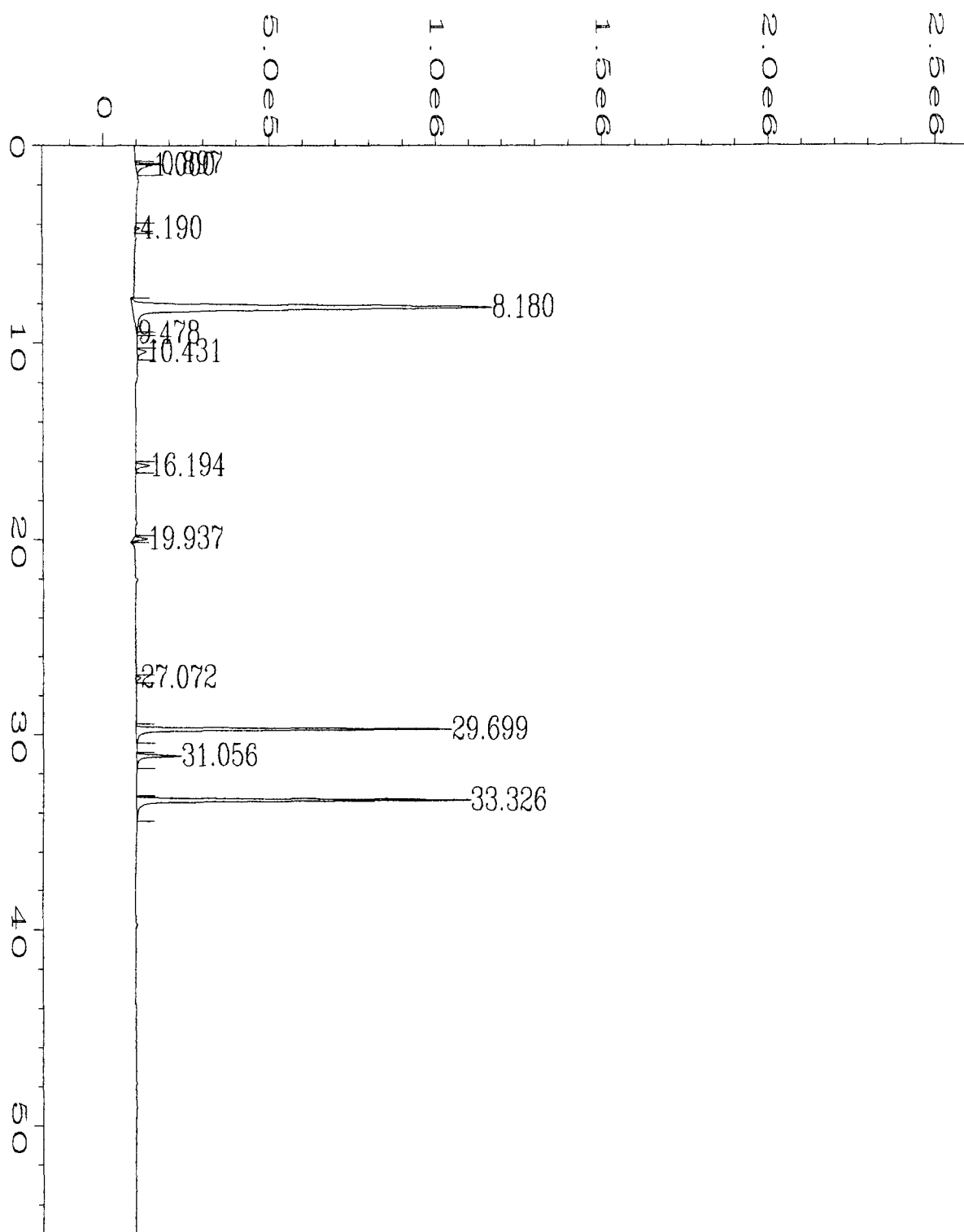
|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\087R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 87          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19462 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 01 Jun 94 10:59 AM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 07:11 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



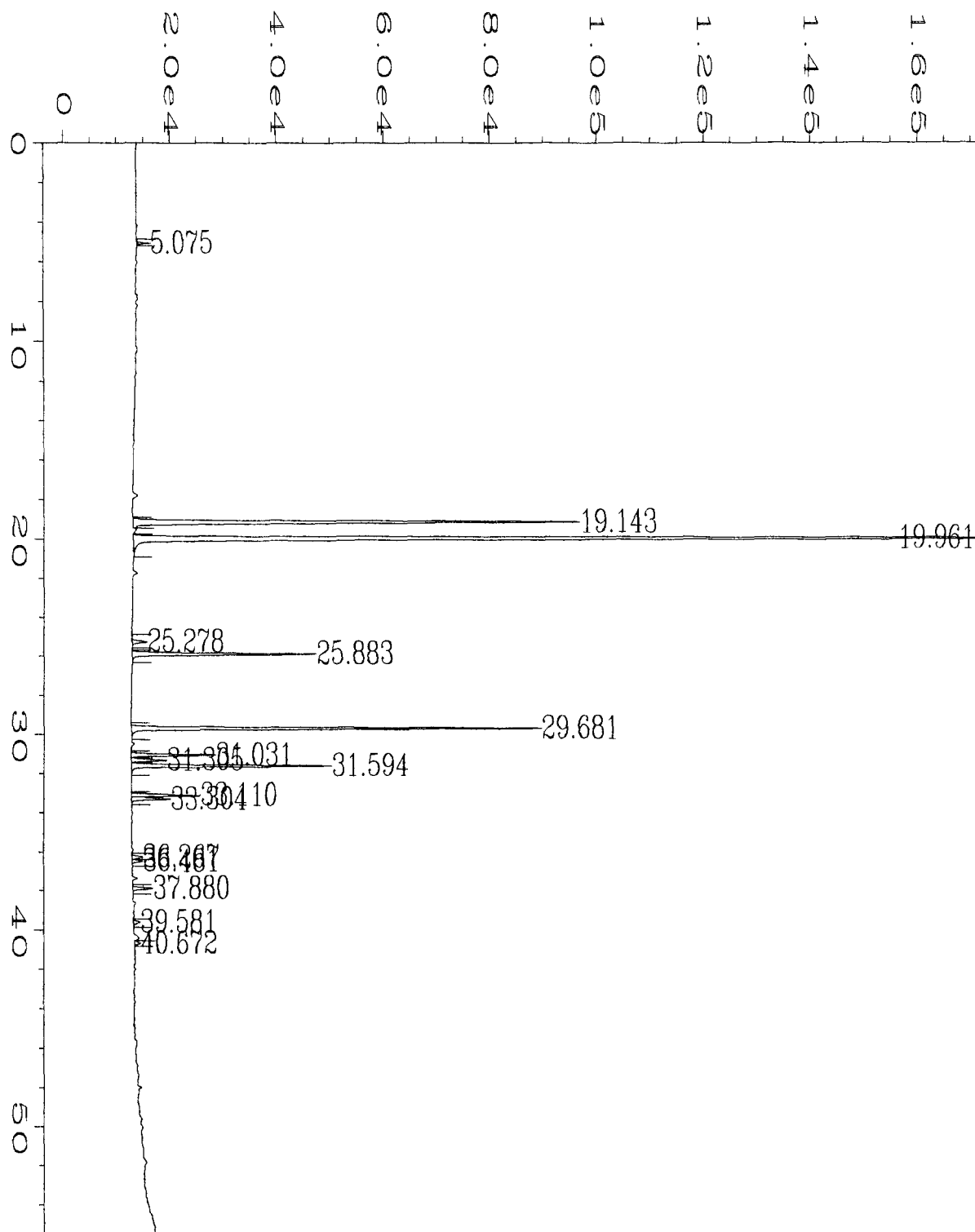
|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
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| Operator           | : PWK                                  | Vial Number        | : 22          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19462 DF200                          | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 02 Jun 94 09:27 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 08:51 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



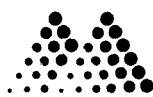
|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\022R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 22          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19462 DF200                          | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 02 Jun 94 09:27 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | : 08 Jun 94 08:49 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\035F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 35          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19462 DF1000                         | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 03 Jun 94 10:24 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 08:51 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\035R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 35          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19462 DF1000                         | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 03 Jun 94 10:24 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | : 08 Jun 94 08:49 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: MW-17B  
 Matrix: Waste Water

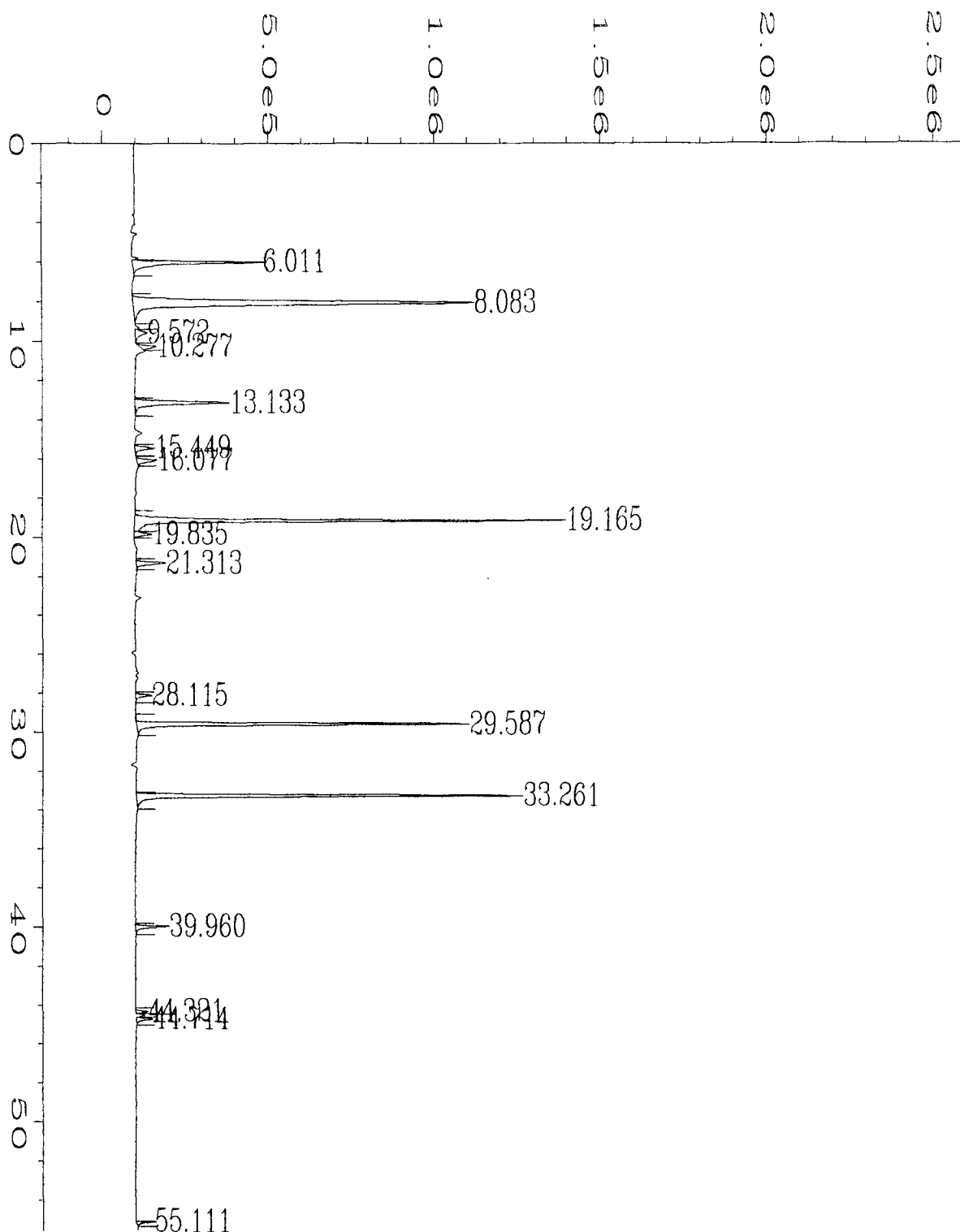
MSAI Sample: 19463  
 MSAI Group: 4781  
 Date Reported: 06/09/94  
 Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/25/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 8.5                    | ug/l  | 1.0                      |
|      | Benzene                                                       | 10,300                 | ug/l  | 1,000                    |
|      | Toluene                                                       | 3,920                  | ug/l  | 200                      |
|      | Ethylbenzene                                                  | 800                    | ug/l  | 200                      |
|      | m,p-Xylene                                                    | 3,930                  | ug/l  | 200                      |
|      | o-Xylene                                                      | 1,490                  | ug/l  | 200                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

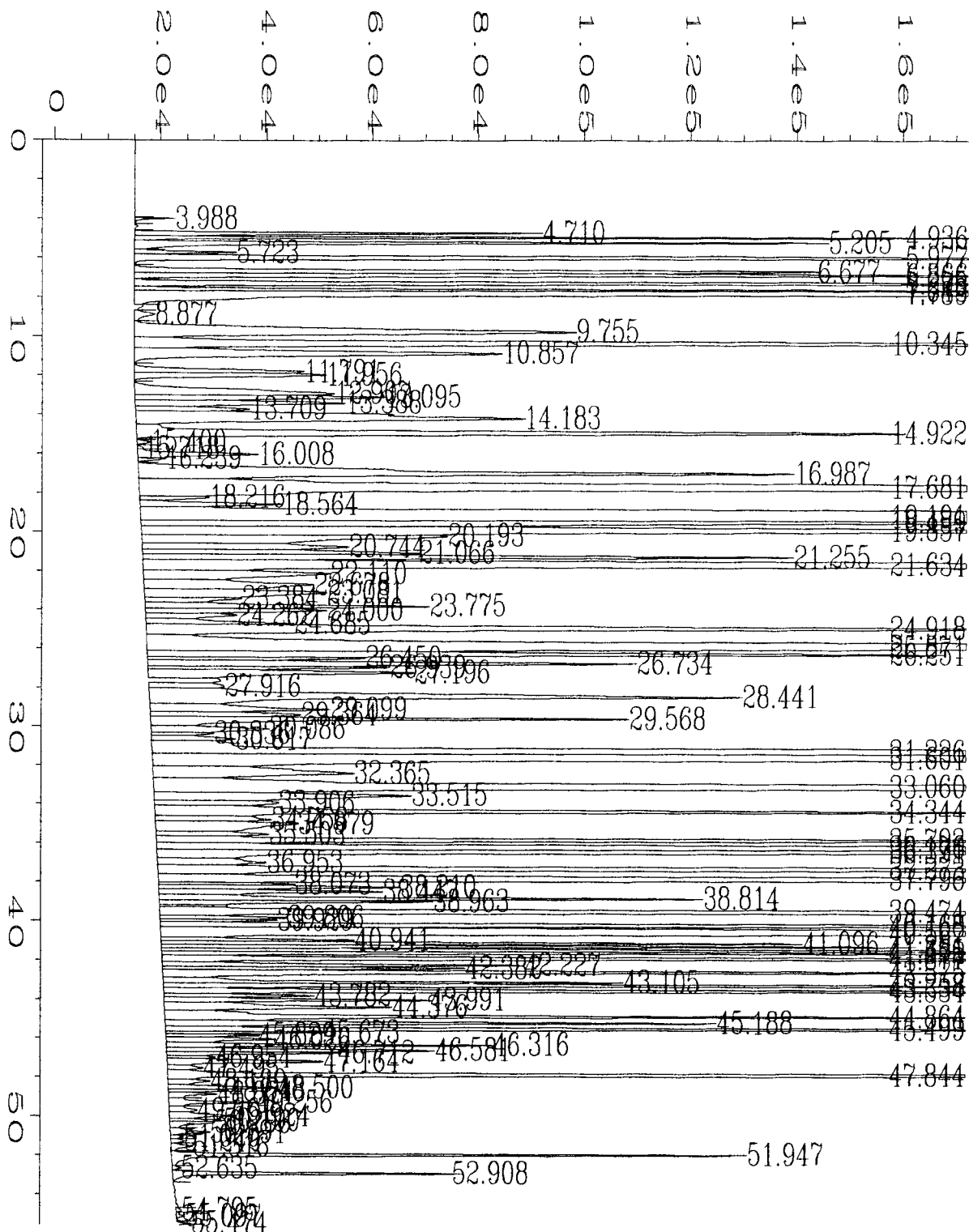
Respectfully Submitted,  
 Reviewed and Approved by:

*Glenn A. Sorensen*  
 Glenn A. Sorensen  
 Project Manager

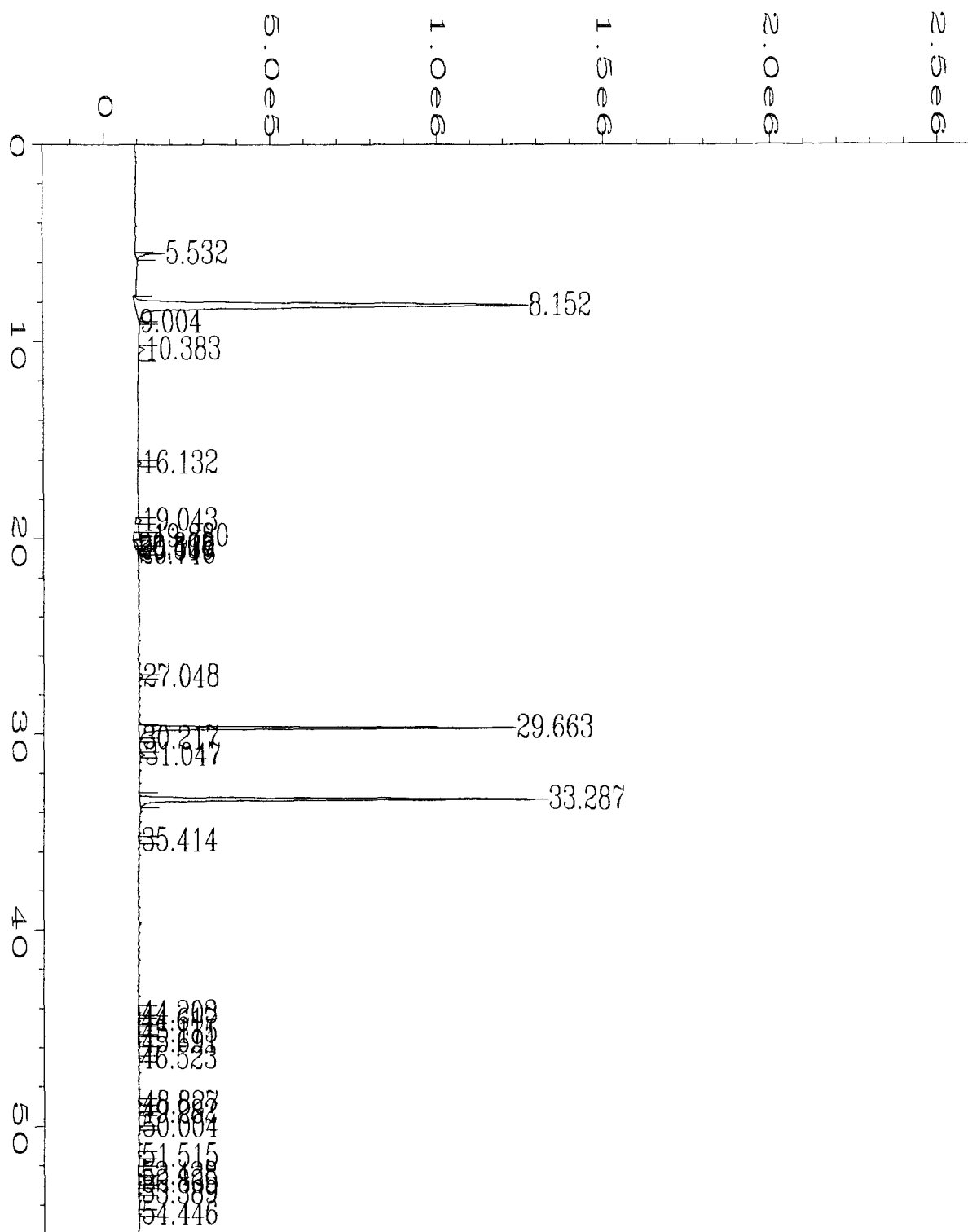




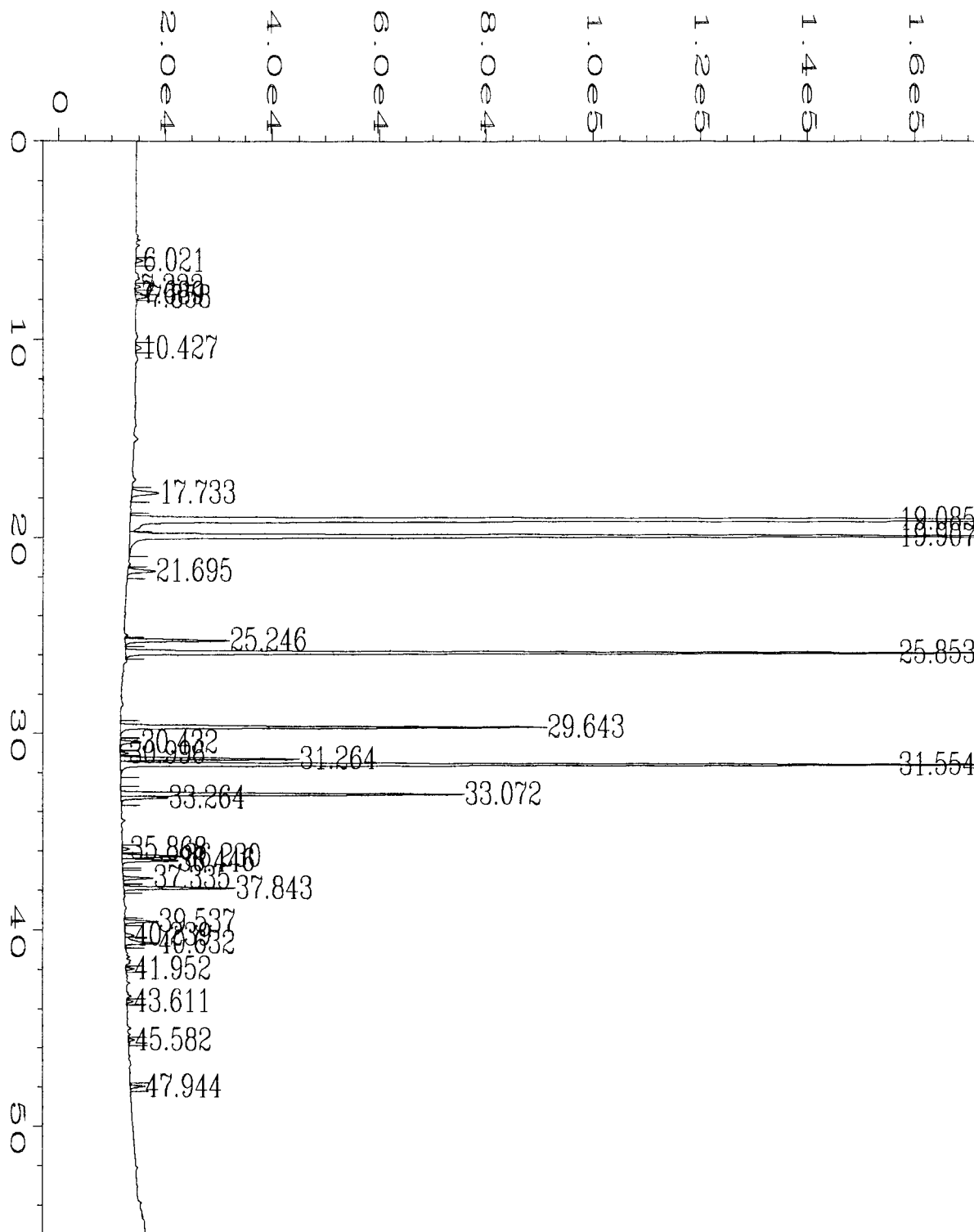
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|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\088F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 88          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19463 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 12:03 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 08:58 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



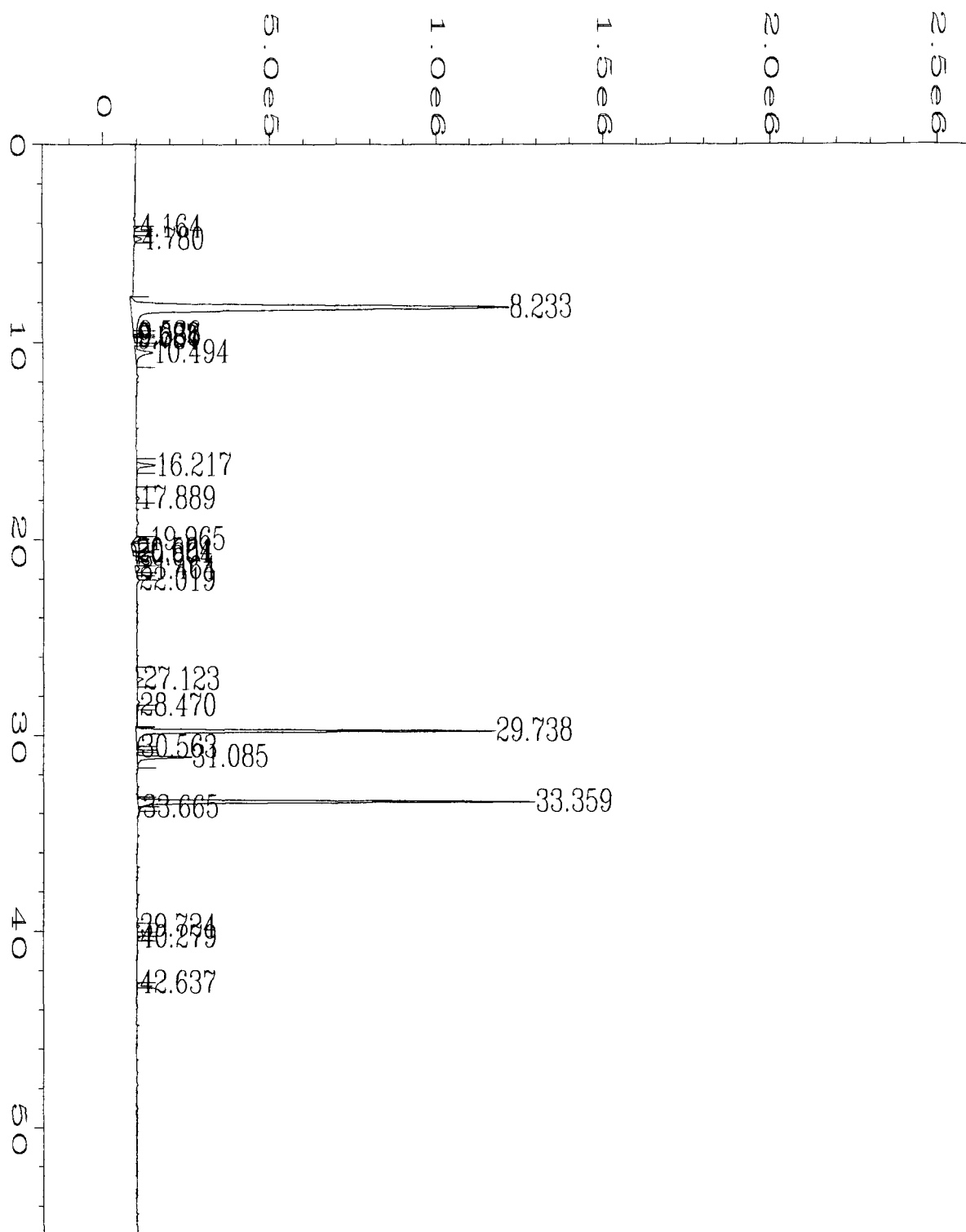
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|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\088R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 88          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19463 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 01 Jun 94 12:03 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 07:12 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



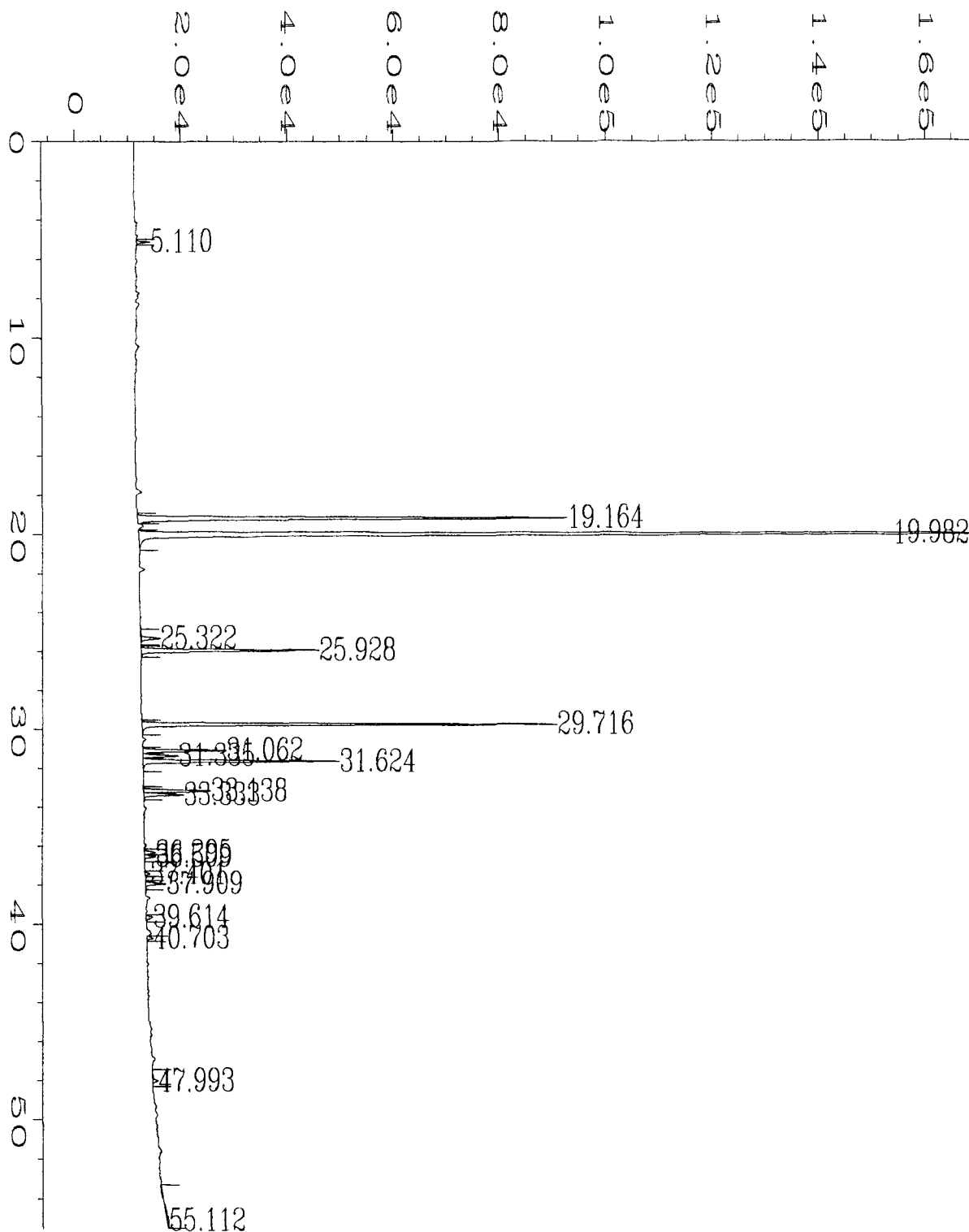
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|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\023F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 23          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19463 DF200                          | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 02 Jun 94 10:33 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 08:52 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\023R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 23          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19463 DF200                          | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 02 Jun 94 10:33 PM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 08:48 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\036F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 36          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19463 DF1000                         | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 04 Jun 94 09:11 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 08:52 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\036R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 36          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19463 DF1000                         | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 04 Jun 94 09:11 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 08:47 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: MW-18  
 Matrix: Waste Water

MSAI Sample: 19464  
 MSAI Group: 4781  
 Date Reported: 06/09/94  
 Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/25/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

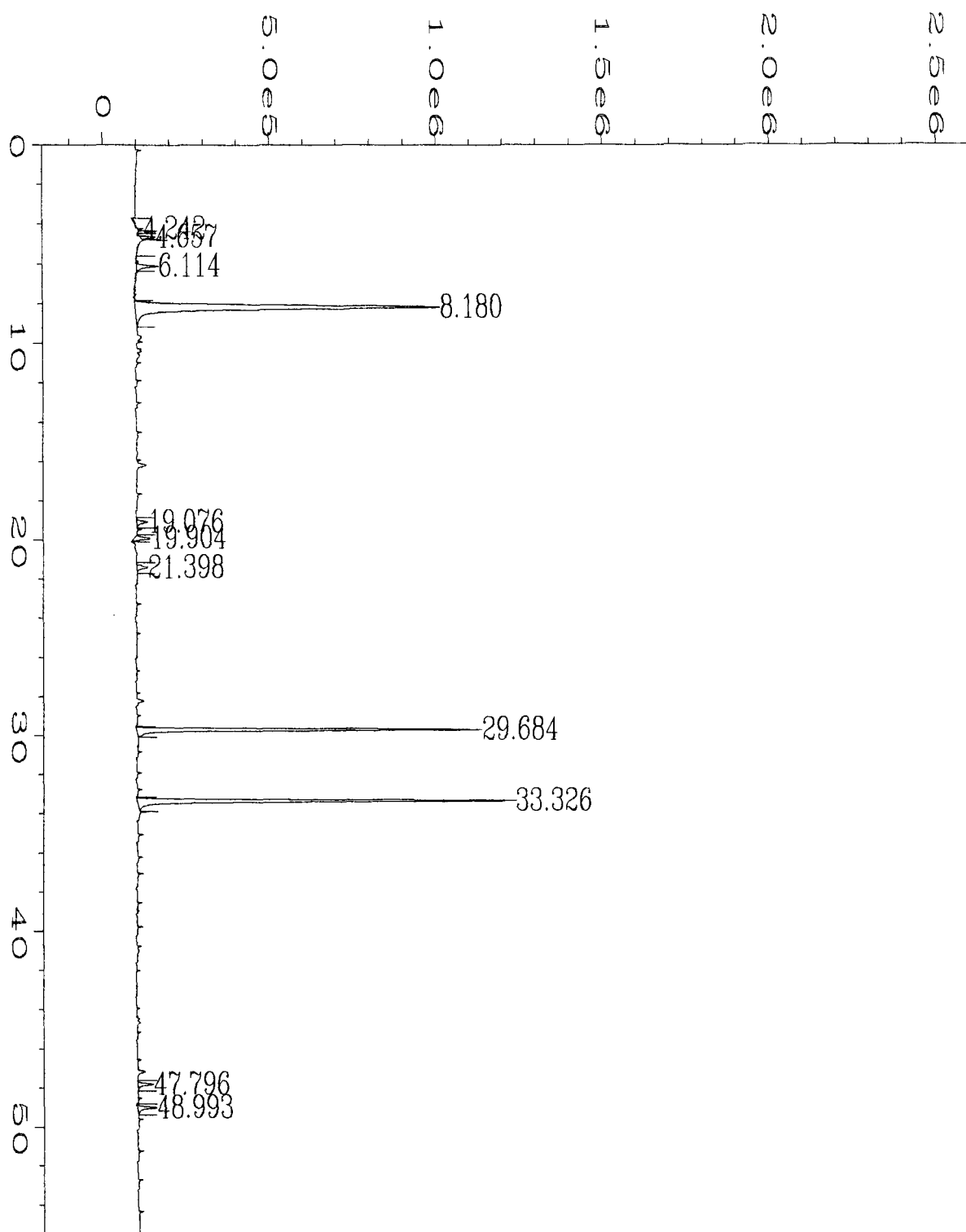
| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | < 1.0                  | ug/l  | (1) 1.0                  |
|      | Benzene                                                       | 50.6                   | ug/l  | 1.0                      |
|      | Toluene                                                       | 10.0                   | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | 6.9                    | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | 95.5                   | ug/l  | 1.0                      |
|      | o-Xylene                                                      | 3.7                    | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

- (1) Note: Benzene and m,p-Xylene are outside the calibration range. Due to restricted sample volume, reruns were not possible. Therefore, these results are approximate.

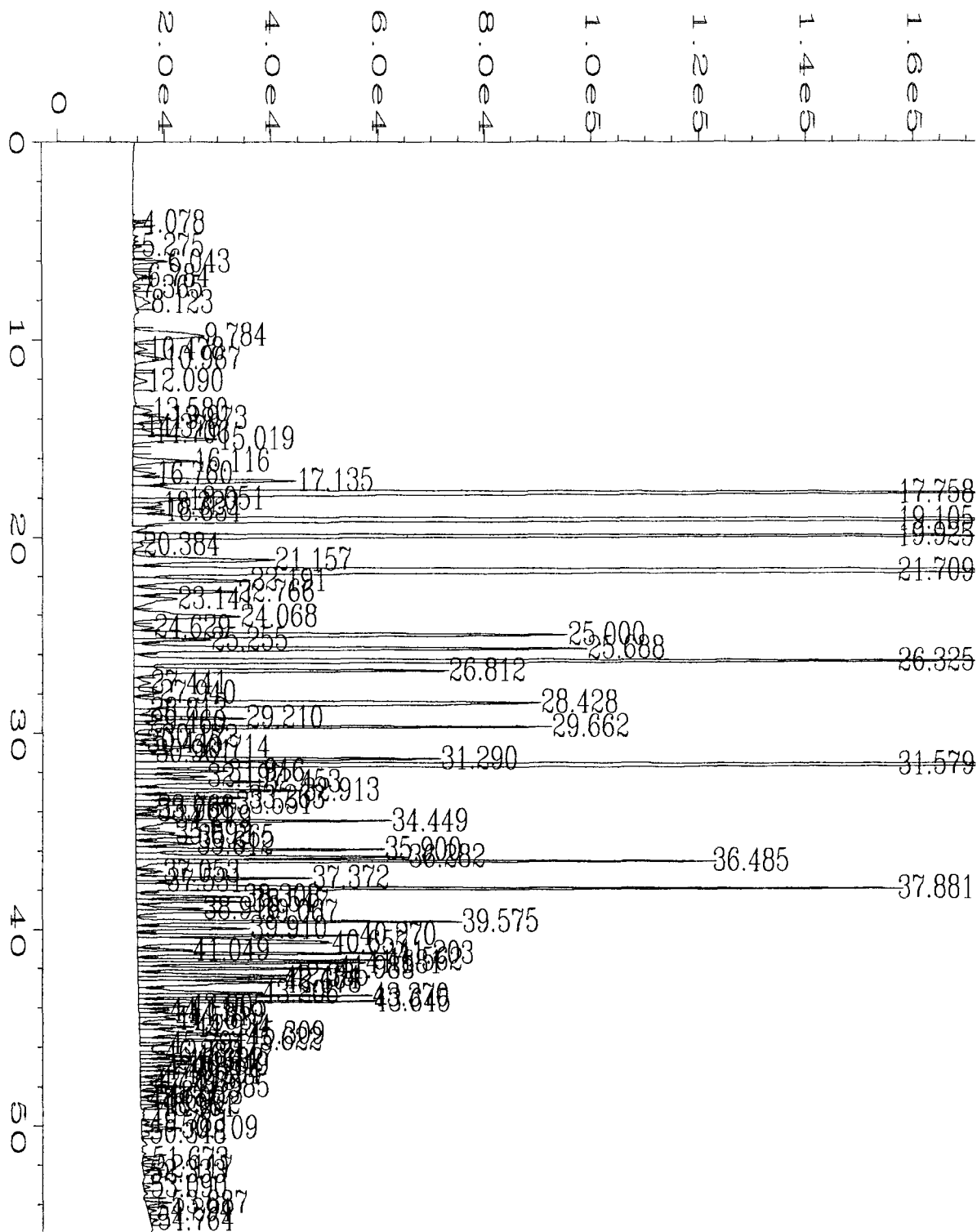
Respectfully Submitted,  
 Reviewed and Approved by:

*Glenn A. Sorensen*  
 Glenn A. Sorensen  
 Project Manager

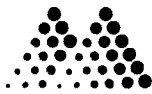




|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\020F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 20          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19464 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 02 Jun 94 07:17 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 08:53 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\020R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 20          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19464 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 02 Jun 94 07:17 PM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 08:47 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: MW-19  
 Matrix: Waste Water

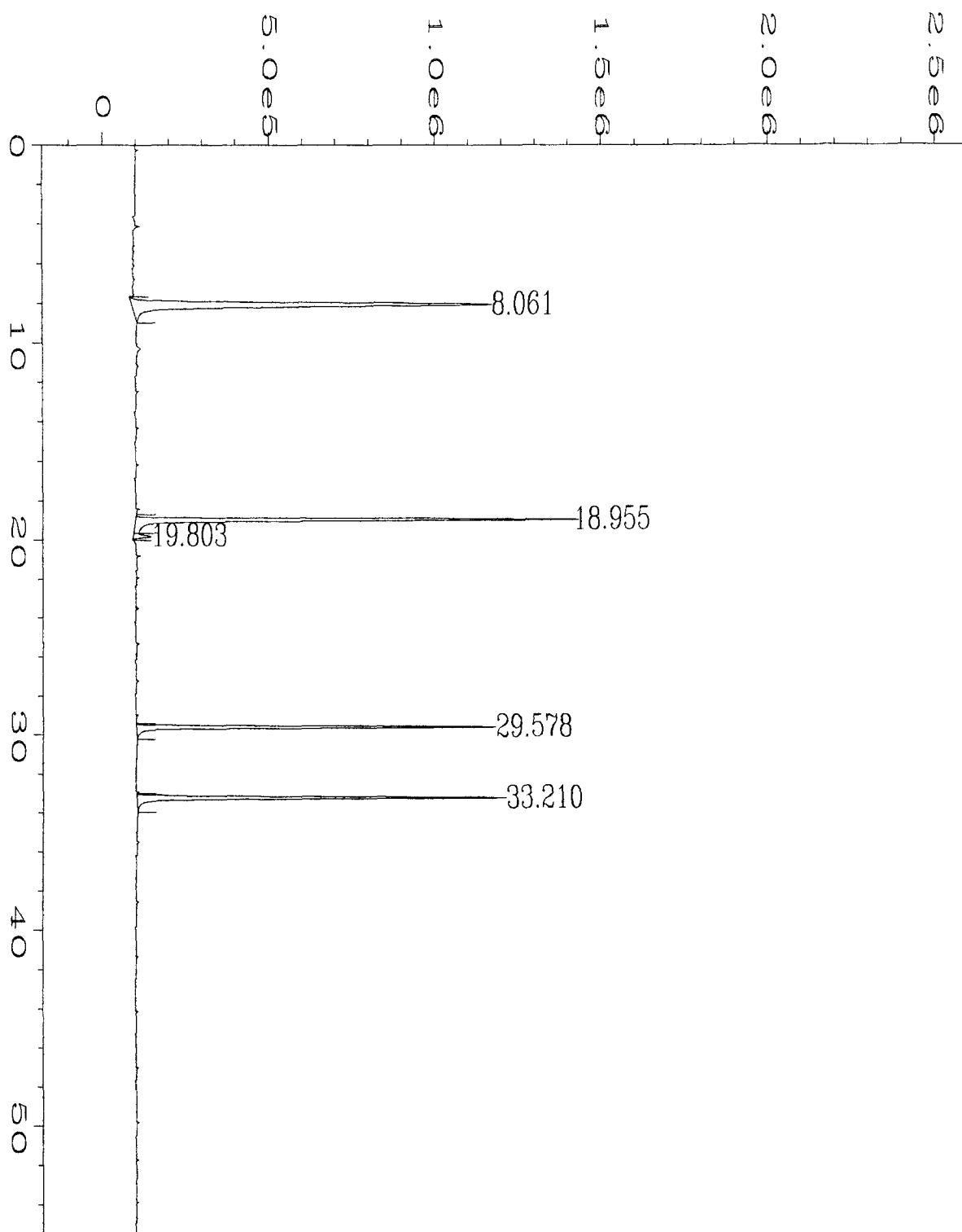
MSAI Sample: 19465  
 MSAI Group: 4781  
 Date Reported: 06/09/94  
 Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/25/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 8.0                    | ug/l  | 1.0                      |
|      | Benzene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Toluene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | < 1.0                  | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | < 1.0                  | ug/l  | 1.0                      |
|      | o-Xylene                                                      | < 1.0                  | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

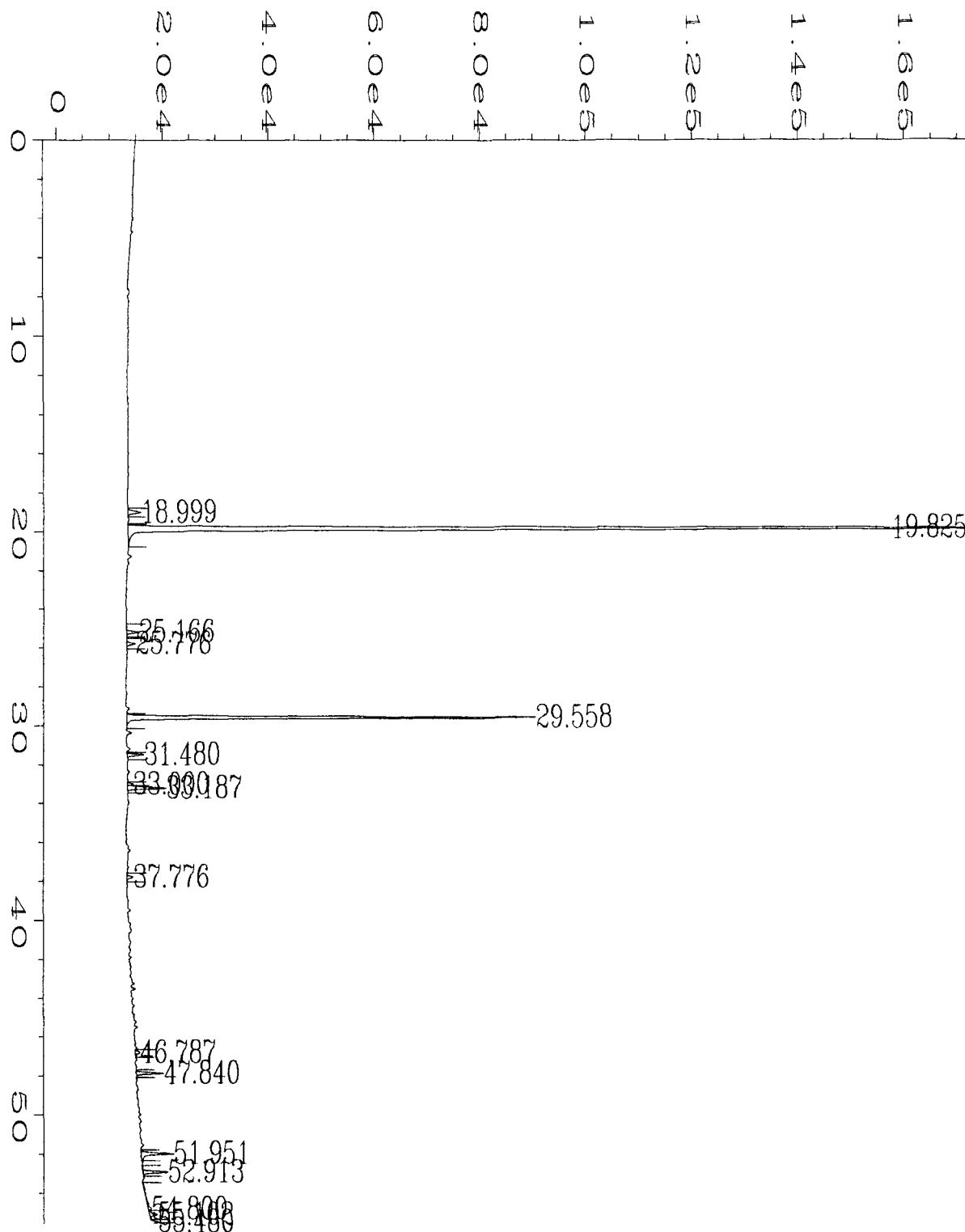
Respectfully Submitted,  
 Reviewed and Approved by:

*Glenn A. Sorensen*  
 Glenn A. Sorensen  
 Project Manager





|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\090F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 90          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19465 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 02:11 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 08:58 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\090R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 90          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19465 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 02:11 PM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 07:13 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: MW-20  
 Matrix: Waste Water

MSAI Sample: 19466  
 MSAI Group: 4781  
 Date Reported: 06/09/94

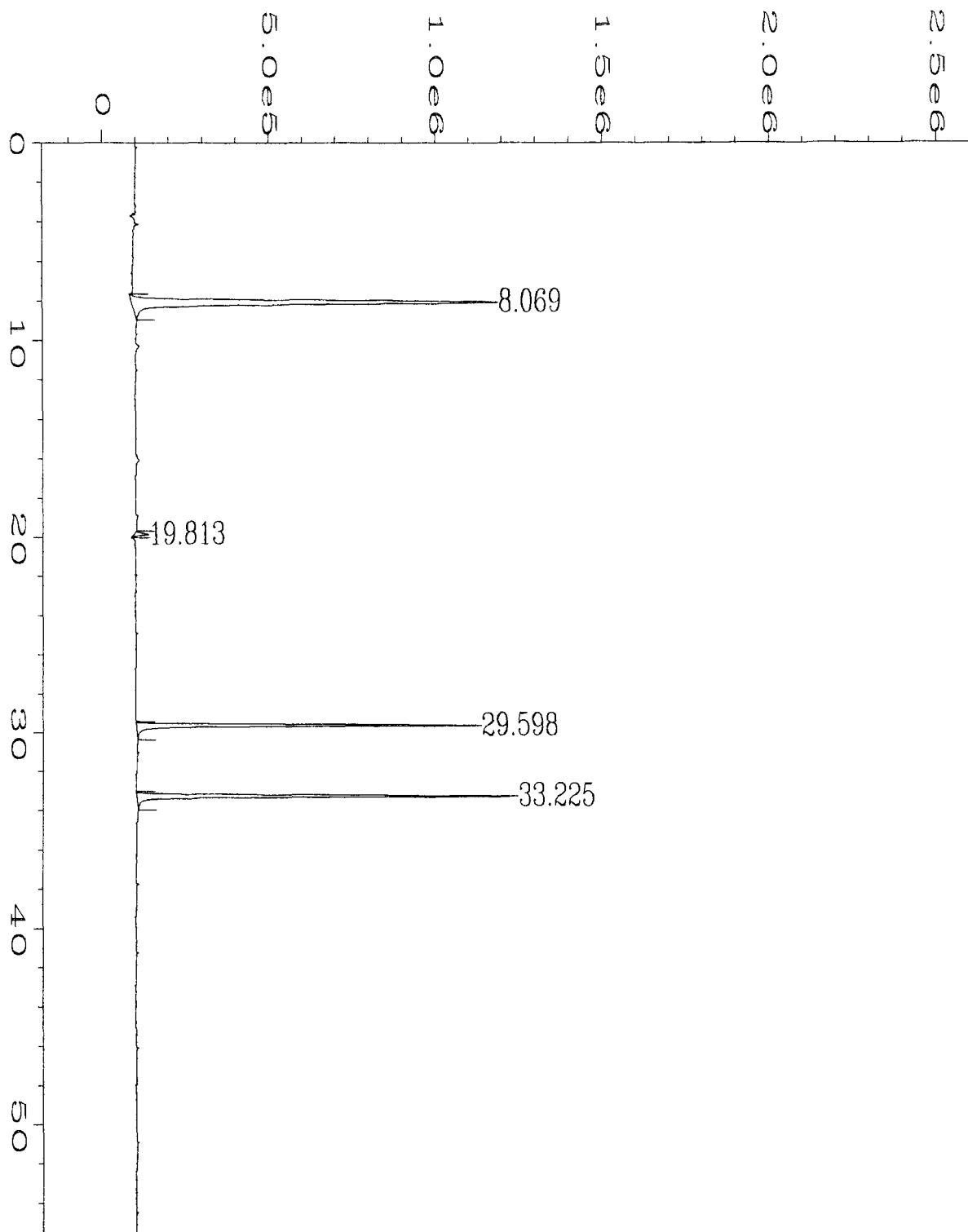
Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/25/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

| Test  | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|-------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| ----- | -----                                                         | -----                  | ----- | -----                    |
| 5515  | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|       | 1,2-Dichloroethane                                            | < 1.0                  | ug/l  | 1.0                      |
|       | Benzene                                                       | < 1.0                  | ug/l  | 1.0                      |
|       | Toluene                                                       | < 1.0                  | ug/l  | 1.0                      |
|       | Ethylbenzene                                                  | < 1.0                  | ug/l  | 1.0                      |
|       | m,p-Xylene                                                    | < 1.0                  | ug/l  | 1.0                      |
|       | o-Xylene                                                      | < 1.0                  | ug/l  | 1.0                      |
| 6159  | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

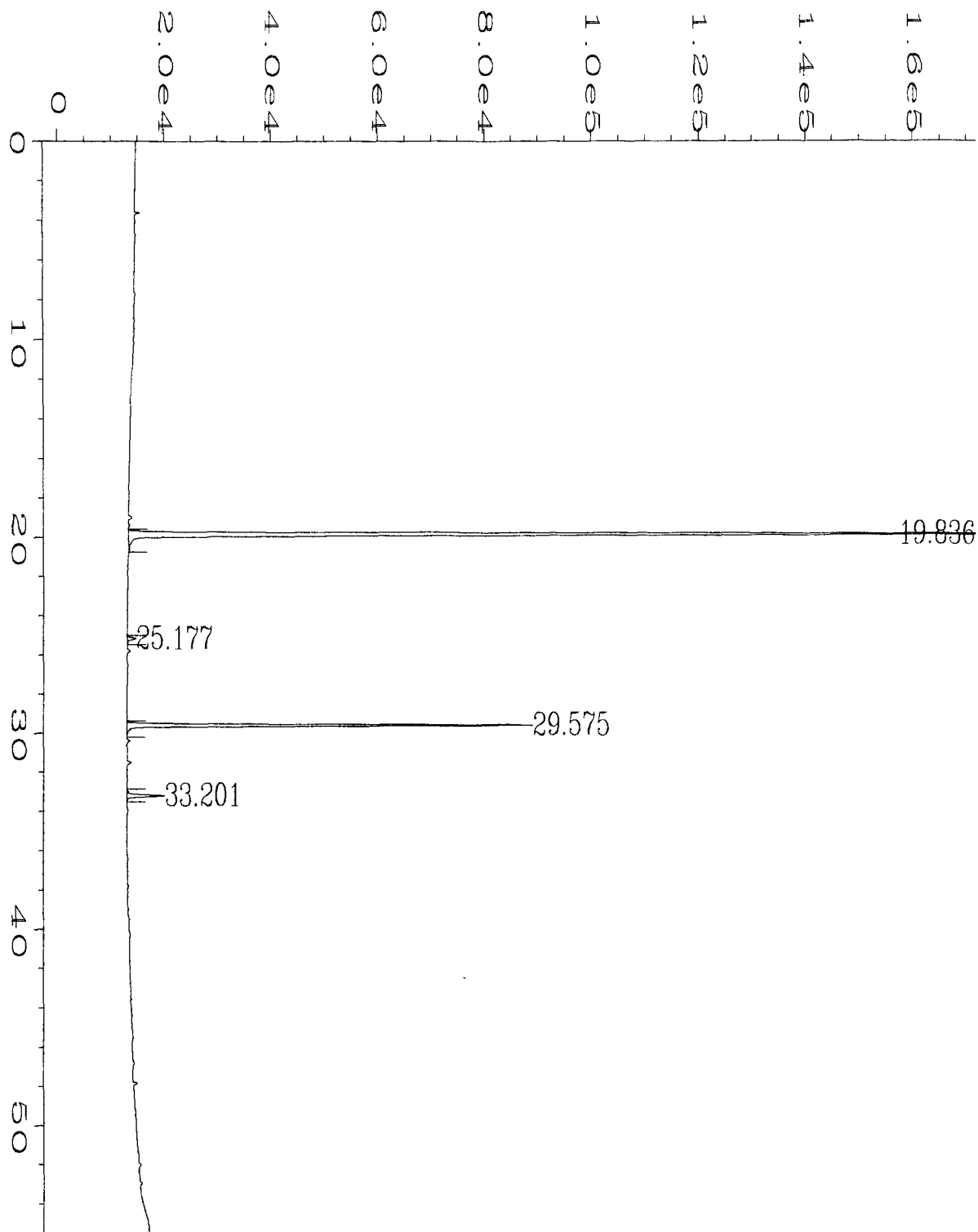
Respectfully Submitted,  
 Reviewed and Approved by:

*Glenn A. Sorensen*  
 Glenn A. Sorensen  
 Project Manager

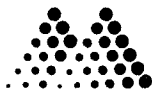




|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\092F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 92          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19466 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 01 Jun 94 04:21 PM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | : 08 Jun 94 09:00 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\092R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 92          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19466 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 01 Jun 94 04:21 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | : 08 Jun 94 07:14 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: MW-21  
 Matrix: Waste Water

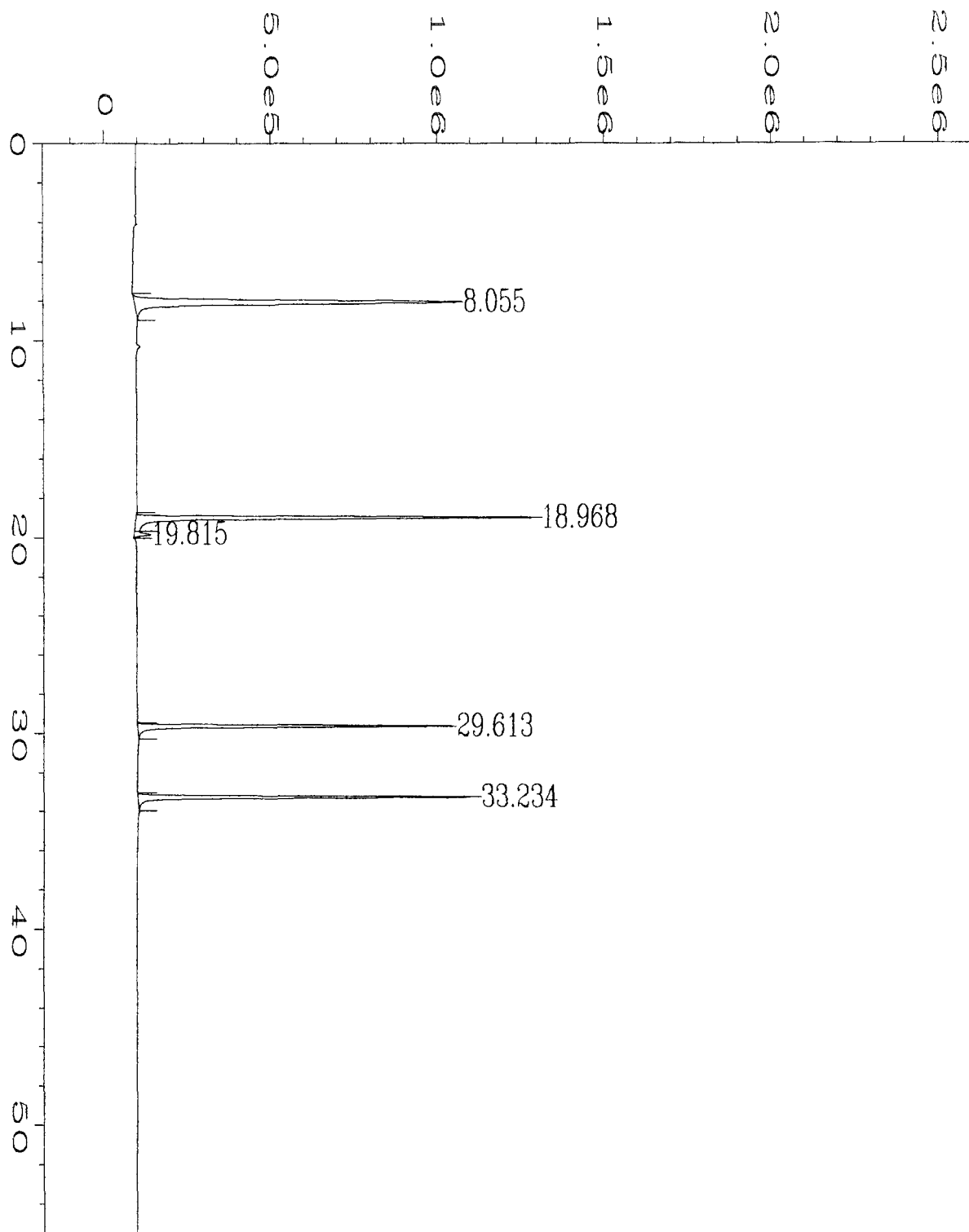
MSAI Sample: 19467  
 MSAI Group: 4781  
 Date Reported: 06/09/94  
 Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/25/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 8.3                    | ug/l  | 1.0                      |
|      | Benzene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Toluene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | < 1.0                  | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | < 1.0                  | ug/l  | 1.0                      |
|      | o-Xylene                                                      | < 1.0                  | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

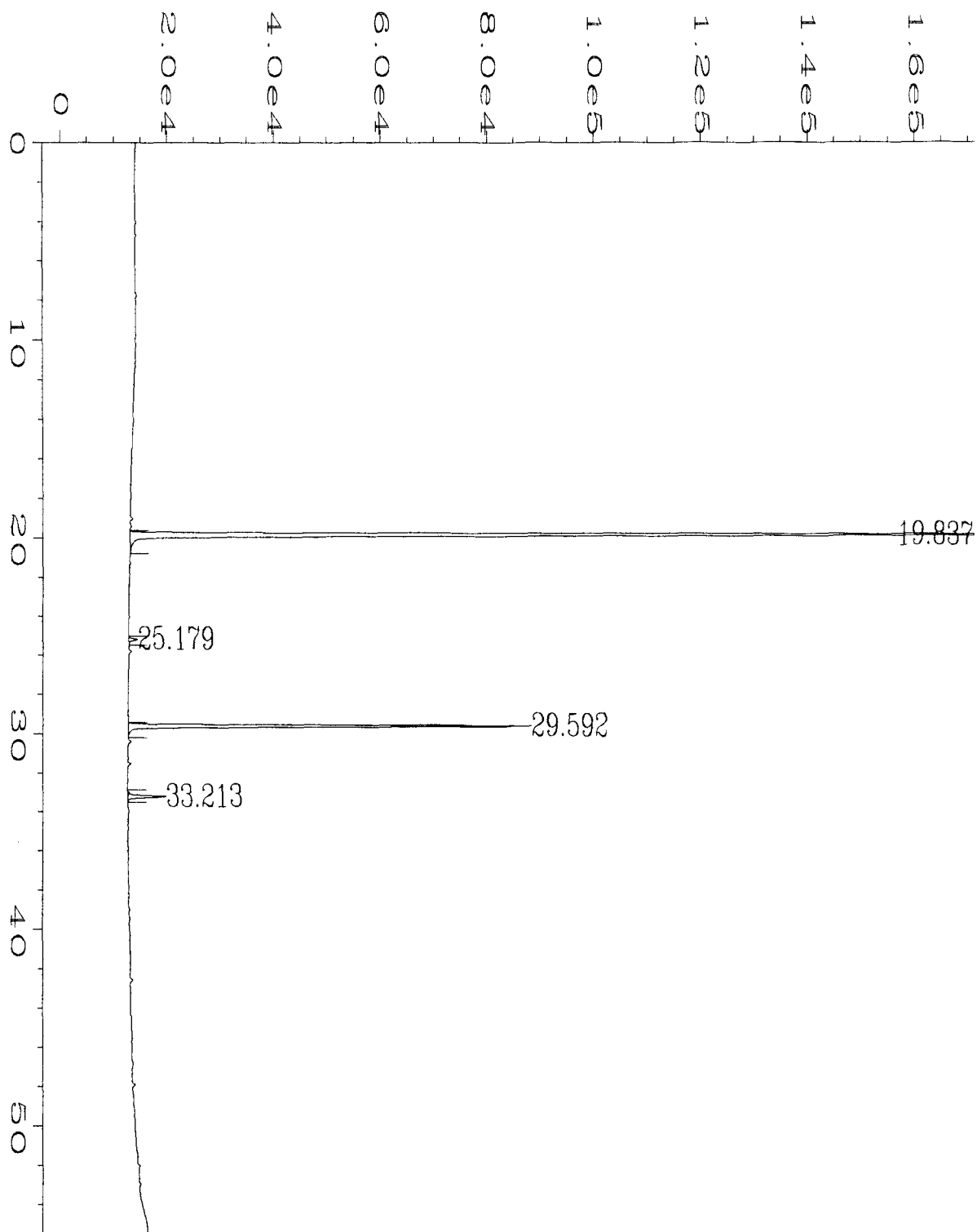
Respectfully Submitted,  
 Reviewed and Approved by:

  
 Glenn A. Sorensen  
 Project Manager

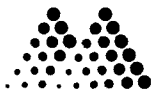




|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\093F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 93          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19467 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 05:25 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 09:00 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\093R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 93          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19467 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 01 Jun 94 05:25 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | : 08 Jun 94 07:15 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



# Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
175 West 200 South  
Suite # 2006  
Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
Project: Maverik - Kirtland NM

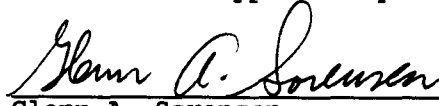
Sample ID: MW-22  
Matrix: Waste Water

MSAI Sample: 19468  
MSAI Group: 4781  
Date Reported: 06/09/94

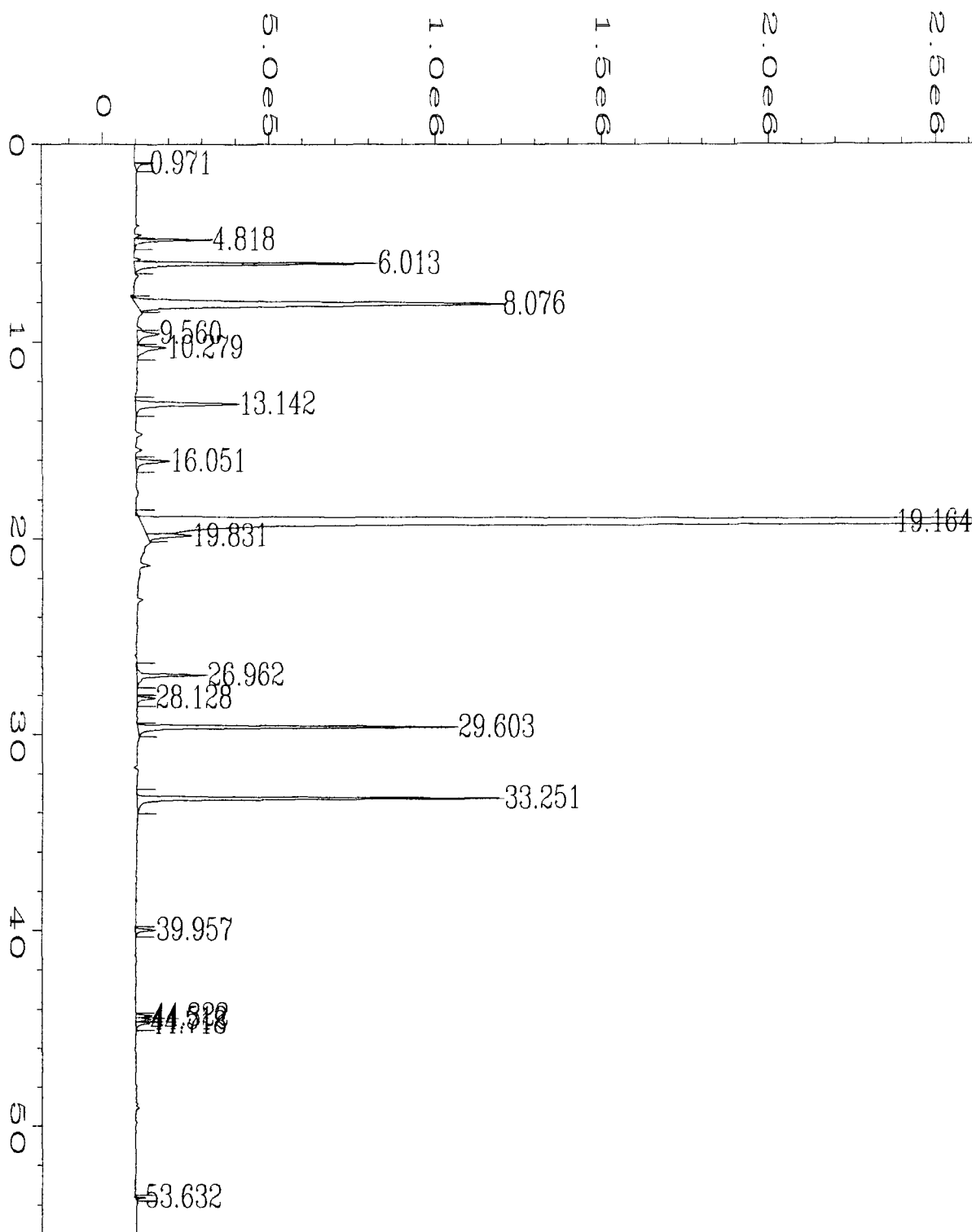
Discard Date: 07/09/94  
Date Submitted: 05/27/94  
Date Sampled: 05/25/94  
Collected by: DA  
Purchase Order: 9131.01  
Project No.:

| Test  | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|-------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| ----- | -----                                                         | -----                  | ----- | -----                    |
| 5515  | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|       | 1,2-Dichloroethane                                            | 379                    | ug/l  | 200                      |
|       | Benzene                                                       | 9,340                  | ug/l  | 1,000                    |
|       | Toluene                                                       | 2,250                  | ug/l  | 200                      |
|       | Ethylbenzene                                                  | 845                    | ug/l  | 200                      |
|       | m,p-Xylene                                                    | 2,750                  | ug/l  | 200                      |
|       | o-Xylene                                                      | 975                    | ug/l  | 200                      |
| 6159  | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

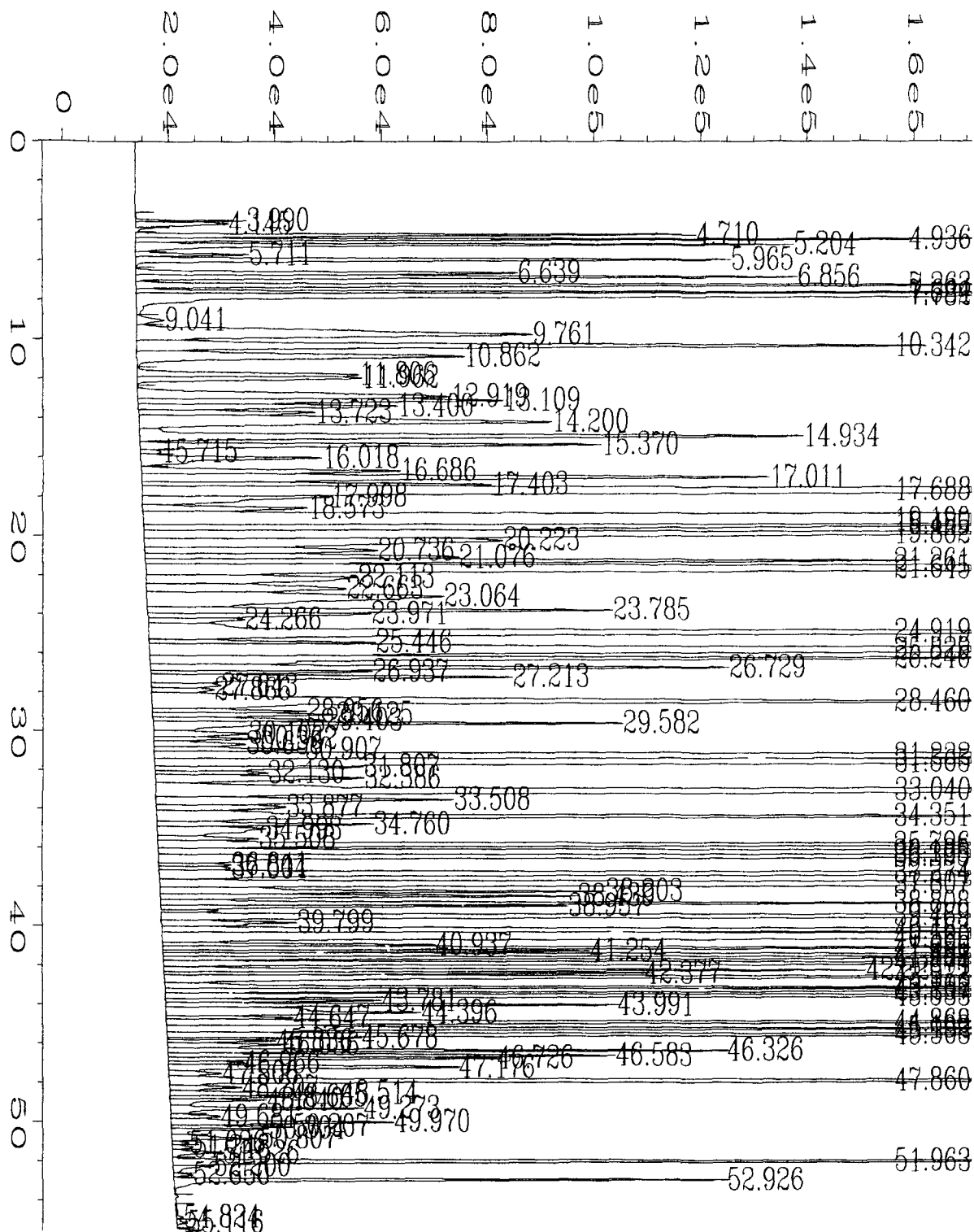
Respectfully Submitted,  
Reviewed and Approved by:

  
Glenn A. Sorensen  
Project Manager

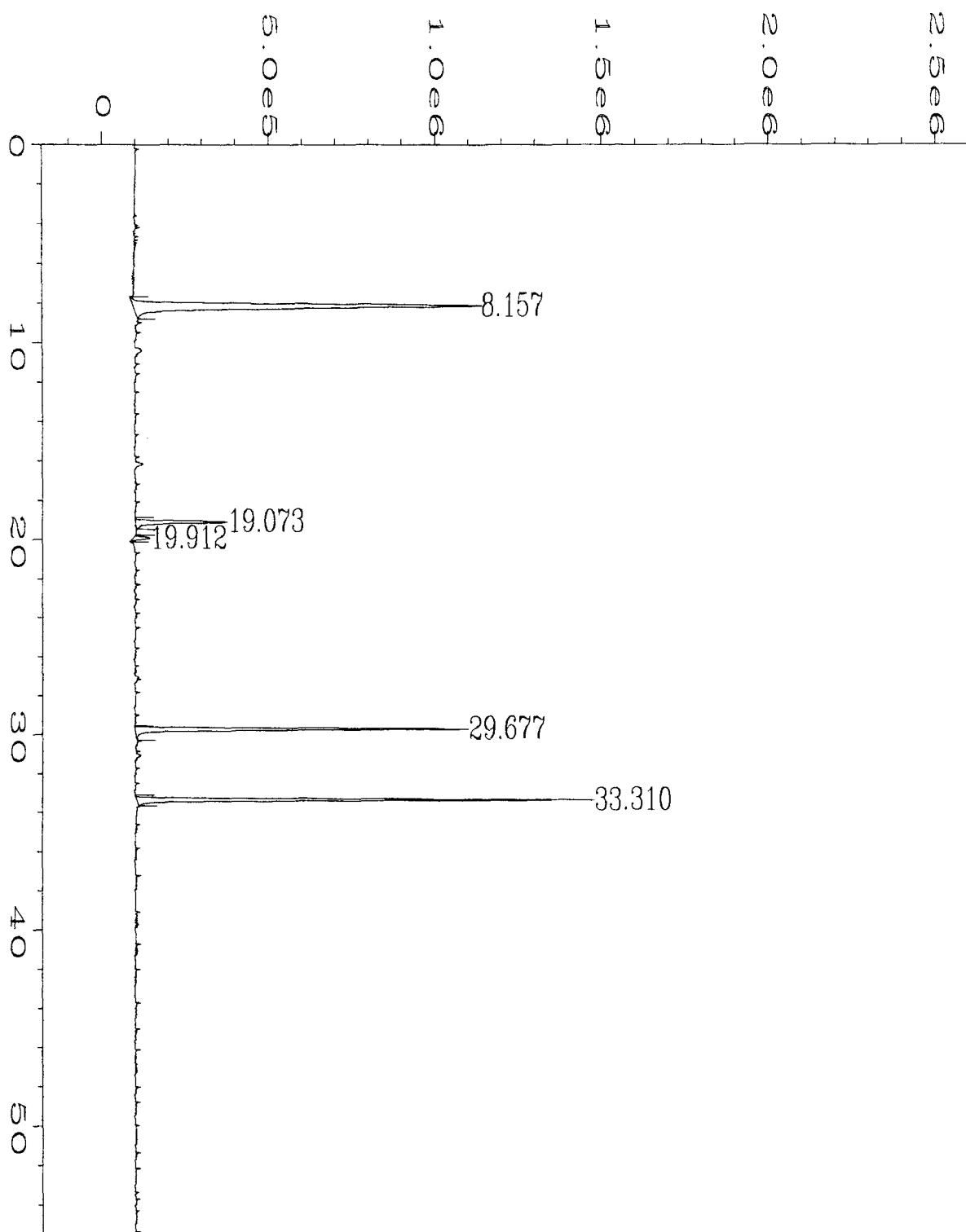




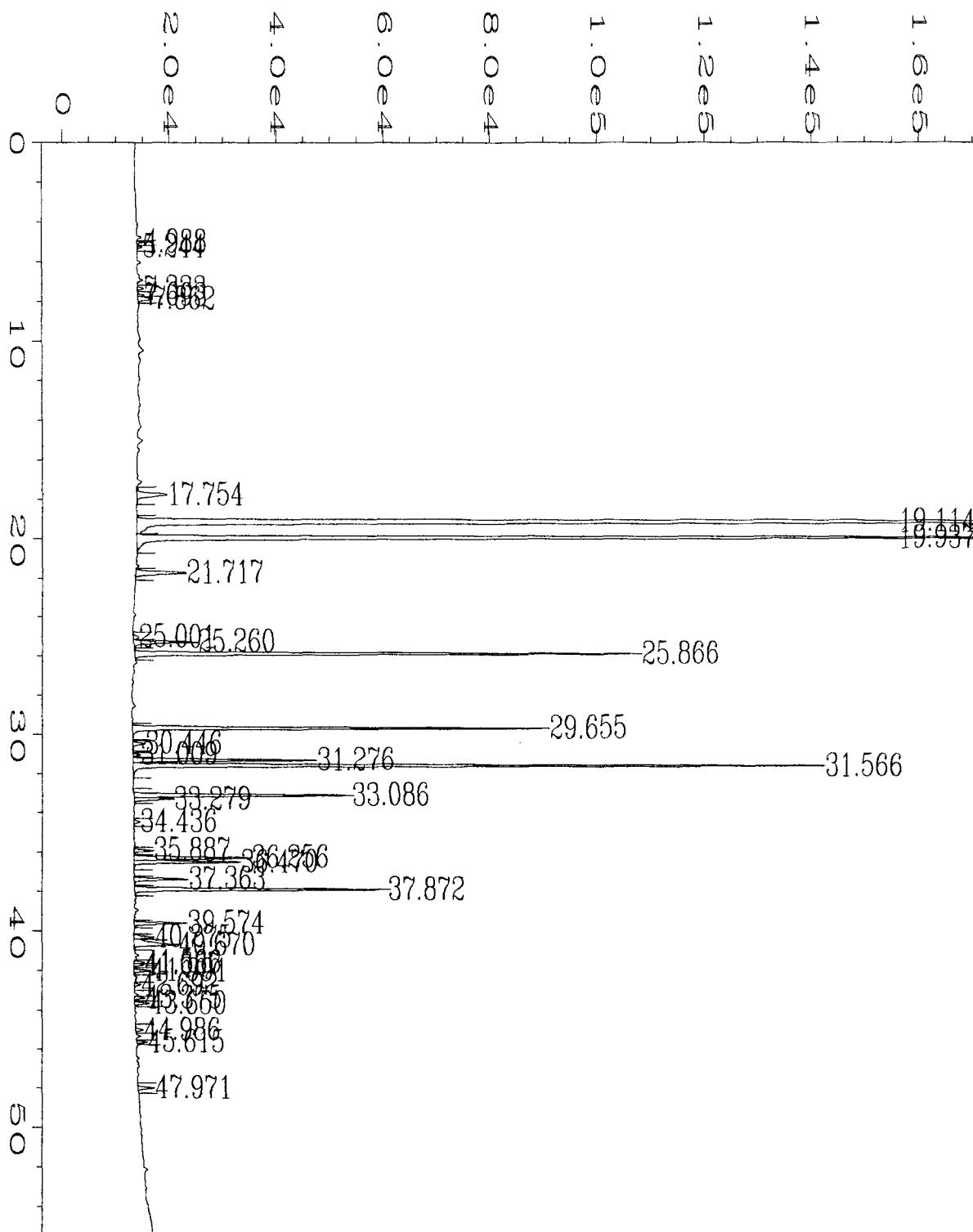
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|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\094F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 94          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19468 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 01 Jun 94 06:29 PM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 09:01 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



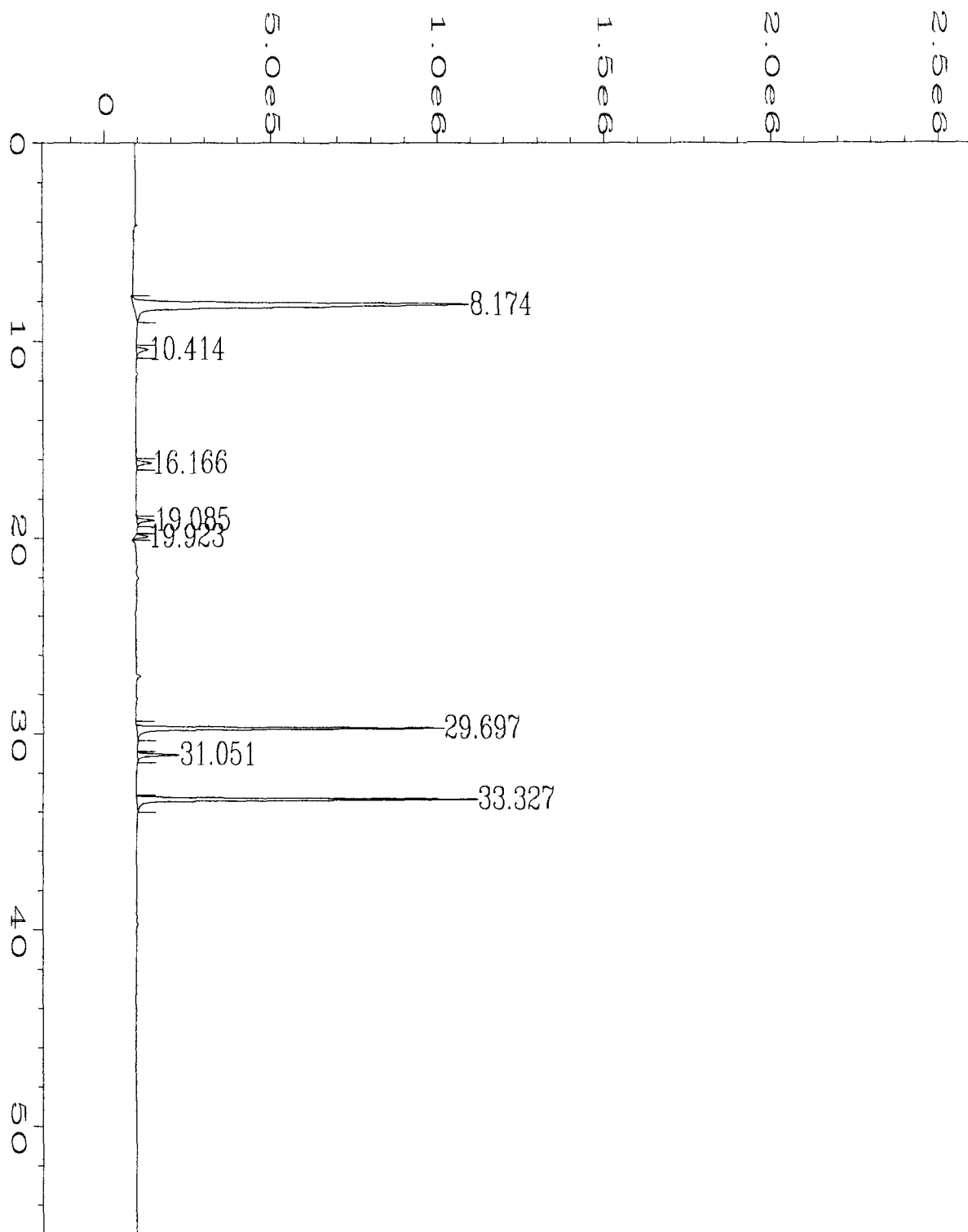
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|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\094R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 94          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19468 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 06:29 PM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 07:16 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



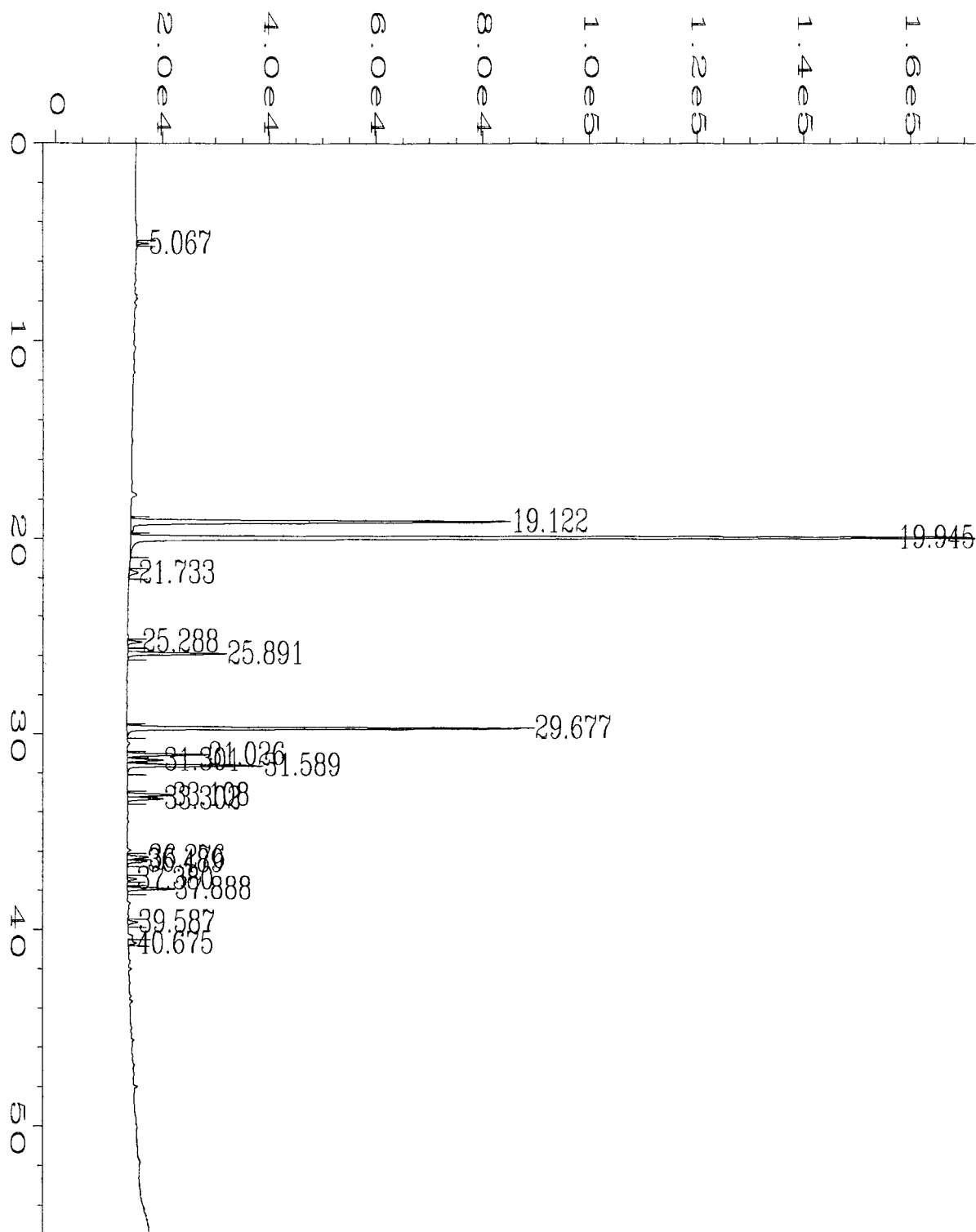
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|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\024F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 24          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19468 DF200                          | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 02 Jun 94 11:37 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 08:54 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



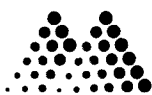
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|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\024R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 24          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19468 DF200                          | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 02 Jun 94 11:37 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | : 08 Jun 94 08:46 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\037F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 37          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19468 DF1000                         | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 04 Jun 94 10:15 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 08:55 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\037R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 37          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19468 DF1000                         | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 04 Jun 94 10:15 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 08:46 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: MW-25  
 Matrix: Waste Water

MSAI Sample: 19469  
 MSAI Group: 4781  
 Date Reported: 06/09/94

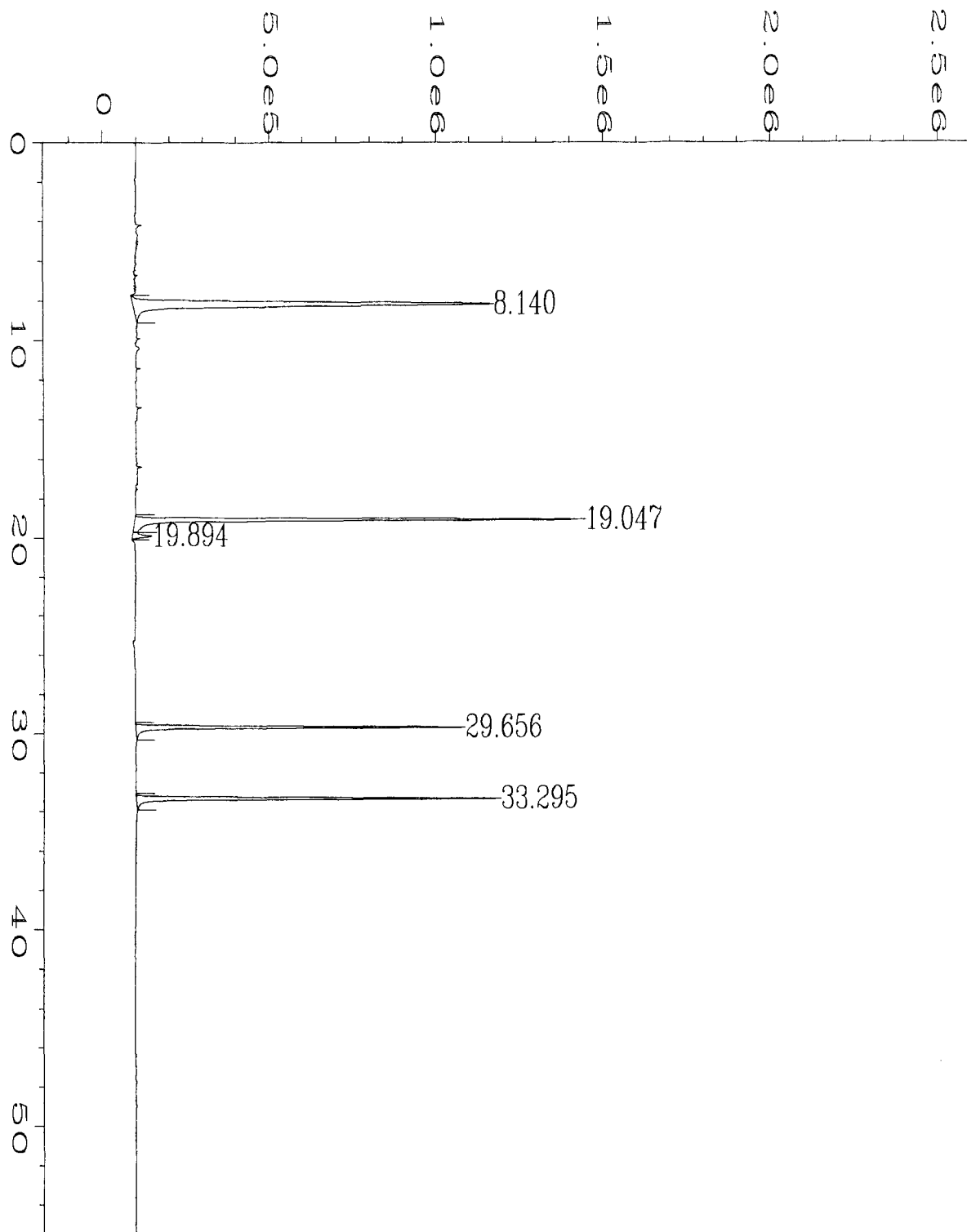
Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/25/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 9.3                    | ug/l  | 1.0                      |
|      | Benzene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Toluene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | < 1.0                  | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | < 1.0                  | ug/l  | 1.0                      |
|      | o-Xylene                                                      | < 1.0                  | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

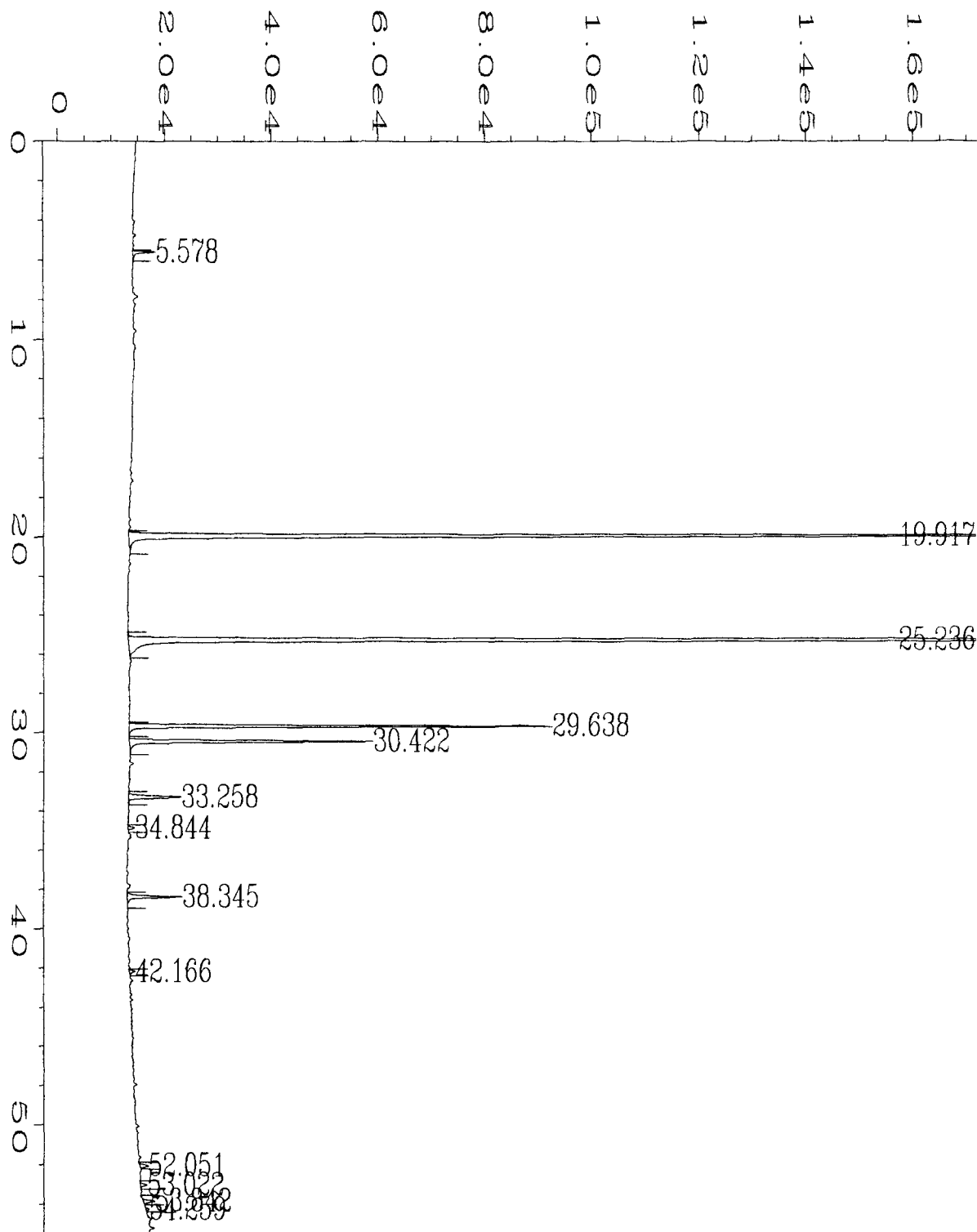
Respectfully Submitted,  
 Reviewed and Approved by:

*Glenn A. Sorensen*  
 Glenn A. Sorensen  
 Project Manager

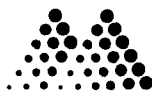




|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\021F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 21          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19469 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 02 Jun 94 08:23 PM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | : 08 Jun 94 08:56 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\01JUNVOL\021R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 21          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19469 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 02 Jun 94 08:23 PM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 08:45 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: Equipment Blank  
 Matrix: Waste Water

MSAI Sample: 19478  
 MSAI Group: 4781  
 Date Reported: 06/09/94

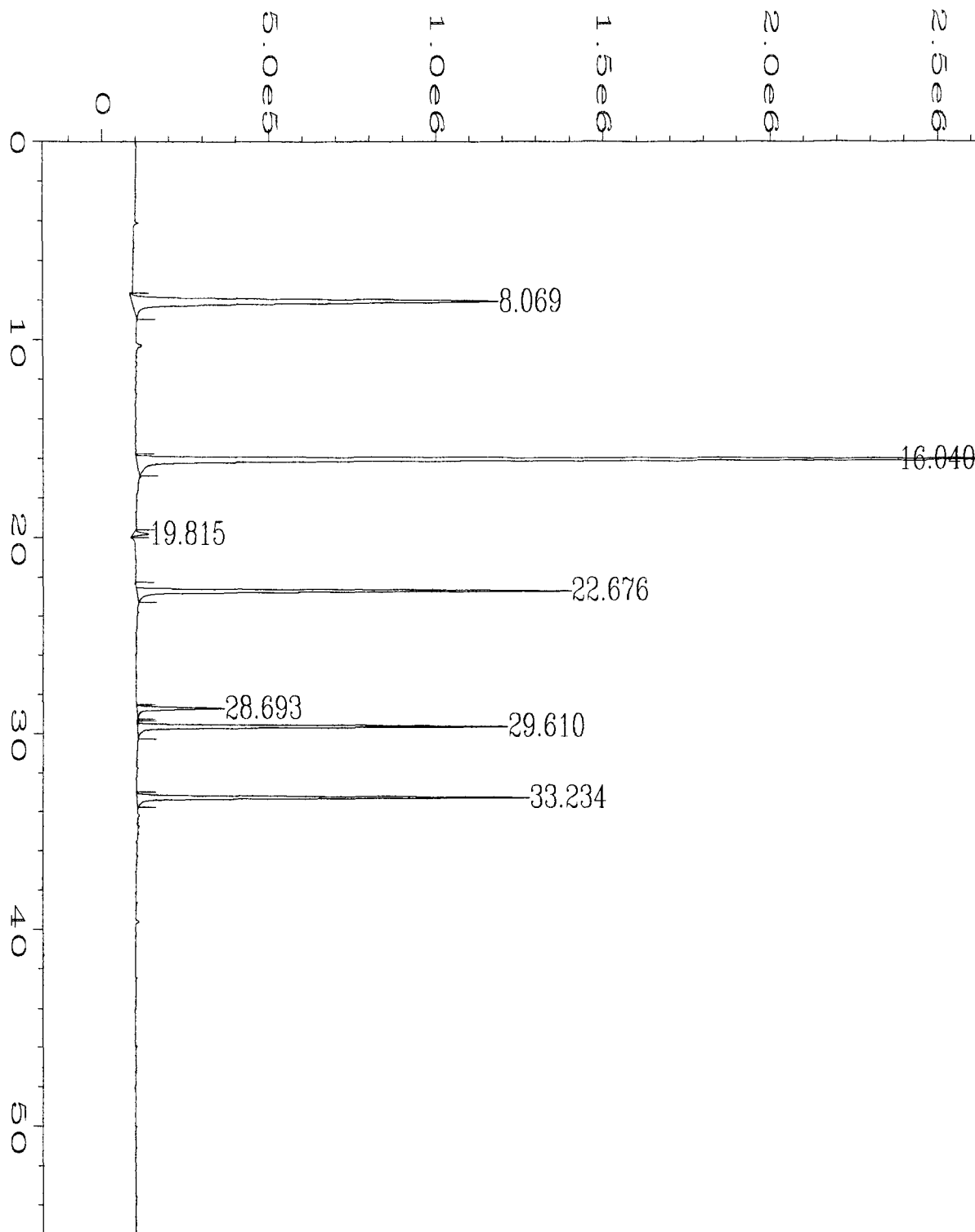
Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/25/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | < 1.0                  | ug/l  | 1.0                      |
|      | Benzene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Toluene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | < 1.0                  | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | < 1.0                  | ug/l  | 1.0                      |
|      | o-Xylene                                                      | < 1.0                  | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

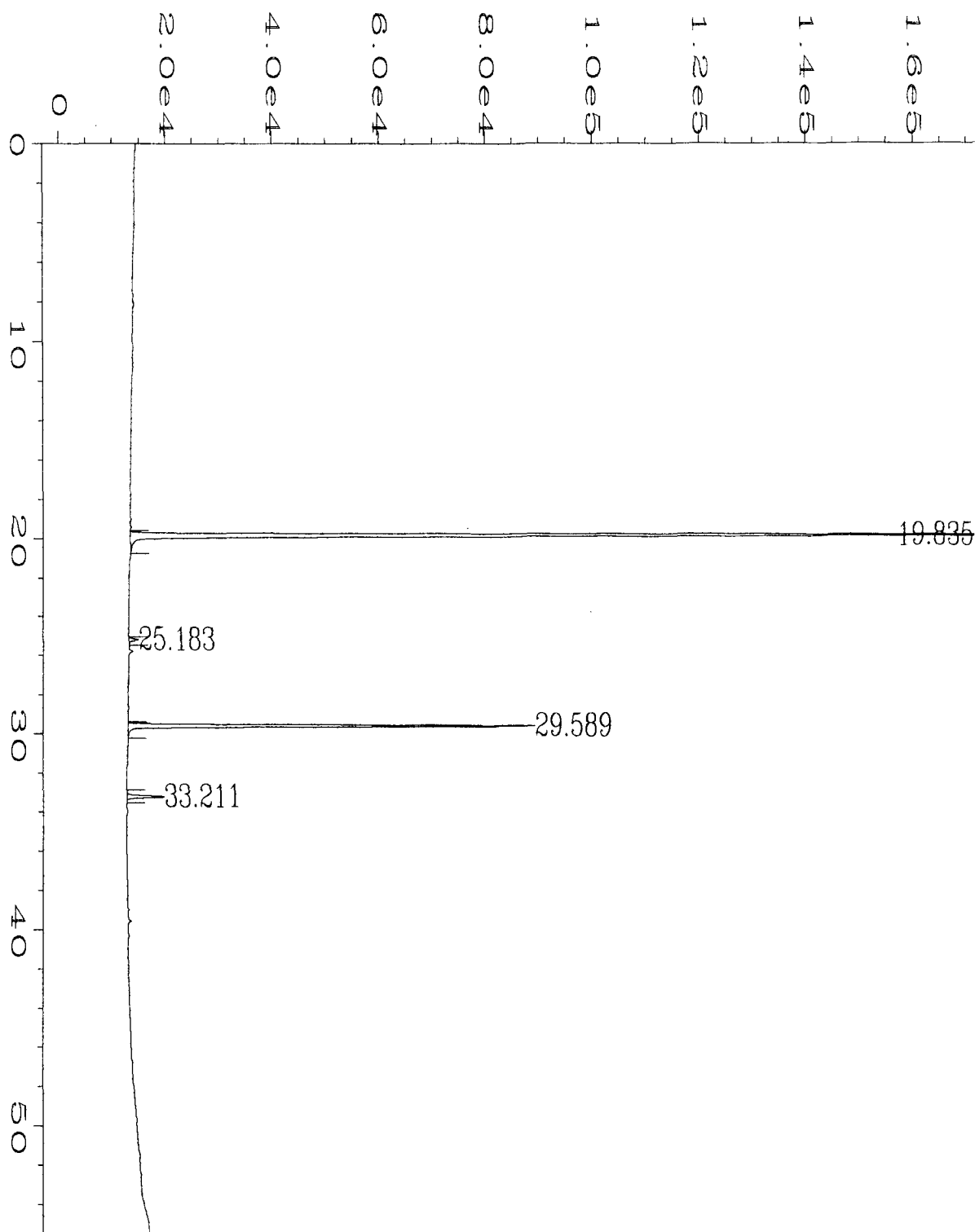
Respectfully Submitted,  
 Reviewed and Approved by:

*Glenn A. Sorensen*  
 Glenn A. Sorensen  
 Project Manager

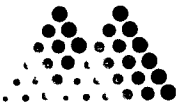




|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\082F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 82          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19478 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 05:39 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 09:01 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



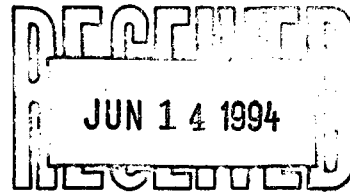
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|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\082R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 82          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19478 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 01 Jun 94 05:39 AM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | : 08 Jun 94 07:17 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



## Mountain States Analytical

June 9, 1994

Mr. Paul Weissenborn  
Geowest Golden, Inc. Salt Lake Office  
175 West 200 South  
Suite # 2006  
Salt Lake City, Ut 84101



Reference:

Project: Maverik - Kirtland NM  
MSAI Group: 4783

Dear Mr. Weissenborn:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

PZ-2

PZ-3

Trip Blank #1

All holding times were met for the tests performed on these samples except:

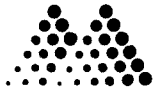
| Sample - (Sample Date)          | Expiration Date | Date Analyzed | Days Past Holding Time |
|---------------------------------|-----------------|---------------|------------------------|
| Trip Blank #1 - (05/16/94)      |                 |               |                        |
| Purgeable Aromatics/Halocarbons | 05/23/94        | 06/02/94      | 10                     |

Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

Glenn A. Sorensen  
Project Manager



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: Trip Blank #1  
 Matrix: Waste Water

MSAI Sample: 19482  
 MSAI Group: 4783  
 Date Reported: 06/09/94

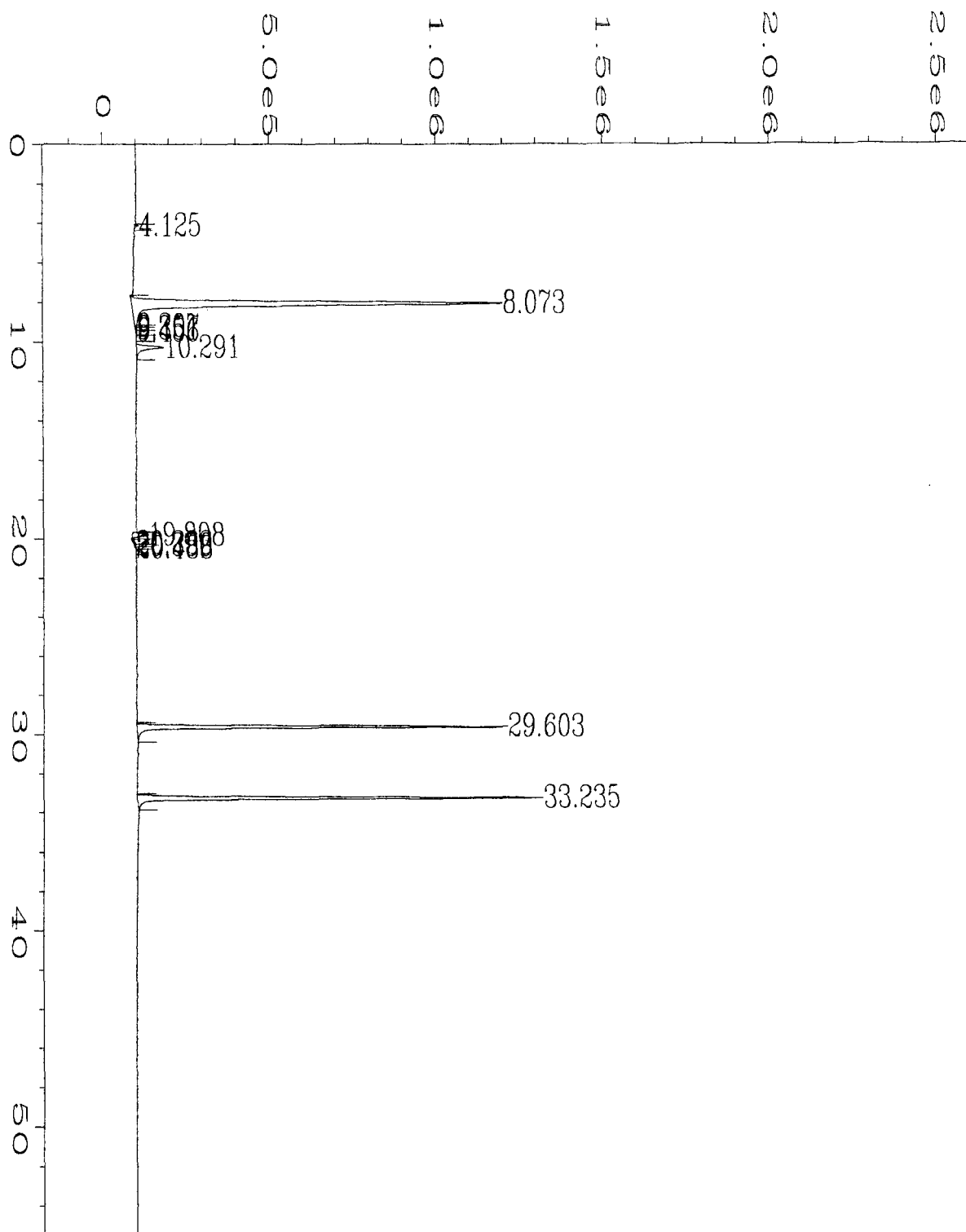
Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/16/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | < 1.0                  | ug/l  | 1.0                      |
|      | Benzene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Toluene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | < 1.0                  | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | < 1.0                  | ug/l  | 1.0                      |
|      | o-Xylene                                                      | < 1.0                  | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

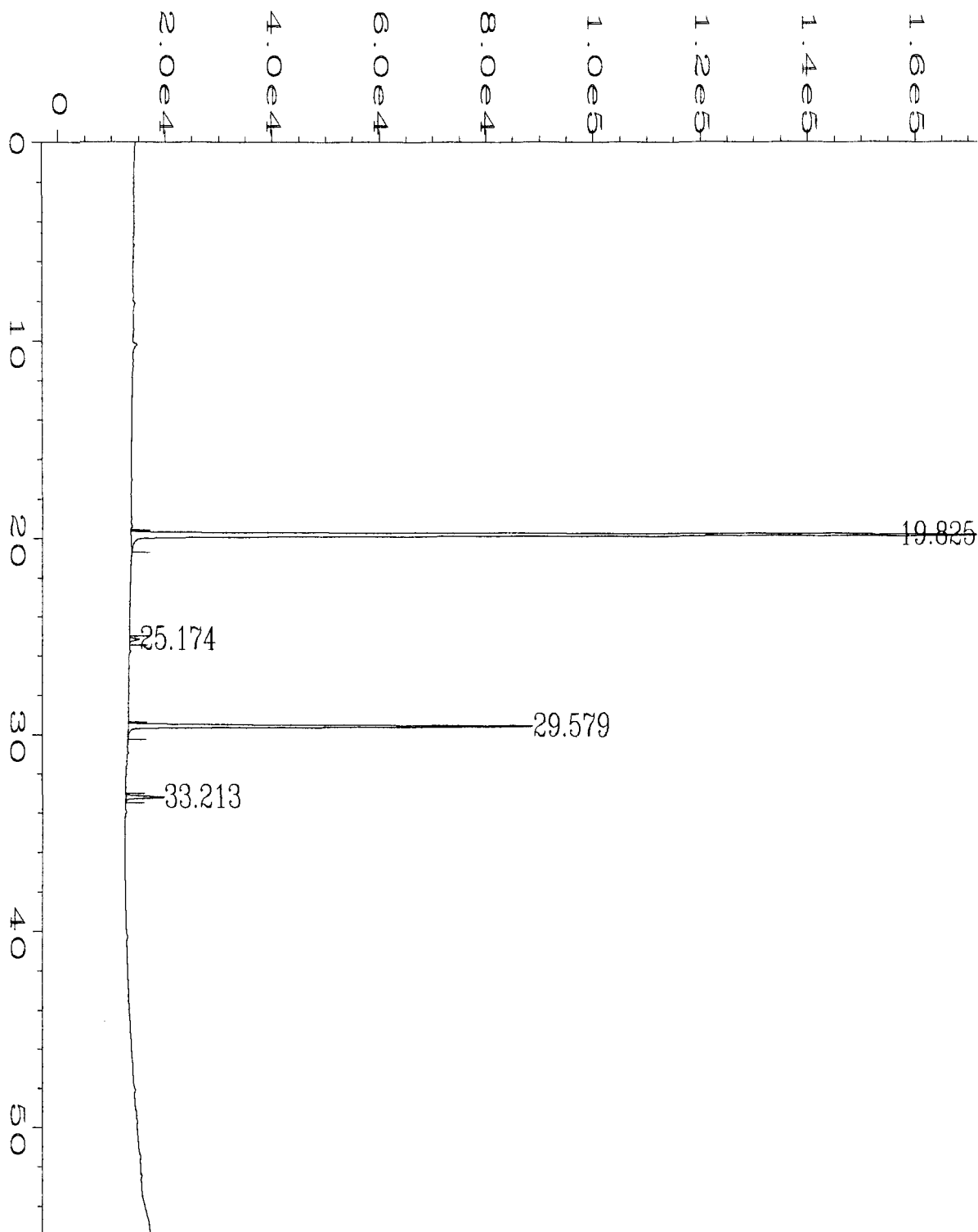
Respectfully Submitted,  
 Reviewed and Approved by:

*Glenn A. Sorensen*  
 Glenn A. Sorensen  
 Project Manager





|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\081F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 81          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19482 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 04:34 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 07:08 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 Jun 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\081R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 81          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19482 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 01 Jun 94 04:34 AM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | : 08 Jun 94 07:09 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |

Invoice No. 203651  
 Invoice Date 06/10/94  
 Page: 1 of 1



## Mountain States Analytical

The Quality Solution

Mr. Paul Weissenborn  
 Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Salt Lake City, Ut 84101  
 Suite # 2006

Project Name: Maverik - Kirtland NM  
 Project Number:  
 Purchase Order: 9131.01  
 Samples Received: 05/27/94  
 Date Reported: 06/09/94  
 Turnaround Time: 13 days  
 Reported To: Mr. Paul Weissenborn

MSAI Group Number: 4783

### Analyses Performed See Analysis Reference Table Below

| Sample I.D.         | Date<br>Sampled | Analyses  | List<br>Price | Rush<br>Charges | Discount | Extended<br>Price |
|---------------------|-----------------|-----------|---------------|-----------------|----------|-------------------|
| 19480 PZ-2          | 05/25/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 19481 PZ-3          | 05/25/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 19482 Trip Blank #1 | 05/16/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| Total Price \$      |                 |           |               |                 |          | 336.60            |

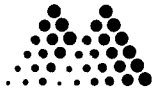
### Analysis Reference Table

| Analysis       |                                 |        |                    | # of<br>Tests | Unit          |                 |                    |              |                   |
|----------------|---------------------------------|--------|--------------------|---------------|---------------|-----------------|--------------------|--------------|-------------------|
| No.            | Analysis Name                   | Matrix | Method             |               | List<br>Price | Rush<br>Charges | Discount<br>Amount | Net<br>Price | Extended<br>Price |
| 5515           | Purgeable Aromatics/Halocarbons | WW     | 600 SERIES 601/602 | 3             | 125.00        |                 | 18.75              | 106.25       | 318.75            |
| 6159           | Chromatograms/Etc. GC           |        | IN HOUSE MSAI      | 3             | 7.00          |                 | 1.05               | 5.95         | 17.85             |
| Total Price \$ |                                 |        |                    |               |               |                 |                    |              | 336.60            |

### Pricing Summary

Extended List Price \$ 396.00  
 Total Rush Charges \$ 0.00  
 Total Discount \$( 59.40)

TOTAL AMOUNT DUE \$ 336.60



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: PZ-2  
 Matrix: Waste Water

MSAI Sample: 19480  
 MSAI Group: 4783  
 Date Reported: 06/09/94

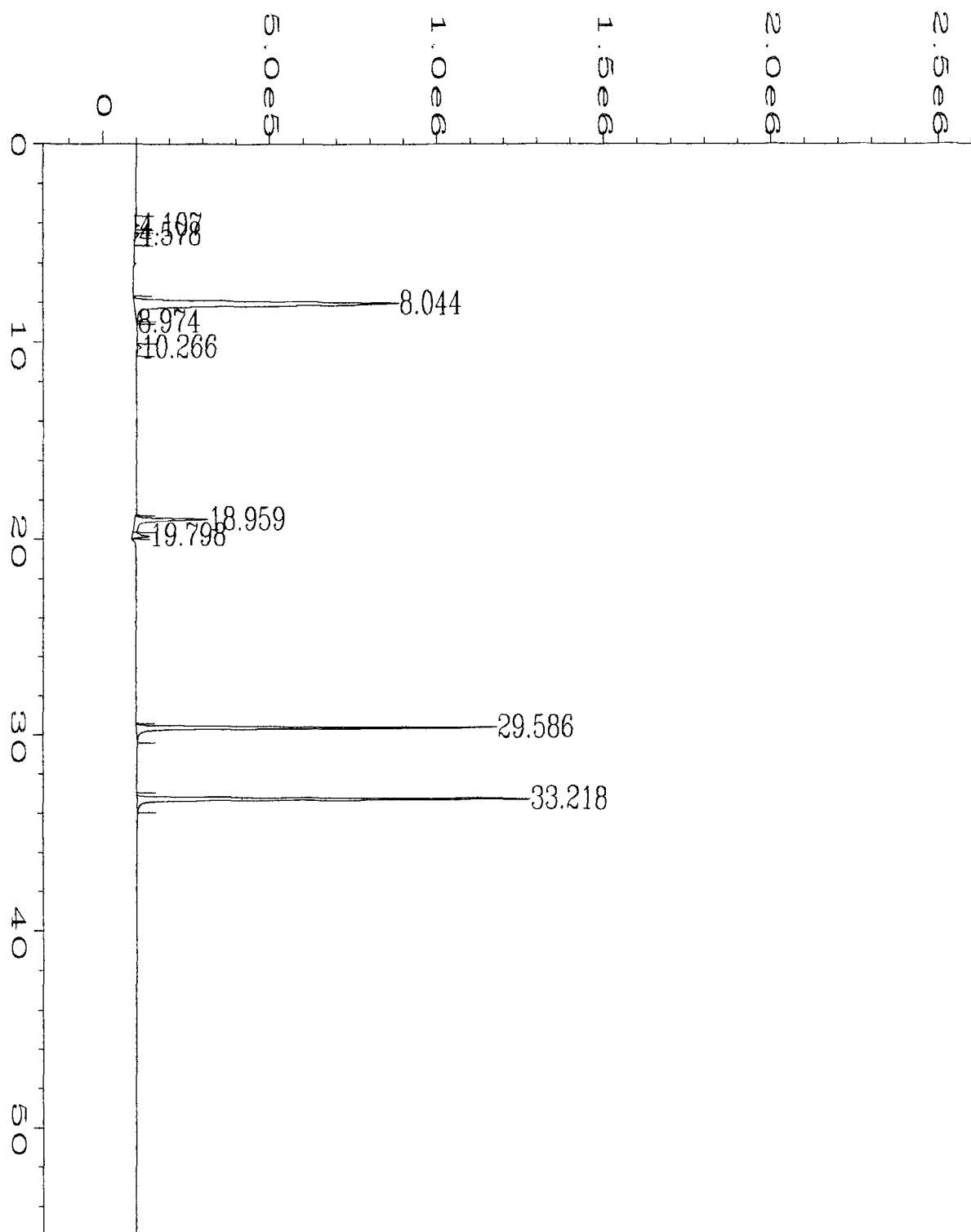
Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/25/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                        | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------|------------------------|-------|--------------------------|
| ---- | -----                           | -----                  | ----- | -----                    |
| 5515 | Purgeable Aromatics/Halocarbons |                        |       |                          |
|      | Method: 600 SERIES 601/602      |                        |       |                          |
|      | 1,2-Dichloroethane              | 1.3                    | ug/l  | 1.0                      |
|      | Benzene                         | < 1.0                  | ug/l  | 1.0                      |
|      | Toluene                         | < 1.0                  | ug/l  | 1.0                      |
|      | Ethylbenzene                    | < 1.0                  | ug/l  | 1.0                      |
|      | m,p-Xylene                      | < 1.0                  | ug/l  | 1.0                      |
|      | o-Xylene                        | < 1.0                  | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC           | See Attached           |       |                          |
|      | Method: IN HOUSE MSAI           |                        |       |                          |

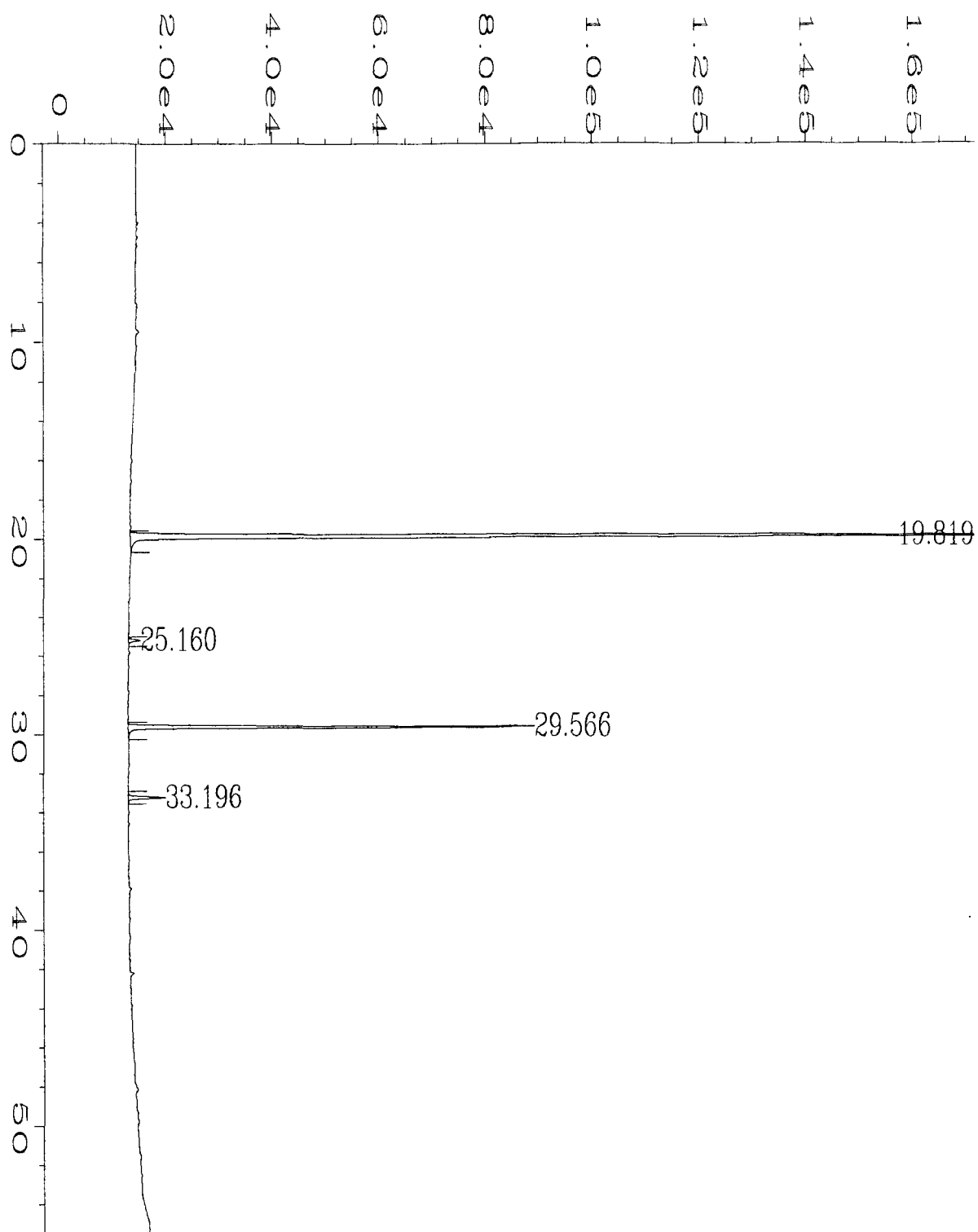
Respectfully Submitted,  
 Reviewed and Approved by:

*Glenn A. Sorensen*  
 Glenn A. Sorensen  
 Project Manager

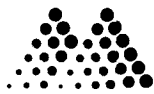




|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\080F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 80          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 19480 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 01 Jun 94 03:29 AM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | : 08 Jun 94 07:07 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 08 Jun 94 06:07 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\080R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 80          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19480 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 03:29 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 07:10 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Maverik - Kirtland NM

Sample ID: PZ-3  
 Matrix: Waste Water

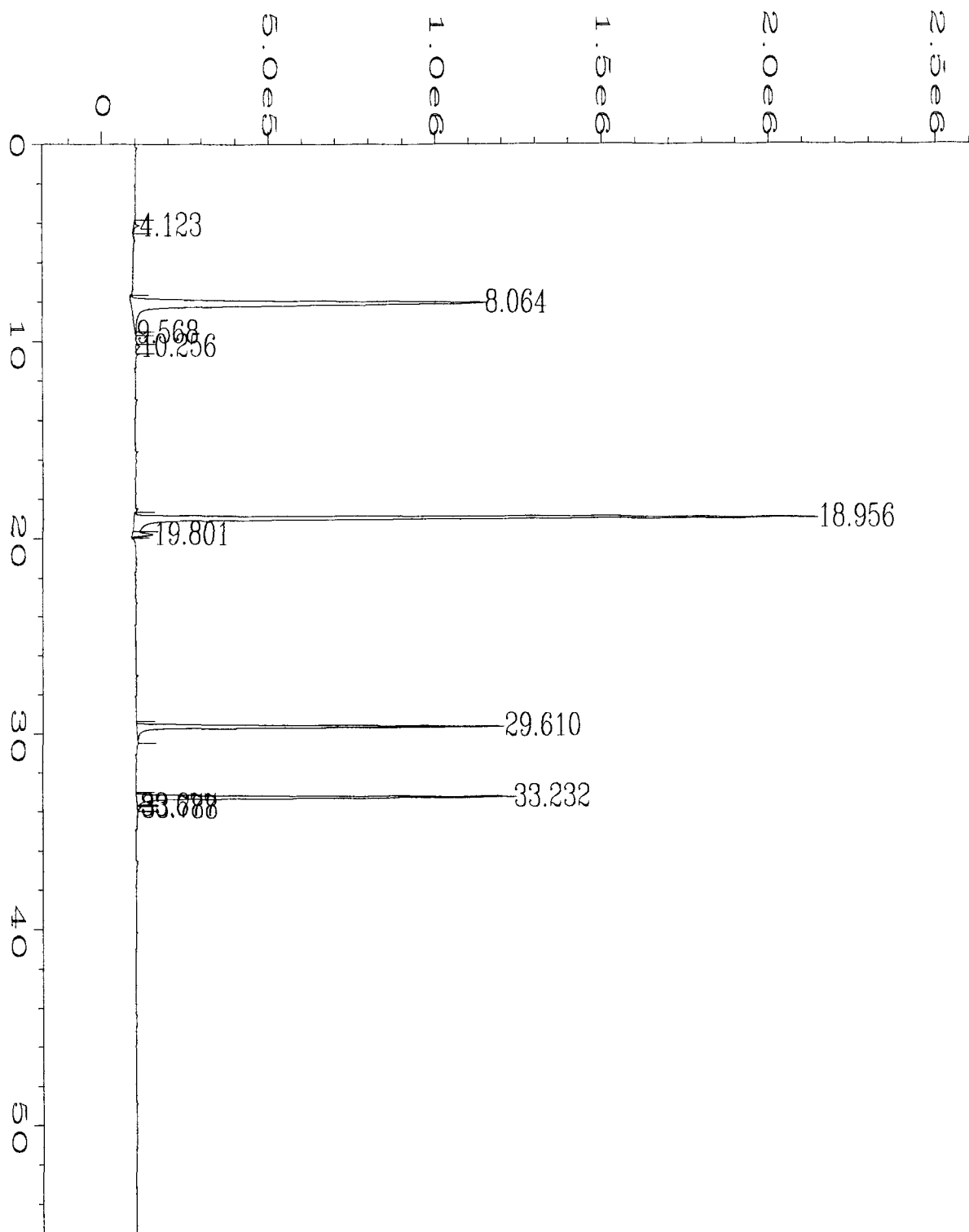
MSAI Sample: 19481  
 MSAI Group: 4783  
 Date Reported: 06/09/94  
 Discard Date: 07/09/94  
 Date Submitted: 05/27/94  
 Date Sampled: 05/25/94  
 Collected by: DA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 12.1                   | ug/l  | 1.0                      |
|      | Benzene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Toluene                                                       | < 1.0                  | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | < 1.0                  | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | < 1.0                  | ug/l  | 1.0                      |
|      | o-Xylene                                                      | < 1.0                  | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

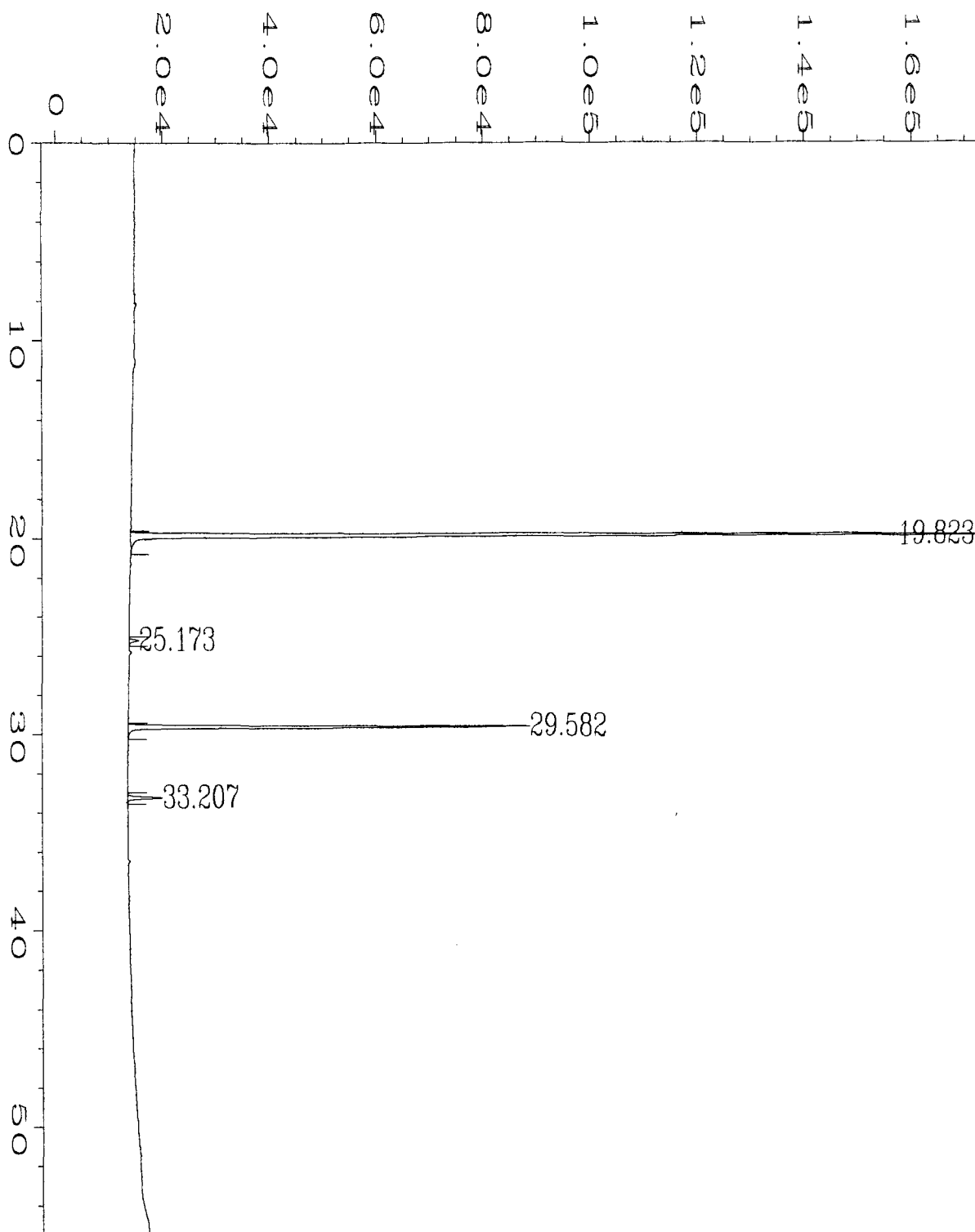
Respectfully Submitted,  
 Reviewed and Approved by:

*Glenn A. Sorensen*  
 Glenn A. Sorensen  
 Project Manager





|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\083F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 83          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19481 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 06:43 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 08 Jun 94 07:07 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 Jun 94 06:07 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\23MAYVOL\083R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 83          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 19481 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 01 Jun 94 06:43 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 08 Jun 94 07:09 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 08 JUN 94 05:19 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |



**Nº 2786**

# Sample Chain of Custody

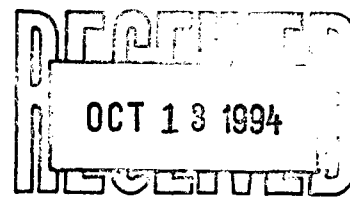
[illegible]



## Mountain States Analytical

October 11, 1994

Mr. Paul Weissenborn  
Geowest Golden, Inc. Salt Lake Office  
175 West 200 South  
Suite # 2006  
Salt Lake City, Ut 84101



Reference:

Project: Kirtland  
MSAI Group: 6177

Dear Mr. Weissenborn:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

PZ-2

PZ-3

PZ-4

All holding times were met for the tests performed on these samples.

Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

Mark W. Bostrom  
Project Manager



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
175 West 200 South  
Suite # 2006  
Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
Project: Kirtland

Sample ID: PZ-2  
Matrix: Waste Water

MSAI Sample: 25122  
MSAI Group: 6177  
Date Reported: 10/11/94

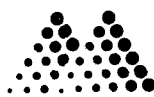
Discard Date: 11/10/94  
Date Submitted: 10/04/94  
Date Sampled: 10/03/94  
Collected by: DA  
Purchase Order: 9080.06  
Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 3.6                    | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | Complete               |       |                          |

ND - Not detected at the limit of quantitation

Respectfully Submitted,  
Reviewed and Approved by:

  
Mark W. Bostrom  
Project Manager



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland

Sample ID: PZ-3  
 Matrix: Waste Water

MSAI Sample: 25123  
 MSAI Group: 6177  
 Date Reported: 10/11/94

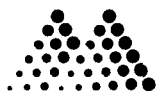
Discard Date: 11/10/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/03/94  
 Collected by: DA  
 Purchase Order: 9080.06  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 12.6                   | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | Complete               |       |                          |

ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

*Mark W. Bostrom*  
 Mark W. Bostrom  
 Project Manager



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
175 West 200 South  
Suite # 2006  
Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
Project: Kirtland

Sample ID: PZ-4  
Matrix: Waste Water

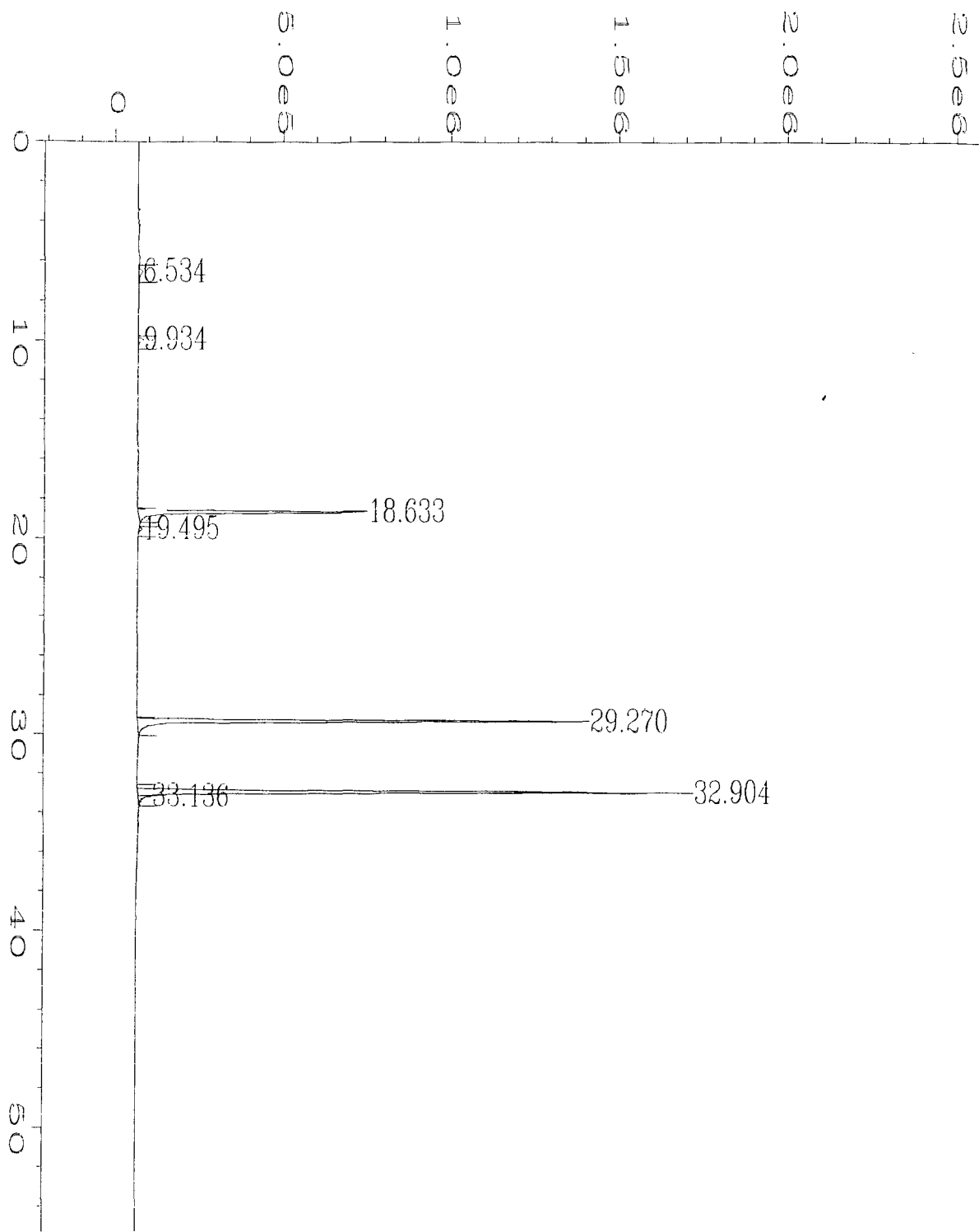
MSAI Sample: 25124  
MSAI Group: 6177  
Date Reported: 10/11/94  
  
Discard Date: 11/10/94  
Date Submitted: 10/04/94  
Date Sampled: 10/03/94  
Collected by: DA  
Purchase Order: 9080.06  
Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| ---- | -----                                                         | -----                  | ----- | -----                    |
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | ND                     | ug/l  | 1.0                      |
|      | Benzene                                                       | 8.9                    | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | 1.9                    | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | 11.8                   | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | Complete               |       |                          |

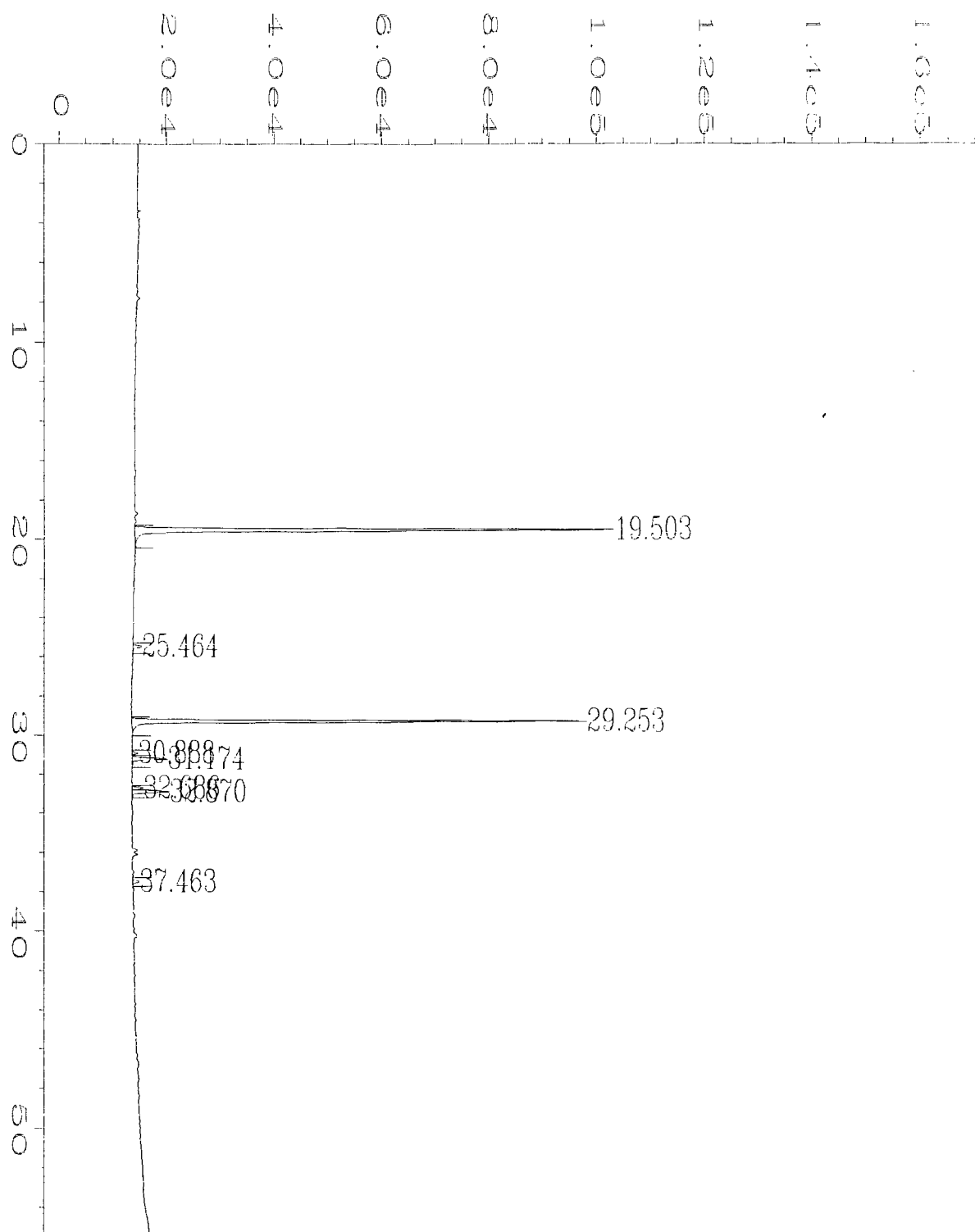
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
Reviewed and Approved by:

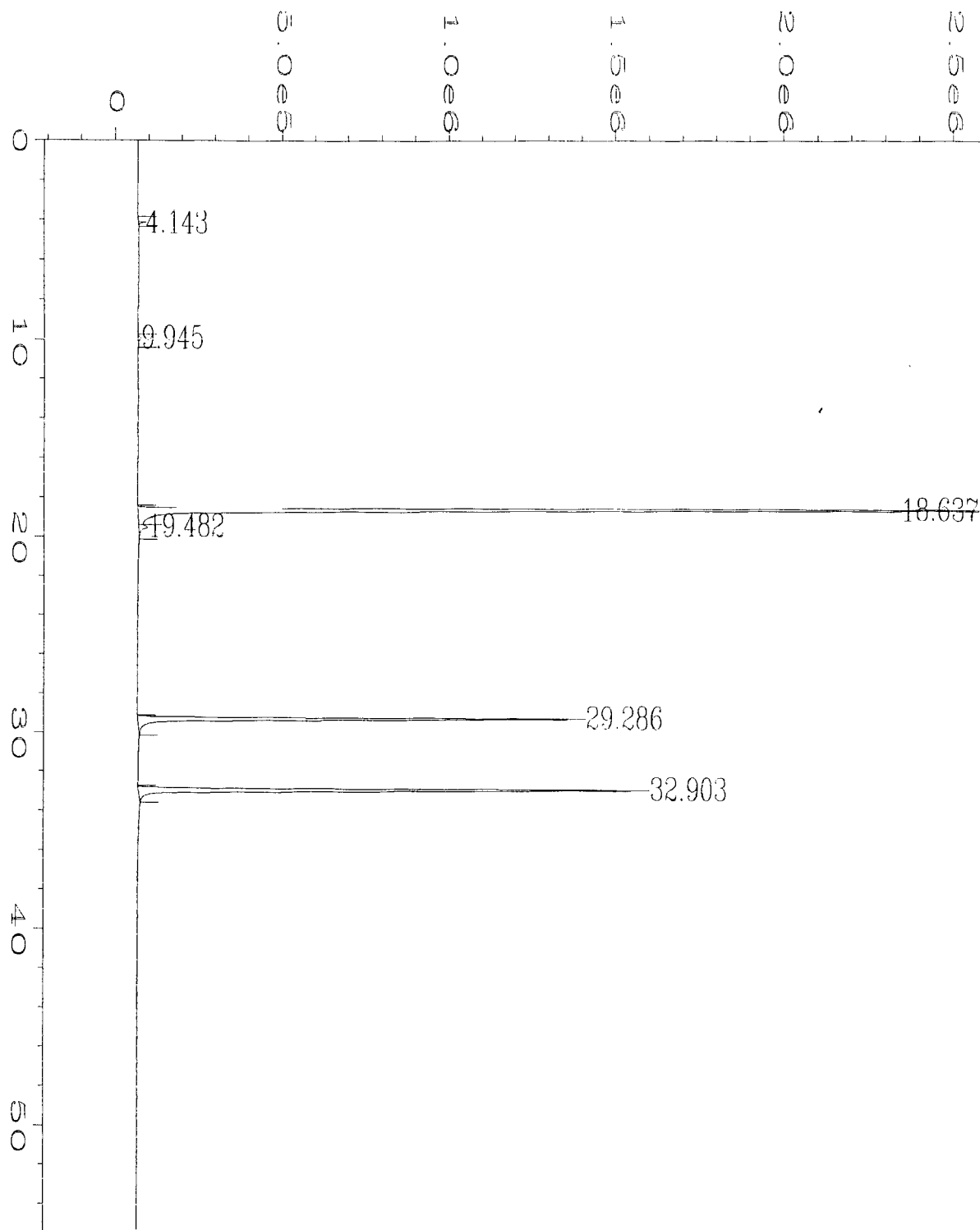
  
Mark W. Bostrom  
Project Manager



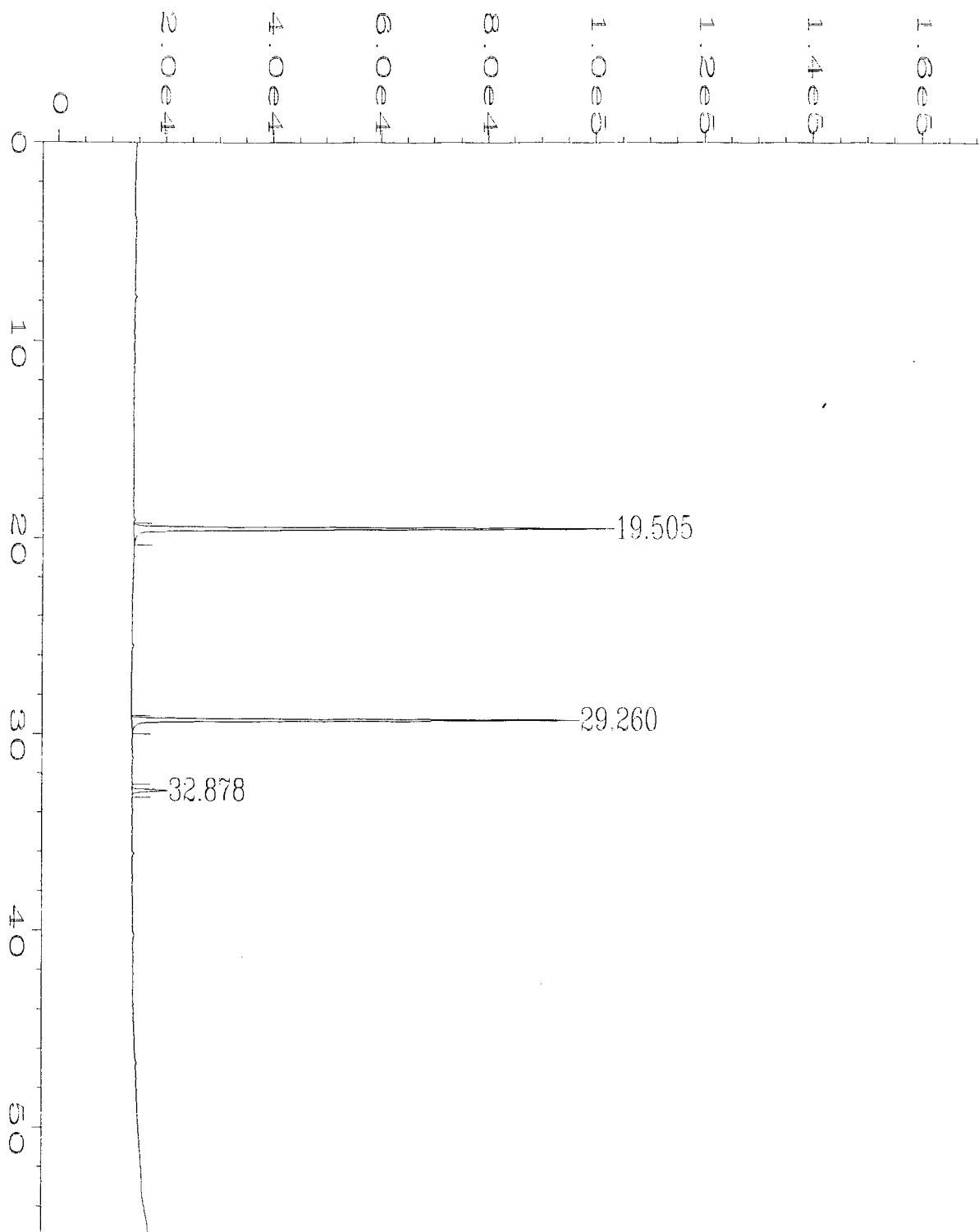
|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\013F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 13          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25122R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 03:36 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 10 Oct 94 04:07 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



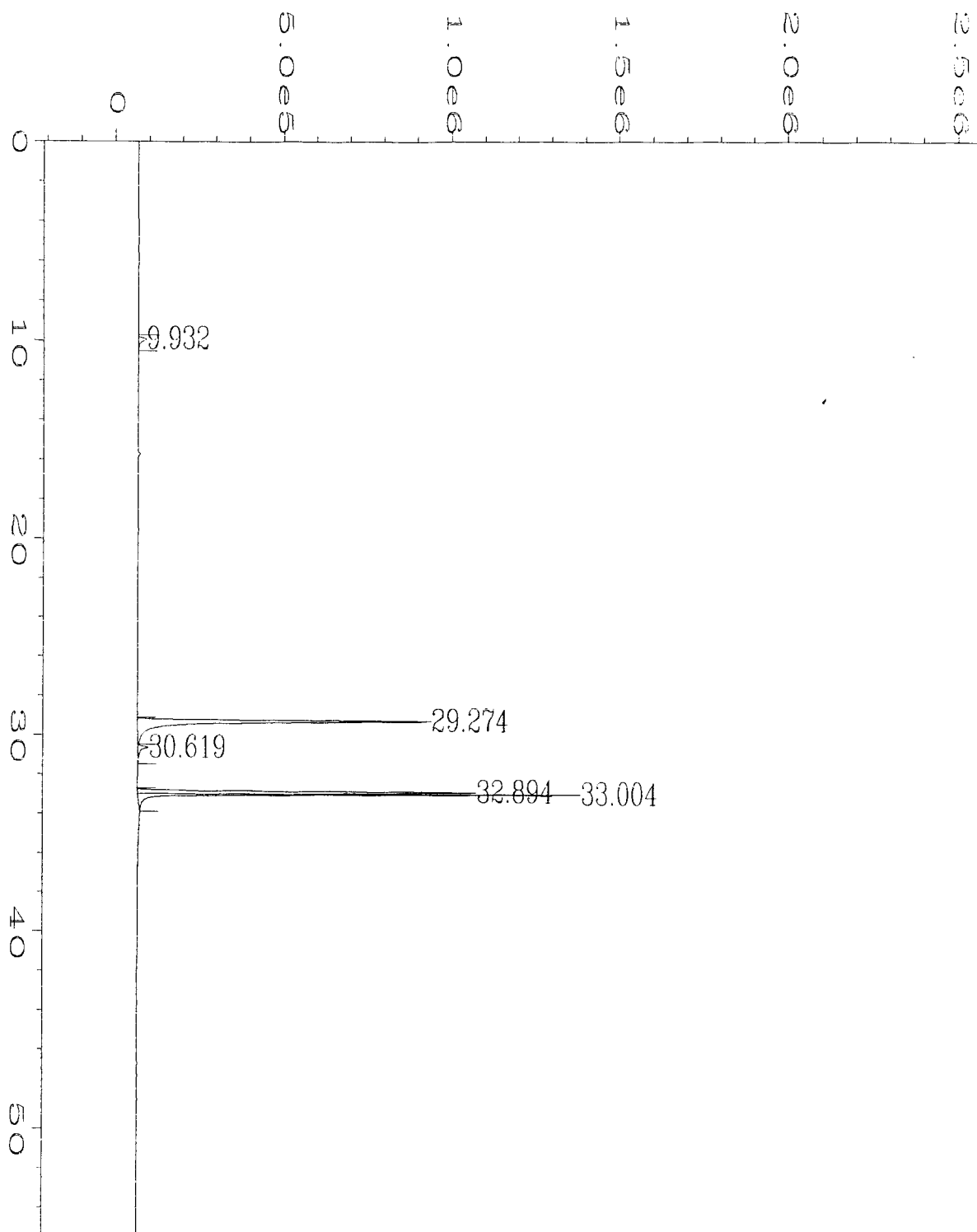
|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\013R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 13          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25122R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 03:36 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 10 Oct 94 03:44 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



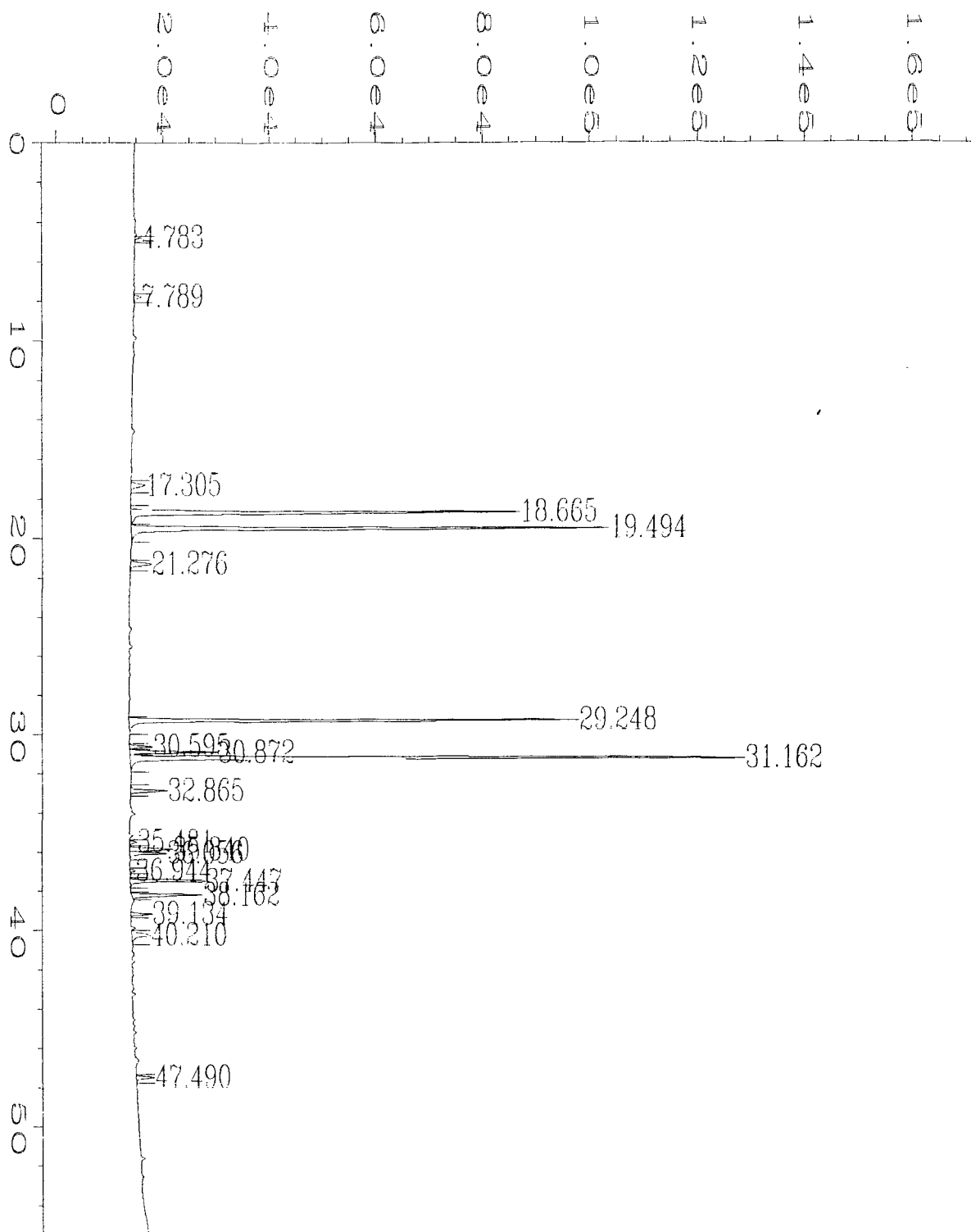
|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\014F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 14          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25123R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 04:41 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 10 Oct 94 04:08 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



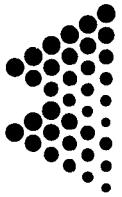
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|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\014R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 14          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25123R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 04:41 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 10 Oct 94 03:45 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\015F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 15          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25124R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 05:46 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 10 Oct 94 04:09 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\015R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 15          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25124R DF1                           | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 08 Oct 94 05:46 AM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | : 10 Oct 94 03:46 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



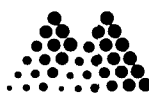
# Mountain States Analytical

N2 3916

## Sample Chain of Custody

|                                                      |  |                             |  |                               |  |
|------------------------------------------------------|--|-----------------------------|--|-------------------------------|--|
| Client Name: <u>Geowest/Maverick P.O.# 9080,06</u>   |  | Analysis Required           |  | Temp. of Samples Upon Receipt |  |
| Phone #: _____                                       |  | Fax #: _____                |  | Rush?                         |  |
| Project Name/ID: <u>Kirtland</u>                     |  | Total of Containers         |  | Remarks                       |  |
| Sampler: <u>Darrell Anderson</u>                     |  | Composite                   |  | BTEX 601                      |  |
| Sample Identification                                |  | Grab                        |  | DCA 602                       |  |
| Date Collected                                       |  | Time Collected              |  | Temp. of Samples Upon Receipt |  |
| PZ-1                                                 |  | NO                          |  | Report only 15.79C            |  |
| PZ-2                                                 |  | 10-3 1230                   |  | BTEX, DCA                     |  |
| PZ-3                                                 |  | 10-3 1215                   |  |                               |  |
| PZ-4                                                 |  | 10-3 1245                   |  |                               |  |
| Note: PZ-1 mislabeled as PZ-4. PZ-4 Not sampled.     |  |                             |  |                               |  |
| PRW 1/24/95                                          |  |                             |  |                               |  |
| Name of Shipper                                      |  | Airbill No.                 |  | Date                          |  |
| Fed Ex                                               |  |                             |  |                               |  |
| Received By (Lab)                                    |  | Date                        |  | Time                          |  |
| Cynthia Ford                                         |  | 10-04/94 1330               |  | NA                            |  |
| Turnaround Time Requested (please circle):           |  | Normal                      |  | Rush                          |  |
| (Rush TAT is subject to MSAI approval and surcharge) |  |                             |  |                               |  |
| Report Results By: (Date)                            |  | Phone                       |  | Fax                           |  |
| Rush results requested by (please circle):           |  |                             |  |                               |  |
| Report Results to:                                   |  | Authorized for Disposal by: |  | Disposed of by:               |  |

Invoice No. 204996  
 Invoice Date 10/11/94  
 Page: 1 of 1



## Mountain States Analytical

The Quality Solution

Mr. Paul Weissenborn  
 Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Project Name: Kirtland  
 Project Number:  
 Purchase Order: 9080.06  
 Samples Received: 10/04/94  
 Date Reported: 10/11/94  
 Turnaround Time: 7 days  
 Reported To: Mr. Paul Weissenborn

### Analyses Performed

See Analysis Reference Table Below

MSAI Group Number: 6177

| Sample I.D. | Date<br>Sampled | Analyses  | List<br>Price | Rush<br>Charges | Discount | Extended<br>Price |
|-------------|-----------------|-----------|---------------|-----------------|----------|-------------------|
| 25122 PZ-2  | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25123 PZ-3  | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25124 PZ-4  | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |

Total Price \$ 336.60

### Analysis Reference Table

| Analysis<br>No. | Analysis Name                   | Matrix | Method             | # of<br>Tests | List<br>Price | Rush<br>Charges | Discount<br>Amount | Net<br>Price | Extended<br>Price |
|-----------------|---------------------------------|--------|--------------------|---------------|---------------|-----------------|--------------------|--------------|-------------------|
| 5515            | Purgeable Aromatics/Halocarbons | WW     | 600 SERIES 601/602 | 3             | 125.00        |                 | 18.75              | 106.25       | 318.75            |
| 6159            | Chromatograms/Etc. GC           |        | IN HOUSE MSAI      | 3             | 7.00          |                 | 1.05               | 5.95         | 17.85             |

Total Price \$ 336.60

### Pricing Summary

Extended List Price \$ 396.00  
 Total Rush Charges \$ 0.00  
 Total Discount \$( 59.40)

TOTAL AMOUNT DUE \$ 336.60

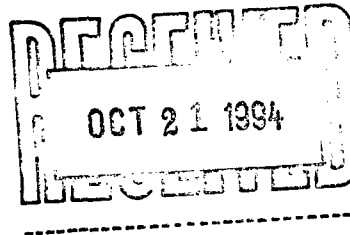




## Mountain States Analytical

October 18, 1994

Mr. Paul Weissenborn  
Geowest Golden, Inc. Salt Lake Office  
175 West 200 South  
Suite # 2006  
Salt Lake City, Ut 84101



Reference:

Project: Kirtland, NM  
MSAI Group: 6161

Dear Mr. Weissenborn:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

|               |               |        |
|---------------|---------------|--------|
| MW-9          | MW-10         | MW-13  |
| MW-14         | MW-15         | MW-16  |
| MW-18         | MW-19         | MW-20  |
| MW-21         | MW-17A        | MW-17B |
| MW-22         | MW-27         | EQB    |
| Trip Blank #1 | Trip Blank #2 |        |

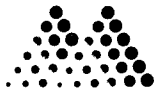
All holding times were met for the tests performed on these samples.

Thank you for selecting Mountain States Analytical, Inc. to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

With Regards,

Mark W. Bostrom  
Project Manager



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: MW-9  
 Matrix: Waste Water

MSAI Sample: 25038  
 MSAI Group: 6161  
 Date Reported: 10/18/94

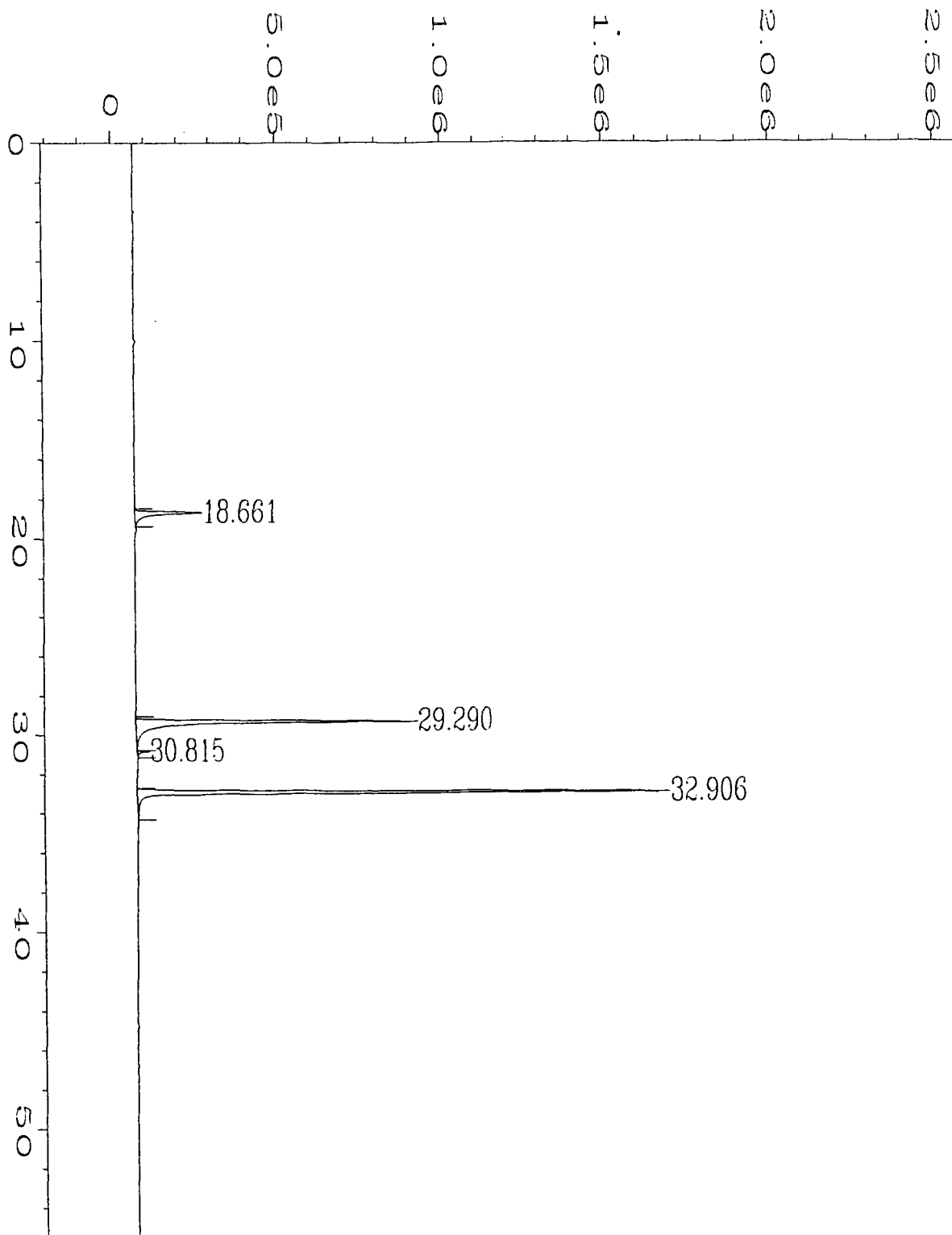
Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/03/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 1.2                    | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

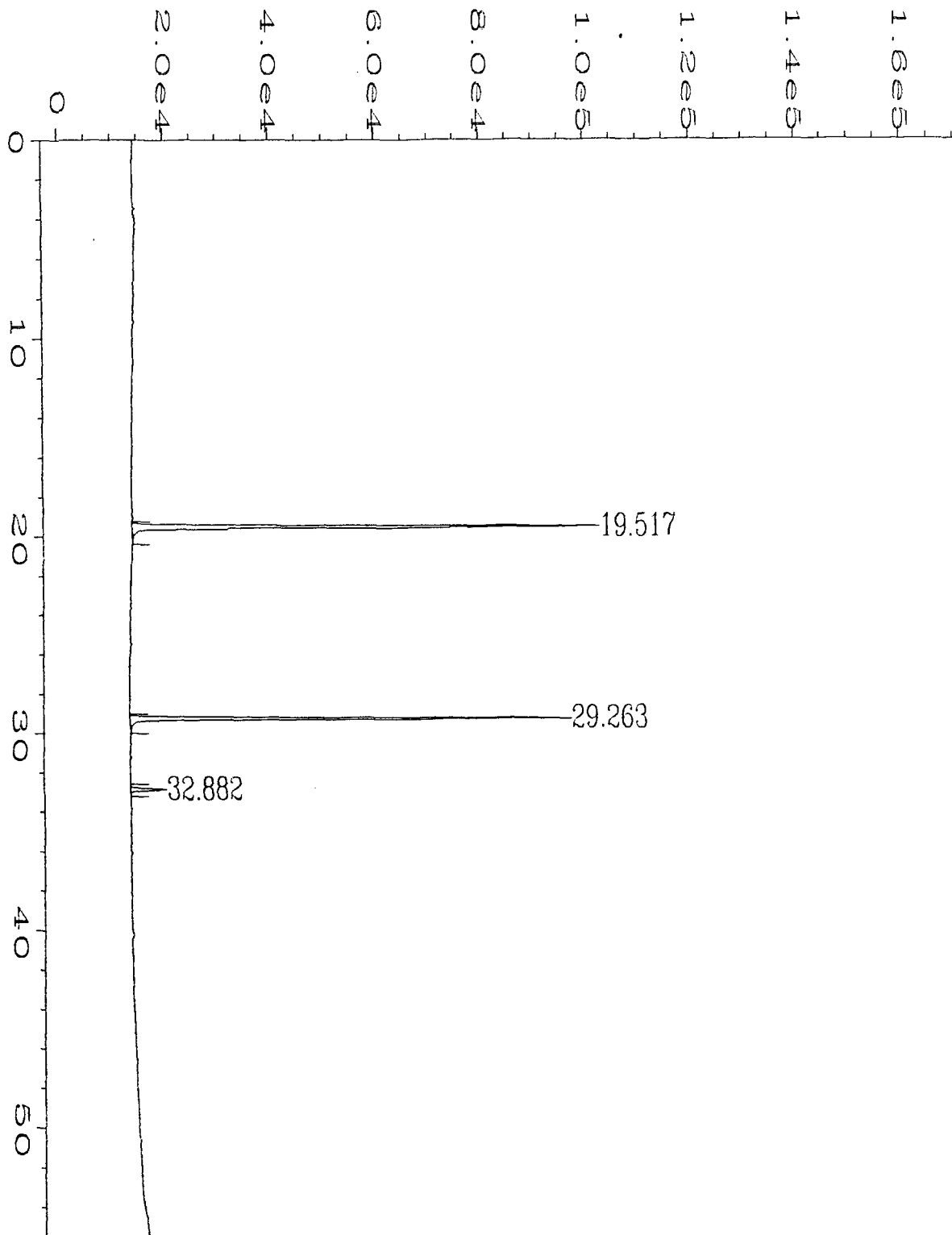
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

*Mark W. Bostrom*  
 Mark W. Bostrom  
 Project Manager



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\018F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 18          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25038R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 09:01 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 10 Oct 94 04:12 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\018R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 18          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25038R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 09:01 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 10 Oct 94 03:49 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: MW-10  
 Matrix: Waste Water

MSAI Sample: 25039  
 MSAI Group: 6161  
 Date Reported: 10/18/94

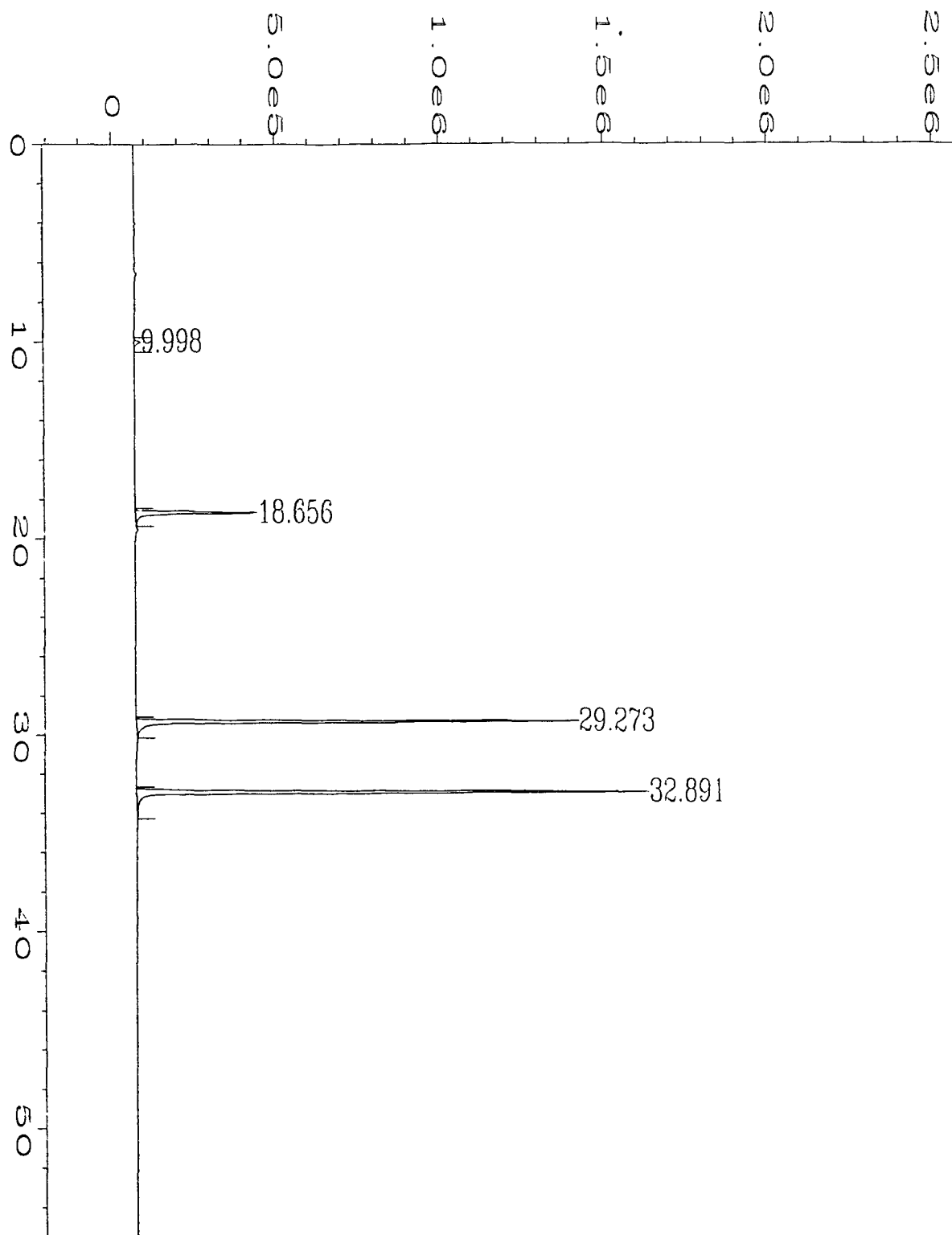
Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/03/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 2.1                    | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

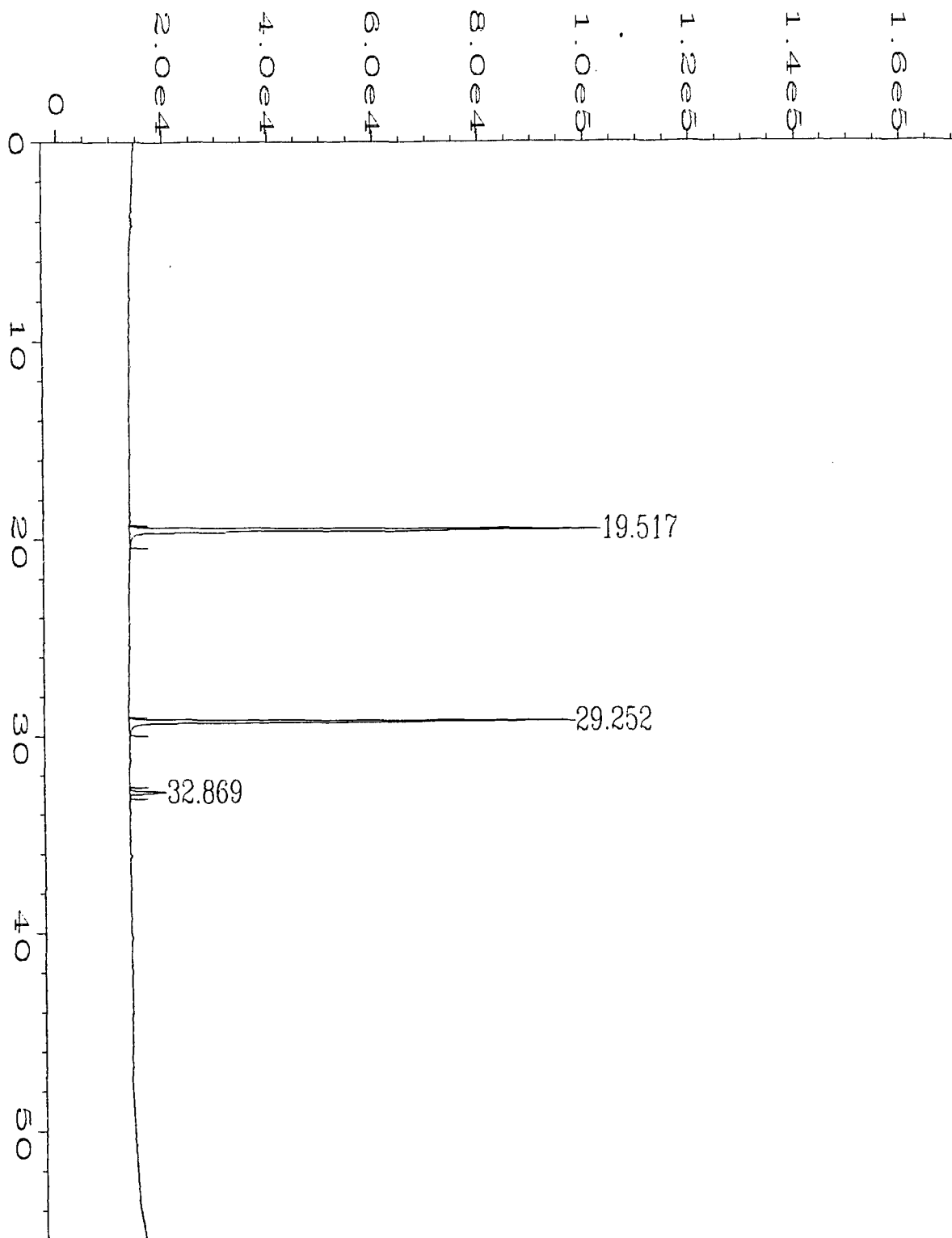
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

*Mark Bostrom*  
 Mark W. Bostrom  
 Project Manager



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\019F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 19          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25039R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 10:05 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 10 Oct 94 04:13 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\019R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 19          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25039R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 10:05 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 10 Oct 94 03:50 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: MW-13  
 Matrix: Waste Water

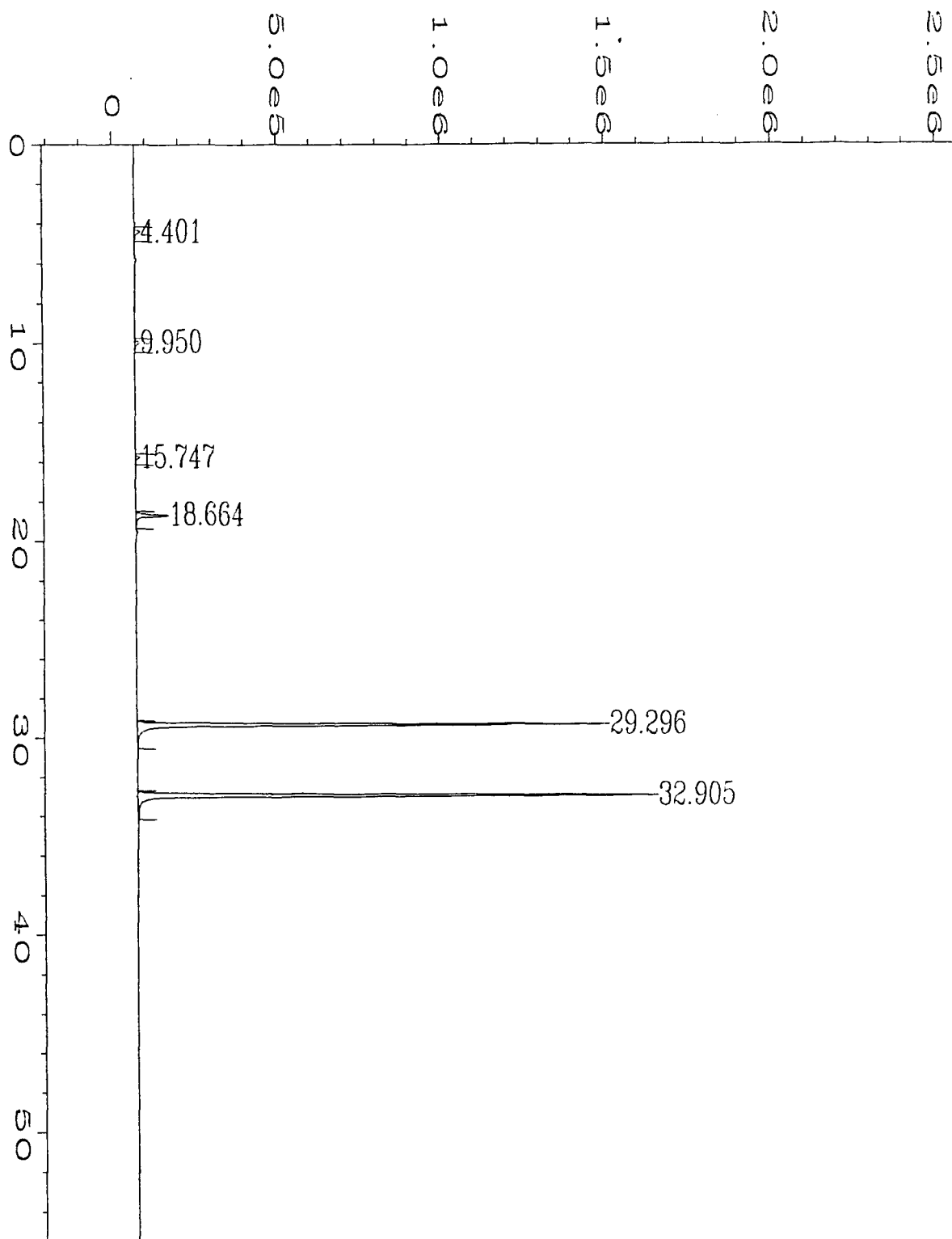
MSAI Sample: 25040  
 MSAI Group: 6161  
 Date Reported: 10/18/94  
 Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/03/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | ND                     | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

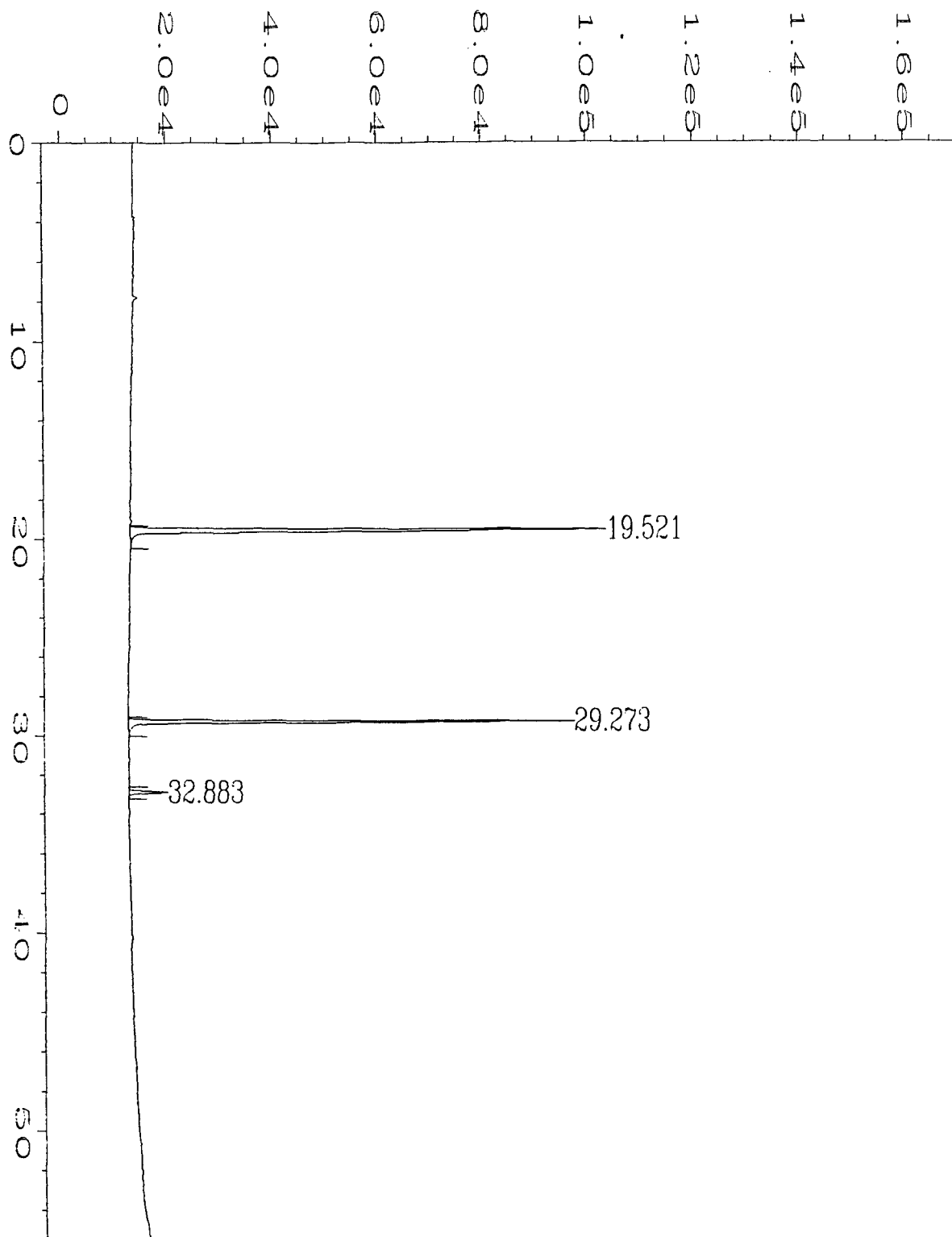
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

Mark W. Bostrom  
 Project Manager



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\020F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 20          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25040R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 11:10 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 10 Oct 94 04:14 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\020R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 20          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25040R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 11:10 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 10 Oct 94 03:51 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: MW-14  
 Matrix: Waste Water

MSAI Sample: 25041  
 MSAI Group: 6161  
 Date Reported: 10/18/94

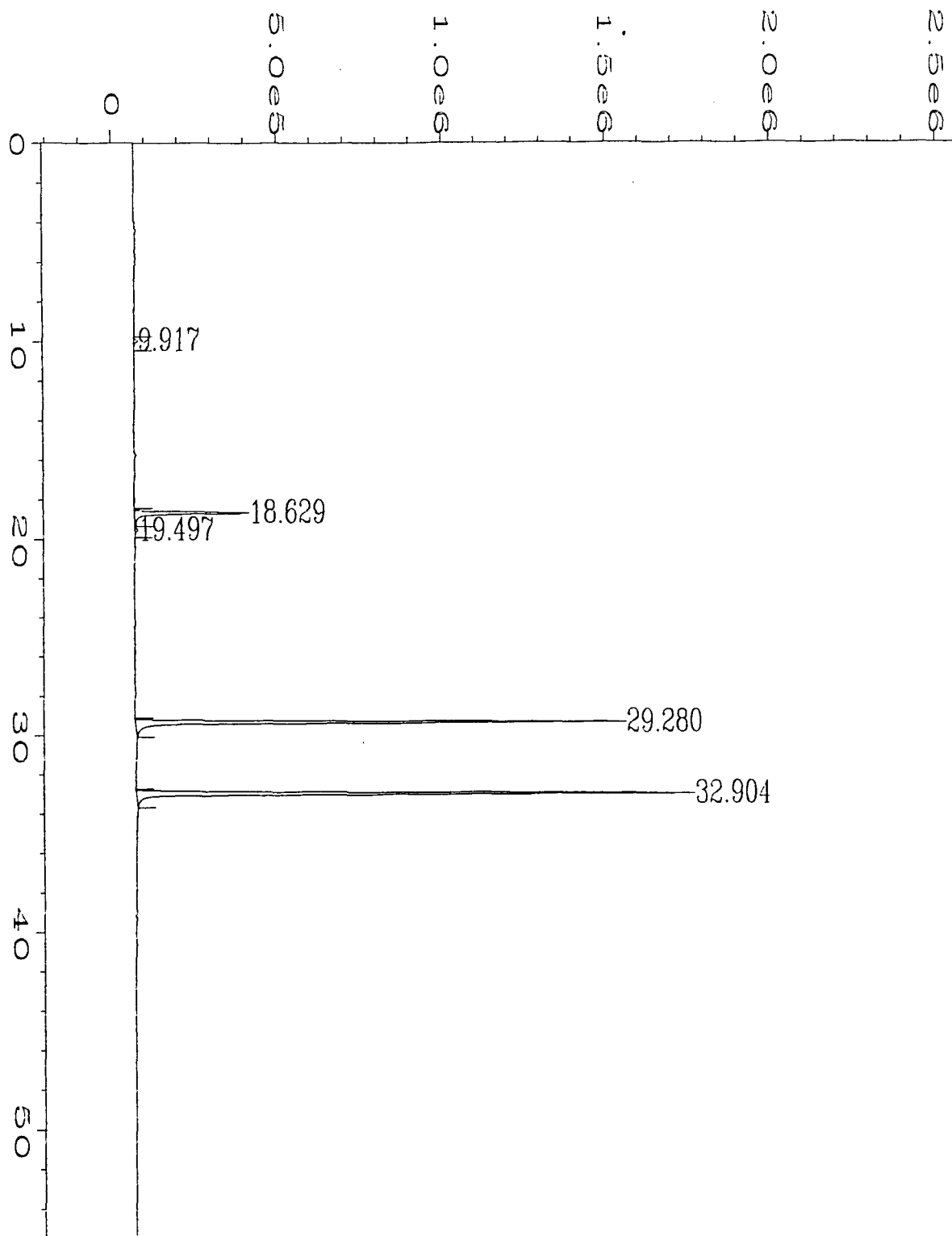
Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/03/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 1.9                    | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

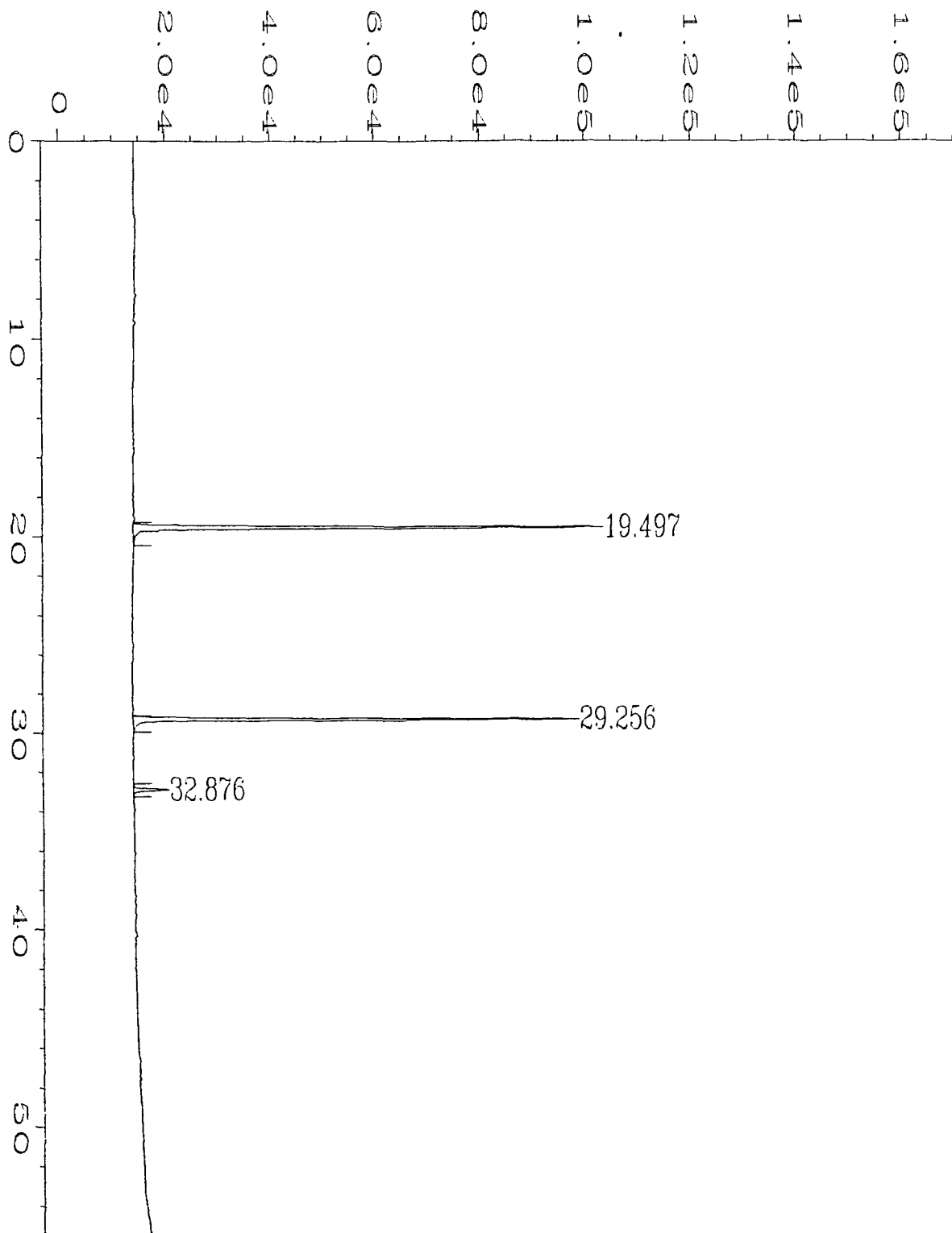
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

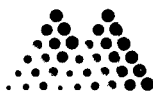
*Mark W. Bostrom*  
 Mark W. Bostrom  
 Project Manager



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\012F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 12          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25041R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 02:31 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 10 Oct 94 04:06 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\012R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 12          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25041R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 02:31 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 10 Oct 94 03:43 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: MW-15  
 Matrix: Waste Water

MSAI Sample: 25042  
 MSAI Group: 6161  
 Date Reported: 10/18/94

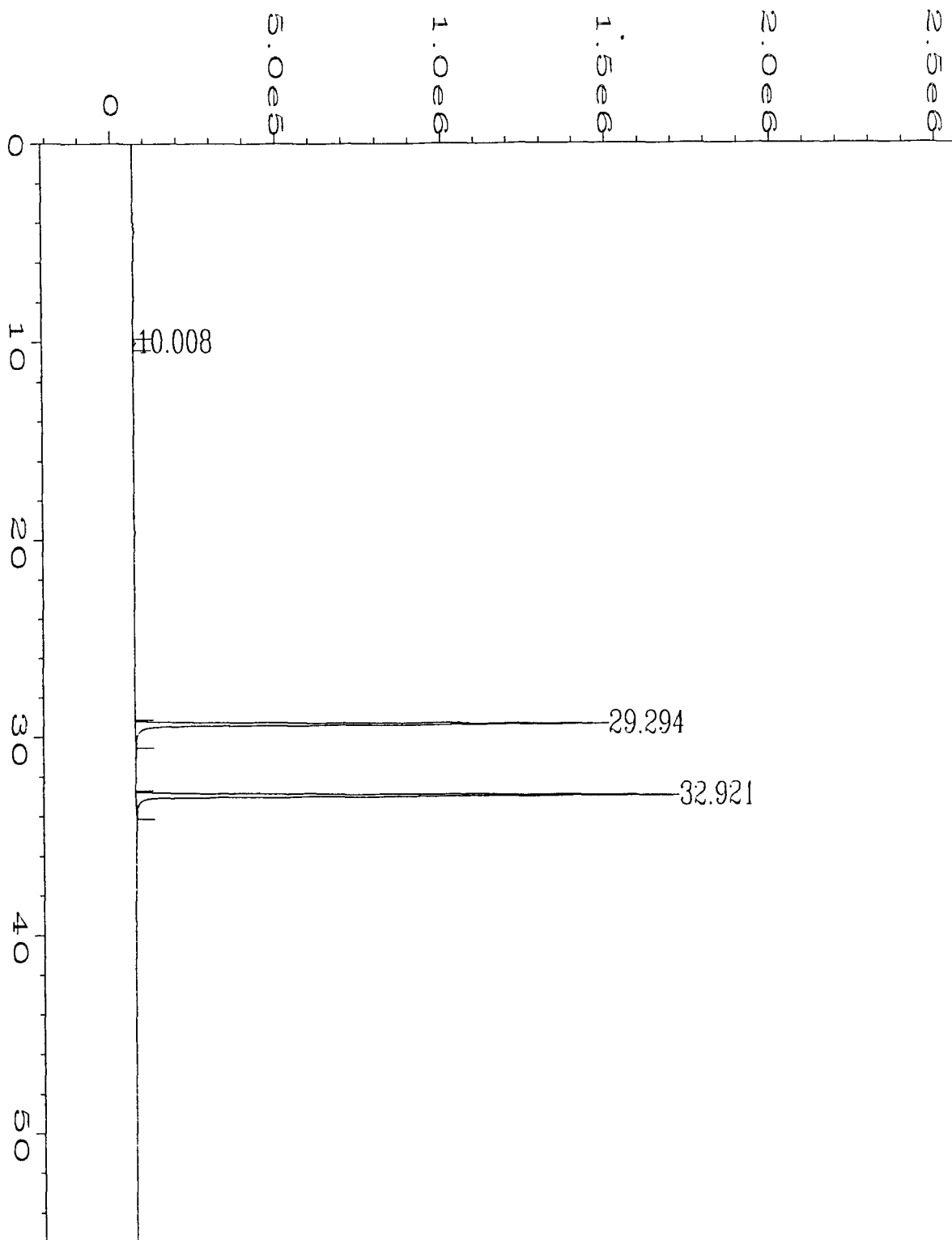
Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/03/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | ND                     | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

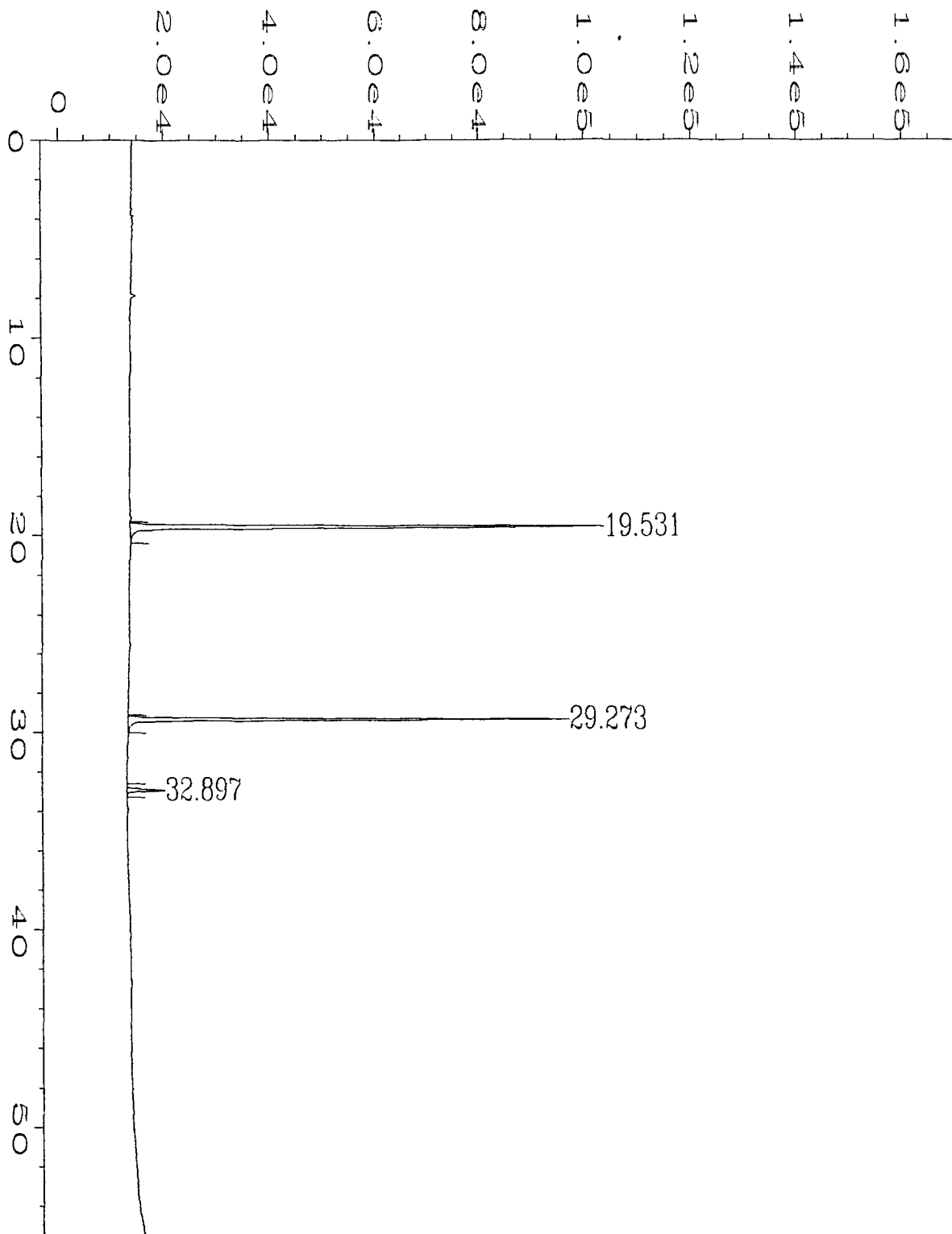
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

  
 Mark W. Bostrom  
 Project Manager



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\021F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 21          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25042R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 12:14 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 10 Oct 94 04:15 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\021R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 21          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25042R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 08 Oct 94 12:14 PM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 10 Oct 94 03:52 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: MW-16  
 Matrix: Waste Water

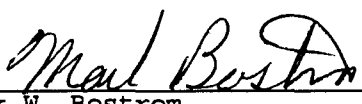
MSAI Sample: 25043  
 MSAI Group: 6161  
 Date Reported: 10/18/94

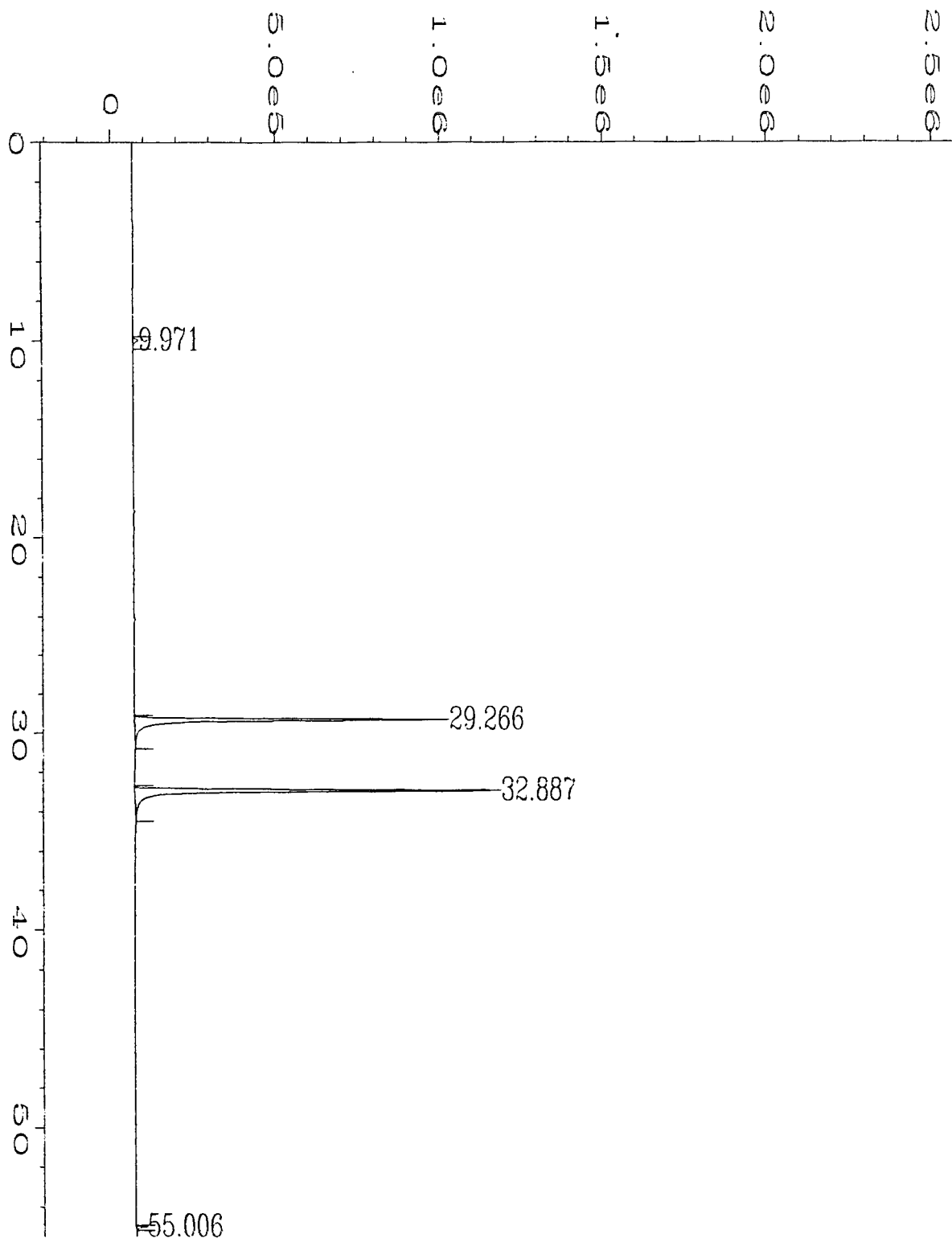
Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/03/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | ND                     | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

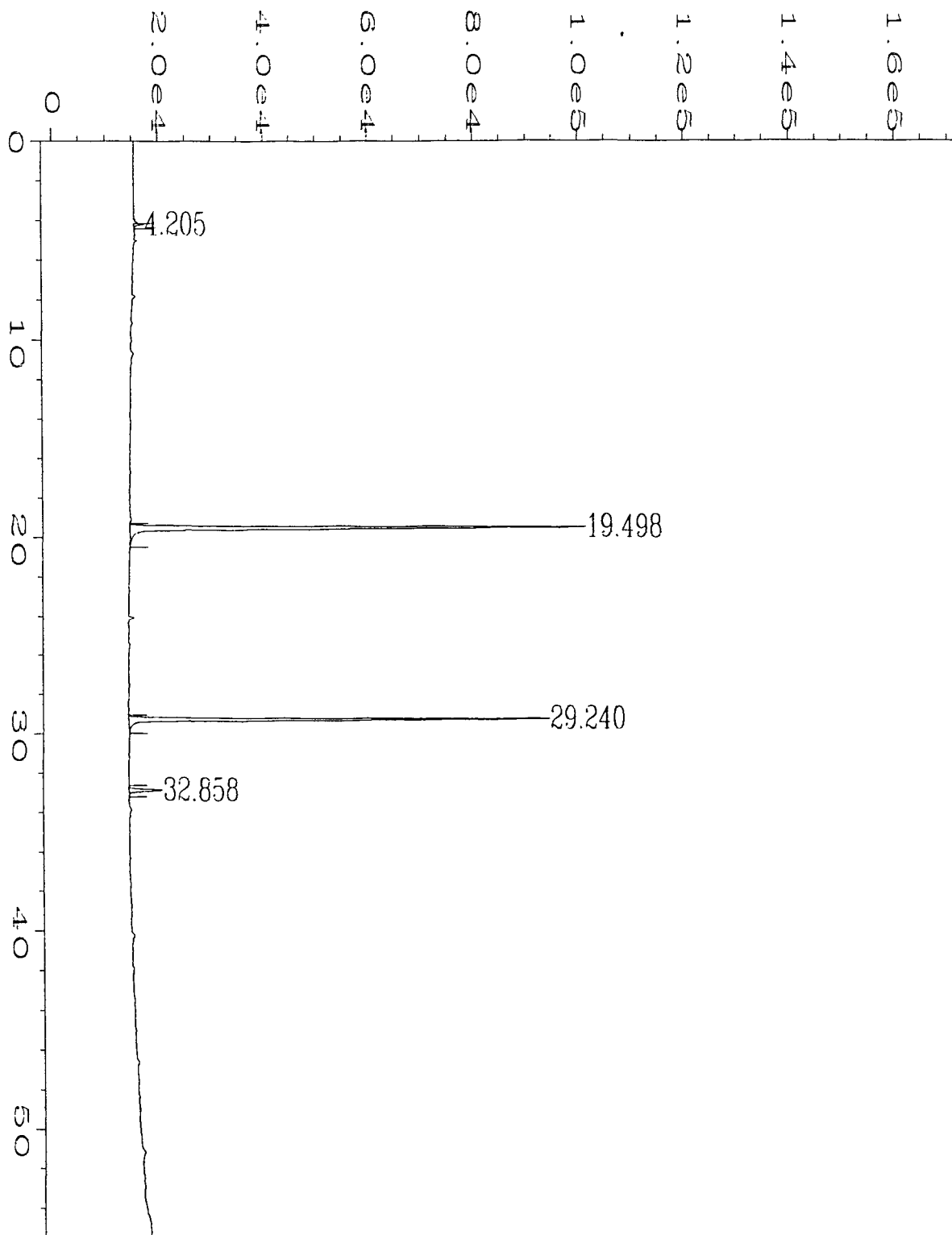
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

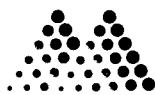
  
 Mark W. Bostrom  
 Project Manager



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\039F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 39          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25043 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 11 Oct 94 06:47 AM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | 11 Oct 94 07:43 AM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\039R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 39          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25043 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 11 Oct 94 06:47 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 11 Oct 94 07:43 AM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: MW-18  
 Matrix: Waste Water

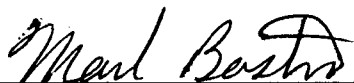
MSAI Sample: 25044  
 MSAI Group: 6161  
 Date Reported: 10/18/94

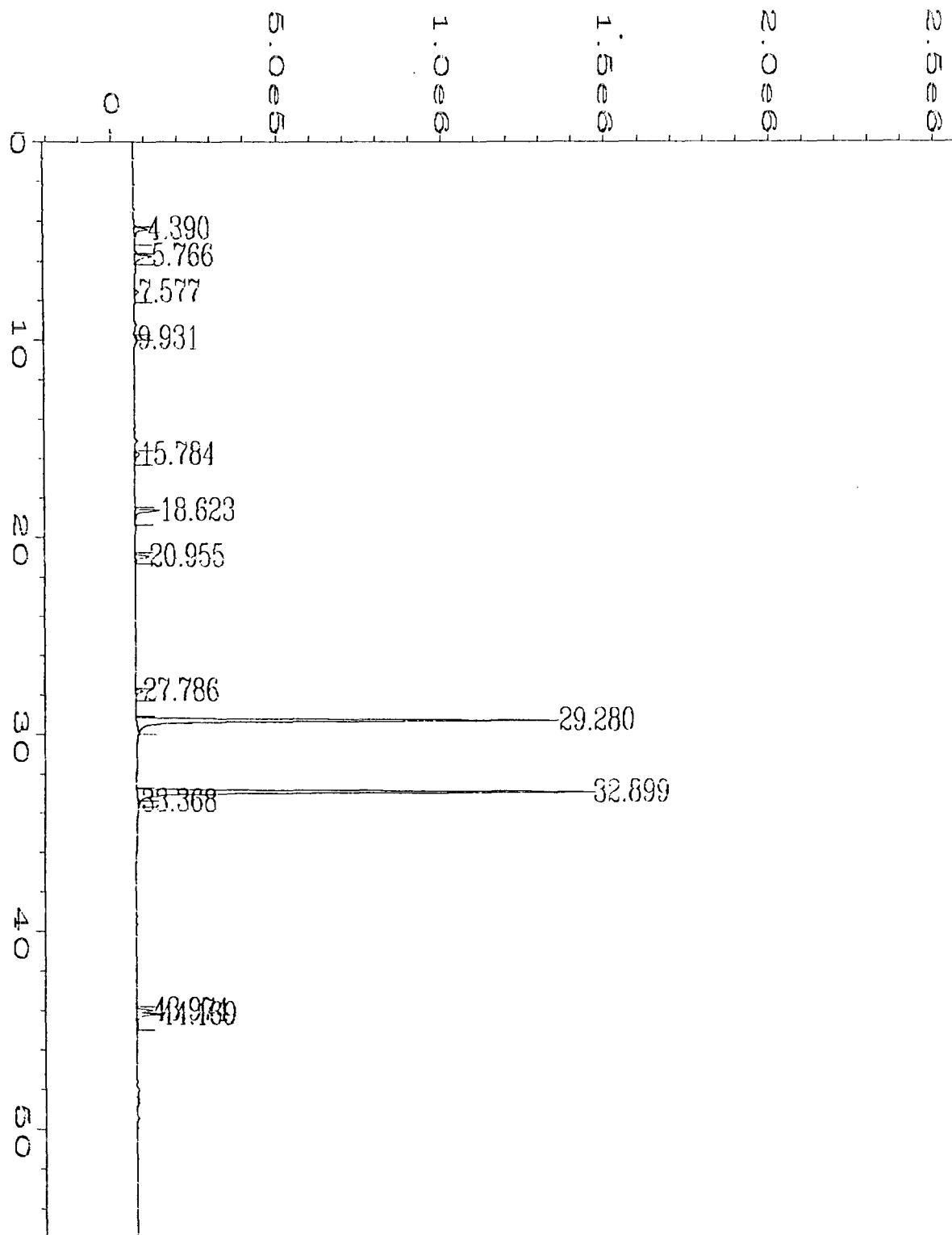
Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/03/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                        | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------|------------------------|-------|--------------------------|
| ---- | -----                           | -----                  | ----- | -----                    |
| 5515 | Purgeable Aromatics/Halocarbons |                        |       |                          |
|      | Method: 600 SERIES 601/602      |                        |       |                          |
|      | 1,2-Dichloroethane              | ND                     | ug/l  | 1.0                      |
|      | Benzene                         | 210                    | ug/l  | 20                       |
|      | Toluene                         | 10.9                   | ug/l  | 1.0                      |
|      | Ethylbenzene                    | 46                     | ug/l  | 20                       |
|      | m,p-Xylene                      | 478                    | ug/l  | 20                       |
|      | o-Xylene                        | 4.8                    | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC           | See Attached           |       |                          |
|      | Method: IN HOUSE MSAI           |                        |       |                          |

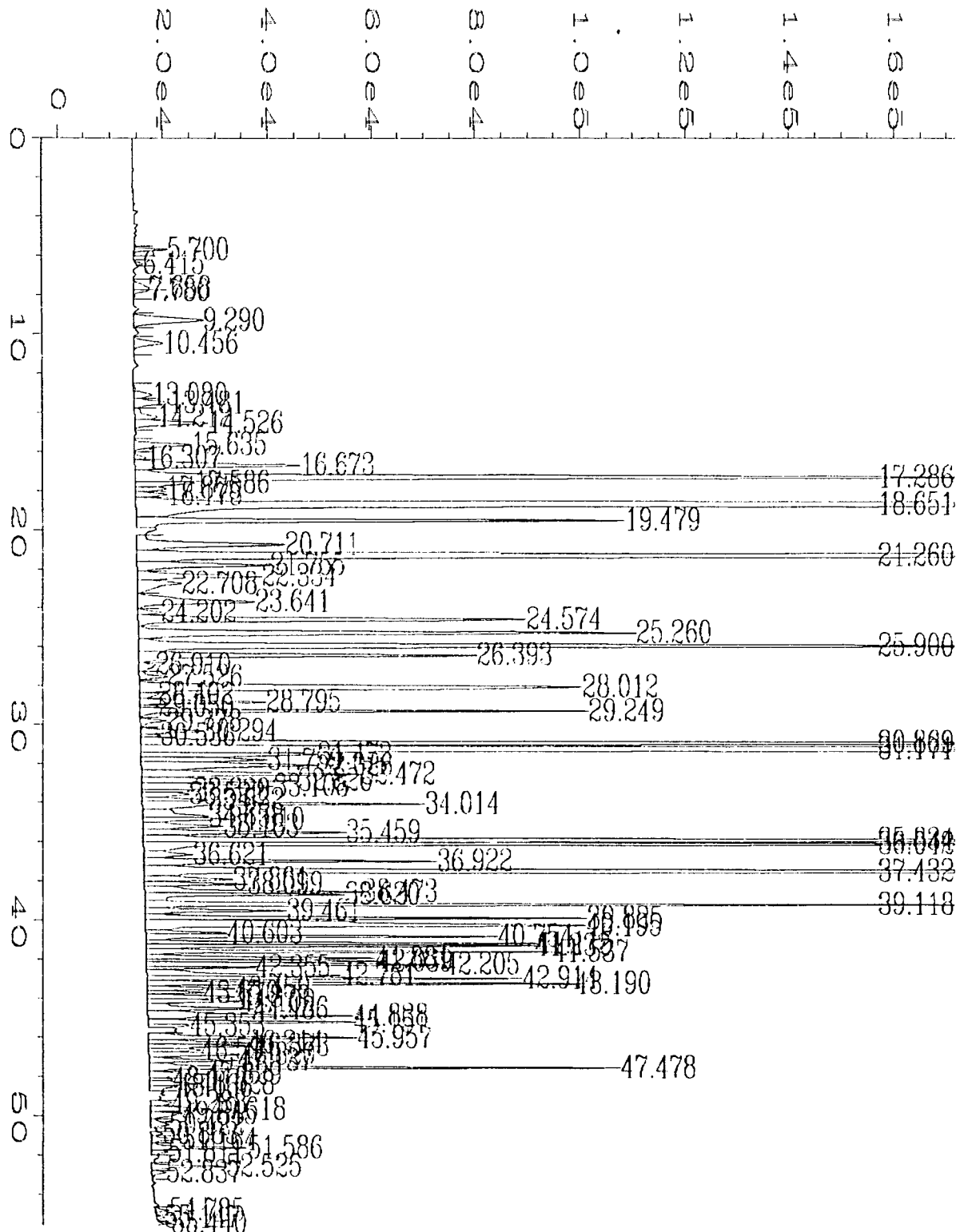
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

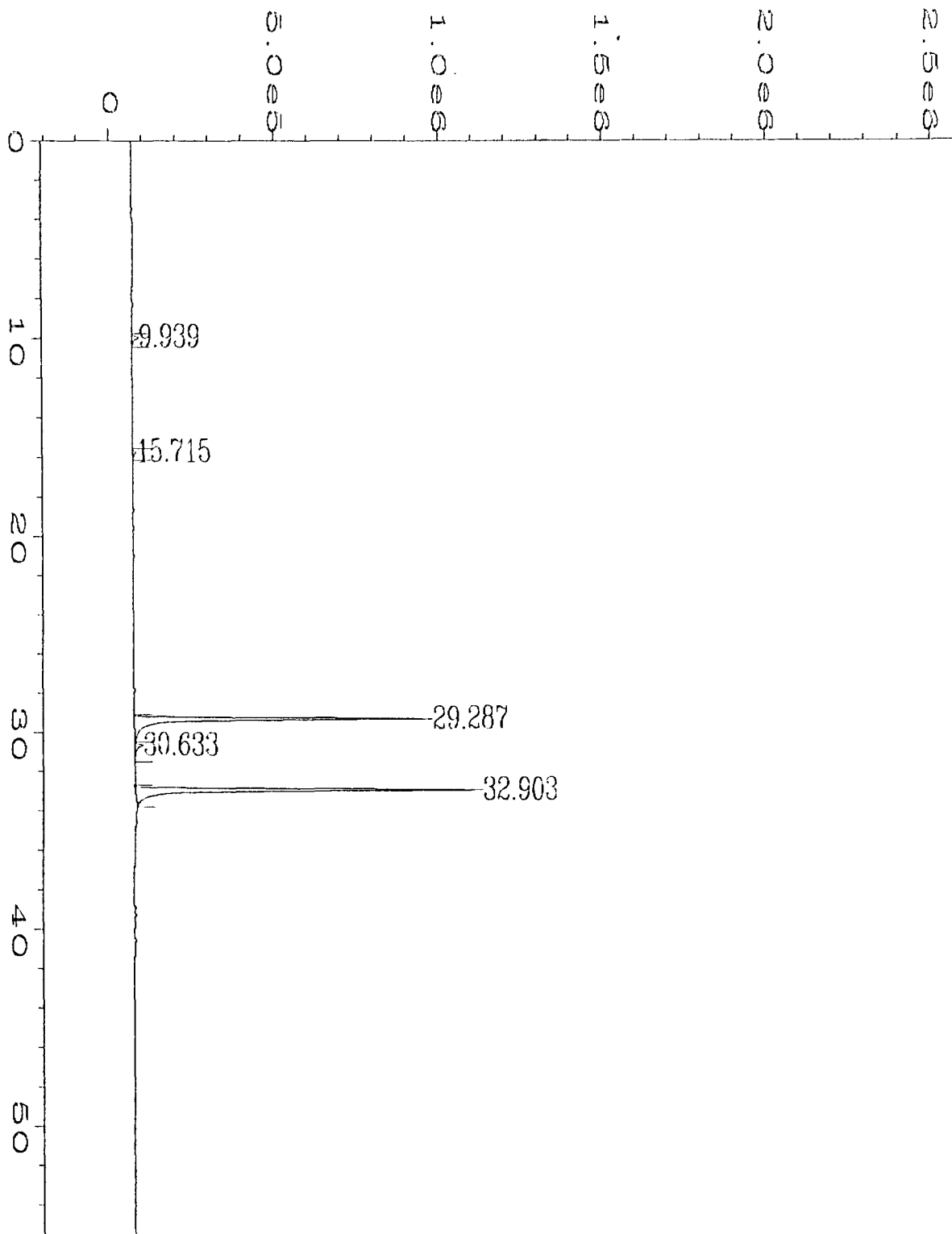
  
 Mark W. Bostrom  
 Project Manager



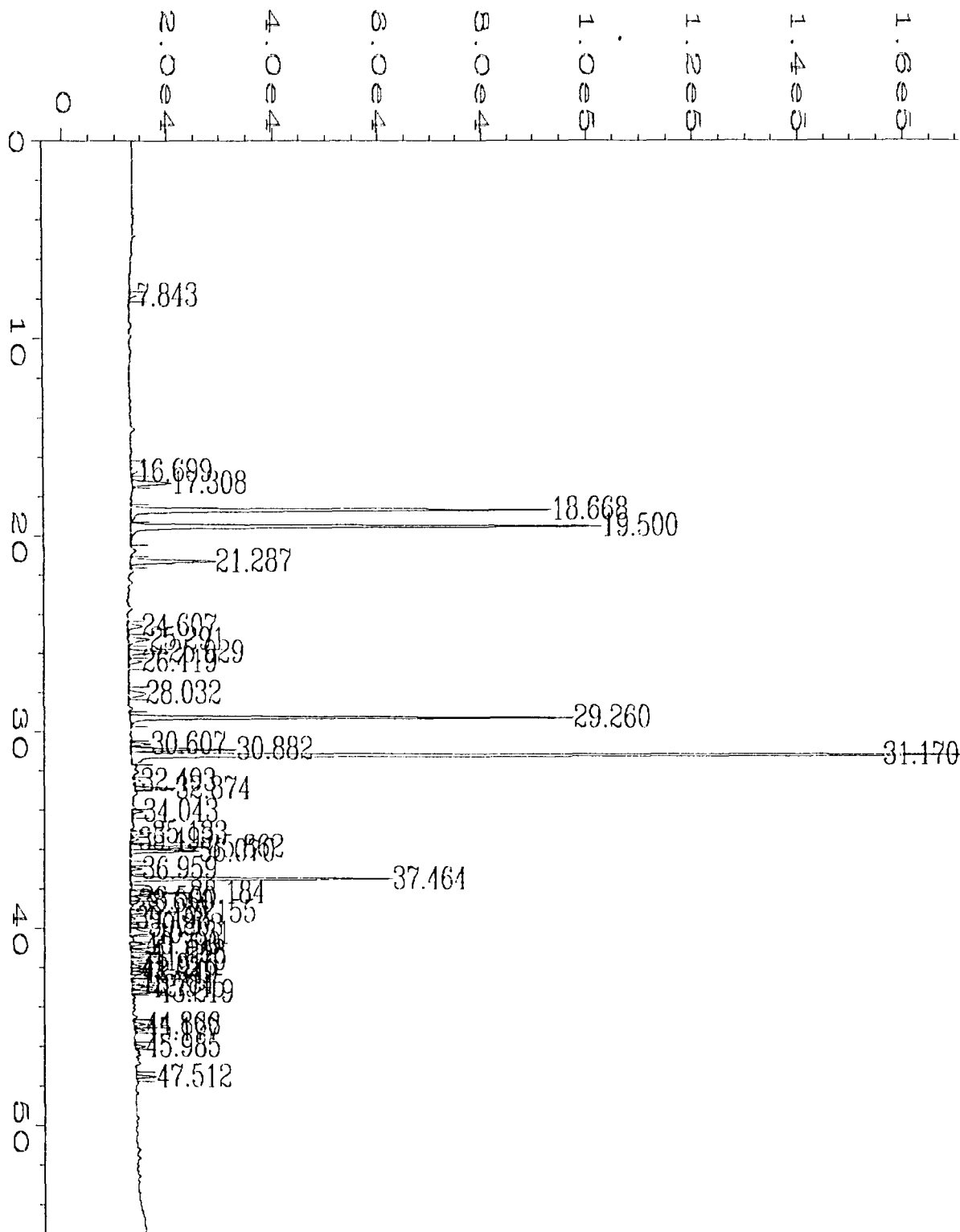
|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\040F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 40          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25044 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 11 Oct 94 07:52 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 11 Oct 94 08:47 AM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\040R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 40          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25044 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 11 Oct 94 07:52 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 11 Oct 94 08:48 AM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\063F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 63          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25044R DF20                          | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 12 Oct 94 12:59 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 12 Oct 94 03:50 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 12 OCT 94 03:14 PM                   | ISTD Amount        | :             |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\063R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 63          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25044R DF20                          | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 12 Oct 94 12:59 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | 12 Oct 94 03:51 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 12 OCT 94 03:33 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: MW-19  
 Matrix: Waste Water

MSAI Sample: 25045  
 MSAI Group: 6161  
 Date Reported: 10/18/94

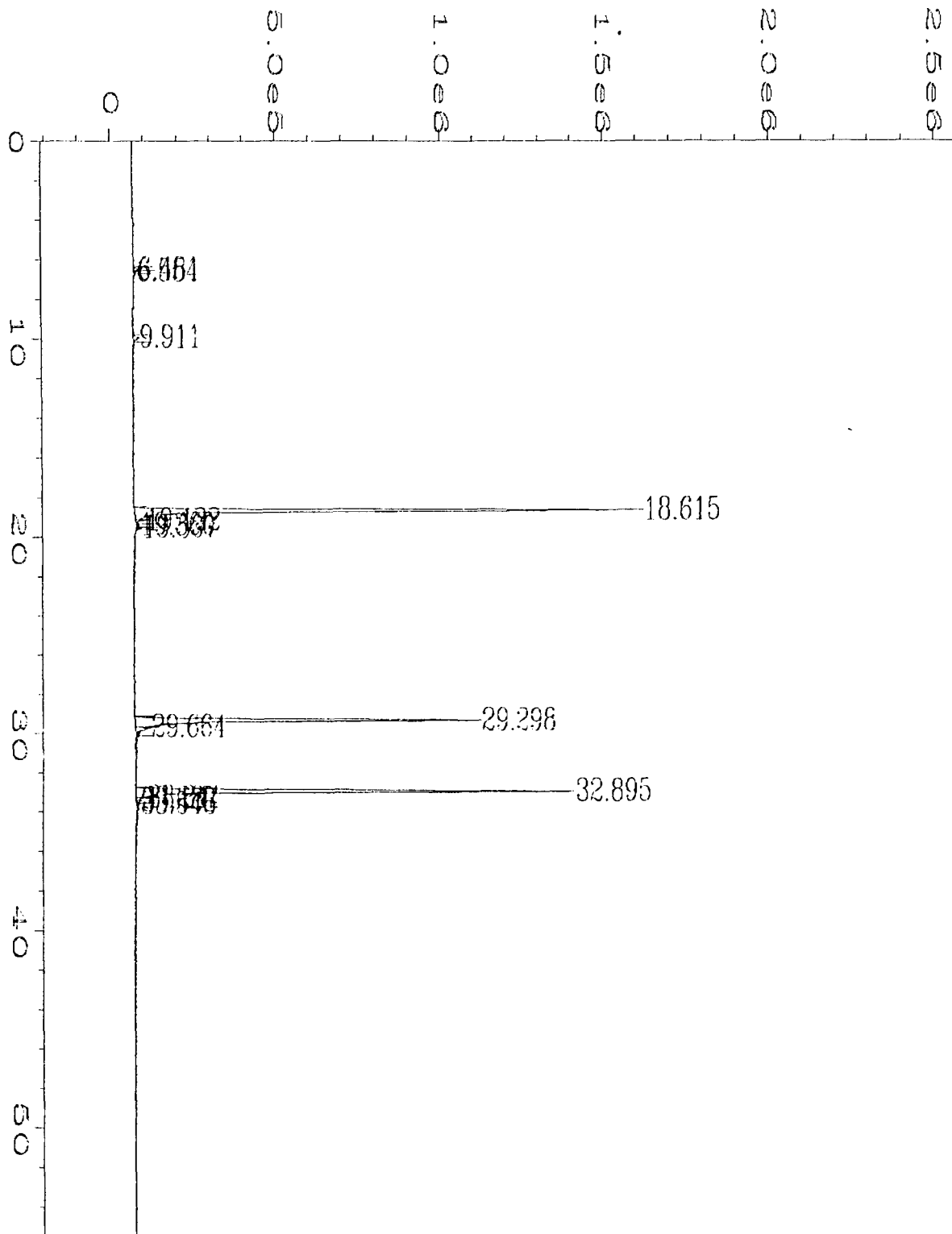
Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/03/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 7.9                    | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

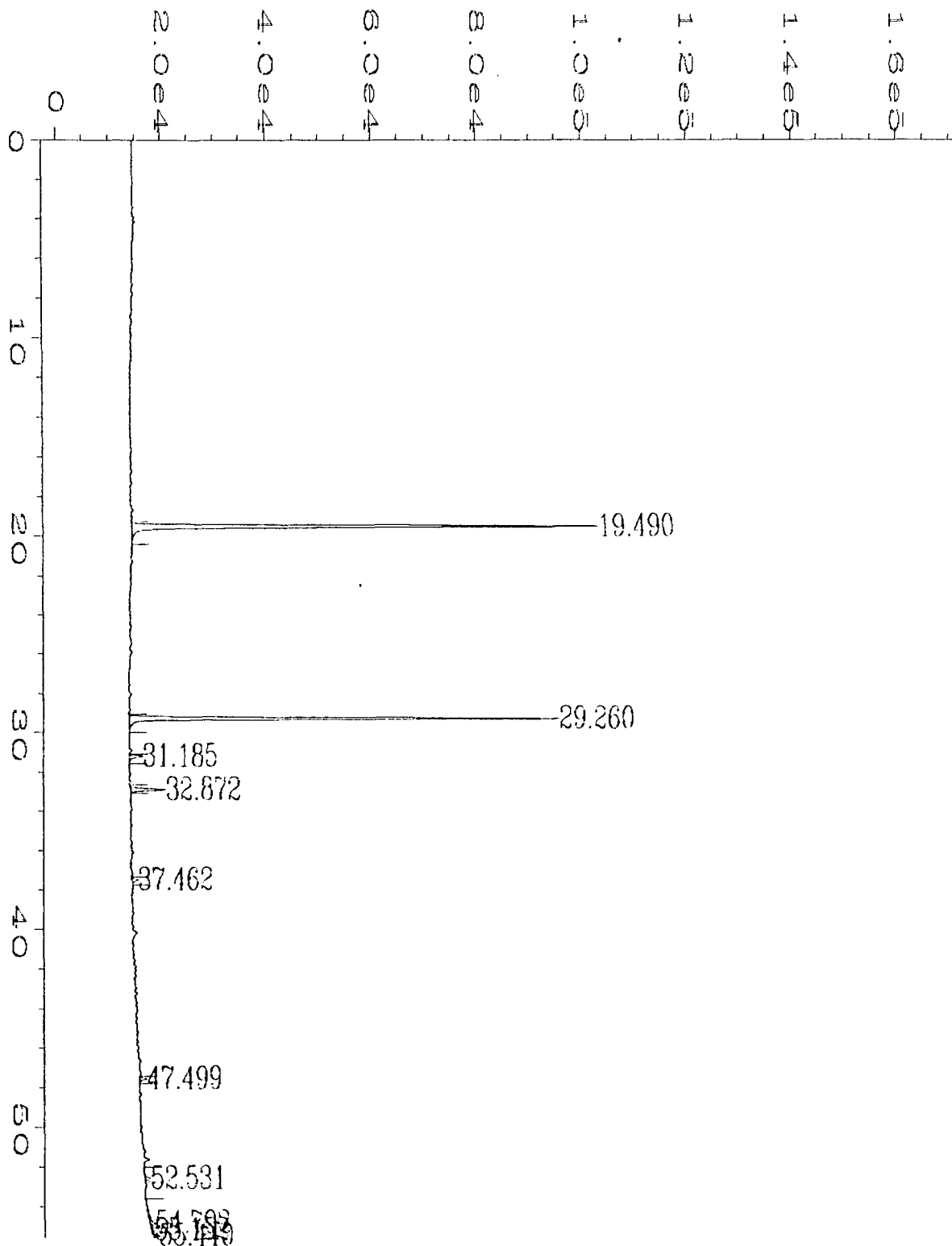
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

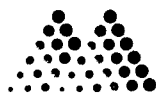
*Mark W. Bostrom*  
 Mark W. Bostrom  
 Project Manager



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\041F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 41          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25045 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 11 Oct 94 08:56 AM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 11 Oct 94 09:52 AM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\041R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 41          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25045 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 11 Oct 94 08:56 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 11 Oct 94 09:52 AM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: MW-20  
 Matrix: Waste Water

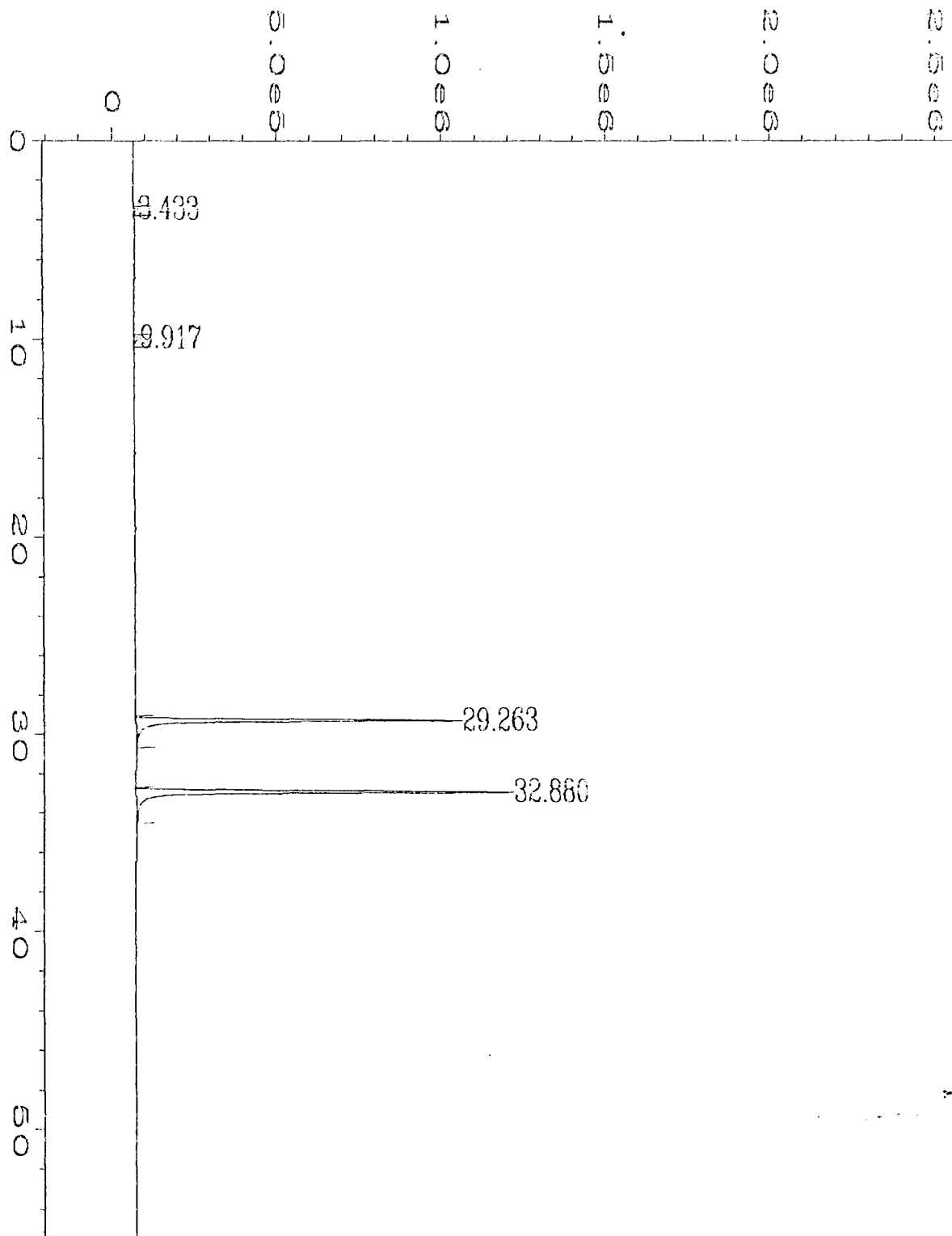
MSAI Sample: 25046  
 MSAI Group: 6161  
 Date Reported: 10/18/94  
 Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/03/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| ---- | -----                                                         | -----                  | ----- | -----                    |
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | ND                     | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

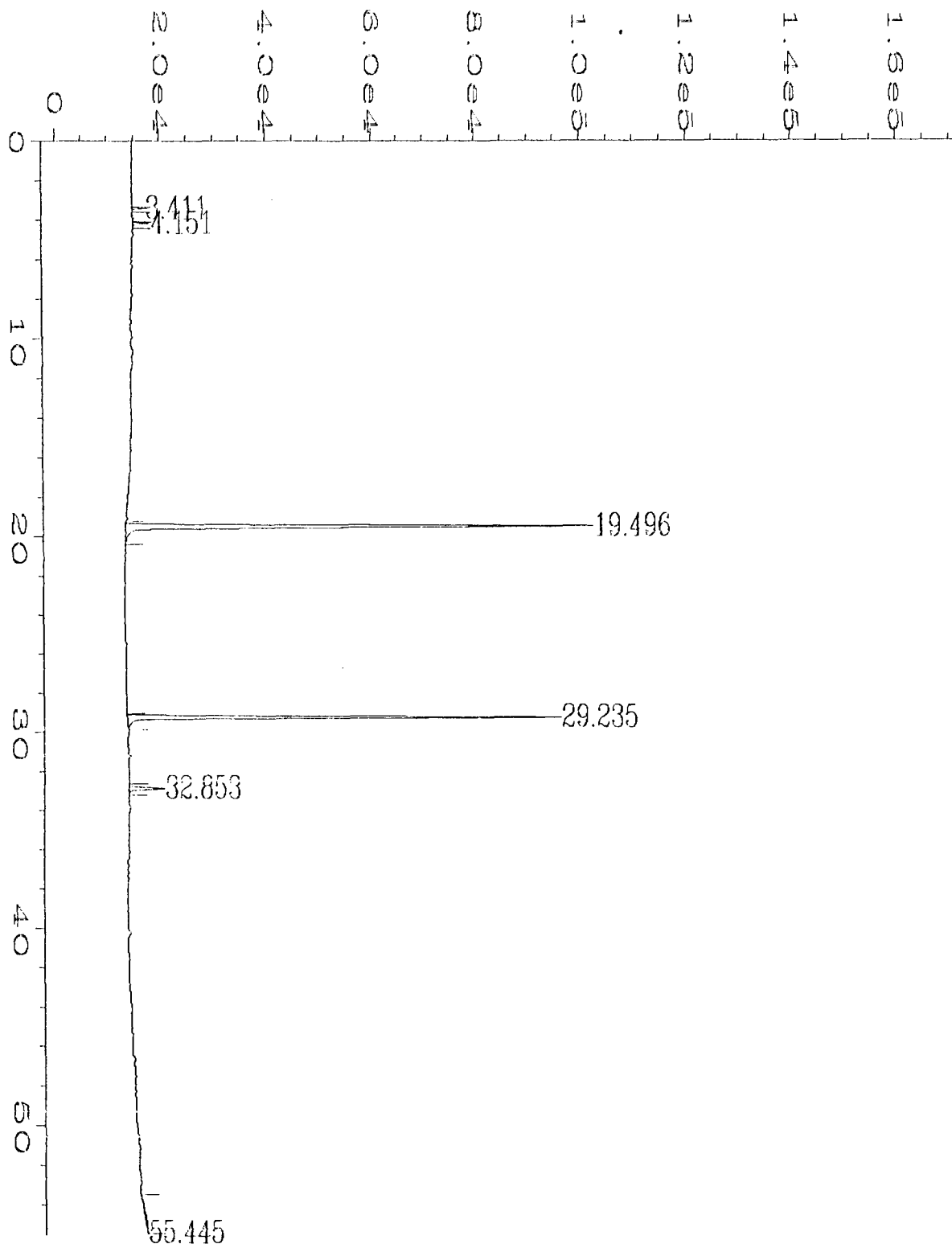
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

*Mark W. Bostrom*  
 Mark W. Bostrom  
 Project Manager



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\042F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 42          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25046 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 11 Oct 94 10:01 AM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | 11 Oct 94 10:57 AM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\042R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 42          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25046 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 11 Oct 94 10:01 AM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | 11 Oct 94 10:58 AM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: MW-21  
 Matrix: Waste Water

MSAI Sample: 25047  
 MSAI Group: 6161  
 Date Reported: 10/18/94

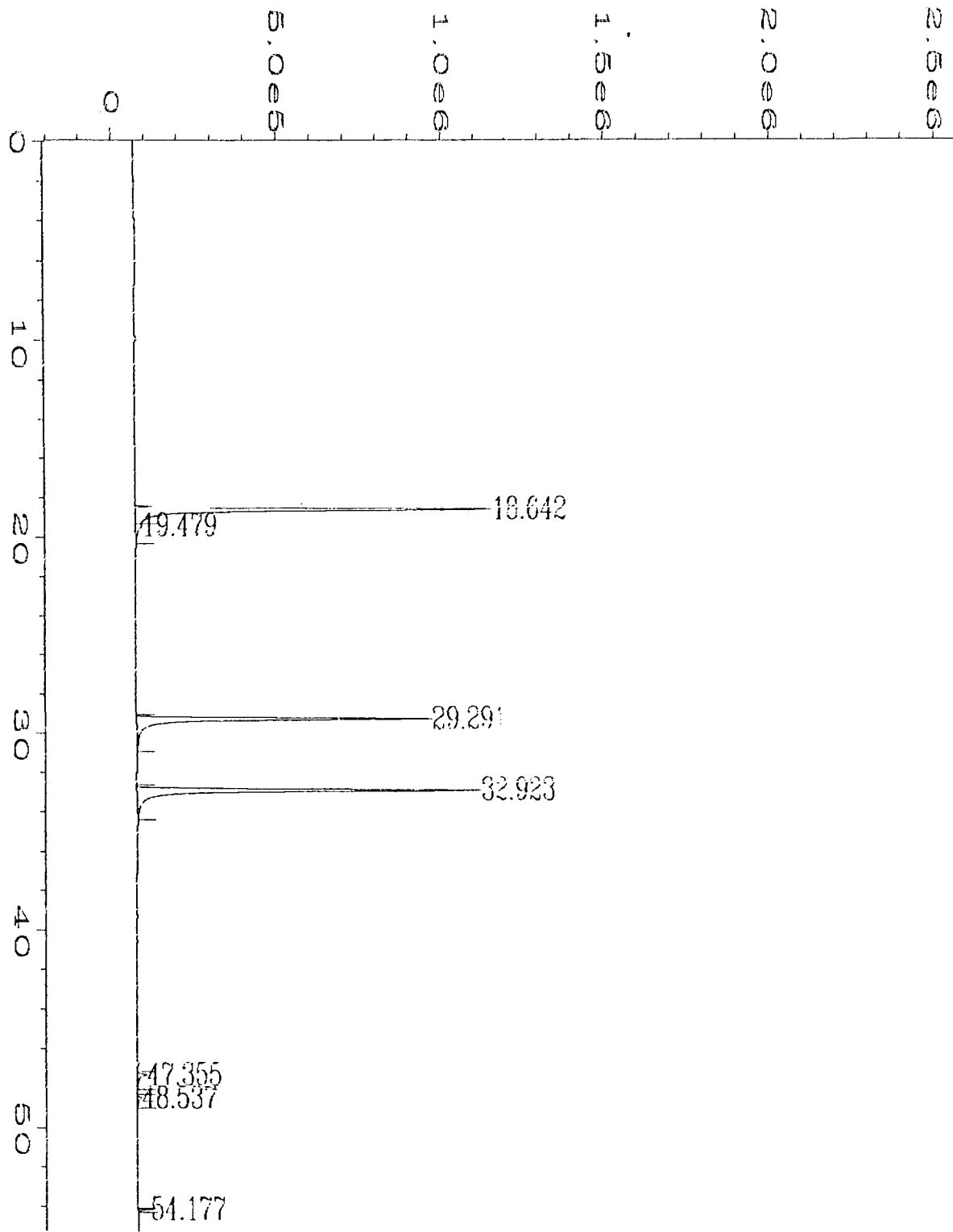
Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/03/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 5.5                    | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

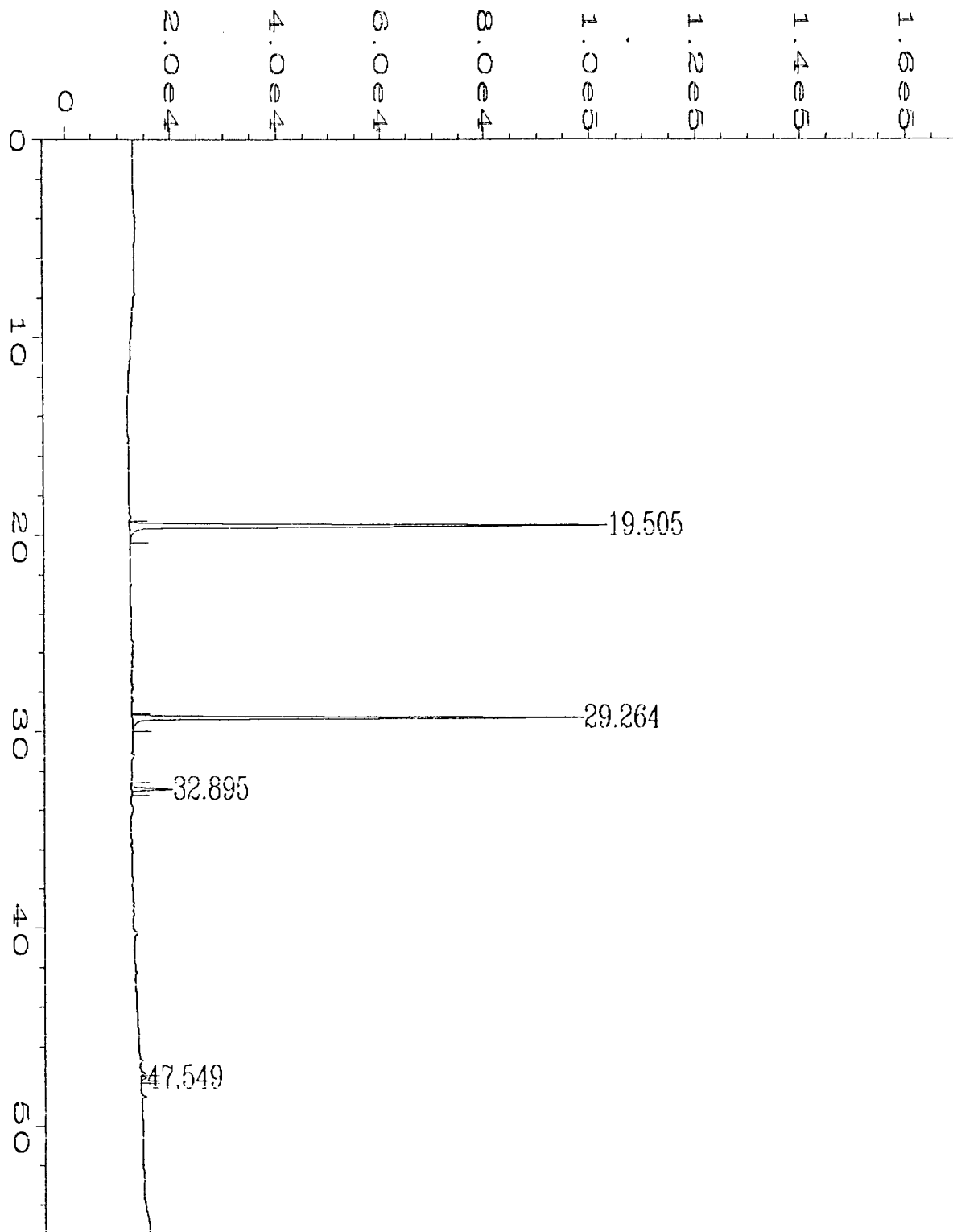
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

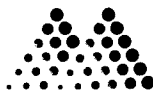
*Mark W. Bostrom*  
 Mark W. Bostrom  
 Project Manager



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\067F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 67          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25047R DF1                           | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 12 Oct 94 06:31 PM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | 12 Oct 94 07:27 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 12 OCT 94 03:14 PM                   | ISTD Amount       | :             |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\067R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 67          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25047R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 12 Oct 94 06:31 PM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 12 Oct 94 07:29 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 12 OCT 94 03:33 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



# Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
175 West 200 South  
Suite # 2006  
Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
Project: Kirtland, NM

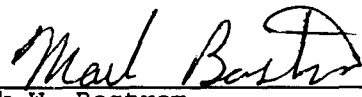
Sample ID: MW-17A  
Matrix: Waste Water

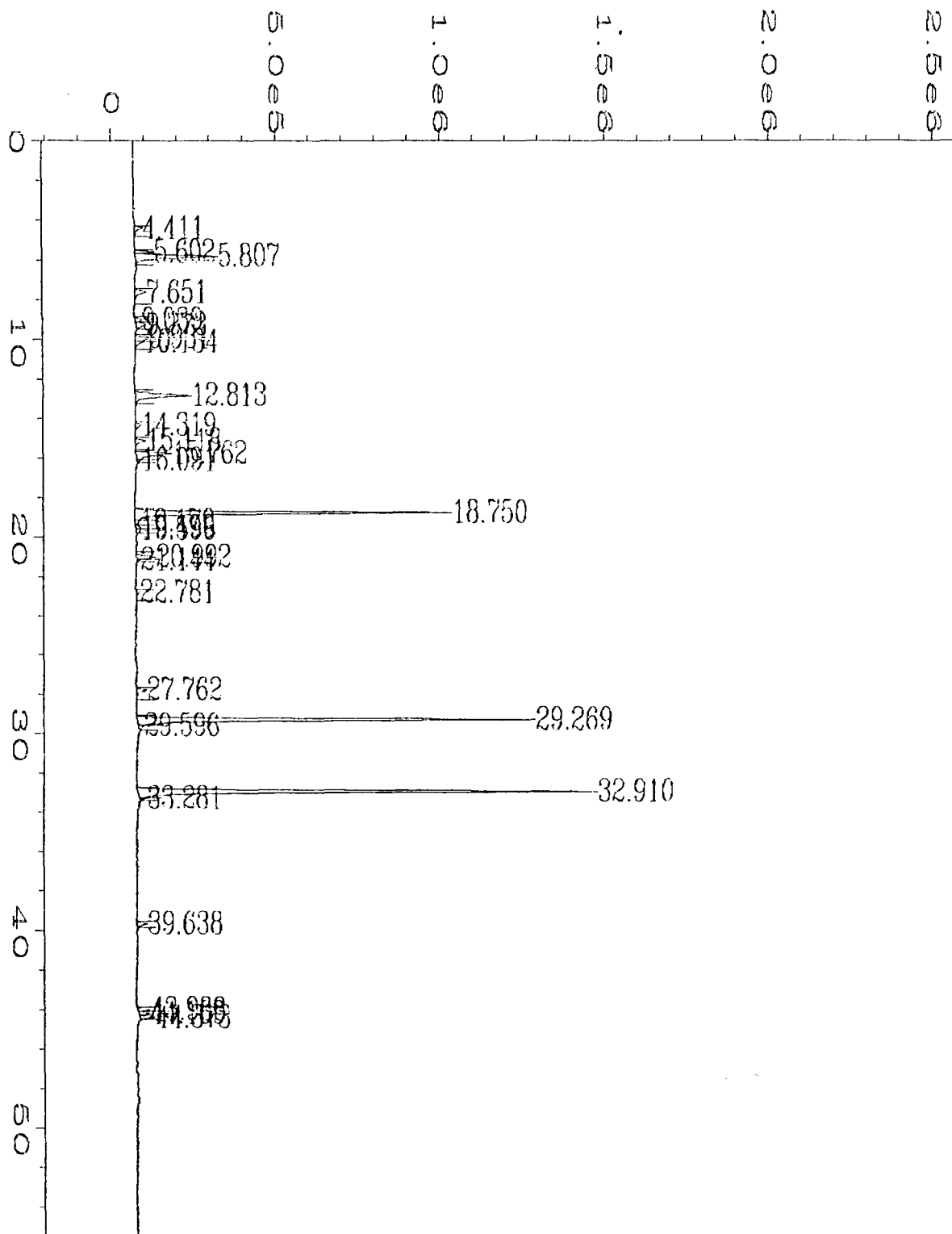
MSAI Sample: 25051  
MSAI Group: 6161  
Date Reported: 10/18/94

Discard Date: 11/17/94  
Date Submitted: 10/04/94  
Date Sampled: 10/02/94  
Collected by: DRA  
Purchase Order: 9131.01  
Project No.:

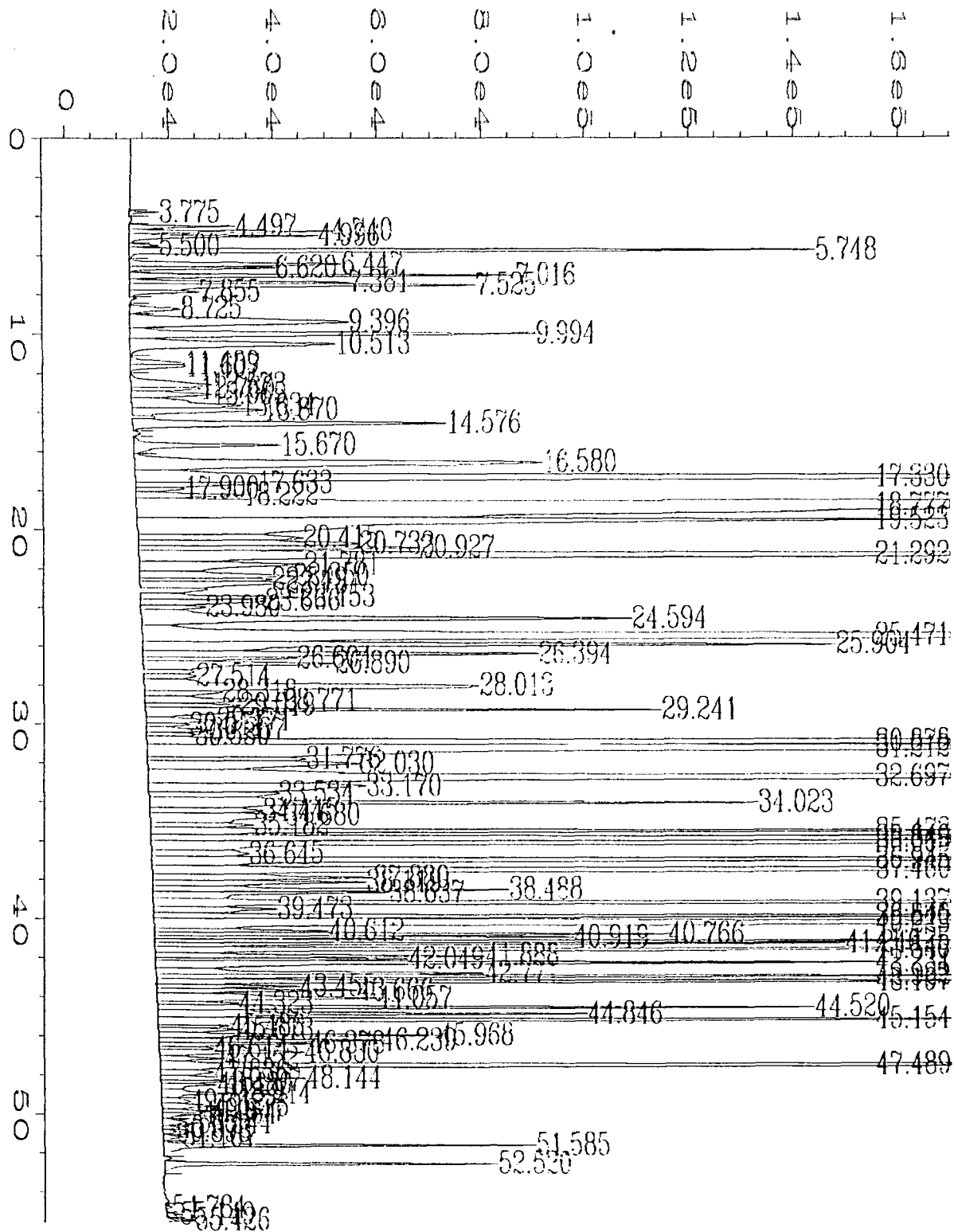
| Test  | Analysis                        | Results<br>as Received | Units | Limit of<br>Quantitation |
|-------|---------------------------------|------------------------|-------|--------------------------|
| ----- | -----                           | -----                  | ----- | -----                    |
| 5515  | Purgeable Aromatics/Halocarbons |                        |       |                          |
|       | Method: 600 SERIES 601/602      |                        |       |                          |
|       | 1,2-Dichloroethane              | 4.9                    | ug/l  | 1.0                      |
|       | Benzene                         | 5,130                  | ug/l  | 100                      |
|       | Toluene                         | 1,160                  | ug/l  | 100                      |
|       | Ethylbenzene                    | 409                    | ug/l  | 100                      |
|       | m,p-Xylene                      | 2,080                  | ug/l  | 100                      |
|       | o-Xylene                        | 738                    | ug/l  | 100                      |
| 6159  | Chromatograms/Etc. GC           | See Attached           |       |                          |
|       | Method: IN HOUSE MSAI           |                        |       |                          |

Respectfully Submitted,  
Reviewed and Approved by:

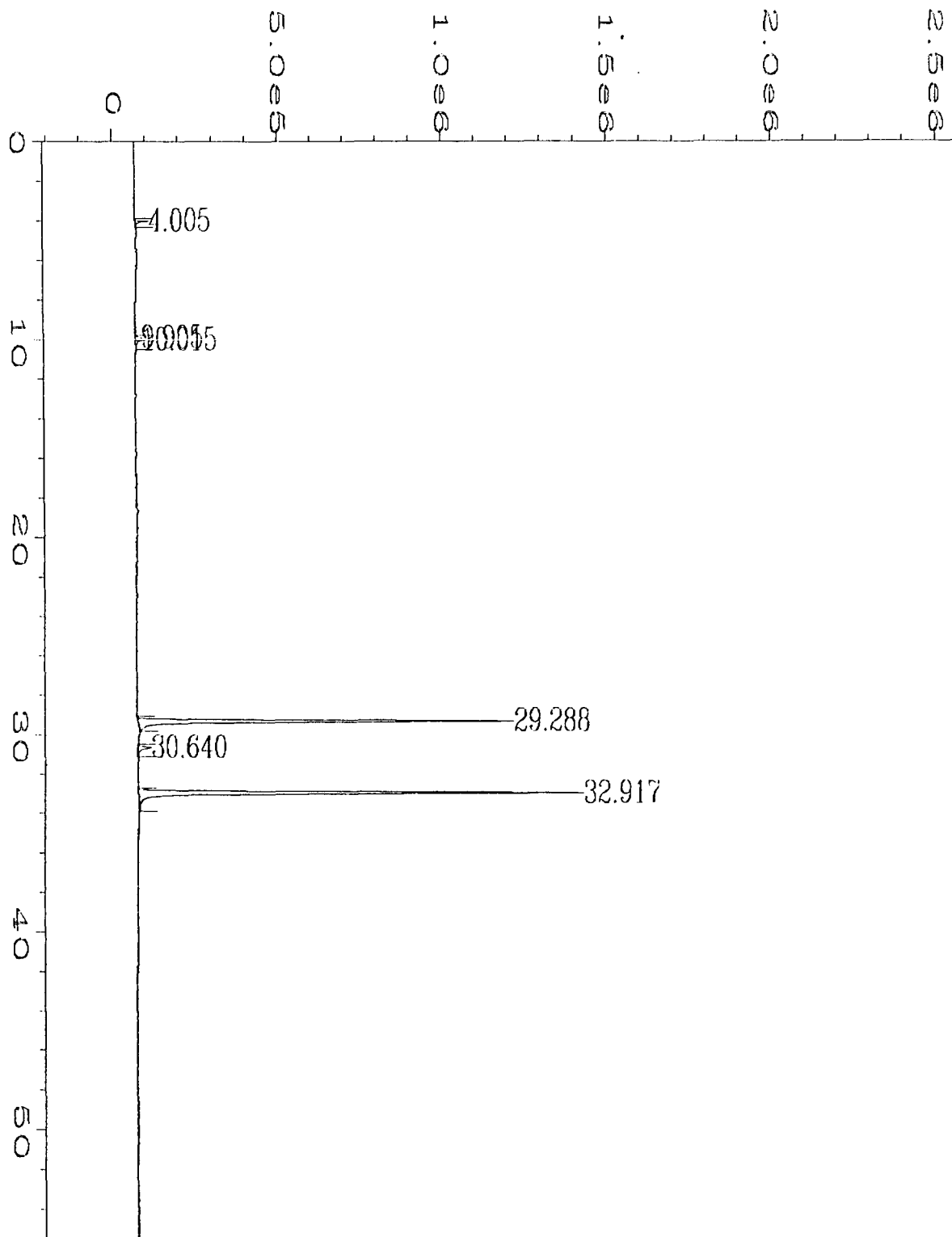
  
Mark W. Bostrom  
Project Manager



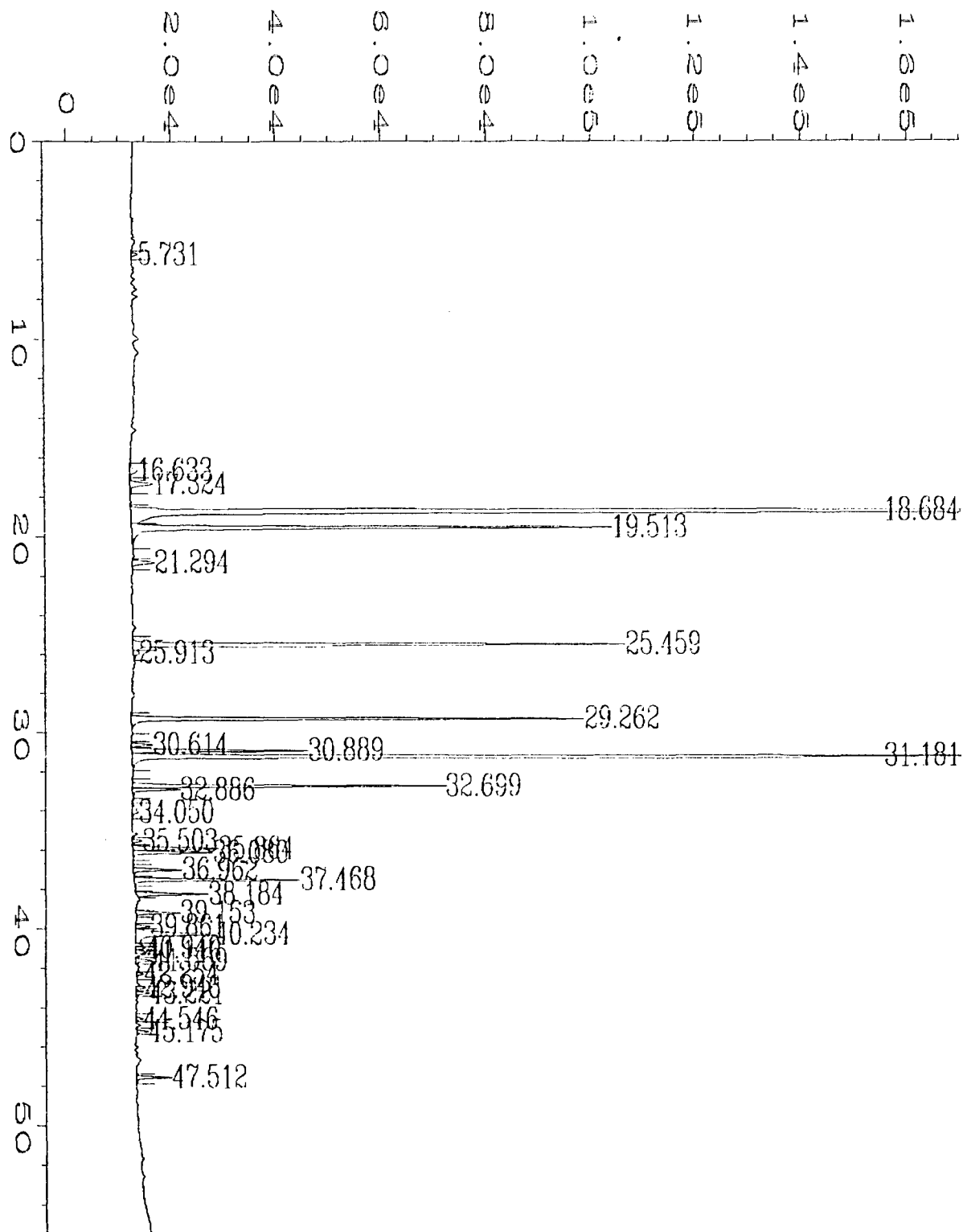
|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\046F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 46          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25051 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 11 Oct 94 02:22 PM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | 11 Oct 94 03:18 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 10 OCT 94 02:55 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\046R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 46          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25051 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 11 Oct 94 02:22 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | 11 Oct 94 03:19 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 10 OCT 94 03:37 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\064F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 64          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25051R DF100                         | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 12 Oct 94 02:04 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 12 Oct 94 03:52 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 12 OCT 94 03:14 PM                   | ISTD Amount        | :             |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\064R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 64          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25051R DF100                         | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 12 Oct 94 02:04 PM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 12 Oct 94 03:53 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 12 OCT 94 03:33 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: MW-17B  
 Matrix: Waste Water

MSAI Sample: 25052  
 MSAI Group: 6161  
 Date Reported: 10/18/94

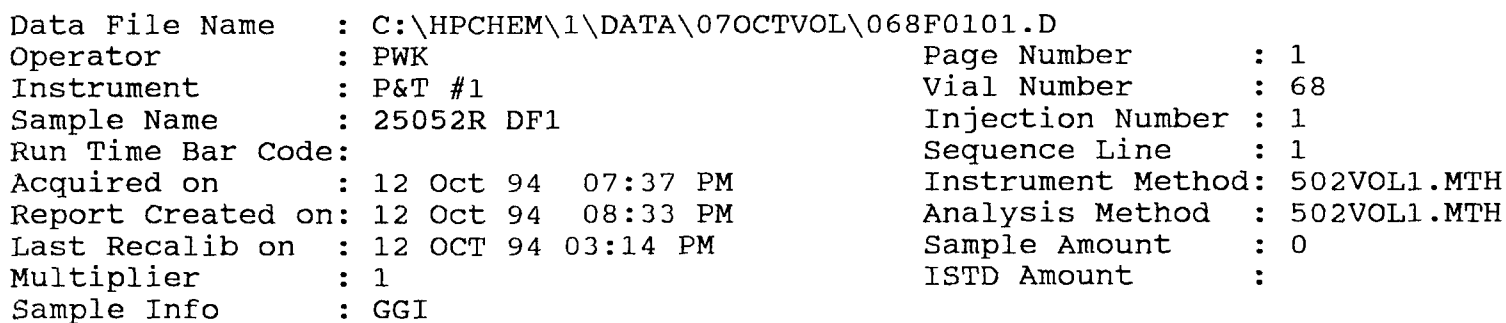
Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/02/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

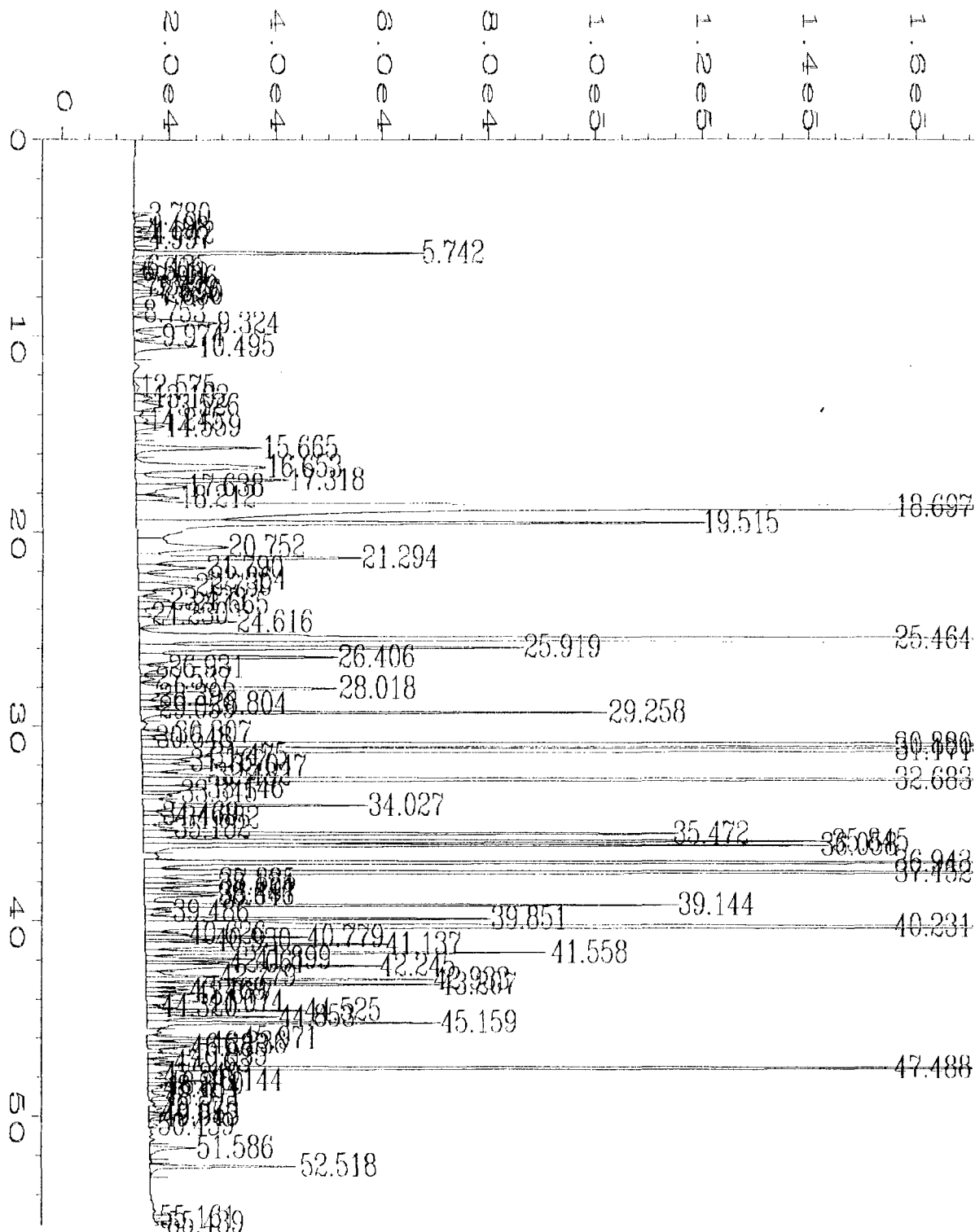
| Test | Analysis                        | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------|------------------------|-------|--------------------------|
| ---- | -----                           | -----                  | ----- | -----                    |
| 5515 | Purgeable Aromatics/Halocarbons |                        |       |                          |
|      | Method: 600 SERIES 601/602      |                        |       |                          |
|      | 1,2-Dichloroethane              | ND                     | ug/l  | 1.0                      |
|      | Benzene                         | 2,070                  | ug/l  | 500                      |
|      | Toluene                         | 807                    | ug/l  | 50                       |
|      | Ethylbenzene                    | 350                    | ug/l  | 50                       |
|      | m,p-Xylene                      | 1,480                  | ug/l  | 50                       |
|      | o-Xylene                        | 533                    | ug/l  | 50                       |
| 6159 | Chromatograms/Etc. GC           | See Attached           |       |                          |
|      | Method: IN HOUSE MSAI           |                        |       |                          |

ND - Not detected at the limit of quantitation

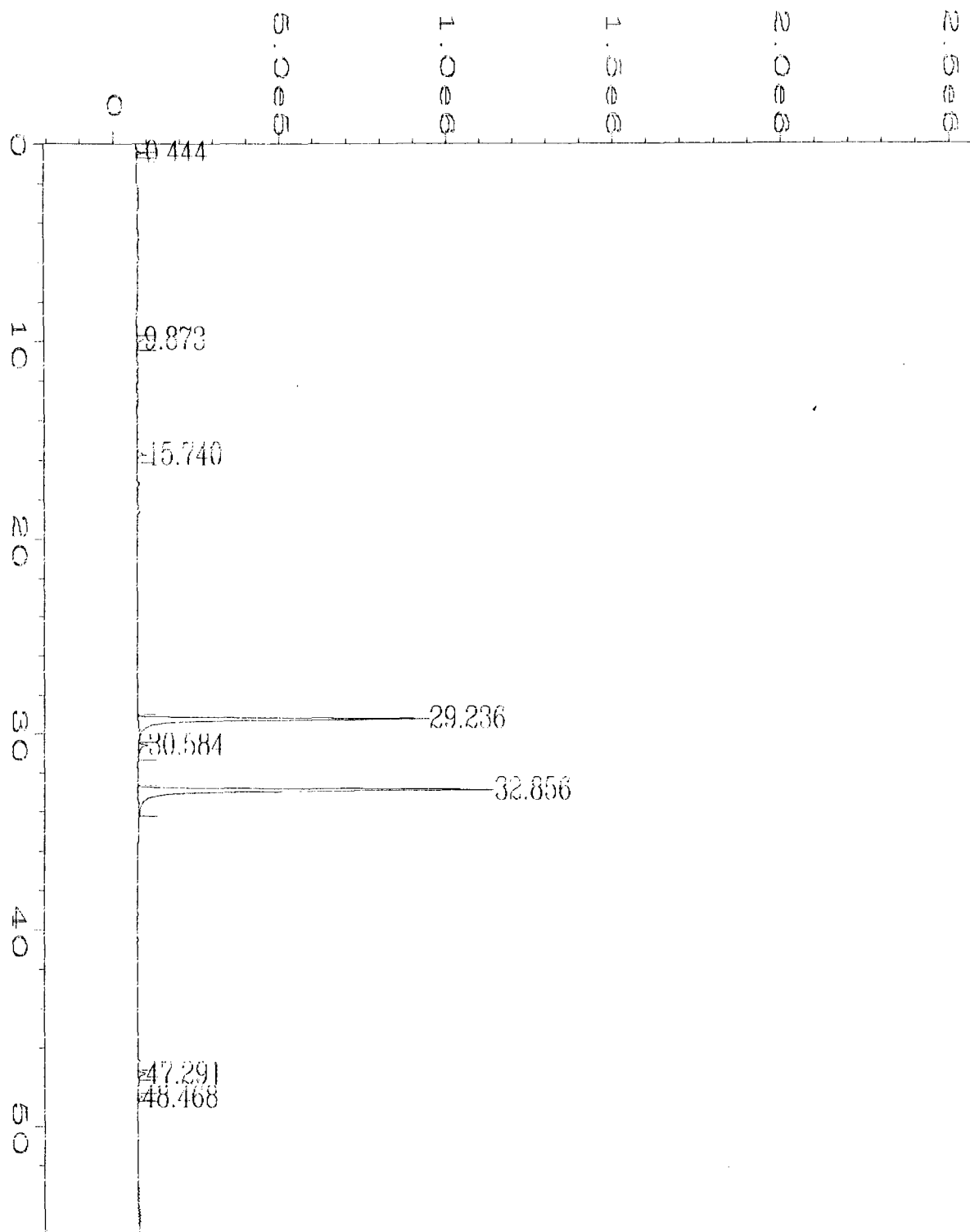
Respectfully Submitted,  
 Reviewed and Approved by:

  
 Mark W. Bostrom  
 Project Manager

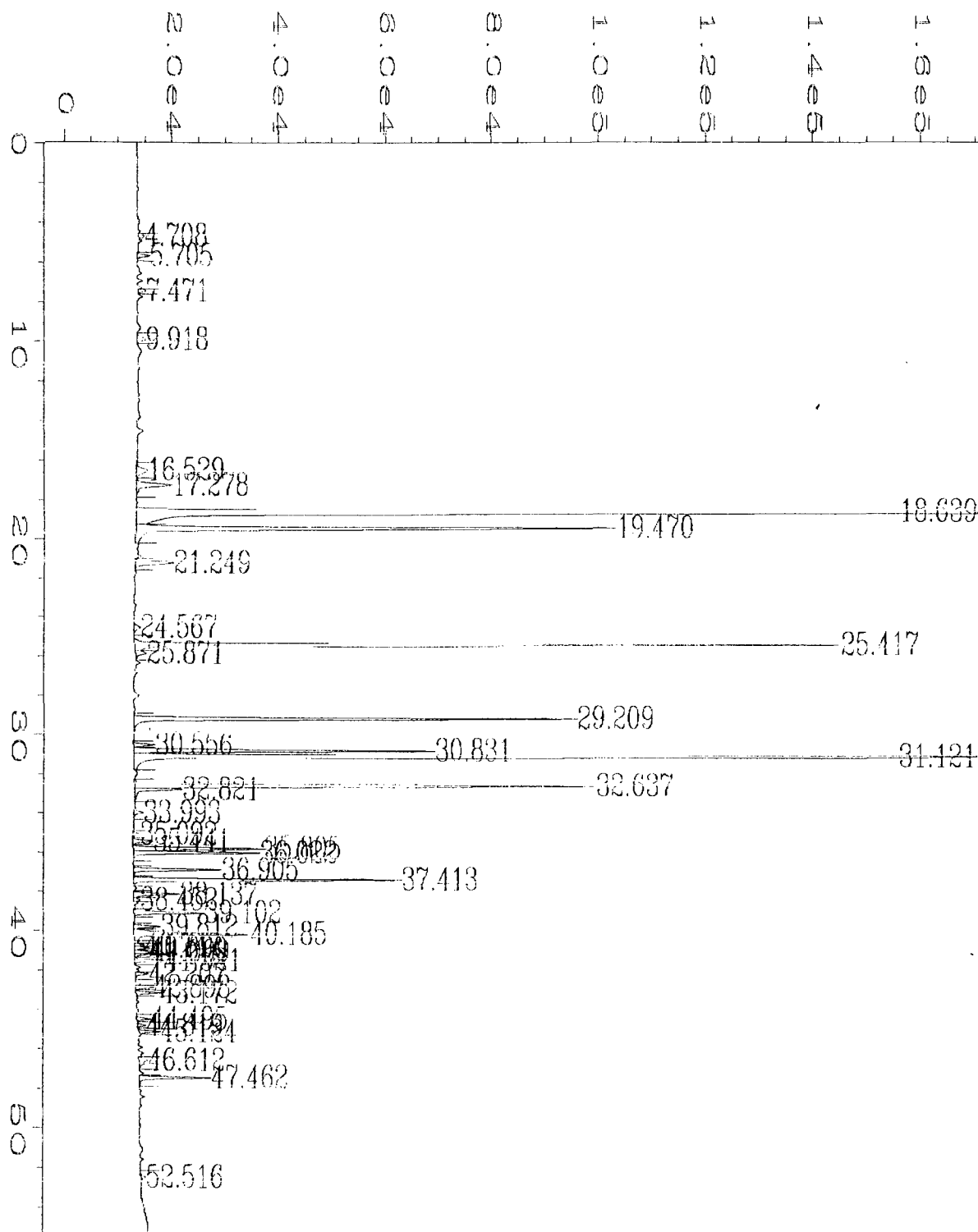




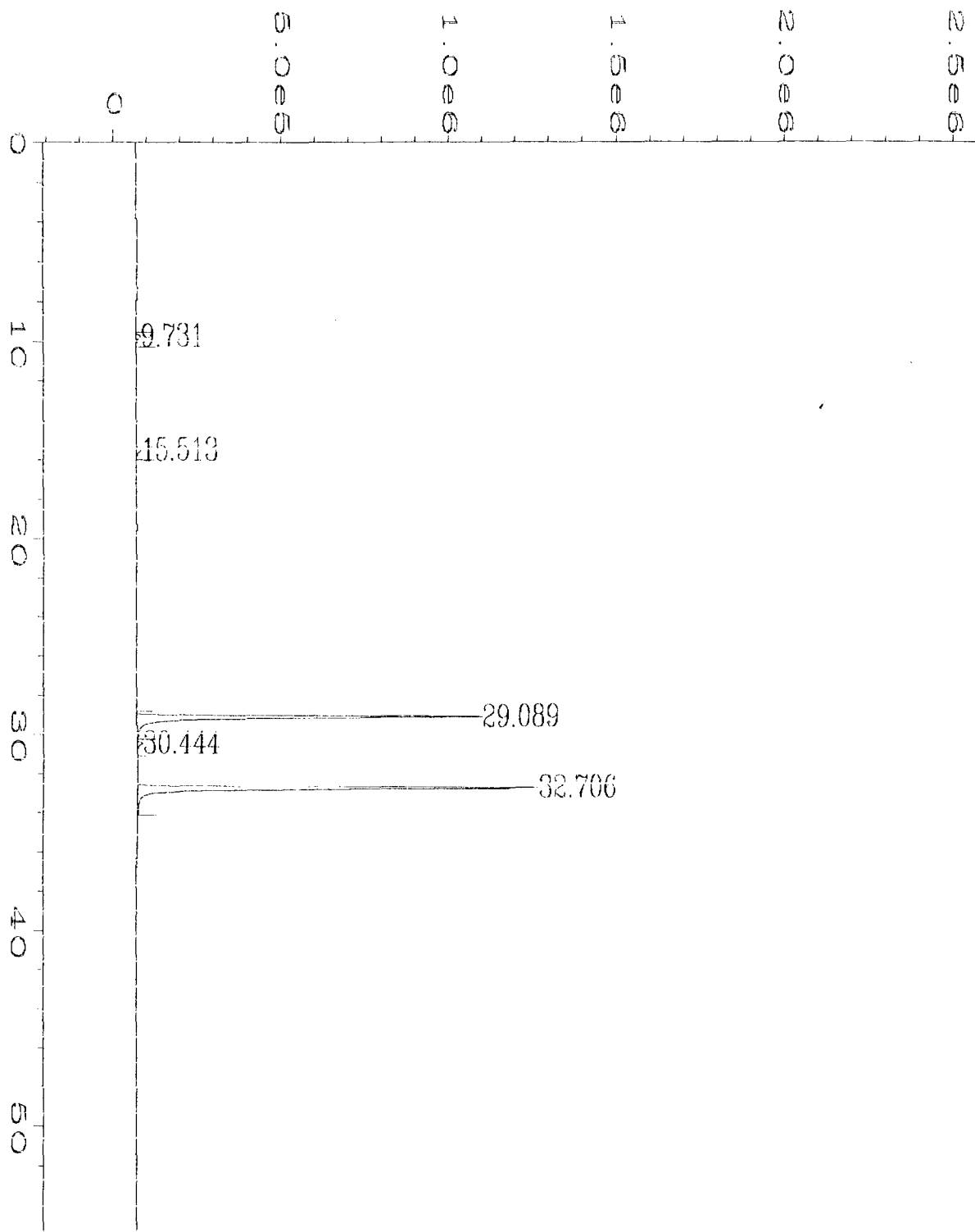
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|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\068R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 68          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25052R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 12 Oct 94 07:37 PM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 12 Oct 94 08:34 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 12 OCT 94 03:33 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



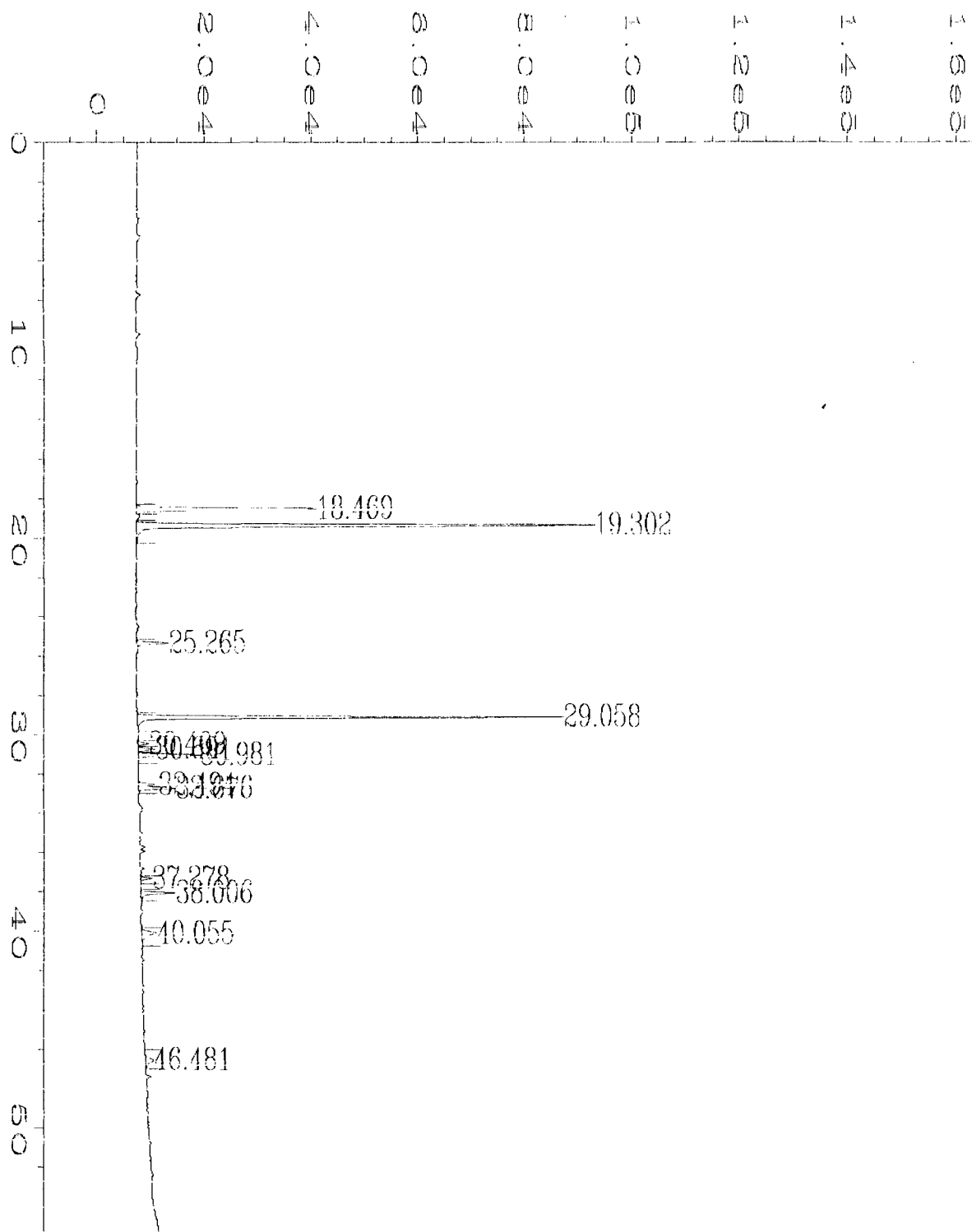
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|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\13OCTVOL\016F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 16          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25052R DF50                          | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 14 Oct 94 02:14 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 14 Oct 94 03:09 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 12 OCT 94 03:14 PM                   | ISTD Amount        | :             |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



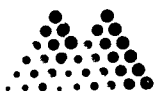
|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\13OCTVOL\016R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 16          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25052R DF50                          | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 14 Oct 94 02:14 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | : 14 Oct 94 03:11 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 12 OCT 94 03:33 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\13OCTVOL\019F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 19          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25052R DF500                         | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 14 Oct 94 07:43 PM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | : 14 Oct 94 08:39 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 12 OCT 94 03:14 PM                   | ISTD Amount       | :             |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\13OCTVOL\019R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 19          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25052R DF500                         | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 14 Oct 94 07:43 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | 14 Oct 94 08:40 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 12 OCT 94 03:33 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: MW-22  
 Matrix: Waste Water

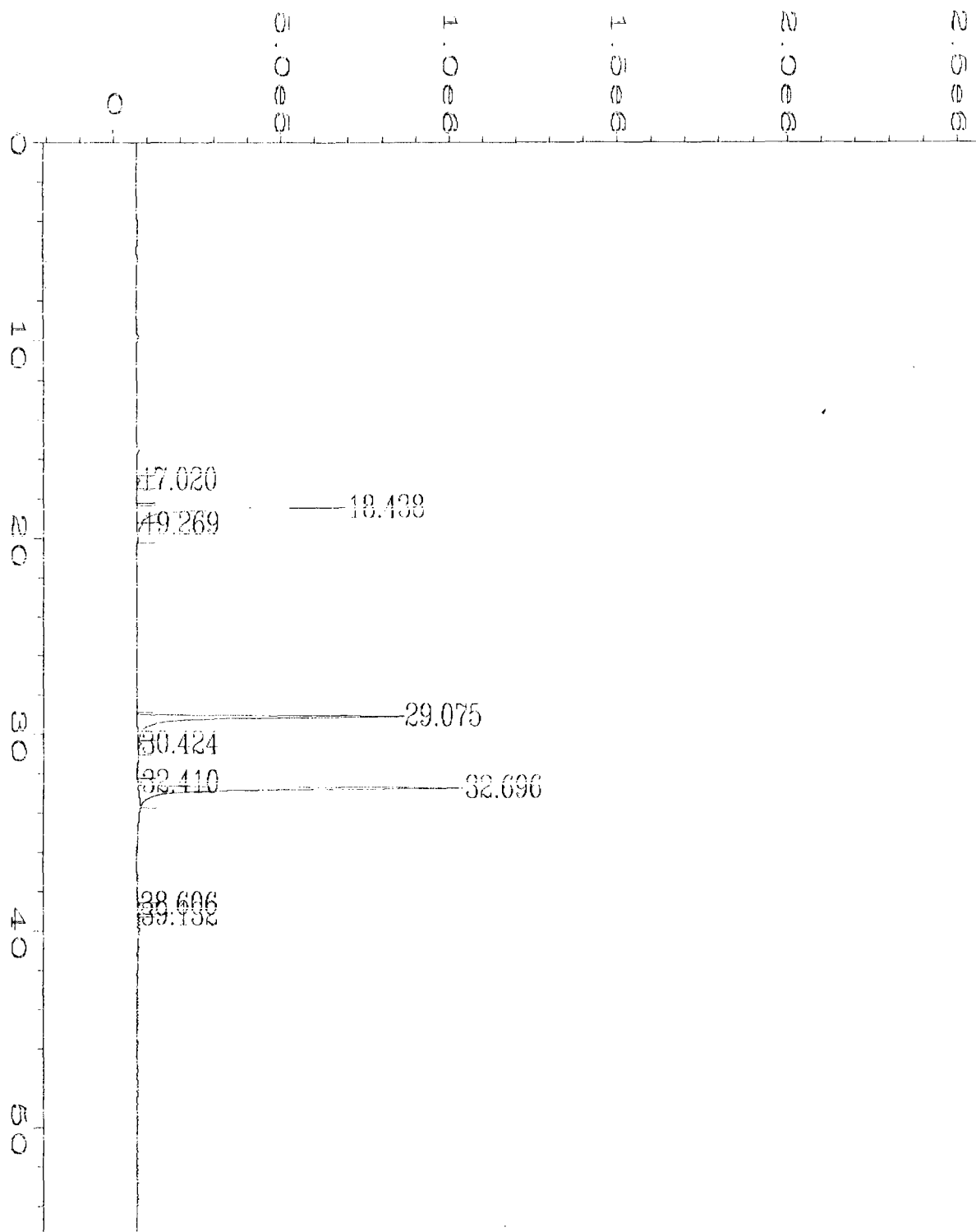
MSAI Sample: 25053  
 MSAI Group: 6161  
 Date Reported: 10/18/94

Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/02/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

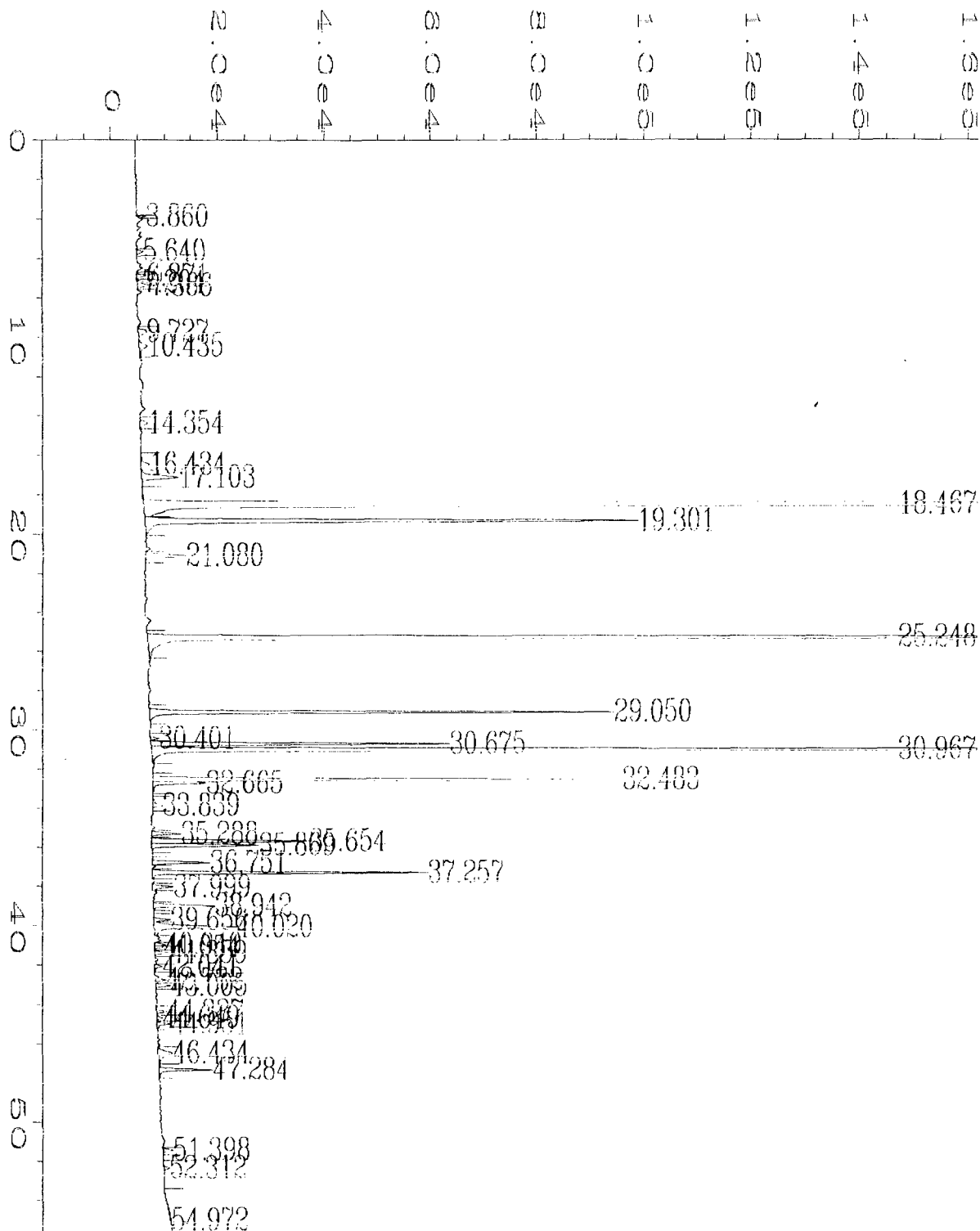
| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 566                    | ug/l  | 200                      |
|      | Benzene                                                       | 10,500                 | ug/l  | 2,000                    |
|      | Toluene                                                       | 5,890                  | ug/l  | 2,000                    |
|      | Ethylbenzene                                                  | 1,390                  | ug/l  | 200                      |
|      | m,p-Xylene                                                    | 6,180                  | ug/l  | 200                      |
|      | o-Xylene                                                      | 2,170                  | ug/l  | 200                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

Respectfully Submitted,  
 Reviewed and Approved by:

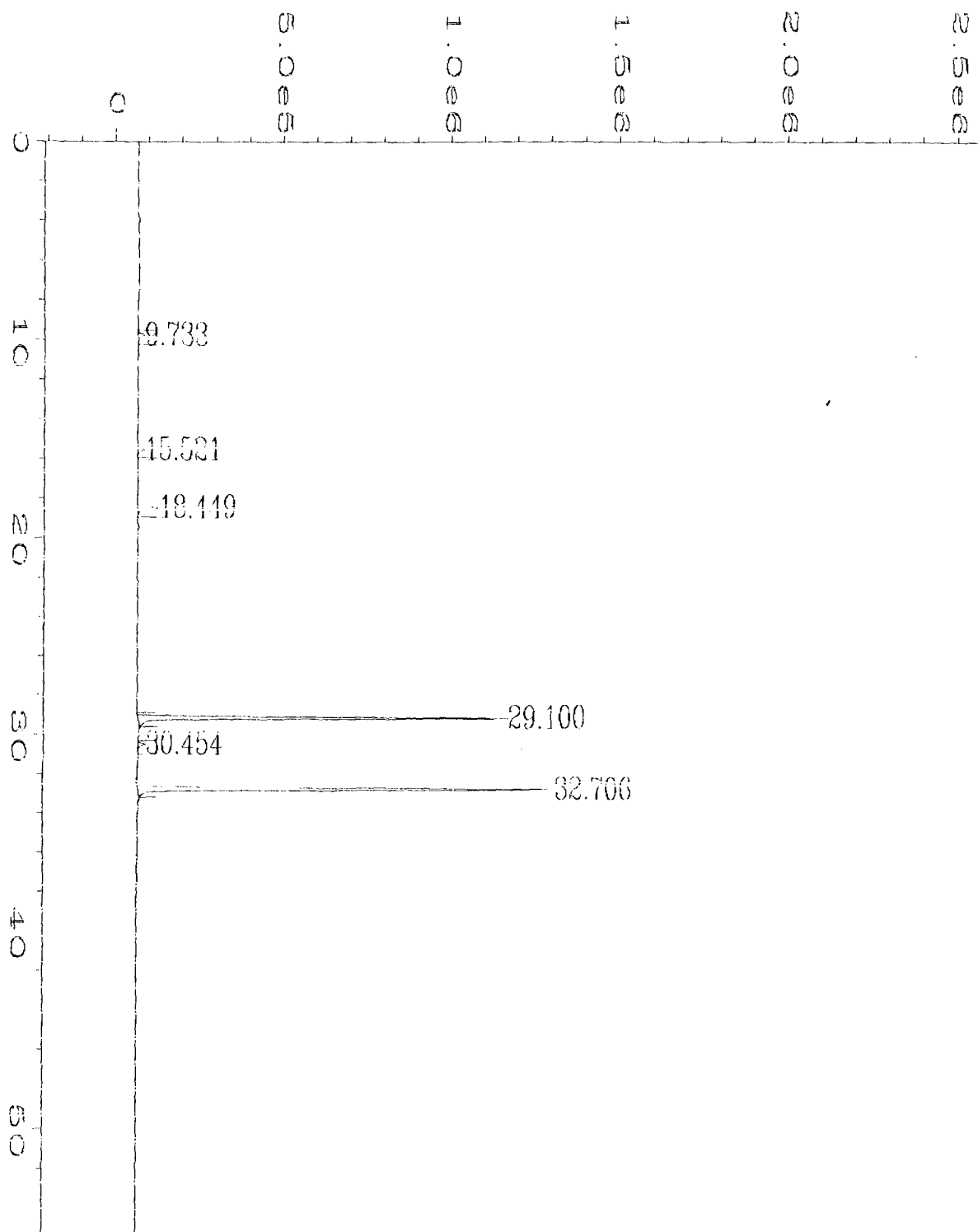
  
 Mark W. Bostrom  
 Project Manager



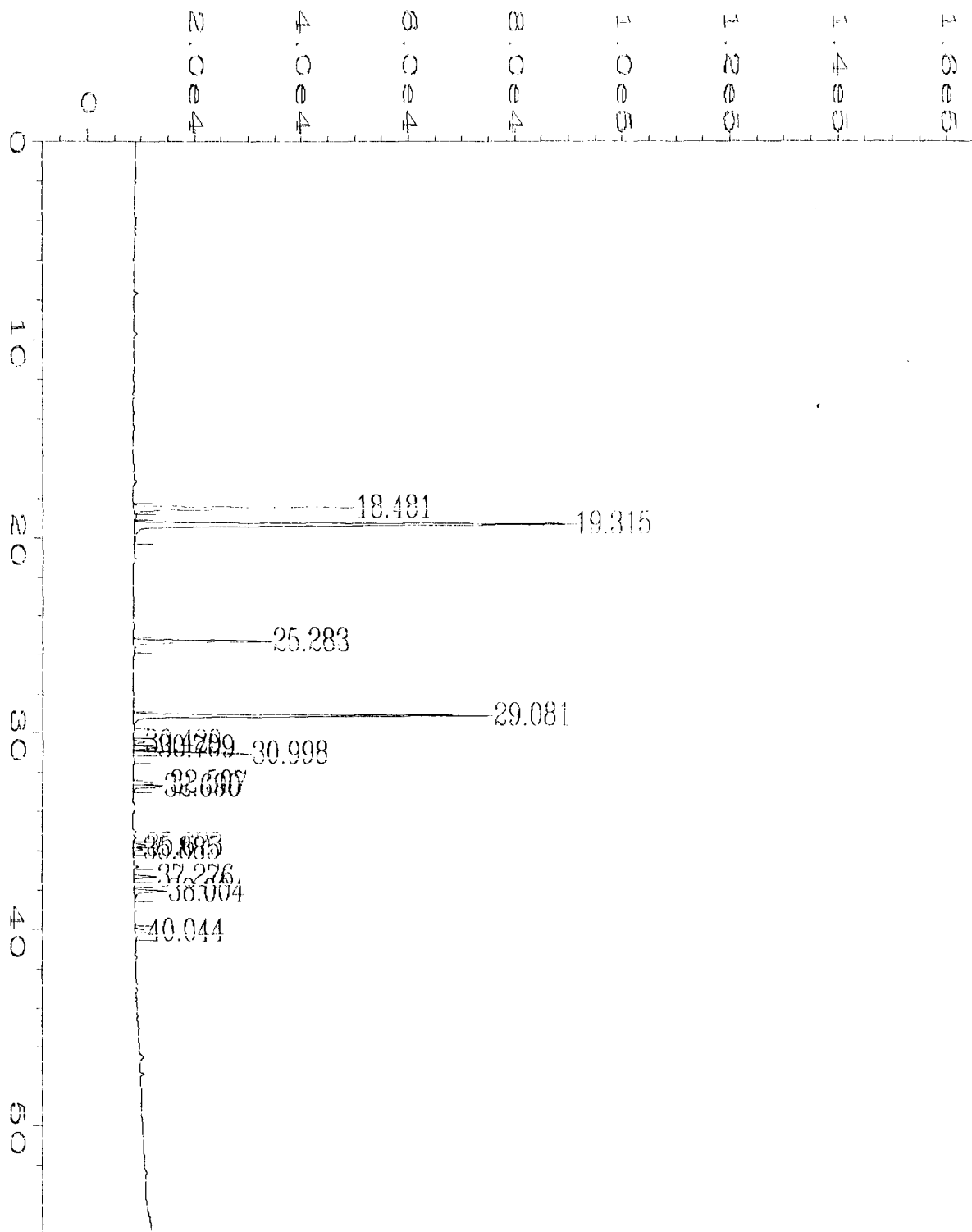
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|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\13OCTVOL\017F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 17          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25053R DF200                         | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 14 Oct 94 05:05 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 14 Oct 94 06:01 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 12 OCT 94 03:14 PM                   | ISTD Amount        | :             |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



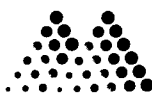
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|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\13OCTVOL\017R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 17          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25053R DF200                         | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 14 Oct 94 05:05 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | 14 Oct 94 06:02 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 12 OCT 94 03:33 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\13OCTVOL\020F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 20          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25053R DF2000                        | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 14 Oct 94 08:48 PM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | 14 Oct 94 09:44 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 12 OCT 94 03:14 PM                   | ISTD Amount       | :             |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\13OCTVOL\020R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 20          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25053R DF2000                        | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 14 Oct 94 08:48 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | : 14 Oct 94 09:45 PM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 12 OCT 94 03:33 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

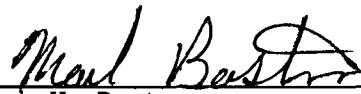
Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

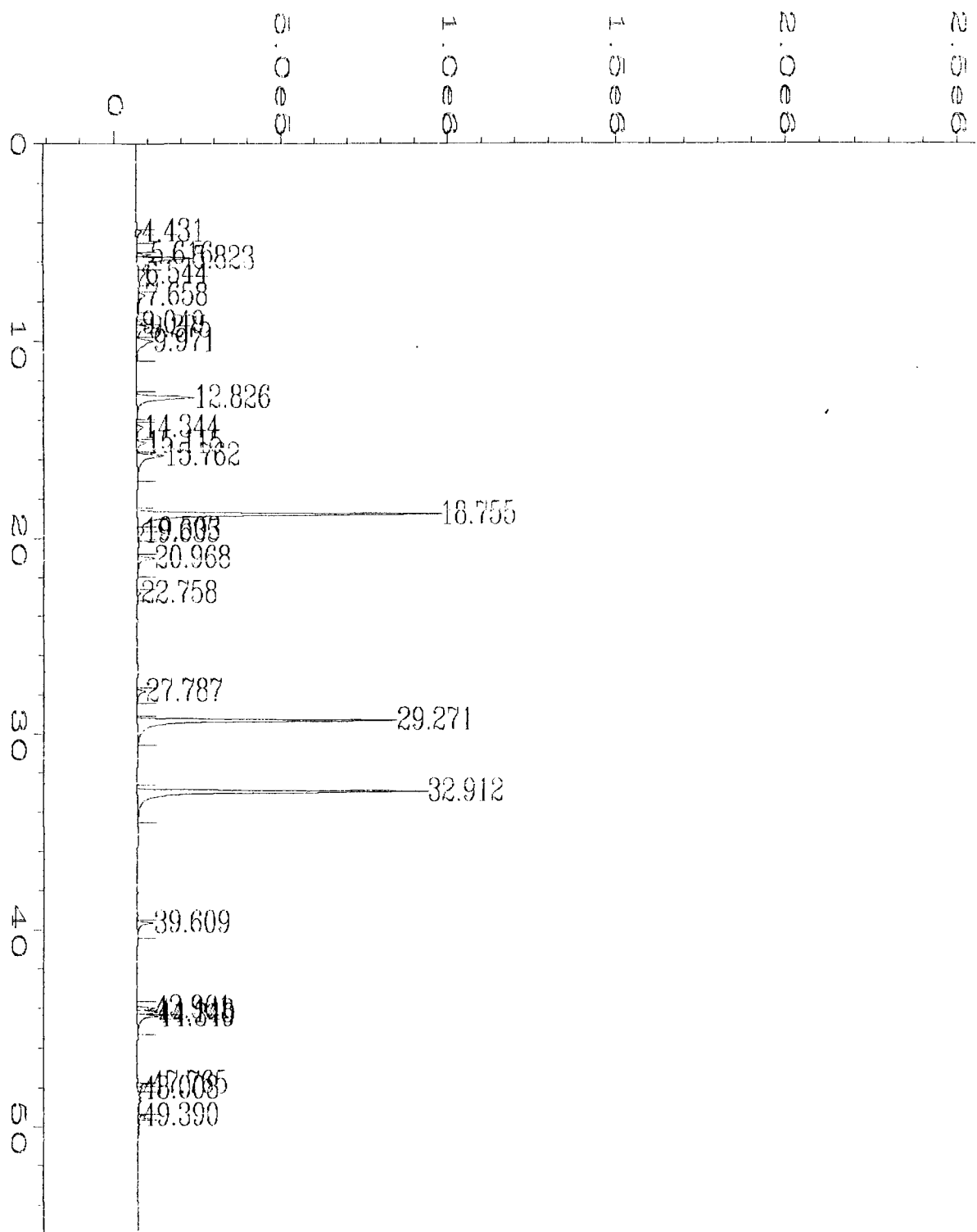
Sample ID: MW-27  
 Matrix: Waste Water

MSAI Sample: 25054  
 MSAI Group: 6161  
 Date Reported: 10/18/94  
 Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/02/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

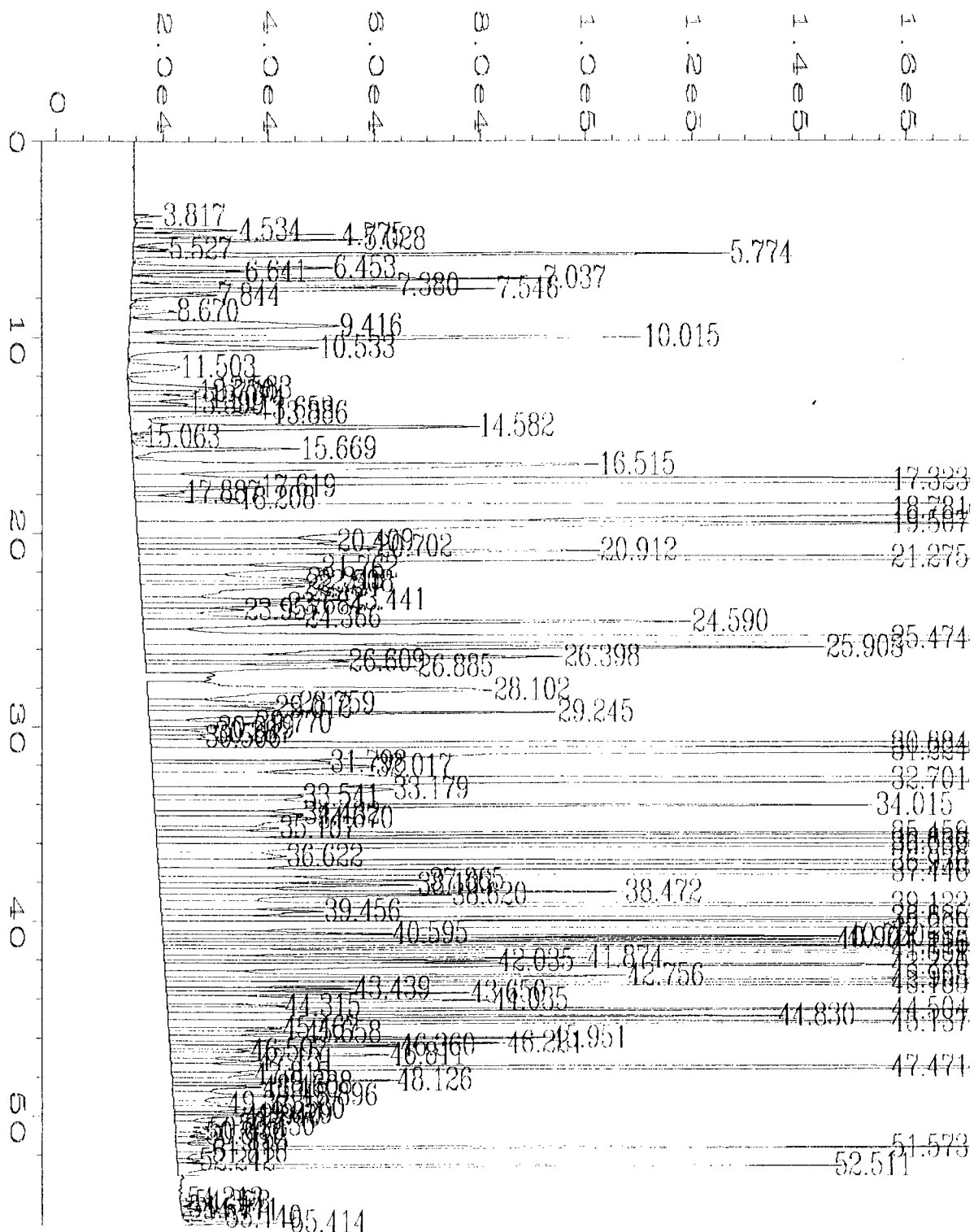
| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | 4.8                    | ug/l  | 1.0                      |
|      | Benzene                                                       | 5,780                  | ug/l  | 200                      |
|      | Toluene                                                       | 1,130                  | ug/l  | 200                      |
|      | Ethylbenzene                                                  | 385                    | ug/l  | 200                      |
|      | m,p-Xylene                                                    | 2,100                  | ug/l  | 200                      |
|      | o-Xylene                                                      | 713                    | ug/l  | 200                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

Respectfully Submitted,  
 Reviewed and Approved by:

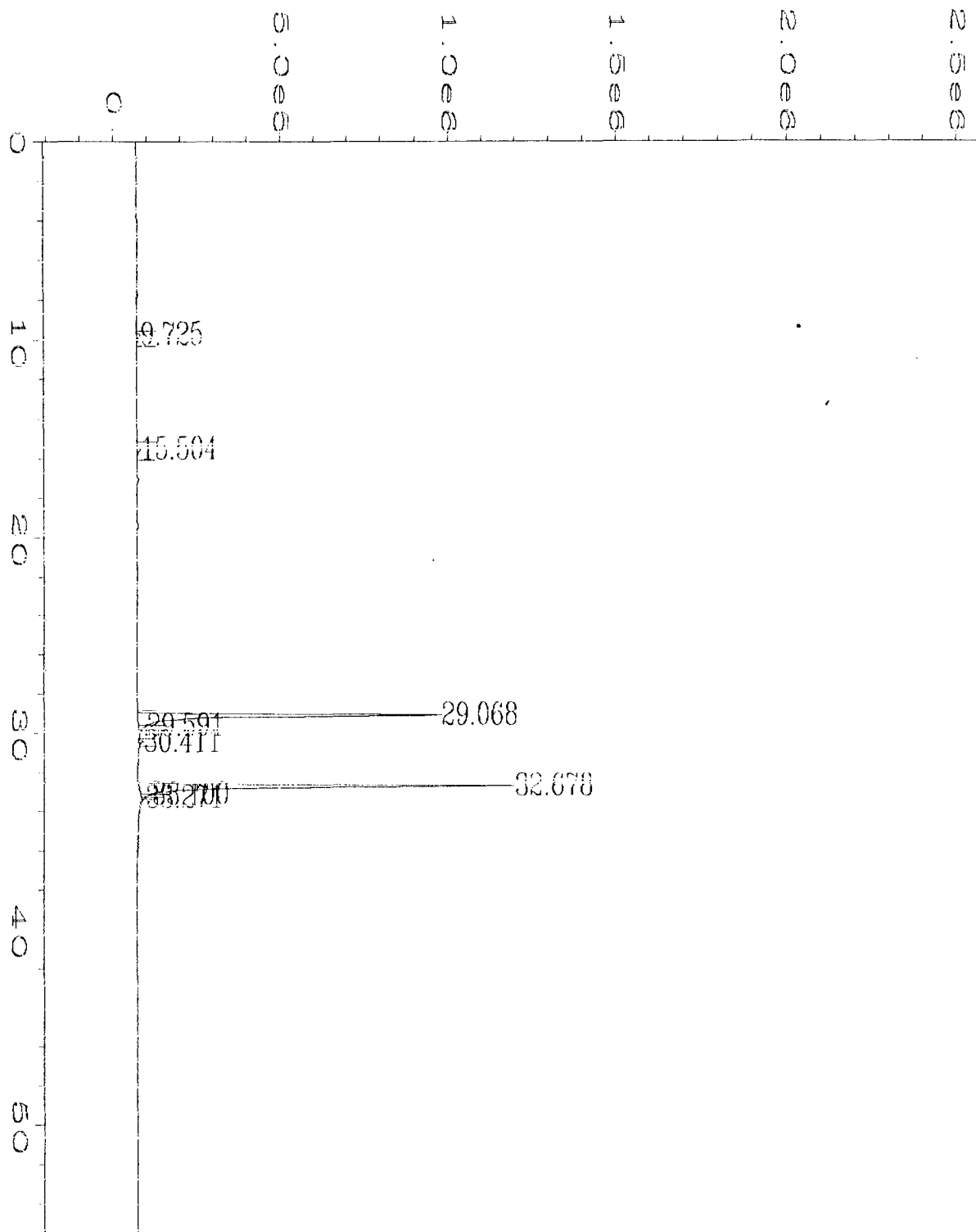
  
 Mark W. Bostrom  
 Project Manager



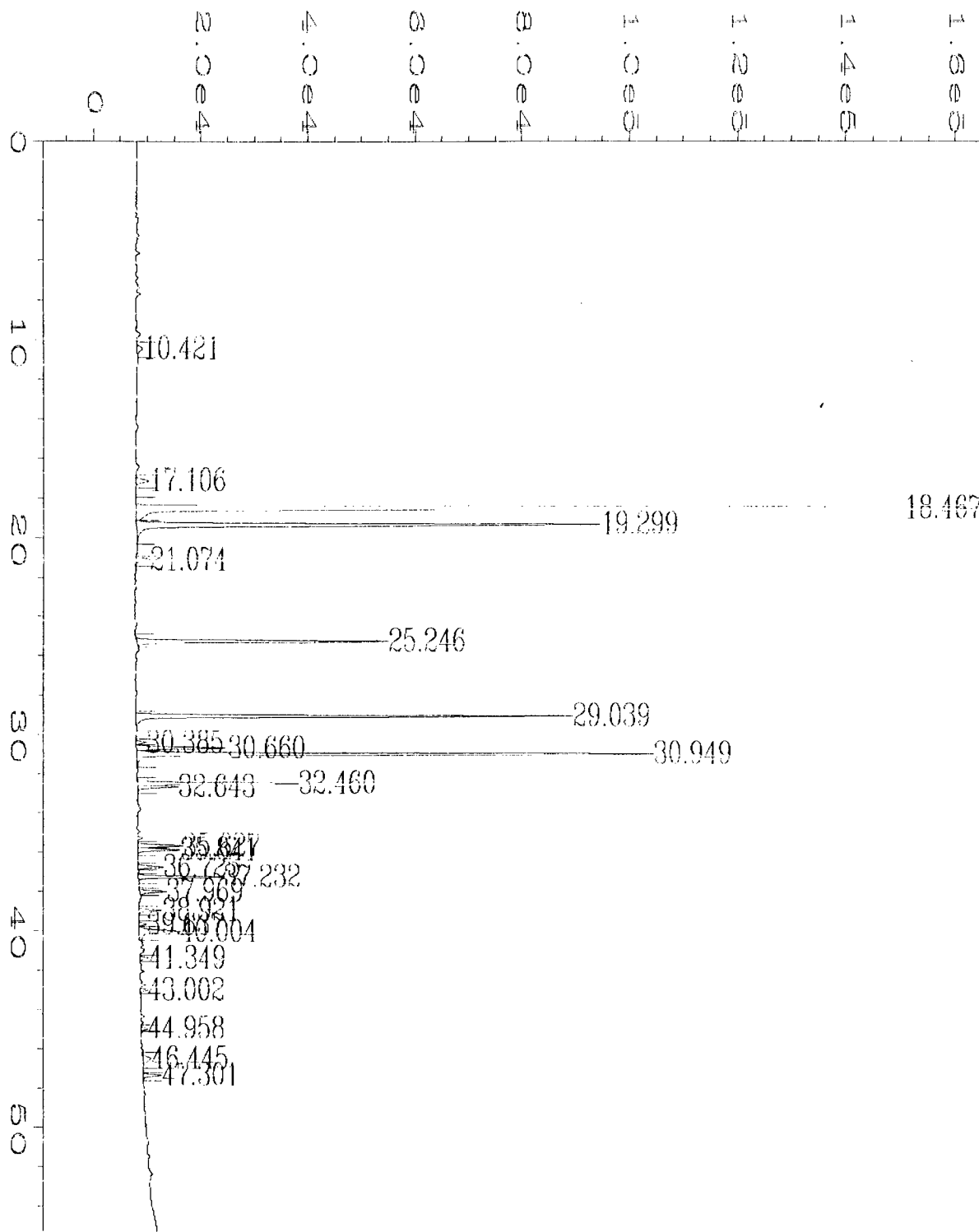
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|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\070F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 70          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25054R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 12 Oct 94 09:47 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 12 Oct 94 10:45 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 12 OCT 94 03:14 PM                   | ISTD Amount        | :             |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



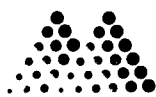
|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\070R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 70          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25054R DF1                           | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 12 Oct 94 09:47 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | 12 Oct 94 10:46 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 12 OCT 94 03:33 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\13OCTVOL\018F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 18          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25054R DF200                         | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 14 Oct 94 06:09 PM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | 14 Oct 94 07:05 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 12 OCT 94 03:14 PM                   | ISTD Amount       | :             |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\13OCTVOL\018R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 18          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25054R DF200                         | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 14 Oct 94 06:09 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | 14 Oct 94 07:06 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 12 OCT 94 03:33 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: EQB  
 Matrix: Waste Water

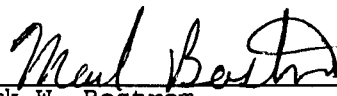
MSAI Sample: 25055  
 MSAI Group: 6161  
 Date Reported: 10/18/94

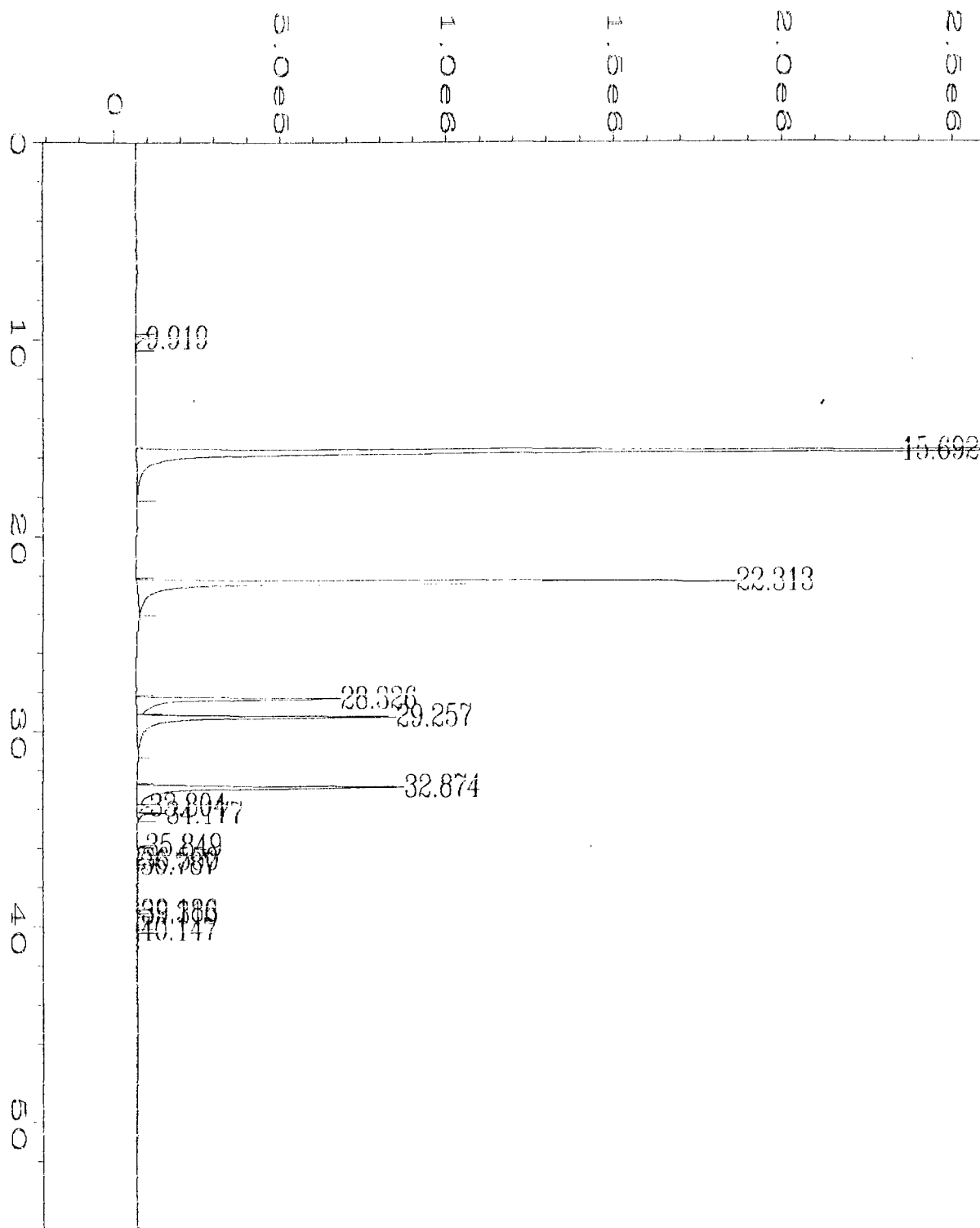
Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/02/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | ND                     | ug/l  | 1.0                      |
|      | Benzene                                                       | 1.3                    | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | 1.4                    | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

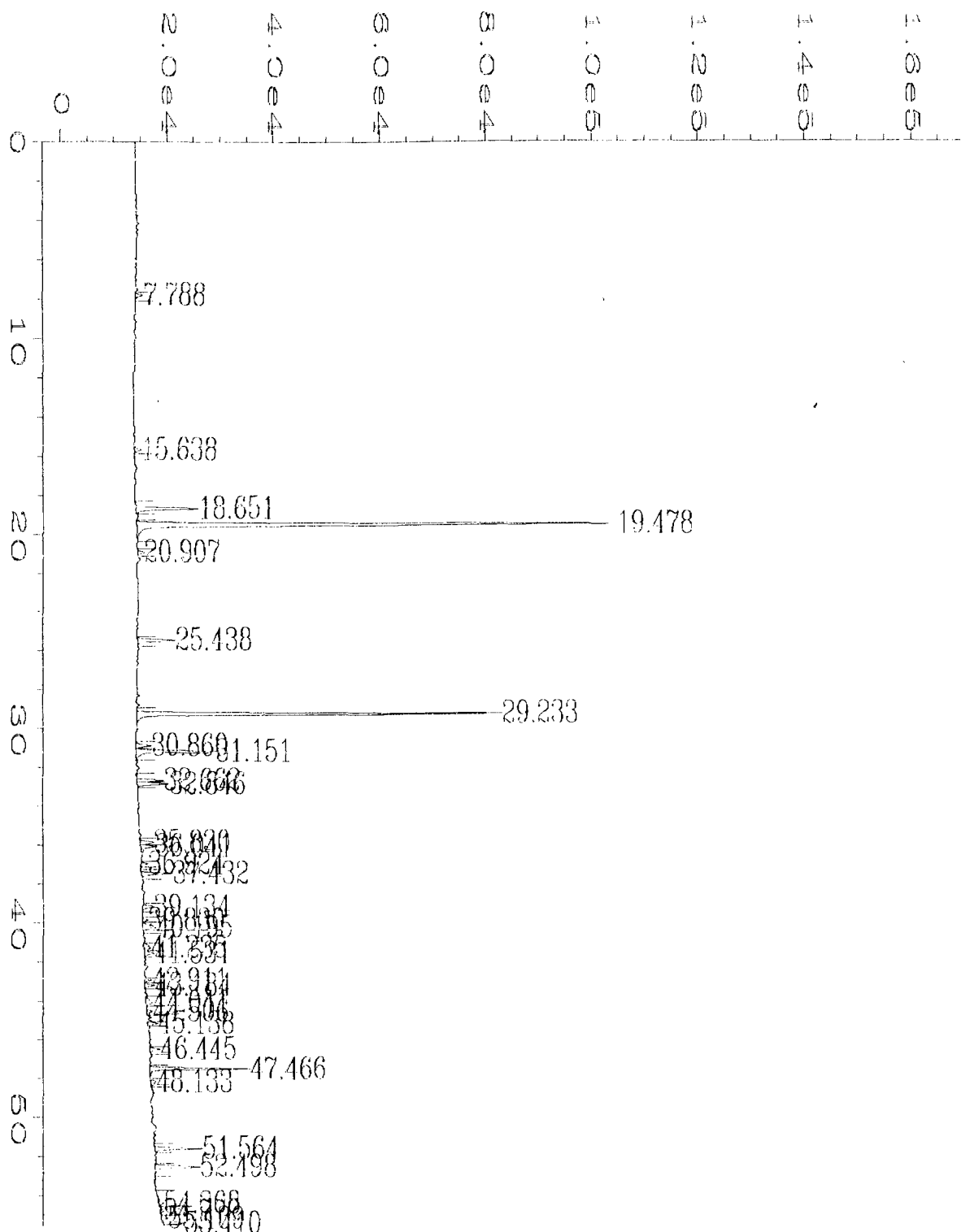
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

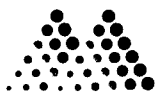
  
 Mark W. Bostrom  
 Project Manager



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\071F0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 71          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25055R DF1                           | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 12 Oct 94 10:51 PM                   | Analysis Method    | : 502VOL1.MTH |
| Report Created on: | 12 Oct 94 11:47 PM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 12 OCT 94 03:14 PM                   | ISTD Amount        | :             |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI                                  |                    |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\07OCTVOL\071R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 71          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25055R DF1                           | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 12 Oct 94 10:51 PM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | 12 Oct 94 11:48 PM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 12 OCT 94 03:33 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI                                  |                   |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: Trip Blank #1  
 Matrix: Waste Water

MSAI Sample: 25056  
 MSAI Group: 6161  
 Date Reported: 10/18/94

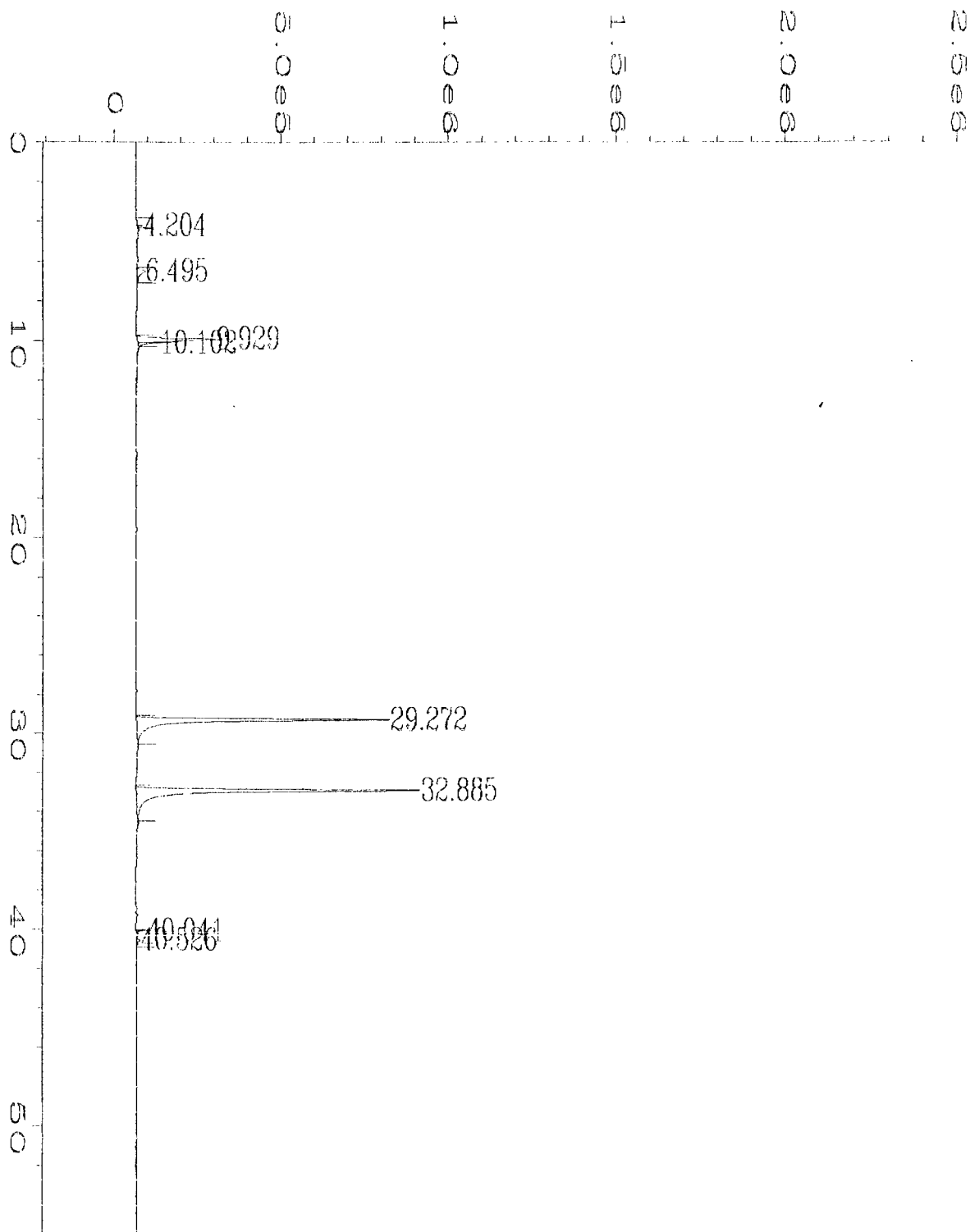
Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/04/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | ND                     | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

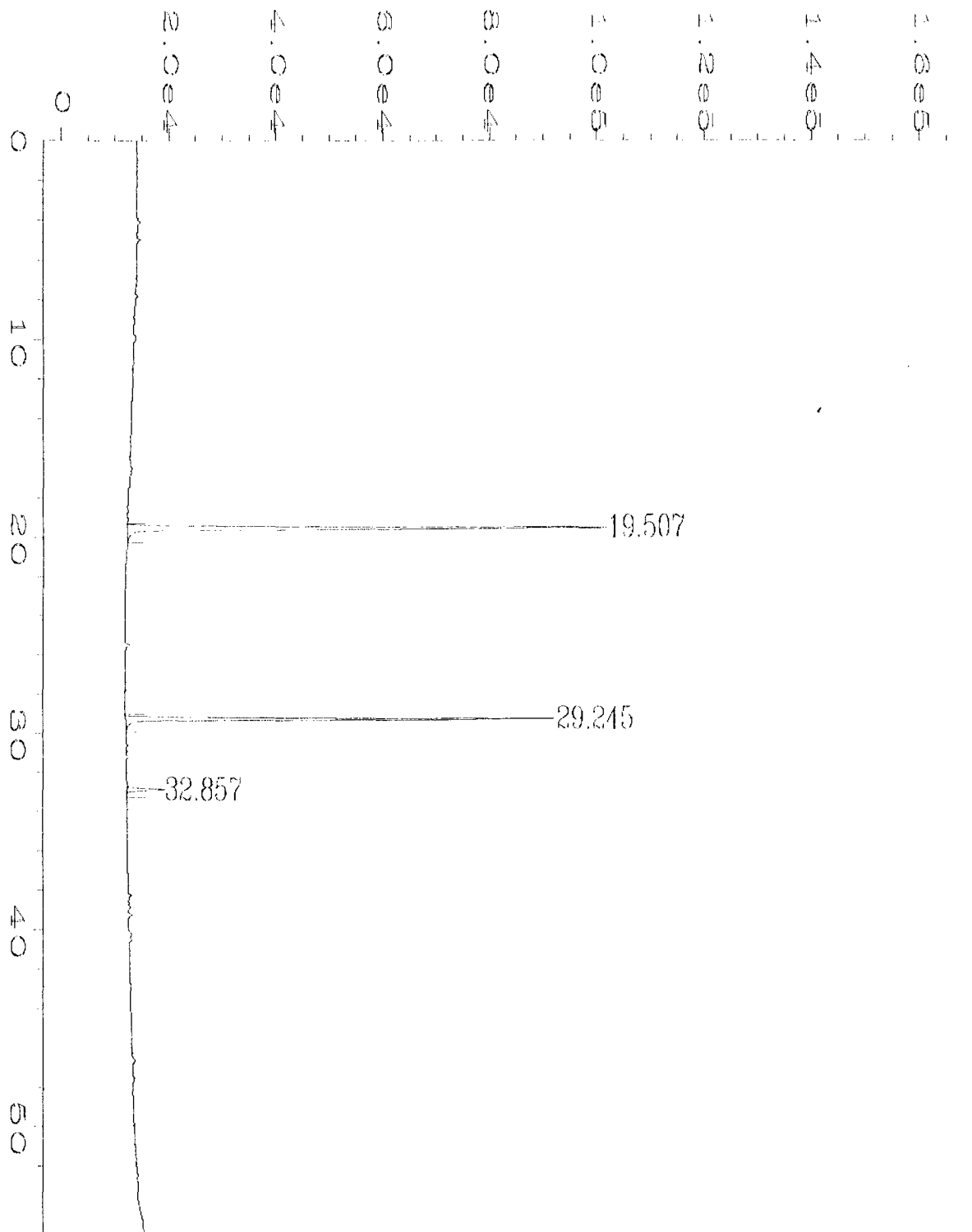
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

*Mark W. Bostrom*  
 Mark W. Bostrom  
 Project Manager



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\03OCTVOL\039F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 39          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25056 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 07 Oct 94 00:46 AM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | : 07 Oct 94 01:42 AM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 29 SEP 94 08:23 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI-Trip Blank                       |                   |               |



|                    |                                        |                    |               |
|--------------------|----------------------------------------|--------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\03OCTVOL\039R0101.D | Page Number        | : 1           |
| Operator           | : PWK                                  | Vial Number        | : 39          |
| Instrument         | : P&T #1                               | Injection Number   | : 1           |
| Sample Name        | : 25056 DF1                            | Sequence Line      | : 1           |
| Run Time Bar Code: |                                        | Instrument Method: | 502VOL1.MTH   |
| Acquired on        | : 07 Oct 94 00:46 AM                   | Analysis Method    | : 502VOL2.MTH |
| Report Created on: | 07 Oct 94 01:43 AM                     | Sample Amount      | : 0           |
| Last Recalib on    | : 20 SEP 94 05:59 PM                   | ISTD Amount        | : 10          |
| Multiplier         | : 1                                    |                    |               |
| Sample Info        | : GGI-Trip Blank                       |                    |               |



## Mountain States Analytical

The Quality Solution

Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Attn: Mr. Paul Weissenborn  
 Project: Kirtland, NM

Sample ID: Trip Blank #2  
 Matrix: Waste Water

MSAI Sample: 25057  
 MSAI Group: 6161  
 Date Reported: 10/18/94

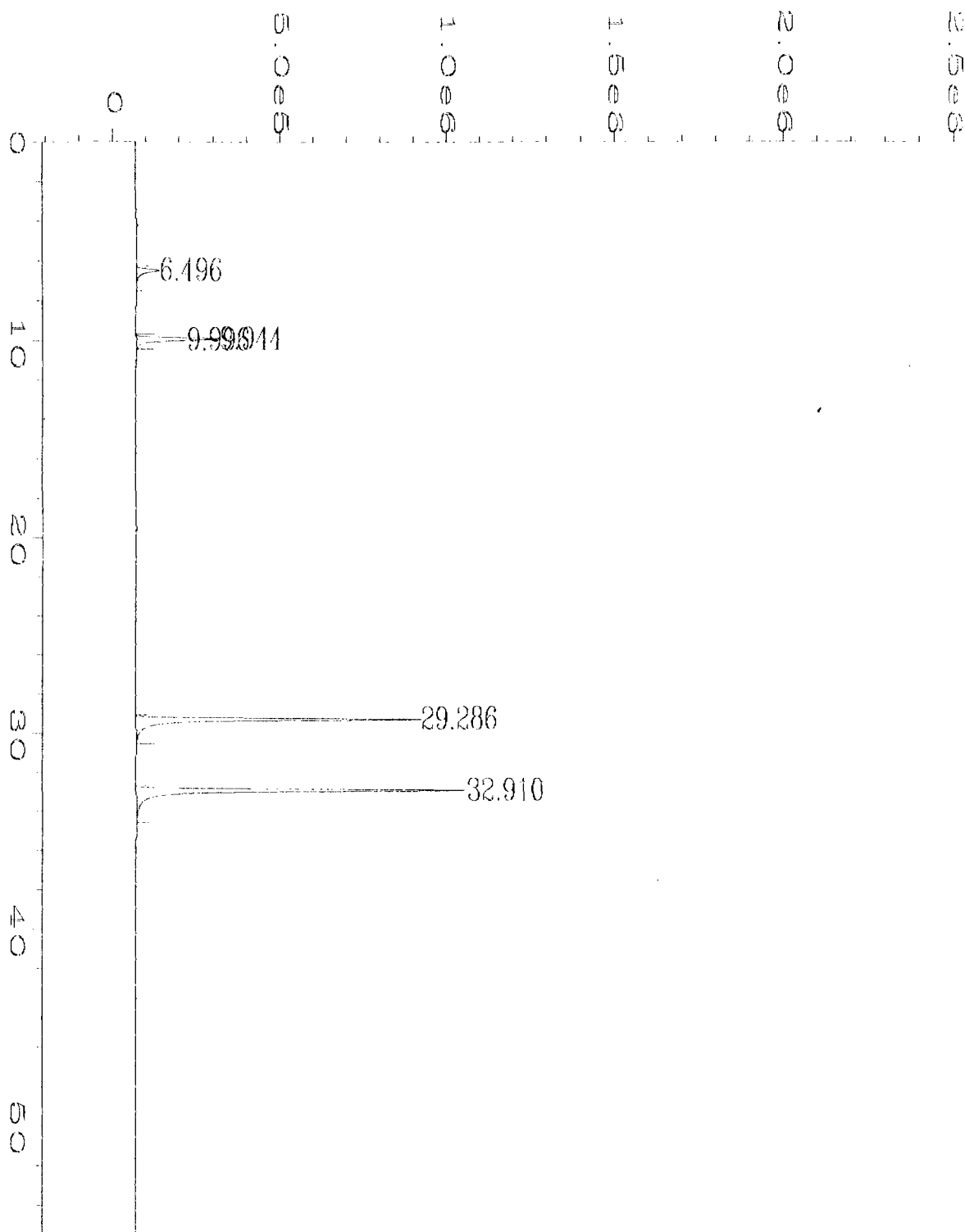
Discard Date: 11/17/94  
 Date Submitted: 10/04/94  
 Date Sampled: 10/04/94  
 Collected by: DRA  
 Purchase Order: 9131.01  
 Project No.:

| Test | Analysis                                                      | Results<br>as Received | Units | Limit of<br>Quantitation |
|------|---------------------------------------------------------------|------------------------|-------|--------------------------|
| 5515 | Purgeable Aromatics/Halocarbons<br>Method: 600 SERIES 601/602 |                        |       |                          |
|      | 1,2-Dichloroethane                                            | ND                     | ug/l  | 1.0                      |
|      | Benzene                                                       | ND                     | ug/l  | 1.0                      |
|      | Toluene                                                       | ND                     | ug/l  | 1.0                      |
|      | Ethylbenzene                                                  | ND                     | ug/l  | 1.0                      |
|      | m,p-Xylene                                                    | ND                     | ug/l  | 1.0                      |
|      | o-Xylene                                                      | ND                     | ug/l  | 1.0                      |
| 6159 | Chromatograms/Etc. GC<br>Method: IN HOUSE MSAI                | See Attached           |       |                          |

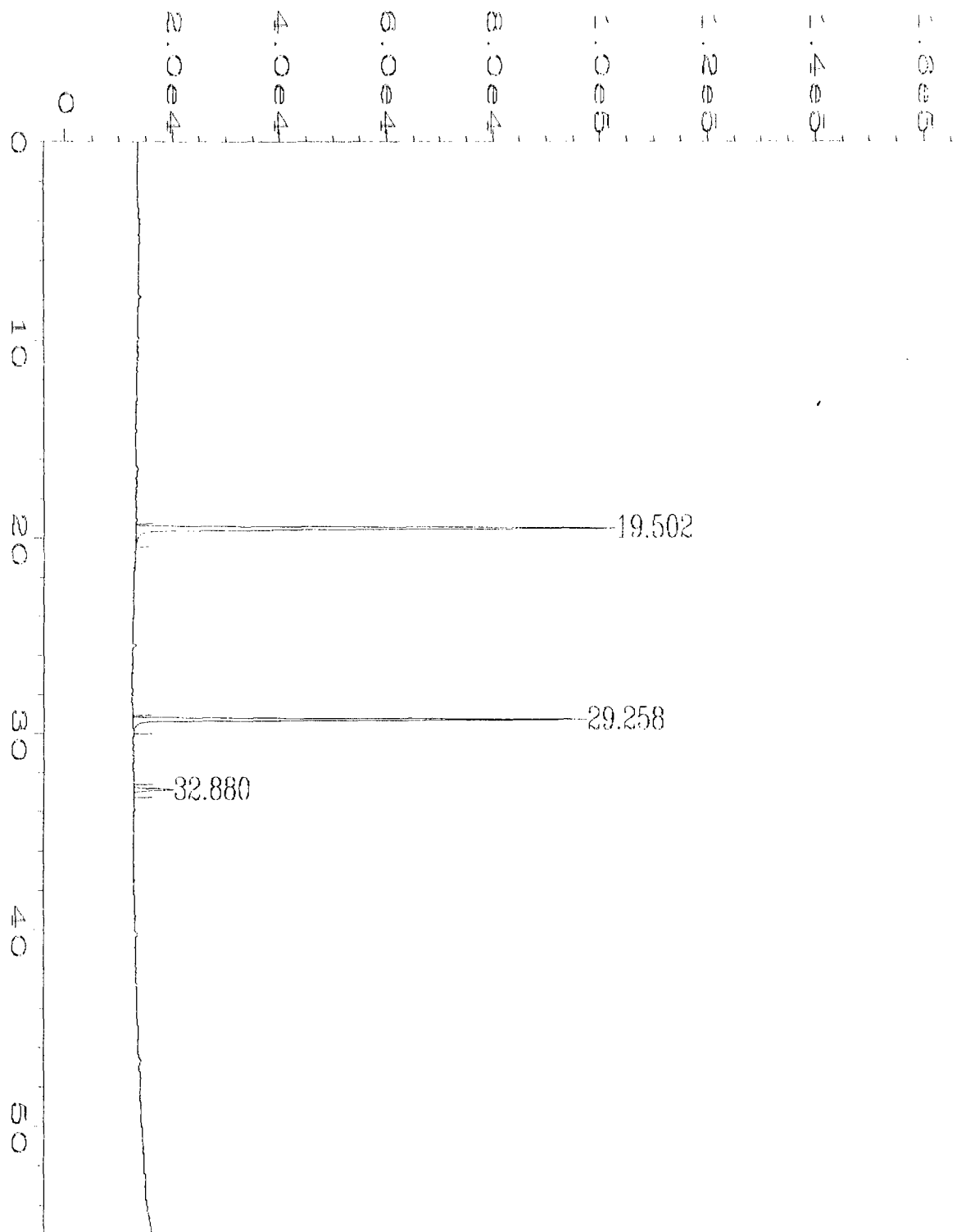
ND - Not detected at the limit of quantitation

Respectfully Submitted,  
 Reviewed and Approved by:

Mark W. Bostrom  
 Project Manager



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\03OCTVOL\040F0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 40          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25057 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 07 Oct 94 01:51 AM                   | Analysis Method   | : 502VOL1.MTH |
| Report Created on: | : 07 Oct 94 02:49 AM                   | Sample Amount     | : 0           |
| Last Recalib on    | : 29 SEP 94 08:23 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI-Trip Blank                       |                   |               |



|                    |                                        |                   |               |
|--------------------|----------------------------------------|-------------------|---------------|
| Data File Name     | : C:\HPCHEM\1\DATA\03OCTVOL\040R0101.D | Page Number       | : 1           |
| Operator           | : PWK                                  | Vial Number       | : 40          |
| Instrument         | : P&T #1                               | Injection Number  | : 1           |
| Sample Name        | : 25057 DF1                            | Sequence Line     | : 1           |
| Run Time Bar Code: |                                        | Instrument Method | : 502VOL1.MTH |
| Acquired on        | : 07 Oct 94 01:51 AM                   | Analysis Method   | : 502VOL2.MTH |
| Report Created on: | 07 Oct 94 02:50 AM                     | Sample Amount     | : 0           |
| Last Recalib on    | : 20 SEP 94 05:59 PM                   | ISTD Amount       | : 10          |
| Multiplier         | : 1                                    |                   |               |
| Sample Info        | : GGI-Trip Blank                       |                   |               |

test #  
5515



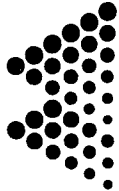
## Sample Chain of Custody

**Nº 3138**

[illegible]

1645 West 2200 South, Salt Lake City, Utah 84119 (801) 973-0050 FAX (801) 972-6278

**White Copy - Original Retain by Lab      Yellow Copy - Return to Customer      Pink Copy - Retain by Sampler**



# Mountain States Analytical

No 3139

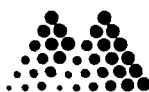
## Sample Chain of Custody

| Client Name: <u>Geovest/Maverik P.O. # 9131.01</u>   |                             |                |               | Analysis Required             |       |       |                     |                     |          |                               |                               |
|------------------------------------------------------|-----------------------------|----------------|---------------|-------------------------------|-------|-------|---------------------|---------------------|----------|-------------------------------|-------------------------------|
| Phone #: _____                                       |                             |                |               | Temp. of Samples Upon Receipt |       |       |                     |                     |          |                               |                               |
| Project Name: <u>Kirtland</u>                        |                             |                |               | Rush?                         |       |       |                     |                     |          |                               |                               |
| Sampler: <u>Danell R. Andersen</u>                   |                             |                |               | Remarks                       |       |       |                     |                     |          |                               |                               |
| Fax #: _____                                         |                             |                |               | Temp. of Samples Upon Receipt |       |       |                     |                     |          |                               |                               |
| Total of Containers                                  |                             |                |               | Temp. of Samples Upon Receipt |       |       |                     |                     |          |                               |                               |
| Grab                                                 |                             |                |               | Temp. of Samples Upon Receipt |       |       |                     |                     |          |                               |                               |
| Composite                                            |                             |                |               | Temp. of Samples Upon Receipt |       |       |                     |                     |          |                               |                               |
| Soil                                                 |                             |                |               | Temp. of Samples Upon Receipt |       |       |                     |                     |          |                               |                               |
| Water                                                |                             |                |               | Temp. of Samples Upon Receipt |       |       |                     |                     |          |                               |                               |
| Other                                                |                             |                |               | Temp. of Samples Upon Receipt |       |       |                     |                     |          |                               |                               |
| Sample Identification                                | Date Collected              | Time Collected | Grab          | Composite                     | Soil  | Water | Other               | Total of Containers | BTEX 602 | DCA 602                       | Temp. of Samples Upon Receipt |
| MW - 9                                               | 10-3                        | 0900           | X             |                               |       | X     |                     | 3                   | X        | X                             | 1600                          |
| MW - 10                                              | 10-3                        | 1100           | X             |                               |       | X     |                     | 3                   | X        | X                             | 1600                          |
| MW - 13                                              | 10-3                        | 0830           | X             |                               |       | X     |                     | 3                   | X        | X                             | 1600                          |
| MW - 14                                              | 10-3                        | 1020           | X             |                               |       | X     |                     | 3                   | X        | X                             | 1600                          |
| MW - 15                                              | 10-3                        | 1145           | X             |                               |       | X     |                     | 3                   | X        | X                             | 1600                          |
| MW - 16                                              | 10-3                        | 0935           | X             |                               |       | X     |                     | 3                   | X        | X                             | 1600                          |
| MW - 18                                              | 10-3                        | 1300           | X             |                               |       | X     |                     | 3                   | X        | X                             | 1600                          |
| MW - 19                                              | 10-3                        | 1130           | X             |                               |       | X     |                     | 3                   | X        | X                             | 1600                          |
| MW - 20                                              | 10-3                        | 0800           | X             |                               |       | X     |                     | 3                   | X        | X                             | 1600                          |
| MW - 21                                              | 10-3                        | 1200           | X             |                               |       | X     |                     | 3                   | X        | X                             | 1600                          |
| Name of Shipper                                      | Airbill No.                 | Date           | Time          | Sample relinquished by:       | Date  | Time  | Sample received by: | Date                | Time     | Temp. of Samples Upon Receipt |                               |
| Feed EX                                              |                             | 10-3           | 1600          | Danell R. Andersen            | 10-30 | 1600  |                     |                     |          |                               |                               |
| Received By (Lab)                                    | Date                        | Time           | Seals Intact? |                               |       |       |                     |                     |          |                               |                               |
| Danell R. Andersen                                   | 10-04-94                    | 1320           | NA            |                               |       |       |                     |                     |          |                               |                               |
| Turnaround Time Requested (please circle):           | Normal                      | Rush           |               |                               |       |       |                     |                     |          |                               |                               |
| (Rush TAT is subject to MSAI approval and surcharge) |                             |                |               |                               |       |       |                     |                     |          |                               |                               |
| Report Results By: (Date)                            |                             |                |               |                               |       |       |                     |                     |          |                               |                               |
| Rush results requested by (please circle):           | Phone                       | Fax            |               |                               |       |       |                     |                     |          |                               |                               |
| Report Results to:                                   |                             |                |               |                               |       |       |                     |                     |          |                               |                               |
| Type of Disposal:                                    | Authorized for Disposal by: |                |               |                               |       |       |                     |                     |          |                               |                               |
| Date/Time of Disposal:                               | Disposed of by:             |                |               |                               |       |       |                     |                     |          |                               |                               |

1645 West 2200 South, Salt Lake City, Utah 84119 (801) 973-0050 FAX (801) 972-6278

White Copy - Original Retain by Lab Yellow Copy - Return to Customer Pink Copy - Retain by Sampler

Invoice No. 205074  
 Invoice Date 10/19/94  
 Page: 1 of



## Mountain States Analytical

The Quality Solution

Mr. Paul Weissenborn  
 Geowest Golden, Inc. Salt Lake Office  
 175 West 200 South  
 Suite # 2006  
 Salt Lake City, Ut 84101

Project Name: Kirtland, NM  
 Project Number:  
 Purchase Order: 9131.01  
 Samples Received: 10/04/94  
 Date Reported: 10/19/94  
 Turnaround Time: 15 days  
 Reported To: Mr. Paul Weissenborn

### Analyses Performed

MSAI Group Number: 6161

See Analysis Reference Table Below

| Sample I.D.         | Date<br>Sampled | Analyses  | List<br>Price | Rush<br>Charges | Discount | Extended<br>Price |
|---------------------|-----------------|-----------|---------------|-----------------|----------|-------------------|
| 25038 MW-9          | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25039 MW-10         | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25040 MW-13         | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25041 MW-14         | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25042 MW-15         | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25043 MW-16         | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25044 MW-18         | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25045 MW-19         | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25046 MW-20         | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25047 MW-21         | 10/03/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25051 MW-17A        | 10/02/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25052 MW-17B        | 10/02/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25053 MW-22         | 10/02/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25054 MW-27         | 10/02/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25055 EQB           | 10/02/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25056 Trip Blank #1 | 10/04/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |
| 25057 Trip Blank #2 | 10/04/94        | 5515 6159 | 132.00        |                 | 19.80    | 112.20            |

Total Price \$ 1,907.40

### Analysis Reference Table

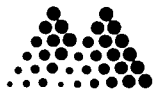
| Analysis |                                 |        |                    | # of<br>Tests | Unit          |                 |                    |              |                   |
|----------|---------------------------------|--------|--------------------|---------------|---------------|-----------------|--------------------|--------------|-------------------|
| No.      | Analysis Name                   | Matrix | Method             |               | List<br>Price | Rush<br>Charges | Discount<br>Amount | Net<br>Price | Extended<br>Price |
| 5515     | Purgeable Aromatics/Halocarbons | WW     | 600 SERIES 601/602 | 17            | 125.00        |                 | 18.75              | 106.25       | 1,806.25          |
| 6159     | Chromatograms/Etc. GC           |        | IN HOUSE MSAI      | 17            | 7.00          |                 | 1.05               | 5.95         | 101.15            |

Total Price \$ 1,907.40

### Pricing Summary

Extended List Price \$ 2,244.00  
 Total Rush Charges \$ 0.00  
 Total Discount \$( 336.60)

TOTAL AMOUNT DUE \$ 1,907.40

**Mountain States Analytical***The Quality Solution*

Mr. Paul Weissenborn  
Geowest Golden, Inc. Salt Lake Office  
175 West 200 South  
Suite # 2006  
Salt Lake City, Ut 84101

Invoice No. 205074  
Invoice Date 10/19/94  
Page: 2 of

Project Name: Kirtland, NM  
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Reported To: Mr. Paul Weissenborn