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Versar INC.

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SEMI-ANNUAL GROUNDWATER MONITORING REPORT

July 2000 Monitoring Event

CENCO Refining Company
(Formerly Powerine Oil Company)
Santa Fe Springs, California

Prepared for:

CENCO Refining Company
12345 Lakeland Road
Santa Fe Springs, California 90670

Prepared by:

Versar INC.
7844 Madison Avenue, Suite 167
Sacramento, California 95628

Versar Project No. 103917.3917.019

January 16, 2001

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CERTIFICATION

SEMI-ANNUAL MONITORING REPORT
JULY 2000 MONITORING EVENT

CENCO REFINING COMPANY
12345 LAKELAND ROAD
SANTA FE SPRINGS, CALIFORNIA

Versar, Inc. (Versar) has prepared this report for the CENCO Refining Company (CENCO) formerly called the Powerine Oil Company (Powerine). Mr. Dale Anderson performed the field activities. The report was reviewed by Mr. Tim Berger, R.G. a California Registered Geologist, Mr. Sudhakar Talanki, P.E., a California Registered Civil Engineer, and approved for release by Dr. Eliana Makhlouf, P.E., a California Registered Chemical Engineer.

The findings, observations, conclusions and recommendations expressed by Versar in this report are limited to the information obtained and should not be considered an opinion concerning the compliance of any past or current owner or operator of the Site with any federal, state, or local law or regulation. No warranty or guarantee, whether express or implied, is made with respect to the data reported or findings, observations, conclusions, and recommendations expressed in this report. Further, such data, findings, observations, conclusions, and recommendations are based solely upon Site conditions in existence at the time of investigation.

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EXECUTIVE SUMMARY

Versar, Inc. prepared the July 2000 Semi-Annual Groundwater Monitoring Report on behalf of the CENCO Refining Company (CENCO). This report documents the sampling and analysis of monitoring wells at the CENCO refinery, located at 12345 Lakeland Road in Santa Fe Springs, California (the Site); the Metropolitan State Hospital property, located south of the Site; and the Walker property, located to the east of the Site. The activities performed as a part of this semi-annual monitoring event include a comprehensive groundwater level survey of 26 monitoring wells, chemical analysis of 23 on- and off-site monitoring wells and two former production wells (Wells 7 and 8), and analysis for indicator parameters for intrinsic bioremediation from five selected monitoring wells. As stipulated by California Regional Water Quality Control Board, Los Angeles Region (RWQCB) Order No. 85-17, the purpose of the groundwater monitoring program is to evaluate groundwater quality at and in the vicinity of the Site.

Groundwater elevations in the majority of the groundwater wells at and in the vicinity of the Site have decreased an average of 1.75 feet since the last monitoring event in January 2000. The average groundwater flow direction at and in the vicinity of the Site is to the south, consistent with previously reported flow directions. The average groundwater gradient is approximately 0.008 foot per foot (ft/ft).

The results of this monitoring event indicate that current groundwater conditions at the Site are not substantially different from the conditions observed during the previous monitoring event performed in January 2000. The fluctuating water table, as has been observed at the Site and in the surrounding areas, can affect hydrocarbon thickness observed in monitoring wells (API, 1989). Benzene concentrations have decreased in eleven (11) on- and off-site monitoring wells and increased in eight (8) on- and off-site monitoring wells. Total petroleum hydrocarbons as gasoline (TPH-G) concentrations have decreased in seventeen (17) on- and off-site monitoring wells and have not increased in any on- and off-site monitoring wells. Free-phase petroleum product greater than 0.1 foot was observed in two on-Site wells (MW-504 and EW-1) and one off-Site well on the Metropolitan State Hospital property (MW-600A).

Results of analyses performed for nitrate, sulfate, ferrous iron, alkalinity, and dissolved oxygen (DO) indicate that intrinsic bioremediation is occurring within the groundwater plume. Total heterotrophic bacterial counts correlated well with the observed TPH-G and benzene distributions in groundwater indicating a relationship between petroleum hydrocarbon levels and bacterial concentrations. TPH and petroleum constituent (e.g., benzene) concentrations have generally decreased since groundwater monitoring was initiated at the Site in June 1988.

1.0 INTRODUCTION

The CENCO Refining Company (CENCO) owns and operates a petroleum refinery located at 12345 Lakeland Road in Santa Fe Springs, California (the Site) (Figure 1). The CENCO refinery has historically processed crude oil to make several grades of petroleum fuels including diesel, gasoline and jet fuel. Although the refinery is not currently processing crude oil, CENCO plans to resume crude oil refining at this facility in the near future. Ongoing groundwater monitoring has been performed at the Site since June 1988 by a number of environmental consultants. The previous groundwater monitoring event was conducted during January 2000 by Versar, Inc. (Versar, 2000b).

This report documents the results of the July 2000 semi-annual groundwater monitoring event at the CENCO refinery, the Metropolitan State Hospital property, and the Walker property (Figure 1). Included in this report are: 1) the results of water level measurements conducted at the Site, 2) the field parameters collected during well sampling, 3) the results of the groundwater laboratory analyses, 4) an assessment of the potential for intrinsic bioremediation of petroleum hydrocarbons in groundwater beneath the Site.

The semi-annual groundwater monitoring well network consists of 26 monitoring wells, including 22 wells located within or downgradient of the CENCO refinery, and four wells located on the nearby Walker property (Figure 2). The activities performed as part of this monitoring event included a comprehensive groundwater elevation survey of 26 monitoring wells, analysis of groundwater samples collected from 23 on- and off-site monitoring wells and two former production wells (Wells 7 and 8), and analysis of groundwater samples from five selected wells for indicators of intrinsic bioremediation. Samples were not collected from wells MW-504, EW-1, and MW-600A due to the presence of more than 0.1 foot of free-phase petroleum product in these wells.

All groundwater samples from the wells were analyzed by a California Department of Health Services (DHS) certified laboratory for TPH-G by modified U. S. Environmental Protection Agency (EPA) Method 8015; benzene, toluene, ethylbenzene and total xylenes (BTEX), methyl-tertiary butyl ether (MTBE); and halogenated volatile organic compounds (HVOCs) by EPA Method 8260; semivolatile organic compounds (SVOCs) by EPA Method 8270; and metals by EPA Method 6010B and 7470A (mercury). Additionally, groundwater samples were collected from five selected monitoring wells and analyzed for ferrous iron, nitrate, sulfate, alkalinity, total heterotrophic bacteria and *Psuedomonas* bacteria to evaluate the potential for intrinsic bioremediation of impacted groundwater at and in the vicinity of the Site.

Well field parameters were measured during purging and sampling; these parameters include pH, temperature, electric conductivity, turbidity, DO, and oxidation-reduction (redox) potential. These measurements, together with analytical results for nitrate, sulfate, alkalinity, ferrous iron, total heterotrophic bacteria, and *Psuedomonas* bacteria, were used to assess the potential for intrinsic bioremediation in groundwater beneath the Site.

2.0 FIELD METHODOLOGY

All field activities were conducted in accordance with the Site-Specific Health and Safety Plan prepared for the CENCO refinery (Versar, 2000a).). Several changes were made this sampling event to field protocols, wells sampled, and the standard analytical suite. The changes were made in response to requests made by the RWQCB in their comments to the Master Plan dated May 5, 2000. In response to the RWQCB comments, sampling and analyses for SVOCs and CCR metals was performed, and two inactive, former industrial supply wells (Wells 7 and 8) were sampled. In addition, to reduce the cost of groundwater monitoring, a new system of well purging and sampling was implemented. The new methodology comprises the installation of dedicated purge piping (stingers) into each well. The wells are then purged directly into a vacuum truck using its pump system. Purge water was then transported directly to the CENCO waste water treatment system and discharged.

Following purging and after the groundwater elevation had returned to a minimum of 80 percent of the initial groundwater level, groundwater samples were collected using a discrete disposable bailer for each well. Additionally, field parameters were measured during well purging using an in-line, flow-through sampler, which provides representative readings of DO and redox potential.

2.1 GROUNDWATER LEVEL MEASUREMENTS

This monitoring event included the measurement of water levels from on- and off-Site monitoring wells on July 31, 2000. Prior to collection of water level measurements, product thicknesses were measured in monitoring wells using an electronic oil-water interface probe. Water level readings were collected by lowering an electronic water level indicator into each well and recording the depth-to-water.

2.2 GROUNDWATER QUALITY MONITORING

Prior to groundwater sample collection, the initial depth-to-water and total well depth were recorded for each well on a field data sheet and used to estimate the volume of groundwater within the well casing. Each well was then purged using the dedicated stingers installed by Belshire Environmental Services (BESI). During well purging, stinger intakes were typically located between 85 and 110 feet below ground surface (bgs), at approximately 10 feet above the bottom of the well. During well purging, periodic field measurements of temperature, electrical conductivity, pH, turbidity, DO, and redox potential were collected using a Data Sonde® meter fitted with an in-line, flow-through sampler. Three sets of field measurements were collected for each well-casing volume of groundwater removed. The groundwater monitoring well purge tables and sampling logs are provided in Appendix B. Purging of the well continued until at least three well-casing volumes had been removed from the well, and field parameters had stabilized to within 5 percent of the previous reading. Wells 7 and 8, due to their size (approximately 600 feet deep and 10-inch diameter), were not purged. In accordance with an agreement with the RWQCB, these wells were sampled without purging. The methodology consisted of lowering a stainless steel bomb sampler slowly to the depth of groundwater sampling, opening the sampler, letting it equilibrate to well flow-through conditions for 24 hours, then closing and sealing the sampler and retrieving the sample to the surface.

Once the well purging was completed, groundwater samples were collected using a discrete, disposable bailer. Samples were labeled, recorded on a chain-of-custody form, and stored on ice in a thermally-insulated container. The samples were sent to off-Site laboratories for chemical analysis and intrinsic bioremediation evaluation.

Groundwater samples from the 23 monitoring wells and two production wells were analyzed for TPH-G using EPA modified Method 8015; BTEX, MTBE, and HVOCs using EPA Method 8260; SVOCs using EPA Method 8270; and metals using EPA Method 6010B and 7470A (mercury). Samples were not collected from wells MW-504, EW-1, and MW-600A due to the presence of free-phase petroleum product in these wells.

Groundwater samples collected from upgradient wells MW-104A and MW-205, on-Site well MW-502, and downgradient wells MW-605 and MW-606 were analyzed for the following parameters:

- Ferrous iron by EPA Method 3500FED;
- Nitrate as NO_3 by EPA Method 353.2;
- Sulfate as SO_4 by EPA Method 375.4;
- Alkalinity by EPA Method 310.2;
- Total heterotrophic bacteria by Standard Method 9251B; and
- *Psuedomonas* bacteria by Standard Method 9213E.

Total heterotrophic bacteria and *Psuedomonas* bacteria analyses were performed by Silliker Laboratories. Alkalinity, nitrate and the remaining analyses were performed by Calscience Environmental Laboratories (Calscience).

3.0 MONITORING RESULTS

The results of the semi-annual monitoring activities are reported in the sections that follow and include an evaluation of groundwater elevations and the average groundwater flow direction, a discussion of the field parameters collected during well purging and groundwater sampling, laboratory analytical results, and an assessment of the potential for intrinsic bioremediation of petroleum hydrocarbons in groundwater beneath the Site.

3.1 GROUNDWATER SURFACE ELEVATION

The potentiometric surface elevation in each well was determined by subtracting the water level reading from the previously surveyed top of (wellhead) casing (TOC) elevation. Table 1 presents a summary of historical depth-to-groundwater and the groundwater elevations for each well. Figure 2 presents the groundwater potentiometric surface map developed based on the groundwater elevation measurements performed during the July 2000 monitoring event. Graphical analysis of historical groundwater elevations is presented in Appendix C.

Groundwater was encountered beneath the Site at depths ranging between 80 and 97 feet below ground surface (bgs). Groundwater elevations in the majority of the groundwater wells at and in the vicinity of the Site have decreased an average of 1.75 feet since the last monitoring event in January

2000. As shown in Figure 2, the average groundwater flow direction in the vicinity of the Site varies from a south-southwestern direction in the northeastern portion of the Site to a south-southeastern direction near the eastern boundary of the Metropolitan State Hospital property. The average groundwater flow direction is generally consistent with those previously reported. The average groundwater gradient across the Site was estimated to be 0.008 ft/ft.

It is important to note that previous investigations at the Walker property indicated that groundwater flow at that Site was to the southwest, and investigations at the Metropolitan State Hospital property have indicated that groundwater flow may be to the southeast or southwest. The estimated groundwater gradient and average flow direction presented in this report do not include water level measurements from some of the wells that were used to evaluate the groundwater flow directions in these other investigations. Several of the wells that were used to derive groundwater flow directions at the Walker property and the Metropolitan State Hospital property have been deleted from the CENCO groundwater monitoring network as a result of construction activities at those sites.

3.2 FREE-PHASE PETROLEUM HYDROCARBONS

Free-phase petroleum hydrocarbons (light non-aqueous phase liquids [LNAPLs]) were detected in five monitoring wells at thicknesses ranging from 0.02 feet (MW-601A) to approximately 2.58 feet (EW-1). Exact measurements of free-product thickness are important in evaluating the areal extent of the free-product plume and groundwater elevations (API, 1989) in monitoring wells with significant free-product thickness. Groundwater elevations in wells containing free product were adjusted to compensate for this effect.

At static equilibrium, the thickness of free product inside a well is usually greater than the thickness outside the well in the adjoining aquifer materials. This difference is due to the lower specific gravity of the product relative to water, the hydraulic conductivity of the surrounding soil matrix, and the tendency of product to accumulate in monitoring wells over time. Additionally, a fluctuating water table, as has been observed at the Site and in the surrounding areas, can affect hydrocarbon thicknesses observed in monitoring wells (API, 1989).

Free-phase petroleum was encountered in Well EW-1 during this semi-annual monitoring event. Free-phase petroleum has been observed in this well as early as 1990, prior to the purchase of the property in 1998 by CENCO (TRC, 1990). A sample of the free-phase material was collected and submitted to Total Air Analysis, Inc. (TAA) to characterize the fractions of gasoline, diesel, and crude oil contained in the sample. The results of analysis by TAA revealed the free-phase petroleum product to consist primarily of diesel fuel and gasoline. Based on the TAA chromatogram, the sample material appears to be relatively fresh. Laboratory analytical results are presented in Appendix A. The source of the free-phase petroleum product at this location is unknown. Cenco Line No. 10, located north of Well EW-1, was used to convey crude oil only and is not considered a source of the product.

3.3 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples were collected from 23 on- and off-Site monitoring wells and two production wells during the July 2000 monitoring event and analyzed for TPH-G using EPA modified Method

8015, BTEX and HVOCs using EPA Method 8260, SVOCs using EPA Method 8270, and metals using EPA Method 6010B and 7470A (mercury). Additionally, samples from five wells (MW-104A, MW-205, MW-502, MW-605, and MW-606) were analyzed for total heterotrophic bacteria, *Psuedomonas* bacteria, alkalinity, sulfate, nitrate and ferrous iron to evaluate the potential for intrinsic bioremediation of impacted groundwater. Table 2 presents a summary of TPH, BTEX, MTBE, and VOC results in groundwater. Table 3 summarizes the results of the sampling performed to evaluate the potential for intrinsic bioremediation of petroleum hydrocarbons in groundwater beneath the Site. Table 4 summarizes the results of SVOC results in groundwater. Table 5 summarizes the results of metals in groundwater. These results are evaluated in detail in Section 3.4. The certified analytical laboratory reports are provided in Appendix A. It is important to note that the results reported in this section and the activities conducted during this semi-annual groundwater monitoring event do not distinguish between facility and non-facility related compounds in groundwater.

During this monitoring event, benzene was detected in 19 of the 23 wells sampled at concentrations ranging from 0.0053 to 21 milligrams per liter (mg/L), which exceed the California Maximum Contaminant Level (MCL) for drinking water of 1 microgram per liter (µg/L) (0.001 mg/L). (Federal MCL for benzene is 5 µg/L [0.005 mg/L].) Since the last monitoring event in January 2000, benzene concentrations have decreased in the following eleven (11) wells MW-103, MW-105, MW-202, MW-205, MW-501A, MW-502, MW-503B, MW-601A, MW-607, W-1, and W-4. Similarly, benzene concentrations have increased in the following eight (8) wells: MW-101, MW-106, MW-107, MW-201, MW-203, MW-204, MW-604, and W-3A. Benzene was not detected at concentrations greater than the reporting limit of 0.0005 mg/L in wells MW-104A, MW-603, MW-605, and MW-606. Figure 3 presents the current distribution of benzene and MTBE concentrations in groundwater in on- and off-Site wells. Benzene and total BTEX concentration trends in groundwater from December 1995 to the present are presented in Appendix D and E, respectively.

During the July 2000 monitoring event, TPH-G was detected at concentrations ranging from 0.1 to 34 mg/L in 14 of the 23 monitoring wells sampled. Since the previous monitoring event in January 2000, TPH-G concentrations have decreased in the following seventeen (17) wells: MW-101, MW-103, MW-105, MW-106, MW-201, MW-202, MW-204, MW-205, MW-501A, MW-502, MW-503B, MW-601A, MW-604, MW-607, W-1, W-3A, and W-4. TPH-G concentrations have not increased in any monitoring wells since the previous monitoring event. Figure 4 presents the current distribution of TPH-G concentrations in groundwater in on- and off-Site monitoring wells. TPH-G concentration trends in groundwater from December 1995 to the present are presented in Appendix F.

During the July 2000 monitoring event, MTBE was detected at concentrations ranging from 0.01 and to 5.6 mg/L in six (6) of the 23 monitoring wells sampled. Since the previous event in January 2000, MTBE concentrations have decreased in the following six wells: MW-103, MW-202, MW-203, MW-502, MW-601A, and MW-606. MTBE concentrations have increased in the following four (4) wells: MW-604, MW-607, W-1, and W-3A. Figure 3 presents the current distribution of MTBE, with benzene, in groundwater in on- and off-Site wells. MTBE concentration trends from July 1996 to the present are presented in Appendix G.

Several HVOCs were detected in groundwater at the Site. There are no known or suspected sources of these compounds to groundwater from CENCO operations. Review of regulatory agency files

indicated that numerous upgradient benzene and HVOC sources exist in the Santa Fe Springs area. Available data suggest that these compounds have originated from off-Site, upgradient sources. The Revised Master Work Plan presents a detailed review of potential upgradient sources (Versar, 2000a). Additional soil investigation will be performed to confirm that no sources of HVOCs to soil and groundwater are present at the Site. Investigation activities will be performed in accordance with the Supplemental Soil Investigation Work Plan (Versar, 2000c).

The interpretation of the distribution of TPH-G, benzene and HVOCs in groundwater presented in this report indicates the presence of both on- and off-Site sources of chemicals in groundwater. A review of the analytical results for monitoring wells MW-105 and MW-106 located at the northern (upgradient) boundary of the facility clearly indicates the presence of off-Site, upgradient sources. Groundwater samples collected from monitoring well MW-105, located at the northwest corner of the facility, contained TPH-G at a concentration of 0.58 mg/L and benzene at a concentration of 0.005 mg/L, as well as several HVOCs, including trichloroethene (TCE), 1,1-dicloroethane (1,1-DCA), 1,2-DCA, 1,1-dichloroethene (1,1-DCE), and 1,2-DCE. Similarly, groundwater samples collect from Well MW-106, located at the northeastern property boundary, contained benzene at a concentration of 0.0053 mg/L as well as several HVOCs, including TCE, 1,1-DCA, and 1,2-DCE. Well MW-104A, located between these two wells in the north-central portion of the facility did not contain benzene or TPH-G at levels greater than laboratory reporting limits; this well did contain 1,2-DCE. It is unlikely that groundwater in these wells has been impacted by Site-related sources or activities.

Of the 17 metals included in the CCR metals analysis suite, only three were detected above California DHS MCLs. Arsenic was detected at concentrations exceeding the MCL in wells in Operational Areas 2 through 5. Barium was detected at concentrations exceeding the MCL at well W-107 in Operational Area 1, well W-3A in Operational Area 6, W-1 on the Walker Property, and in wells MW-604 and 607 within the Metropolitan State Hospital. Thallium was detected at concentrations exceeding the MCL in well MW-202 in Operational Area 2, well MW-501A in Operational Area 5, and well MW-606 in the Metropolitan State Hospital property. Concentrations of barium and thallium just exceeded their respective state primary MCLs (PMCL); seven of 13 arsenic concentrations exceeded the state PMCL.

Four SVOCs (1-methyl naphthalene, 2-methyl naphthalene, naphthalene, and phenol) have been detected in groundwater in four of the six operational areas at the Site and at the Walker and Metropolitan State Hospital Properties. None of the four SVOCs are included in state or federal drinking water MCLs. Phenol has a California DHS action level of 0.005 mg/L (taste and odor threshold).

During the July 2000 monitoring event, groundwater samples were collected from two production wells (Wells 7 and 8) which have not been used since 1987. Table 2 presents the results of TPH-G and VOC analyses; the wells were not sampled for SVOCs and metals. The only organic compound detected at concentrations greater than laboratory reporting limits in samples collected from Well 7 was 1,1-DCA, which was detected at a concentration of 0.0012 mg/L. The only organic compound detected at concentrations greater than laboratory reporting limits in samples collected from Well 8 was benzene, which was detected at a concentration of 0.0028 mg/L.

3.4 POTENTIAL FOR INTRINSIC BIOREMEDIATION

The National Research Council (NRC) defines intrinsic bioremediation as a type of *in situ* bioremediation that uses the innate capabilities of naturally occurring microorganisms to degrade chemicals without taking any engineering steps to enhance the process (NRC, 1993). To demonstrate that intrinsic bioremediation is occurring, the following lines of evidence should be considered:

1) Decrease in concentrations of chemicals of concern over time, and
2) Appropriate trends in other intrinsic bioremediation parameter measurements.

The steps that were taken to evaluate the potential for intrinsic bioremediation at the Site and the results of this monitoring event are presented below.

3.4.1 Study Design

For an analysis of bioremediation potential to be meaningful, it should include at least one upgradient well, one downgradient well and one well in the center of the plume (Chevron Research and Technology Company [CRTC], 1995). At the CENCO facility, two upgradient wells (MW-104A and MW-205), two downgradient wells (MW-605 and MW-606), one crossgradient well (EW-1) and one well in the center of the benzene plume (MW-502) were selected for intrinsic bioremediation monitoring.

Several strains of bacteria are capable of utilizing hydrocarbons as an energy source. In this evaluation, samples were analyzed for total heterotrophic bacteria and for the hydrocarbon utilizing bacteria, *Psuedomonas*. These analyses were performed to evaluate whether these microbes are present in groundwater beneath the Site.

The primary electron receptor for microbial breakdown of constituents in aerobic environments is oxygen (O_2). In anaerobic environments, nitrate (NO_3), sulfate (SO_4) and ferrous iron (Fe^{2+}) become important electron receptors. Alkalinity is a measure of the ability of the aquifer to buffer the changes in pH that can be caused by microbial breakdown of hydrocarbons.

The evaluation of intrinsic bioremediation potential at the Site included documentation of the following lines of evidence:

1) Trend analysis of chemical concentrations over time;
2) Field measurements of DO and redox potential;
3) Laboratory analysis for total heterotrophic bacteria and *Psuedomonas* bacteria,
4) Laboratory analysis of the terminal electron receptors NO_3, SO_4, and Fe^{2+}, and
5) Buffering potential of alkalinity.

3.4.2 Results of Bioremediation Analysis

Intrinsic bioremediation of petroleum hydrocarbons was evidenced this monitoring event by the presence of hydrocarbon utilizing bacteria and reduced iron in areas having hydrocarbons. Concentrations of nitrate across the plume area were also indicative of bioactivity within the hydrocarbon plume.

Dissolved Oxygen - DO was measured in the field using a Data Sonde® meter fitted with an in-line, flow-through sample port. In general, DO measurements decreased during well purging as fresh groundwater from the surrounding aquifer flowed into the well. DO measurements ranged from 0.04 to 1.5 mg/L in wells within the area encompassed by the CENCO monitoring well network. Two wells, which are located on the Metropolitan State Hospital property (MW-605 and MW-606) and downgradient of the benzene plume, had higher (greater than 1 mg/L) DO concentrations when compared to other wells in the monitoring well network.

A variation in DO concentrations of greater than 2 mg/L across TPH-G and benzene plumes is suggestive of aerobic biodegradation activity (CRTC, 1995). DO concentrations at the Site ranged from 0.04 to 1.5 mg/L across the groundwater plume. The higher DO concentrations in the two downgradient wells (MW-605 and MW-606), which are outside of the impacted area, may be indicative of some aerobic bioremediation activity within the area of impacted groundwater.

Redox Potential - Redox potential was measured in the field using a Data Sonde® meter fitted with an in-line, flow-through sample port. The redox potential reflected a decreasing trend in wells during purging.

The observed redox potential at and in the vicinity of the Site indicates that the groundwater typically exhibits a reducing environment. Exceptions to this are seen in downgradient wells (MW-603, MW-605, and MW-606), which all displayed redox potentials indicative of an oxidizing environment. MW-605 and MW-606 have elevated DO levels, which correlates well with the positive redox potentials in these wells. Reducing conditions within the plume and oxidizing conditions outside of the plume are suggestive of anaerobic biological activity within the plume.

Nitrate (NO_3) - Nitrate samples were collected from the six wells used for assessing bioremediation potential as described above. Concentrations of nitrate were found to range from non-detect (less than 0.10 mg/L) in wells MW-104A, MW-205, MW-502 and EW-1, to 8.8 mg/L in MW-606.

If intrinsic bioremediation is occurring in an anaerobic environment, and nitrate is being used as the primary electron receptor, lower nitrate concentrations (relating to well outside the impacted area) correlate with higher benzene concentrations, which is indicative of intrinsic bioremediation in groundwater (*i.e.*, nitrate is being consumed.) At the Site, the nitrate concentrations were highest in the two downgradient wells (MW-605 and MW-606), which did not contain benzene at concentrations greater than laboratory detection limits. Conversely, the lowest nitrate concentrations were observed in MW-104A, MW- 205, and MW-502. The results from MW-502 appeared to correlate well with the higher benzene concentrations observed in these wells.

Sulfate (SO_4) - Sulfate samples were collected from the five wells used to assess bioremediation potential as described above. Sulfate was observed at concentrations ranging 4 mg/L in well MW-502 to 236 mg/L in MW-606.

Similar to nitrate, a lower sulfate concentrations correlate with higher benzene concentrations, which is indicative of intrinsic bioremediation in groundwater (i.e., sulfate is being consumed.) At the CENCO Site, sulfate was found to be the lowest in wells MW-104A, MW-205 and MW-502. The results for MW-205 and MW-502 correlate well with the increased chemical concentrations in these wells. However, the low sulfate result observed in MW-104A does not correlate with the absence of detected chemicals observed in this well. Low sulfate in MW-104A may relate to depletion during pass-through of previous contamination coming from off site.

Ferrous Iron (Fe^{2+}) - Ferrous iron samples were collected from the five wells used to assess bioremediation potential as described above. Concentrations of ferrous iron were found to range from non-detect (less than 0.10 mg/L), (MW-605 and MW-606) to 0.85 mg/L in MW-502.

If ferric iron (Fe^{3+}) is being produced through use as the preferred electron acceptor, increasing concentrations of ferrous iron may be correlated with increasing chemical concentrations. At the CENCO site, ferrous iron concentration has been highest in MW-502, which correlates with the area of highest concentration of petroleum constituents of the wells monitored for bioremediation potential.

Alkalinity - Alkalinity samples were collected from the five wells used to assess bioremediation potential as described above. Alkalinity was observed to range from 390 mg/L (MW-606) to 849 mg/L (MW-104A).

Alkalinity is a measure of the ability of the groundwater to buffer changes in pH caused by microbial activity. A relative increase in alkalinity correlated with increasing chemical concentrations suggests the potential for intrinsic bioremediation (CRTC, 1995). At the CENCO site, alkalinity was observed to be highest in monitoring wells MW-104A, MW-205, and MW-502. With the exception of MW-104A, all of these wells contained significant levels of petroleum hydrocarbons, suggesting intrinsic bioremediation activity.

Bacterial Counts - Bacteria samples were analyzed for total heterotrophic bacteria and *Psuedomonas* bacteria by the methods described above. Heterotrophic bacteria were detected in three of the five monitoring wells at concentrations ranging from 10 colony forming units per milliliter (cfu/mL) in MW-502 to 2,200 cfu/mL in MW-205. The lower concentration of Heterotrophic bacteria in MW-502 may relate to toxicity based on increased petroleum hydrocarbon concentrations. *Psuedomonas* bacteria were detected two of the five monitoring wells included in this evaluation. The results for total heterotrophic bacteria correlate well with the observed distribution of petroleum constituents in groundwater, suggesting that bacteria may be present in sufficient numbers to degrade petroleum hydrocarbons in the groundwater.

4.0 CONCLUSIONS

The purpose of this monitoring event was to monitor the groundwater quality at and in the vicinity of the Site located in Santa Fe Springs, California. The activities performed as a part of this semi-annual monitoring event included a comprehensive groundwater level survey, and analysis of groundwater samples from 23 on- and off-Site monitoring wells and two former production wells, (Wells 7 and 8). Samples were also collected from five wells to evaluate the potential for intrinsic bioremediation in the vicinity of the Site.

Groundwater elevations at and in the vicinity of the Site have decreased an average of 1.75 feet since the previous monitoring event performed in January 2000. Free-phase petroleum product was detected in five wells within the CENCO monitoring well network at similar product thicknesses as the previous monitoring event, with the exception of monitoring well EW-1. The presence of petroleum hydrocarbons in monitoring well EW-1 appears to be from an off-Site source.

The groundwater quality results for this monitoring event indicate that current groundwater conditions at and in the vicinity of the Site are similar to that of the previous event in January 2000. Since the previous monitoring event, TPH-G concentrations did not increase in any of the 23 monitoring wells sampled, and benzene concentrations have increased in only eight (8) of the 23 wells. Benzene and TPH-G concentrations have decreased in eleven (11) and seventeen (17) monitoring wells, respectively.

SVOCs detected comprised 1 and 2 methylnaphthalenes, naphthalene, and phenol in eight of 23 sampled wells. Concentrations were below actionable levels. Metals concentrations exceeding primary drinking water standards were detected in 12 of 23 wells. The elevated metals were arsenic, barium, and thallium. Elevated arsenic concentrations were located in the CENCO refinery and Walker property areas. Elevated barium concentrations were detected in the eastern area of groundwater monitoring (Bloomfield and Walker properties). Elevated thallium concentrations were detected at one location each in the refinery and Lakeland properties, and in the farthest downgradient monitored well (MW-606), at Metropolitan State Hospital.
Several HVOCs were detected in groundwater samples collected from monitoring wells within the CENCO monitoring well network. There are currently no known or suspected sources of these compounds to groundwater on the CENCO property. Review of regulatory agency files indicated that numerous upgradient HVOC sources exist in the Santa Fe Springs area. Available data suggest that these compounds have originated from off-Site, upgradient sources. The Revised Master Work Plan presents a detailed review of potential upgradient sources (Versar, 2000a).

The results of the intrinsic bioremediation investigation confirm the potential for intrinsic bioremediation to occur in groundwater beneath the Site. Specifically, the results of analyses performed for nitrate, sulfate, ferrous iron, alkalinity, and DO indicate that the potential for intrinsic bioremediation exists in the vicinity of the Site. TPH-G and associated constituent concentrations have generally declined since groundwater monitoring was initiated at the Site.

The two groundwater production wells, W-7 and W-8, were sampled and analyzed for TPH-G and VOCs. One organic chemical compound, 1,1-dichloroethane, was detected in well W-7. VOCs are commonly found in deep water bearing units in the Los Angeles basin, resulting from a history of industrial use (RWQCB, 1994).

5.0 REFERENCES

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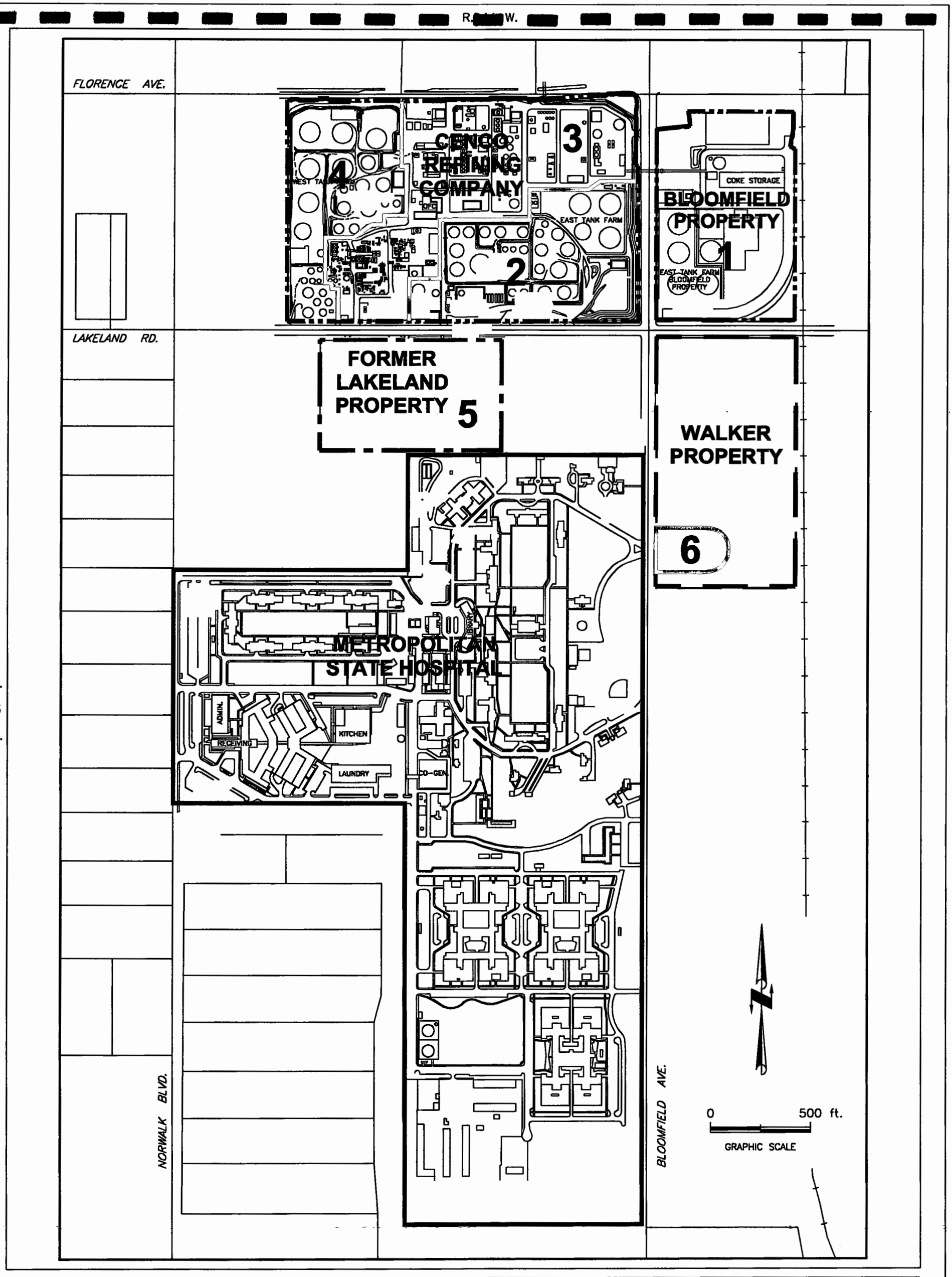

LEGEND

OPERATIONAL AREAS

1. BLOOMFIELD PROPERTY
2. EAST TANK FARM AREA
3. PROCESSING AREA
4. WEST TANK FARM AREA
5. FORMER LAKELAND PROPERTY
6. FORMER AST AREA – WALKER PROPERTY

CENCO PROPERTY BOUNDARY

WALKER PROPERTY BOUNDARY

FORMER LAKELAND PROPERTY

METROPOLITAN STATE HOSPITAL

Versar INC.
7844 Madison Avenue
Suite 167
Fair Oaks, CA 95628
(916) 962-1612

VERSAR JOB NO.: 3917-

DRAWN / APPROVED: DKT / SRT

FILE: P/CENCO/3917-015/CAD/011700F1.DWG

SITE LOCATION MAP

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

FIGURE 1

FX-9 Wells

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-101	Jun-88	134.98	88.66	ND	46.32	--
	Sep-88	134.98	89.29	ND	45.69	--
	Dec-88	134.98	90.10	ND	44.88	--
	Mar-89	134.98	90.28	ND	44.70	--
	Dec-89	134.98	90.29	ND	44.69	--
	Mar-91	134.98	91.09	ND	43.89	--
	Jun-91	134.98	90.24	ND	44.74	--
	Dec-91	135.23	90.40	ND	44.83	--
	Mar-92	135.23	89.87	ND	45.36	--
	Jun-92	135.23	88.47	ND	46.76	--
	Sep-92	135.23	88.60	ND	46.63	--
	Dec-92	135.23	88.69	ND	46.54	--
	Mar-93	135.23	87.35	ND	47.88	--
	Sep-93	135.23	82.34	82.33	52.90	0.01
	Nov-93	135.23	80.83	80.82	54.41	0.01
	Mar-94	135.23	78.10	78.08	57.15	0.02
	Jun-94	135.23	76.38	76.37	58.86	0.01
	Sep-94	135.23	76.64	76.63	58.60	0.01
	Dec-94	135.23	77.57	ND	57.66	--
	Mar-95	135.23	77.46	ND	57.77	--
	Sep-95	135.23	74.75	ND	60.48	--
	Dec-95	135.23	75.15	ND	60.08	--
	Jul-96	135.23	74.55	ND	60.68	--
	Dec-96	135.23	75.61	ND	59.62	--
	Jan-98	135.23	74.72	ND	60.51	--
	Aug-98	135.23	73.45	ND	61.78	--
	Jan-99	135.23	74.03	ND	61.20	--
	Jul-99	135.23	75.53	ND	59.70	--
	Jan-00	135.23	79.40	ND	55.83	--
	Jul-00	135.23	81.20	ND	54.03	--
MW-103	Jun-88	136.95	93.36	ND	43.59	--
	Sep-88	136.95	93.82	ND	43.13	--
	Dec-88	136.95	94.76	ND	42.19	--
	Mar-89	136.95	95.68	ND	41.27	--
	Jun-89	136.95	95.92	ND	41.03	--
	Sep-89	136.95	96.20	ND	40.75	--
	Dec-89	136.95	96.90	ND	40.05	--
	Mar-91	136.95	96.51	ND	40.44	--
	Jun-91	136.95	96.08	ND	40.87	--
	Sep-91	136.95	95.92	ND	41.03	--
	Dec-91	136.95	95.91	ND	41.04	--
	Mar-92	136.95	95.06	ND	41.89	--
	Jun-92	136.95	93.90	ND	43.05	--
	Sep-92	136.95	93.73	ND	43.22	--
	Dec-92	136.95	93.99	ND	42.96	--
	Mar-93	136.95	93.15	ND	43.80	--
	May-93	136.95	90.90	ND	46.05	--
	Sep-93	136.95	88.67	ND	48.28	--
	Nov-93	136.95	87.24	ND	49.71	--
	Mar-94	136.95	84.86	84.85	52.10	0.01
	Jun-94	136.95	83.15	83.14	53.81	0.01
	Sep-94	136.95	82.70	82.69	54.26	0.01
	Dec-94	136.95	83.17	ND	53.78	--
	Mar-95	136.95	82.65	ND	54.30	--
	Sep-95	136.95	81.03	ND	55.92	--
	Dec-95	136.95	81.21	ND	55.74	--
	Jul-96	136.95	80.41	ND	56.54	--
	Dec-96	136.95	81.24	ND	55.71	--
	Jan-98	136.95	80.55	ND	56.40	--
	Aug-98	136.95	79.51	ND	57.44	--
	Jan-99	136.95	79.88	ND	57.07	--
	Jul-99	136.95	80.74	ND	56.21	--
	Jan-00	136.95	83.70	ND	53.25	--
	Jul-00	136.95	85.80	ND	51.15	--

For Notes and explanations see page 11

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-104 (ABANDONED)	Jun-88	141.60	87.95	ND	53.65	--
	Sep-88	141.60	88.25	ND	53.35	--
	Dec-88	141.60	88.67	ND	52.93	--
	Mar-89	141.60	89.15	ND	52.45	--
	Jun-89	141.60	89.57	ND	52.03	--
	Sep-89	141.60	89.90	ND	51.70	--
	Dec-89	141.60	90.17	ND	51.43	--
	Mar-90	141.60	90.62	ND	50.98	--
	Jun-90	141.60	90.82	ND	50.78	--
	Sep-90	141.60	90.96	ND	50.64	--
	Dec-90	141.60	91.13	ND	50.47	--
	Mar-91	141.60	91.12	ND	50.48	--
	Jun-91	141.60	91.02	ND	50.58	--
	Sep-91	141.60	90.76	ND	50.84	--
	Dec-91	141.60	90.63	ND	50.97	--
	Mar-92	141.60	90.45	ND	51.15	--
	Jun-92	141.60	89.90	ND	51.70	--
	Sep-92	141.60	89.33	ND	52.27	--
	Dec-92	141.60	89.10	ND	52.50	--
	Mar-93	141.60	88.71	ND	52.89	--
	May-93	141.60	87.55	ND	54.05	--
	Sep-93	141.60	86.15	ND	55.45	--
	Nov-93	141.60	84.05	ND	57.55	--
	Mar-94	141.60	82.33	ND	59.27	--
	Jun-94	141.60	80.55	ND	61.05	--
	Sep-94	141.60	79.37	79.36	62.24	0.01
	Dec-94	141.60	79.50	ND	62.10	--
	Mar-95	141.60	79.32	ND	62.28	--
	Sep-95	141.60	77.26	ND	64.34	--
	Dec-95	141.60	77.21	ND	64.39	--
	Jul-96	141.60	76.75	ND	64.85	--
	Dec-96	141.60	77.38	ND	64.22	--
	Jan-98	141.60	75.58	ND	66.02	--
	Aug-98	141.60	75.58	ND	66.02	--
	Jan-99	141.60	75.91	ND	65.69	--
MW-104A	Jul-99	141.16	76.32	ND	64.84	--
	Jan-00	141.16	78.86	ND	62.30	--
	Jul-00	141.16	81.50	ND	59.66	--
MW-105	Jul-96	138.63	73.85	ND	64.78	--
	Dec-96	138.63	75.12	ND	63.51	--
	Jan-98	138.63	74.13	ND	64.50	--
	Aug-98	138.63	72.66	ND	65.97	--
	Jan-99	138.63	73.15	ND	65.48	--
	Jul-99	138.63	74.95	ND	63.68	--
	Jan-00	138.63	78.91	ND	59.72	--
	Jul-00	138.63	80.72	ND	57.91	--
MW-106	Jul-96	148.41	81.86	ND	66.55	--
	Dec-96	148.41	82.05	ND	66.36	--
	Jan-98	148.41	81.29	ND	67.12	--
	Aug-98	148.41	80.47	ND	67.94	--
	Jan-99	148.41	80.48	ND	67.93	--
	Jul-99	148.41	80.92	ND	67.49	--
	Jan-00	148.41	82.65	ND	65.76	--
	Jul-00	148.41	85.18	ND	63.23	--
MW-107	Jul-96	148.93	89.92	ND	59.01	--
	Dec-96	148.93	89.85	ND	59.08	--
	Jan-98	148.93	88.99	ND	59.94	--
	Aug-98	148.93	88.05	ND	60.88	--
	Jan-99	148.93	88.14	ND	60.79	--
	Jul-99	148.93	88.45	ND	60.48	--
	Jan-00	148.93	90.00	ND	58.93	--
	Jul-00	148.93	91.90	ND	57.03	--

For Notes and explanations see page 11

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-201	Jun-88	132.91	90.05	ND	42.86	--
	Sep-88	132.91	90.77	ND	42.14	--
	Dec-88	132.91	92.24	ND	40.67	--
	Mar-89	132.91	92.84	ND	40.07	--
	Jun-89	132.91	93.00	ND	39.91	--
	Sep-89	132.91	93.60	ND	39.31	--
	Dec-89	132.91	94.51	ND	38.40	--
	Mar-90	132.91	94.91	ND	38.00	--
	Jun-90	132.91	94.48	ND	38.43	--
	Sep-90	132.91	94.85	ND	38.06	--
	Dec-90	132.91	95.43	ND	37.48	--
	Mar-91	132.91	93.88	ND	39.03	--
	Jun-91	132.91	93.05	ND	39.86	--
	Sep-91	132.91	93.57	ND	39.34	--
	Dec-91	132.91	92.90	ND	40.01	--
	Mar-92	132.91	91.30	ND	41.61	--
	Jun-92	132.91	90.10	ND	42.81	--
	Sep-92	132.91	90.40	ND	42.51	--
	Dec-92	132.91	90.29	ND	42.62	--
	Mar-93	132.91	88.84	ND	44.07	--
	May-93	132.91	86.33	ND	46.58	--
	Sep-93	132.91	84.47	84.45	48.46	0.02
	Dec-93	132.91	82.75	82.74	50.17	0.01
	Mar-94	132.91	79.76	79.75	53.16	0.01
	Jun-94	132.91	78.06	78.05	54.86	0.01
	Sep-94	132.91	78.46	78.45	54.46	0.01
	Dec-94	132.91	79.10	ND	53.81	--
	Mar-95	132.91	77.87	ND	55.04	--
	Sep-95	132.91	76.53	ND	56.38	--
	Dec-95	132.91	76.79	ND	56.12	--
	Jul-96	132.91	76.00	ND	56.91	--
	Dec-96	132.91	76.93	ND	55.98	--
	Jan-98	132.91	76.02	ND	56.89	--
	Aug-98	132.91	75.01	ND	57.90	--
	Jan-99	132.91	75.36	ND	57.55	--
	Jul-99	132.91	76.88	ND	56.03	--
	Jan-00	132.91	79.50	ND	53.41	--
	Jul-00	132.91	82.44	ND	50.47	--
MW-202	Jun-88	137.89	DRY	ND	ND	--
	Sep-88	137.89	DRY	ND	ND	--
	Dec-88	137.89	DRY	ND	ND	--
	Mar-89	137.89	DRY	ND	ND	--
	Jun-89	137.89	DRY	ND	ND	--
	Sep-89	137.89	DRY	ND	ND	--
	Dec-89	137.89	DRY	ND	ND	--
	Mar-90	137.89	DRY	ND	ND	--
	Sep-90	137.89	DRY	ND	ND	--
	Dec-90	137.89	DRY	ND	ND	--
	Mar-91	137.89	DRY	ND	ND	--
	Jun-91	137.89	DRY	ND	ND	--
	Sep-91	137.89	DRY	ND	ND	--
	Dec-91	137.89	DRY	ND	ND	--
	Mar-92	137.89	DRY	ND	ND	--
	Jun-92	137.89	DRY	ND	ND	--
	Sep-92	137.89	DRY	ND	ND	--
	Dec-92	137.89	DRY	ND	ND	--
	Mar-93	137.89	DRY	ND	ND	--
	May-93	137.89	DRY	ND	ND	--
	Sep-93	137.89	89.36	89.35	48.54	0.01
	Nov-93	137.89	87.85	ND	50.04	--
	Mar-94	137.89	85.36	85.35	52.54	0.01
	Jun-94	137.89	83.53	83.52	54.37	0.01
	Sep-94	137.89	83.32	83.31	54.58	0.01
	Dec-94	137.89	83.88	83.87	54.02	0.01

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-202 (cont.)	Mar-95	137.89	83.10	ND	54.79	–
	Sep-95	137.89	81.44	ND	56.45	–
	Dec-95	137.89	81.71	ND	56.18	–
	Jul-96	137.89	80.90	ND	56.99	–
	Dec-96	137.89	81.78	ND	56.11	–
	Jan-98	137.89	81.00	ND	56.89	–
	Aug-98	137.89	79.93	ND	57.96	–
	Jan-99	137.89	83.35	ND	54.54	–
	Jul-99	137.89	81.37	ND	56.52	–
	Jan-00	137.89	84.70	ND	53.19	–
	Jul-00	137.89	86.78	ND	51.11	–
MW-203	Jun-88	143.89	95.98	ND	47.91	–
	Sep-88	143.89	96.30	ND	47.59	–
	Dec-88	143.89	96.76	ND	47.13	–
	Mar-89	143.89	97.15	ND	46.74	–
	Jun-89	143.89	97.50	ND	46.39	–
	Sep-89	143.89	97.85	ND	46.04	–
	Dec-89	143.89	98.19	ND	45.70	–
	Mar-90	143.89	98.72	ND	45.17	–
	Sep-90	143.89	99.09	ND	44.80	–
	Dec-90	143.89	99.55	ND	44.34	–
	Mar-91	143.89	99.23	ND	44.66	–
	Jun-91	143.89	99.19	ND	44.70	–
	Sep-91	143.89	98.93	ND	44.96	–
	Dec-91	143.89	98.84	ND	45.05	–
	Mar-92	143.89	98.39	ND	45.50	–
	Jun-92	143.89	97.76	ND	46.13	–
	Sep-92	143.89	97.47	ND	46.42	–
	Dec-92	143.89	97.50	ND	46.39	–
	Mar-93	143.89	97.13	ND	46.76	–
	May-93	143.89	96.14	ND	47.75	–
	Sep-93	143.89	95.81	ND	48.08	–
	Nov-93	143.89	93.84	93.83	50.06	0.01
	Mar-94	143.89	92.27	92.25	51.64	0.02
	Jun-94	143.89	90.68	90.67	53.22	0.01
	Sep-94	143.89	89.61	89.60	54.29	0.01
	Dec-94	143.89	89.41	ND	54.48	–
	Mar-95	143.89	89.03	ND	54.86	–
	Sep-95	143.89	87.47	ND	56.42	–
	Dec-95	143.89	87.38	ND	56.51	–
	Jul-96	143.89	86.53	ND	57.36	–
	Dec-96	143.89	87.03	ND	56.86	–
	Jan-98	143.89	86.39	ND	57.50	–
	Aug-98	143.89	85.38	ND	58.51	–
	Jan-99	143.89	85.72	ND	58.17	–
	Jul-99	143.89	86.30	ND	57.59	–
	Jan-00	143.89	88.54	ND	55.35	–
	Jul-00	143.89	90.60	ND	53.29	–
MW-204	Jun-88	140.14	94.95	ND	45.19	–
	Sep-88	140.14	95.43	ND	44.71	–
	Dec-88	140.14	96.57	ND	43.57	–
	Mar-89	140.14	97.53	ND	42.61	–
	Jun-89	140.14	97.68	ND	42.46	–
	Sep-89	140.14	98.00	ND	42.14	–
	Dec-89	140.14	98.70	ND	41.44	–
	Mar-90	140.14	99.19	ND	40.95	–
	Jun-90	140.14	98.95	ND	41.19	–
	Sep-90	140.14	99.08	ND	41.06	–
	Dec-90	140.14	99.50	ND	40.64	–
	Mar-91	140.14	98.61	ND	41.53	–
	Jun-91	140.14	97.85	ND	42.29	–
	Sep-91	140.14	97.59	ND	42.55	–
	Dec-91	140.14	97.50	ND	42.64	–
	Mar-92	140.14	96.45	ND	43.69	–

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-204 (cont.)	Jun-92	140.14	95.07	ND	45.07	--
	Sep-92	140.14	94.91	ND	45.23	--
	Dec-92	140.14	95.08	ND	45.06	--
	Mar-93	140.14	94.03	ND	46.11	--
	May-93	140.14	91.83	ND	48.31	--
	Sep-93	140.14	89.56	89.55	50.59	0.01
	Nov-93	140.14	88.10	88.09	52.05	0.01
	Mar-94	140.14	85.90	85.89	54.25	0.01
	Jun-94	140.14	84.09	ND	56.05	--
	Sep-94	140.14	83.71	83.70	56.44	0.01
	Dec-94	140.14	84.31	ND	55.83	--
	Mar-95	140.14	83.76	ND	56.38	--
	Sep-95	140.14	81.98	ND	58.16	--
	Dec-95	140.14	82.23	ND	57.91	--
	Jul-96	140.14	81.50	ND	58.64	--
	Dec-96	140.14	82.42	ND	57.72	--
	Jan-98	140.14	81.69	ND	58.45	--
	Aug-98	140.14	80.57	ND	59.57	--
	Jan-99	140.14	80.95	ND	59.19	--
	Jul-99	140.14	81.93	ND	58.21	--
	Jan-00	140.14	84.80	ND	55.34	--
	Jul-00	140.14	87.17	ND	52.97	--
MW-205	Jun-88	138.17	90.15	ND	48.02	--
	Sep-88	138.17	90.67	ND	47.50	--
	Dec-88	138.17	91.92	ND	46.25	--
	Mar-89	138.17	92.88	ND	45.29	--
	Jun-89	138.17	92.80	ND	45.37	--
	Sep-89	138.17	93.20	ND	44.97	--
	Dec-89	138.17	94.05	ND	44.12	--
	Mar-90	138.17	94.20	ND	43.97	--
	Jun-90	138.17	94.12	ND	44.05	--
	Sep-90	138.17	93.85	ND	44.32	--
	Dec-90	138.17	94.80	ND	43.37	--
	Mar-91	138.17	93.49	ND	44.68	--
	Jun-91	138.17	92.64	ND	45.53	--
	Sep-91	138.17	92.45	ND	45.72	--
	Dec-91	138.04	92.65	ND	45.39	--
	Mar-92	138.04	90.92	ND	47.12	--
	Jun-92	138.04	89.59	ND	48.45	--
	Sep-92	138.04	89.61	ND	48.43	--
	Dec-92	138.04	89.65	ND	48.39	--
	Mar-93	138.04	88.60	ND	49.44	--
	May-93	138.04	85.92	ND	52.12	--
	Sep-93	138.04	83.56	83.55	54.49	0.01
	Nov-93	138.04	82.00	ND	56.04	--
	Mar-94	138.04	79.55	79.54	58.50	0.01
	Jun-94	138.04	77.75	77.74	60.30	0.01
	Sep-94	138.04	77.80	77.79	60.25	0.01
	Dec-94	138.04	78.76	ND	59.28	--
	Mar-95	138.04	77.80	ND	60.24	--
	Sep-95	138.04	75.91	ND	62.13	--
	Dec-95	138.04	76.28	ND	61.76	--
	Jul-96	138.04	75.74	ND	62.30	--
	Dec-96	138.04	76.09	ND	61.95	--
	Jan-98	138.04	75.26	ND	62.78	--
	Aug-98	138.04	73.96	ND	64.08	--
	Jan-99	138.04	74.59	ND	63.45	--
	Jul-99	138.04	75.95	ND	62.09	--
	Jan-00	138.04	79.45	ND	58.59	--
	Jul-00	138.04	81.60	ND	56.44	--

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-206 (ABANDONED)	Jun-88	129.93	92.37	ND	37.56	–
	Sep-88	129.93	93.37	ND	36.56	–
	Dec-88	129.93	94.93	ND	35.00	–
	Mar-89	129.93	95.20	ND	34.73	–
	Jun-89	129.93	95.55	ND	34.38	–
	Sep-89	129.93	96.88	ND	33.05	–
	Dec-89	129.93	94.75	ND	35.18	–
	Mar-90	129.93	97.75	ND	32.18	–
	Jun-90	129.93	97.48	ND	32.45	–
	Sep-90	129.93	98.02	ND	31.91	–
	Dec-90	129.93	98.64	ND	31.29	–
	Mar-91	129.93	96.92	ND	33.01	–
	Jun-91	129.93	96.11	ND	33.82	–
	Sep-91	129.93	96.41	ND	33.52	–
	Dec-91	129.93	96.12	ND	33.81	–
	Mar-92	129.93	94.32	ND	35.61	–
	Jun-92	129.93	93.45	ND	36.48	–
	Sep-92	129.93	93.97	ND	35.96	–
	Dec-92	129.93	93.50	ND	36.43	–
	Mar-93	129.93	91.91	ND	38.02	–
	May-93	129.93	89.60	ND	40.33	–
	Sep-93	129.93	87.91	87.90	42.03	0.01
	Dec-93	129.93	86.43	86.41	43.52	0.02
	Mar-94	129.93	82.89	82.88	47.05	0.01
	Jun-94	129.93	81.30	81.29	48.64	0.01
	Sep-94	129.93	81.81	81.80	48.13	0.01
	Dec-94	129.93	82.00	ND	47.93	–
	Mar-95	129.93	80.33	ND	49.60	–
	Sep-95	129.93	79.68	ND	50.25	–
	Dec-95	129.93	79.65	ND	50.28	–
	Jul-96	129.93	78.57	ND	51.36	–
	Dec-96	129.93	79.40	ND	50.53	–
	Jan-98	129.93	78.40	ND	51.53	–
	Aug-98	Well Damaged	NR	NR	NAP	NAP
	Jan-99	Well Destroyed	NAP	NAP	NAP	NAP
MW-501 (ABANDONED)	Jun-88	128.70	92.46	91.16	37.23	1.30
	Sep-88	128.70	94.39	93.03	35.34	1.36
	Dec-88	128.70	94.41	93.71	34.82	0.70
	Mar-89	128.70	94.81	94.06	34.46	0.75
	Jun-89	128.70	94.62	93.81	34.70	0.81
	Sep-89	128.70	96.17	95.21	33.26	0.96
	Dec-89	128.70	97.15	96.32	32.18	0.83
	Mar-90	128.70	97.62	96.80	31.70	0.82
	Jun-90	128.70	96.02	95.27	33.25	0.75
	Sep-90	128.70	97.80	96.85	31.62	0.95
	Dec-90	128.70	98.82	97.64	30.78	1.18
	Mar-91	128.70	96.83	96.25	32.31	0.58
	Jun-91	128.70	95.94	95.44	33.14	0.50
	Sep-91	128.70	96.12	95.62	32.96	0.50
	Dec-91	128.70	95.91	95.44	33.15	0.47
	Mar-92	128.70	94.14	93.93	34.72	0.21
	Jun-92	128.70	92.98	92.97	35.73	0.01
	Sep-92	128.70	93.42	93.25	35.41	0.17
	Dec-92	128.70	92.99	92.85	35.82	0.14
	Mar-93	128.70	91.60	ND	37.10	–
	May-93	128.70	89.45	ND	39.25	–
	Sep-93	128.70	87.77	87.76	40.94	0.01
	Dec-93	128.70	86.25	86.24	42.46	0.01
	Mar-94	128.70	83.19	83.18	45.52	0.01
	Jun-94	128.70	81.35	81.34	47.36	0.01
	Sep-94	128.70	81.27	81.26	47.44	0.01
	Dec-94	128.70	81.50	81.49	47.21	0.01

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-501 (cont.) (ABANDONED)	Mar-95	128.70	80.23	ND	48.47	--
	Sep-95	128.70	76.04	ND	52.66	--
	Dec-95	128.70	79.09	ND	49.61	--
	Jul-96	128.70	77.84	ND	50.86	--
	Dec-96	128.70	78.67	ND	50.03	--
	Jan-98	128.70	NR	NR	NAP	NAP
	Aug-98	Well Damaged	NR	NR	NAP	NAP
	Jan-99	Well Damaged	NR	NR	NAP	NAP
MW-501A	Jul-99	Not Surveyed	77.70	ND	NAP	NAP
	Jan-00	Not Surveyed	81.30	ND	NAP	NAP
	Jul-00	Not Surveyed	83.24	ND	NAP	NAP
MW-502	Jun-88	131.19	94.00	ND	37.19	--
	Sep-88	131.19	94.95	ND	36.24	--
	Dec-88	131.19	96.35	ND	34.84	--
	Mar-89	131.19	96.75	ND	34.44	--
	Jun-89	131.19	97.27	94.14	36.30	3.13
	Sep-89	131.19	99.08	96.25	34.26	2.83
	Dec-89	131.19	100.40	98.65	32.12	1.75
	Mar-90	131.19	100.96	99.23	31.54	1.73
	Jun-90	131.19	99.16	97.77	33.09	1.39
	Jun-91	130.82	97.95	97.21	33.43	0.74
	Sep-91	130.82	98.20	97.46	33.18	0.74
	Dec-91	130.82	97.97	97.19	33.44	0.78
	Mar-92	130.82	96.00	95.57	35.15	0.43
	Jun-92	130.82	94.95	94.65	36.10	0.30
	Sep-92	130.82	95.51	95.11	35.61	0.40
	Dec-92	130.82	95.14	94.87	35.89	0.27
	Mar-93	130.82	93.30	ND	37.52	--
	May-93	130.82	91.13	ND	39.69	--
	Sep-93	130.82	89.45	89.44	41.38	0.01
	Dec-93	130.82	87.94	87.93	42.89	0.01
	Mar-94	130.82	84.70	84.69	46.13	0.01
	Jun-94	130.82	82.99	82.98	47.84	0.01
	Sep-94	130.82	83.03	ND	47.79	--
	Dec-94	130.82	83.40	ND	47.42	--
	Mar-95	130.82	81.96	ND	48.86	--
	Sep-95	130.82	81.05	ND	49.77	--
	Dec-95	130.82	81.02	ND	49.80	--
	Jul-96	130.82	79.83	ND	50.99	--
	Dec-96	130.82	80.68	ND	50.14	--
	Jan-98	130.82	79.78	ND	51.04	--
	Aug-98	130.82	78.98	ND	51.84	--
	Jan-99	128.30	76.73	ND	51.57	--
	Jul-99	128.30	76.90	ND	51.40	--
	Jan-00	128.30	81.56	ND	46.74	--
	Jul-00	128.30	83.48	ND	44.82	--
MW-503 (ABANDONED)	Jun-88	131.43	92.55	ND	38.88	--
	Sep-88	131.43	93.26	ND	38.17	--
	Dec-88	131.43	94.74	ND	36.69	--
	Mar-89	131.43	95.18	ND	36.25	--
	Jun-89	131.43	95.50	ND	35.93	--
	Sep-89	131.43	96.30	ND	35.13	--
	Dec-89	131.43	97.16	ND	34.27	--
	Mar-90	131.43	97.54	ND	33.89	--
	Jun-90	131.43	97.30	ND	34.13	--
	Sep-90	131.43	97.70	ND	33.73	--
	Dec-90	131.43	98.27	ND	33.16	--
	Mar-91	131.43	96.64	ND	34.79	--
	Jun-91	131.43	95.79	ND	35.64	--
	Sep-91	131.43	96.05	ND	35.38	--
	Dec-91	131.43	95.80	ND	35.63	--
	Mar-92	131.43	93.98	ND	37.45	--

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-503 (cont.) (ABANDONED)	Jun-92	131.43	93.01	ND	38.42	--
	Sep-92	131.43	93.52	ND	37.91	--
	Dec-92	131.43	93.11	ND	38.32	--
	Mar-93	131.43	91.67	ND	39.76	--
	May-93	134.43	88.78	ND	45.65	--
	Sep-93	134.43	87.47	87.45	46.98	0.02
	Dec-93	134.43	86.02	86.00	48.43	0.02
	Mar-94	134.43	82.54	82.53	51.90	0.01
	Jun-94	134.43	80.95	80.94	53.49	0.01
	Sep-94	134.43	81.41	81.40	53.03	0.01
	Dec-94	134.43	81.75	ND	52.68	--
	Mar-95	134.43	80.10	ND	54.33	--
	Sep-95	134.43	79.34	ND	55.09	--
	Dec-95	134.43	79.37	ND	55.06	--
	Jul-96	134.43	78.35	ND	56.08	--
	Dec-96	134.43	79.31	ND	55.12	--
	Jan-98	134.43	78.24	ND	56.19	--
	Aug-98	134.43	77.45	ND	56.98	--
	Jan-99	Well Destroyed	NAP	NAP	NAP	NAP
MW-503B	Feb-99	129.96	77.05	ND	52.91	--
	Jul-99	129.96	78.64	ND	51.32	--
	Jan-00	129.96	82.58	ND	47.38	--
	Jul-00	129.96	84.17	ND	45.79	--
MW-504	Jun-88	133.83	92.56	90.73	42.66	1.83
	Sep-88	133.83	93.98	92.41	41.04	1.57
	Dec-88	133.83	94.70	92.83	40.55	1.87
	Mar-89	133.83	96.25	93.50	39.67	2.75
	Jun-89	133.83	94.36	92.16	41.14	2.20
	Sep-89	133.83	99.21	97.15	36.19	2.06
	Dec-89	133.83	96.80	95.45	38.06	1.35
	Mar-90	133.83	97.10	95.72	37.78	1.38
	Jun-90	133.83	95.75	95.13	38.55	0.62
	Dec-90	133.83	97.47	96.31	37.24	1.16
	Jun-91	134.51	95.20	ND	39.31	--
	Sep-91	134.51	95.19	ND	39.32	--
	Dec-91	134.51	95.08	ND	39.43	--
	Mar-92	134.51	95.55	ND	38.96	--
	Jun-92	134.51	92.28	ND	42.23	--
	Sep-92	134.51	92.47	ND	42.04	--
	Dec-92	134.51	92.32	ND	42.19	--
	Mar-93	134.51	91.09	ND	43.42	--
	May-93	134.51	88.78	ND	45.73	--
	Sep-93	134.51	86.64	86.63	47.88	0.01
	Nov-93	134.51	85.10	ND	49.41	--
	Mar-94	134.51	82.26	82.25	52.26	0.01
	Jun-94	134.51	80.43	ND	54.08	--
	Sep-94	134.51	80.59	80.58	53.93	0.01
	Dec-94	134.51	81.14	ND	53.37	--
	Mar-95	134.51	80.06	ND	54.45	--
	Sep-95	134.51	78.55	ND	55.96	--
	Dec-95	134.51	78.76	ND	55.75	--
	Jul-96	134.51	77.92	ND	56.59	--
	Dec-96	134.51	79.15	78.85	55.59	0.30
	Jan-98	134.51	78.00	77.98	56.53	0.02
	Aug-98	134.51	77.00	76.98	57.53	0.02
	Jan-99	134.51	77.50	77.46	57.03	0.10
	Jul-99	134.51	79.12	78.63	55.76	0.49
	Jan-00	134.51	82.88	82.20	52.15	0.68
	Jul-00	134.51	83.96	84.90	51.26	0.94
MW-600 (ABANDONED)	Sep-90	120.05	91.48	90.31	29.46	1.17
	Dec-90	120.05	92.43	90.79	28.87	1.64
	Mar-91	120.05	89.88	89.00	30.84	0.88
	Jun-91	120.05	89.35	88.45	31.38	0.90

For Notes and explanations see page 11

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-600 (cont.) (ABANDONED)	Sep-91	120.05	89.64	88.76	31.08	0.88
	Dec-91	120.05	88.91	88.58	31.39	0.33
	Mar-92	120.05	87.09	86.89	33.11	0.20
	Jun-92	120.05	86.26	86.12	33.90	0.14
	Sep-92	120.05	86.90	86.69	33.31	0.21
	Dec-92	120.05	86.02	86.00	34.05	0.02
	Mar-93	120.05	84.63	ND	35.42	--
	May-93	120.05	82.52	ND	37.53	--
	Sep-93	120.05	80.99	80.98	39.07	0.01
	Dec-93	120.05	79.49	79.48	40.57	0.01
	Mar-94	120.05	76.01	76.00	44.05	0.01
	Jun-94	120.05	74.40	74.39	45.66	0.01
	Sep-94	120.05	74.73	74.72	45.33	0.01
	Dec-94	120.05	74.90	74.84	45.20	0.06
	Mar-95	120.05	73.65	73.03	46.87	0.62
	Sep-95	120.05	73.69	73.30	46.66	0.39
	Dec-95	120.05	72.02	ND	48.03	--
	Jul-96	120.05	73.55	70.59	48.75	2.96
	Dec-96	120.05	73.90	71.35	48.09	2.55
	Jan-98	120.05	75.05	69.67	49.09	5.38
	Aug-98	120.05	74.50	72.70	49.09	1.8 [2]
	Jan-99	120.05	73.72	69.60	49.46	4.12
MW-600A	Jul-99	120.34	77.55	77.32	42.96	0.23
	Jan-00	120.34	77.80	76.77	43.32	1.03
	Jul-00	120.34	78.59	78.99	42.05	0.40
MW-601 (ABANDONED)	Sep-90	125.03	96.64	95.89	28.96	0.75
	Dec-90	125.03	97.01	96.52	28.39	0.49
	Mar-91	125.03	94.84	ND	30.19	--
	Jun-91	125.03	94.27	ND	30.76	--
	Sep-91	125.03	94.54	ND	30.49	--
	Dec-91	125.03	94.30	ND	30.73	--
	Mar-92	125.03	92.66	ND	32.37	--
	Jun-92	125.03	91.81	ND	33.22	--
	Sep-92	125.03	92.80	92.28	32.63	0.52
	Dec-92	125.03	91.78	ND	33.25	--
	Mar-93	125.03	90.38	ND	34.65	--
	May-93	125.03	88.35	ND	36.68	--
	Sep-93	125.03	86.76	86.75	38.28	0.01
	Dec-93	125.03	85.36	85.35	39.68	0.01
	Mar-94	125.03	82.01	82.00	43.03	0.01
	Jun-94	125.03	80.30	80.25	44.77	0.05
	Sep-94	125.03	80.50	80.40	44.61	0.10
	Dec-94	125.03	80.65	80.52	44.48	0.13
	Mar-95	125.03	79.08	78.98	46.03	0.10
	Sep-95	125.03	78.36	78.11	46.86	0.25
	Dec-95	125.03	78.07	ND	46.96	--
	Jul-96	125.03	77.03	76.75	48.21	0.28
	Dec-96	125.03	77.57	ND	47.46	--
	Jan-98	125.03	76.79	76.40	48.54	0.39
	Aug-98	125.03	76.29	76.05	48.92	0.24 [2]
	Jan-99	125.03	76.62	75.95	48.92	0.67
MW-601A	Jul-99	126.53	77.39	77.36	49.12	-0.03
	Jan-00	126.53	81.03	ND	45.50	--
	Jul-00	126.53	82.70	82.72	43.85	0.02
MW-603	Jul-96	118.54	72.01	ND	46.53	--
	Dec-96	118.54	72.39	ND	46.15	--
	Jan-98	118.54	71.33	ND	47.21	--
	Aug-98	118.54	71.12	ND	47.42	--
	Jan-99	118.54	77.71	ND	46.83	--
	Jul-99	118.54	72.97	ND	45.57	--
	Jan-00	118.54	76.87	ND	41.67	--
	Jul-00	118.54	78.00	ND	40.54	--

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SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-604	Jul-96	138.16	88.79	ND	49.37	–
	Dec-96	138.16	89.57	ND	48.59	–
	Jan-98	138.16	88.61	ND	49.55	–
	Aug-98	138.16	87.55	ND	50.61	–
	Jan-99	138.16	87.88	ND	50.28	–
	Jul-99	138.16	88.53	ND	49.63	–
	Jan-00	138.16	92.10	ND	46.06	–
	Jul-00	138.16	94.21	ND	43.95	–
MW-605	Jul-96	114.54	74.03	ND	40.51	–
	Dec-96	114.54	74.06	ND	40.48	–
	Jan-98	114.54	73.19	ND	41.35	–
	Aug-98	114.54	73.18	ND	41.36	–
	Jan-99	114.54	72.52	ND	42.02	–
	Jul-99	114.54	74.62	ND	39.92	–
	Jan-00	114.54	78.58	ND	35.96	–
	Jul-00	114.54	79.54	ND	35.00	–
MW-606	Jul-96	113.89	77.19	ND	36.70	–
	Dec-96	113.89	77.50	ND	36.39	–
	Jan-98	113.89	75.92	ND	37.97	–
	Aug-98	113.89	75.93	ND	37.96	–
	Jan-99	113.89	75.26	ND	38.63	–
	Jul-99	113.89	77.19	ND	36.70	–
	Jan-00	113.89	80.87	ND	33.02	–
	Jul-00	113.89	82.12	ND	31.77	–
MW-607	Jul-96	126.03	86.88	ND	39.15	–
	Dec-96	126.03	87.56	ND	38.47	–
	Jan-98	126.03	86.50	ND	39.53	–
	Aug-98	126.03	85.64	ND	40.39	–
	Jan-99	126.03	85.88	ND	40.15	–
	Jul-99	126.03	86.52	ND	39.51	–
	Jan-00	126.03	90.40	ND	35.63	–
	Jul-00	126.03	92.02	ND	34.01	–
W-1	Dec-96	142.89	90.10	ND	52.79	–
	Jan-98	142.89	89.28	ND	53.61	–
	Aug-98	142.89	88.19	ND	54.70	–
	Jan-99	142.89	88.62	ND	54.27	–
	Jul-99	142.89	89.25	ND	53.64	–
	Jan-00	142.89	91.80	ND	51.09	–
	Jul-00	142.89	94.00	ND	48.89	–
W-2 (ABANDONED)	Dec-96	139.31	88.72	ND	50.59	–
	Jan-98	139.31	87.95	ND	51.36	–
	Aug-98	139.31	86.95	ND	52.36	–
	Jan-99	NS	NS	NAP	NAP	NAP
W-3 (ABANDONED)	Dec-96	136.11	90.98	ND	45.13	–
	Jan-98	136.11	89.95	ND	46.16	–
	Aug-98	NS	NS	NAP	NAP	NAP
	Jan-99	NS	NS	NAP	NAP	NAP
W-4	Dec-96	142.38	92.88	ND	49.50	–
	Jan-98	142.38	92.01	ND	50.37	–
	Aug-98	142.38	90.90	ND	51.48	–
	Jan-99	142.38	91.31	ND	51.07	–
	Jul-99	142.38	91.90	ND	50.48	–
	Jan-00	142.38	94.66	ND	47.72	–
	Jul-00	142.38	96.88	ND	45.50	–
W-3A	Aug-98	124.00	91.14	ND	32.86	–
	Jan-99	124.00	91.55	ND	32.45	–
	Jul-99	124.00	92.21	ND	31.79	–
	Jan-00	124.00	95.65	ND	28.35	–
	Jul-00	124.00	97.10	97.14	48.92	0.04

For Notes and explanations see page 11

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
EW-1	Aug-98	112.40	85.99	ND	26.41	–
	Jan-99	112.40	86.22	ND	26.18	–
	Jul-99	112.40	86.51	ND	25.89	–
	Jan-00	112.40	88.29	88.21	24.17	0.08
	Jul-00	112.40	89.14	91.72	25.22	2.58

NOTES:

Measurements prior to January, 1998, were conducted by consultants other than Versar, Inc.

[1] Groundwater elevations for wells containing free product were adjusted for hydrocarbon thickness using methods described in API, 1989. A specific gravity value of 0.76 was used for free product. Previously reported groundwater elevations did not take into account the effect of the specific gravity of free product on groundwater elevation and therefore may differ from groundwater elevations reported herein.

[2] Product thickness was estimated due to malfunction of oil-water interface probe.

TOC = Top of Well Casing Elevation
FT-MSL = Feet Above Mean Sea Level
Well Damaged = Well damaged due to construction activities.
NR = Not recorded due to well damage, or improper equipment reading.
NAP = Not Applicable
ND = None Detected
NA = Data Not Available
NS = Not Scheduled for Measurement

TABLE 2
SUMMARY OF TOTAL HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) (MG/L)
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Monitoring Well ID	Date	TPH-g	TPH-d	TRPH	MTBE	B	T	E	X	BDCM	BCM	Chloroform	Chloro ethane	c-1,2-DCE	1,2-DCB	Dichloro-difluoro methane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCP	isoPB	MC	n-BB	t-BB	n-PB	1m naphthalene	2m naphthalene	Napthalene	p-isoPT	sec-BB	Phenol	PCE	t-1,2-DCE	TCE	1,2,4-TMB	1,3,5-TMB	TOX	VC	CB
OPERATION AREA 1: BLOOMFIELD PROPERTY																																							
MW-106	12/20/95	0.79	–	<10	–	0.012	0.0035	0.01	0.01	–	–	–	–	0.033	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.015	0.0015	–	–	–	–	–
	7/31/96	0.6	–	–	0.0036	0.014	0.0022	0.009	<0.005	<0.0003	–	<0.0003	–	0.026	<0.0003	<0.0003	<0.0003	<0.0003	0.00054	<0.0003	–	<0.0003	–	–	–	–	–	–	–	–	–	<0.0003	0.017	0.0025	–	–	–	0.00098	–
	12/17/96	0.36	–	–	<0.002	0.0031	<0.002	<0.002	<0.004	<0.002	<0.002	<0.002	–	0.063	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0027	<0.002	<0.002	–	<0.002	–	–	<0.002	<0.002	<0.002	–	<0.002	0.026	<0.002	<0.002	<0.002	–	<0.004	–
	1/20/98	0.8	–	–	<0.005	0.024	<0.005	0.0081	<0.005	<0.005	<0.005	<0.005	–	0.046	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.0073	<0.005	<0.005	–	<0.005	–	–	<0.01	<0.005	<0.005	–	<0.005	0.01	<0.005	<0.005	<0.005	–	<0.01	<0.005
	8/20/98	1.0	–	–	<0.005	0.027	<0.005	0.084	<0.005	<0.005	<0.005	<0.005	–	0.43	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.0096	<0.005	<0.005	–	0.0059	–	–	<0.01	<0.005	<0.005	–	<0.005	0.0058	<0.005	<0.005	<0.005	–	<0.01	<0.005
	1/27/99	1.1	–	–	<0.005	0.021	<0.005	0.0085	<0.005	<0.005	<0.005	<0.005	–	0.047	<0.005		<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005	–	0.0072	–	–	<0.01	<0.005	<0.005	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.01	<0.005
	7/19/99	0.89	–	–	<0.001	0.018	<0.001	0.0077	<0.001	<0.001	<0.001	<0.001	–	0.039	<0.001	<0.001	0.0017	<0.0005	0.0012	<0.001	0.007	<0.01	<0.001	–	0.0052	–	–	<0.01	<0.001	0.0015	–	<0.001	0.0064	0.0026	<0.001	<0.001	–	<0.0005	<0.001
	1/14/00	1.0	–	–	<0.001	0.0041	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.020	<0.001	<0.001	0.0022	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.010	–	<0.001	–	–	<0.010	<0.001	<0.001	–	<0.001	0.0096	<0.001	<0.001	<0.001	–	<0.0005	<0.001
	7/31/00	<0.5	–	–	<0.001	0.0053	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.026	<0.001	<0.001	0.0027	<0.0005	<0.001	<0.001	0.001	<0.001	<0.010	<0.001	<0.001	<0.010	<0.010	<0.010	<0.001	<0.001	<0.010	0.021	0.021	0.0021	<0.001	<0.001	–	0.025	–
MW-107	12/1/95	<0.5	–	<10	–	0.016	0.00099	0.00077	0.0029	–	–	–	–	0.028	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.0065	–	–	–	–	–	–
	7/31/96	0.6	–	–	0.11	0.031	0.0044	0.0066	<0.005	<0.0003	–	<0.0003	–	0.031	<0.0003	<0.0003	<0.0003	<0.0003	0.00045	<0.0003	–	<0.0003	–	–	–	–	–	–	–	–	–	<0.0003	0.019	0.00078	–	–	–	0.0011	–
	12/17/96	0.38	–	–	<0.002	0.022	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	–	0.08	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	–	–	<0.005	<0.005	<0.005	–	<0.005	0.033	<0.005	<0.005	<0.005	–	<0.01	–
	1/20/98	0.83	–	–	<0.005	0.042	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	0.12	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	–	–	<0.010	<0.005	<0.005	–	<0.005	0.047	<0.005	<0.005	<0.005	–	<0.01	<0.005
	8/20/98	0.83	–	–	<0.005	0.028	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	0.098	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.0062	<0.005	<0.005	–	<0.005	–	–	<0.010	<0.005	<0.005	–	<0.005	0.025	<0.005	<0.005	<0.005	–	<0.01	<0.005
	1/27/99	1.1	–	–	<0.005	0.036	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	0.1	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.0069	<0.005	<0.005	–	<0.005	–	–	<0.010	<0.005	<0.005	–	<0.005	0.044	<0.005	<0.005	<0.005	–	<0.01	<0.005
	7/19/99	0.82	–	–	<0.005	0.038	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	0.12	<0.005	<0.005	<0.005	<0.0025	<0.005	<0.005	<0.005	<0.05	<0.005	–	<0.005	–	–	<0.05	<0.005	<0.005	–	<0.005	0.077	<0.005	<0.005	<0.005	–	<0.0025	<0.005
	1/12/00	1.7	–	–	<0.001	0.087	<0.001	0.0078	<0.001	<0.001	<0.001	<0.001	–	0.120	<0.001	<0.001	0.0016	<0.0005	0.0011	<0.001	0.011	<0.010	<0.001	–	0.0022	–	–	<0.010	<0.001	0.003	–	<0.001	0.110	0.0034	<0.001	<0.001	–	<0.0005	0.0013
	7/31/00	1.7	–	–	<0.005	0.250	<0.005	0.020	<0.005	<0.005	<0.005	<0.005	<0.005	0.043	<0.005	<0.005	0.0083	<0.0025	<0.005	<0.005	0.048	<0.050	<0.005	<0.005	0.049	0.110	0.140	<0.050	<0.005	0.0086	<0.011	<0.005	0.059	<0.005	<0.005	<0.005	–	0.053	<0.005
MW-203	6/1/88	–	–	–	–	0.046	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/88	–	–	–	–	0.076	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/88	–	–	–	–	0.064	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/89	–	–	–	–	0.11	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/89	–	–	–	–	0.11	<0.005	0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/89	–	–	–	–	0.08	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/89	–	–	–	–	0.1	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/90	–	–	–	–	0.09	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/90	–	–	–	–	0.088	0.002	0.007	0.002	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/90	–	–	–	–	0.13	<0.005	0.009	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/90	–	–	–	–	0.094	<0.005	0.007	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/91	–	–	–	–	0.1	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/91	–	–	–	–	0.1	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/91	–	–	–	–	0.14	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/91	–	–	–	–	0.13	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/92	–	–	–	–	0.12	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/92	–	–	–	–	0.085	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/92	–	–	–	–	0.046	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/92	–	–	–	–	0.064	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/93	–	–	–	–	0.069	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	5/1/93	–	–	–	–	0.086	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	5/25/93	–	–	–	–	0.086	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/93	–	–	–	–	0.04	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/94	–	–	–	–	0.039	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/95	–	–	–	–	0.027	<0.005	<0.005	<0.015	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/95	–	–	–	–	0.028	<0.002	<0.002	<0.002	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/13/95	0.64	–	<5	–	0.037	0.001	0.012	0.0019	–	–	–	–	0.04	–	–	0.00061	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.0045	–	–	–	–	0.0014	–
	7/31/96	0.5	–	–	<0.02	0.043	0.002	0.0018	<0.005	<0.0003	–	<0.0003	–	0.022	<0.0003	<0.0003	0.00034	<0.0003	<0.0003	<0.0003	–	<0.0003	–	–	–	–	–	–	–	–	–	<0.0003	0.0017	0.00034	–	–	–	0.002	–
	12/17/96	0.16	–	–	<0.002	0.03	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0012	<0.001	<0.001	–	<0.001	–	–	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.002	–
	1/20/98	0.25	–	–	<0.005	0.024	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	0.028	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	–	–	<0.01	<0.005	<0.005	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.01	<0.005
	8/20/98	0.29	–	–	<0.005	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	0.035	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	–	–	<0.01	<0.005	<0.005	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.01	<0.005
	1/27/99	0.33	–	–	<0.005	0.012	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	0.035	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	–	–	<0.01	<0.005	<0.005	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.01	<0.005
	7/19/99	<0.50	–	–	<0.001	0.016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.024	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	–	<0.001	–	–	<0.01	<0.001	<0.001	–	<0.001	0.0019	<0.001	<0.001	<0.001	–	<0.00050	<0.001
	1/12/00	<0.50	–	–	0.001	0.0078	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.014	<0.001	<0.001	<0.001	0.00053	<0.001	<0.001	<0.001	<0.010	<0.001	–	<0.001	–	–	<0.010	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.005	<0.001
	7/31/00	<0.50	–	–	<0.005	0.097	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	0.016	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.00051	<0.001

SEE NOTES AND EXPLANATIONS ON PAGE 9

P:\CENCO\2017-010\REPO\2Q7\Table 2

TABLE 2
SUMMARY OF TOTAL HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) (MG/L)
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1 TPH-g	2 TPH-d	3 TRPH	4 MTBE	5 B	6 T	7 E	8 X	9 BDCM	10 BCM	11 Chloroform	12 Chloro ethane	13 c-1,2-DCE	14 1,2-DCB	15 Dichloro-difluoro methane	16 1,1-DCA	17 1,2-DCA	18 1,1-DCE	19 1,2-DCP	20 isoPB	21 MC	22 n-BB	23 t-BB	24 n-PB	25 1m naphthalene	26 2m naphthalene	27 Naphthalene	28 p-isoPT	29 sec-BB	30 Phenol	31 PCE	32 t-1,2-DCE	33 TCE	34 1,2,4-TMB	35 1,3,5-TMB	36 TOX	37 VC	38 CB
OPERATION AREA 2: EAST TANK FARM AREA																																							
MW-103	8/85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.06	–	–
	6/1/88	–	–	–	–	0.97	0.074	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/88	–	–	–	–	0.3	<0.005	<0.005	0.008	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/88	–	–	–	–	0.37	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/89	–	–	–	–	0.94	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/89	–	–	–	–	0.7	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/89	–	–	–	–	1.0	0.03	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/92	–	–	–	–	0.21	<0.005	0.005	0.023	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/92	–	–	–	–	0.88	<0.005	<0.005	0.055	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/92	–	–	–	–	0.2	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/92	–	–	–	–	0.35	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/93	–	–	–	–	<0.005	0.008	0.019	0.01	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	5/1/93	–	–	–	–	4.8	<0.25	<0.25	<0.25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	5/25/93	–	–	–	–	4.8	<0.25	<0.25	<0.25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/93	–	–	–	–	1.3	0.088	0.062	0.23	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	11/1/93	–	–	–	–	1.4	<0.25	<0.25	<0.25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/94	–	–	–	–	0.24	<0.010	<0.010	0.011	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/95	–	–	–	–	0.16	<0.005	<0.005	<0.015	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/95	–	–	–	–	0.9	<0.05	<0.05	<0.05	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/13/95	4.1	–	<0.5	–	0.41	0.0041	0.0026	0.0077	–	–	–	–	<0.0005	–	–	0.0022	0.0021	<0.0005	<0.0005	–	<0.0005	–	–	–	–	–	–	–	–	–	<0.0005	<0.0005	<0.0005	–	–	–	0.0028	–
	7/31/96	2.7	–	–	<0.010	0.34	0.008	<0.0005	0.012	<0.0003	–	<0.0003	–	0.0007	0.0012	0.011	0.017	0.0017	<0.0003	<0.0003	–	<0.0003	–	–	–	–	–	–	–	–	–	<0.0003	<0.0003	0.00038	–	–	–	<0.0003	–
	12/17/96	2.4	–	–	<0.010	0.2	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	–	<0.005	<0.005	<0.010	0.027	<0.005	<0.005	<0.005	0.006	<0.005	<0.005	–	0.0084	–	–	<0.005	<0.005	<0.005	–	0.0089	<0.005	<0.005	<0.005	<0.005	–	0.084	–
	1/21/98	1.3	–	–	<0.005	0.23	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	–	0.015	–	–	<0.010	<0.005	<0.005	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	0.028	<0.005
	8/19/98	1.6	–	–	<0.005	0.22	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	0.0069	–	0.018	–	–	<0.010	<0.005	0.0054	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.01	<0.005
	1/27/99	1.9	–	–	<0.005	0.11	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	0.0071	<0.005	<0.005	–	0.0059	–	–	<0.010	<0.005	<0.005	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.01	<0.005
	7/19/99	1.8	–	–	<0.001	0.061	0.0011	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.0012	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	0.0088	<0.010	0.0031	–	0.0081	–	–	<0.010	<0.001	0.0039	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.0005	<0.001
	1/12/00	1.5	–	–	0.0012	0.081	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.003	<0.001	<0.001	<0.001	0.004	<0.001	<0.001	0.0063	<0.010	0.0035	–	0.0067	–	–	<0.010	<0.001	0.0037	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.0005	<0.001
	8/4/00	0.52	–	–	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0029	<0.001	<0.001	<0.001	0.0015	<0.001	<0.001	0.0035	<0.010	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.001	0.0039	<0.010	<0.001	<0.001	0.0012	<0.001	<0.001	–	0.00075	<0.001
MW-202	8/85	–	–	–	–	–	–	–	–											–	–	–	–	–	–	–	–	–	–	–	1.9	–	–	–	–	–	–	–	–
	11/1/93	–	–	–	–	7.7	<0.5	2.6	6.3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/95	–	–	–	–	0.4	0.007	0.029	0.042	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/95	–	–	–	–	0.5	0.01	0.048	0.042	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/95	6.5	–	–	–	0.33	0.021	0.051	0.074	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	7/31/96	4.8	–	–	0.062	0.64	0.015	<0.0005	0.032	<0.0003	–	<0.0003	–	0.002	<0.0003	0.0057	0.00054	0.00058	<0.0003	0.0004	–	<0.0003	–	–	–	–	–	–	–	–	–	<0.0003	0.00034	0.00037	–	–	–	<0.0003	–
	12/17/96	7.4	–	–	<0.02	0.89	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	–	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.055	<0.05	<0.05	–	0.1	–	–	<0.05	<0.05	<0.05	–	<0.05	<0.05	<0.05	<0.05	<0.05	–	<0.01	–
	1/21/98	1.6	–	–	<0.005	0.45	<0.005	0.019	0.021	<0.005	<0.005	<0.005	–	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	0.057	<0.005	0.011	–	0.1	–	–	<0.010	<0.005	0.016	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.01	<0.005
	8/18/98	3.1	–	–	<0.005	0.28	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	0.049	<0.005	0.016	–	0.091	–	–	<0.010	<0.005	0.026	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.01	<0.005
	1/27/99	2.3	–	–	<0.005	0.076	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	0.067	<0.005	<0.005	–	0.13	–	–	<0.010	<0.005	0.029	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.01	<0.005
	7/19/99	2.3	–	–	<0.002	0.036	0.0021	0.0037	0.0024	<0.002	<0.002	<0.002	–	0.0033	<0.002	<0.002	<0.002	<0.001	<0.002	<0.002	0.062	<0.02	0.019	–	0.13	–	–	<0.02	<0.002	0.029	–	<0.002	<0.002	<0.002	<0.002	<0.002	–	<0.001	<0.002
	1/11/00	2.4	–	–	0.0012	0.049	<0.001	0.0024	0.0023	<0.001	<0.001	<0.001	–	0.0019	<0.001	<0.001	0.0022	<0.0005	<0.001	<0.001	0.046	<0.010	0.0072	–	0.039	–	–	<0.010	<0.001	0.023	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.0005	<0.001
	8/2/00	1.4	–	–	<0.001	0.041	<0.001	<0.001	0.0018	<0.001	<0.001	<0.001	<0.001	0.0046	<0.001	<0.001	0.011	<0.0005	<0.001	<0.001	0.035	<0.010	0.0019	0.0018	0.01	<0.010	<0.010	<0.010	<0.001	0.023	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.0005	<0.001
MW-204	6/1/88	–	–	–	–	0.019	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/88	–	–	–	–	0.006	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/88	–	–	–	–	0.033	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/89	–	–	–	–	0.039	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/89	–	–	–	–	0.076	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/89	–	–	–	–	0.064	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/89	–	–	–	–	0.16	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/90	–	–	–	–	0.009	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/90	–	–	–	–	0.002	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/90	–	–	–	–	0.025	<0.005	<0.005	0.006	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/90	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/91	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/91	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/91	–	–	–	–	0.027	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/91	–	–	–	–	0.047	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/92	–	–	–	–	0.09	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/92	–	–	–	–	0.11	0.071	<0.005	0.02	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/92	–	–	–	–	0.09	0.02	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

SEE NOTES AND EXPLANATIONS ON PAGE 9

TABLE 2
SUMMARY OF TOTAL HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) (MG/L)
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	TPH-g	TPH-d	TRPH	MTBE	B	T	E	X	BDCM	BCM	Chloroform	Chloro ethane	c-1,2-DCE	1,2-DCB	Dichloro-difluoro methane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCP	IsoPB	MC	n-BB	t-BB	n-PB	1m naphthalene	2m naphthalene	Napthalene	p-isoPT	sec-BB	Phenol	PCE	t-1,2-DCE	TCE	1,2,4-TMB	1,3,5-TMB	TOX	VC	CB
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
	12/1/92	–	–	–	–	2.7	3.7	<0.005	1.06	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	4/1/93	–	–	–	–	0.13	0.028	0.021	0.193	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	5/1/93	–	–	–	–	0.78	<0.05	<0.05	<0.05	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	5/25/93	–	–	–	–	0.78	<0.05	<0.05	<0.05	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/94	–	–	–	–	5.5	0.63	0.19	0.99	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/95	–	–	–	–	5.0	0.077	0.12	0.49	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/95	–	–	–	–	6.9	4.7	0.65	3.7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/13/95	12000.0	–	<5	–	0.88	0.67	0.24	0.86	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	8/1/96	14.0	–	–	0.032	1.4	1.3	0.52	1.7	<0.001	–	<0.001	–	0.0029	<0.001	<0.001	0.0033	0.0072	<0.001	<0.001	–	<0.001	–	–	–	–	–	–	–	–	–	<0.001	<0.001	0.0011	–	–	–	0.0052	–
	12/17/96	2.1	–	–	<0.2	0.75	0.058	<0.05	<0.1	<0.05	<0.05	<0.05	–	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	–	<0.05	–	–	<0.05	<0.05	<0.05	–	<0.05	<0.05	<0.05	<0.05	<0.05	–	<0.1	–
	1/21/98	6.0	–	–	0.0051	2.3	0.079	0.21	0.5	<0.005	<0.005	<0.005	–	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	–	0.036	–	–	0.065	<0.005	0.081	–	<0.005	<0.005	<0.005	0.09	0.023	–	0.009	<0.005
	8/21/98	11.0	–	–	<0.05	5.1	0.51	0.52	1.73	<0.05	<0.05	<0.05	–	<0.05	<0.05	<0.1	<0.05	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	–	0.054	–	–	<0.1	<0.05	<0.05	–	<0.05	<0.05	<0.05	0.2	<0.05	–	<0.1	<0.05
	1/28/99	10.0	–	–	<0.05	3.3	0.11	0.47	1.84	<0.05	<0.05	<0.05	–	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	–	<0.05	–	–	<0.1	<0.05	<0.05	–	<0.05	<0.05	<0.05	0.21	0.052	–	<0.1	<0.05
	7/19/99	1.9	–	–	0.027	0.56	<0.010	0.11	0.23	<0.010	<0.010	<0.010	–	<0.010	<0.010	<0.010	<0.010	<0.005	<0.010	<0.010	<0.010	<0.100	<0.01	–	0.023	–	–	<0.1	<0.01	<0.01	–	<0.01	<0.01	<0.01	0.047	0.011	–	<0.005	<0.01
	1/11/00	2.1	–	–	<0.010	0.27	<0.010	<0.010	0.014	<0.010	<0.010	<0.010	–	<0.010	<0.010	<0.010	<0.010	<0.005	<0.010	<0.010	<0.010	<0.100	<0.010	–	0.019	–	–	<0.100	<0.010	<0.010	–	<0.010	<0.010	<0.010	<0.010	<0.010	–	<0.005	<0.010
	8/3/00	1.3	–	–	<0.005	0.4	<0.005	0.012	0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.0025	<0.005	<0.005	0.0082	<0.050	<0.005	<0.005	0.021	0.064	0.088	<0.010	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.0025	<0.005
Well 7	8/4/00	<0.5	–	–	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.0001	<0.0001	0.0012	<0.001	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.010	–	–	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.0005	<0.001
OPERATION AREA 3: PROCESSING AREA																																							
MW-104	6/1/88	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
(ABANDONED)	9/1/88	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/88	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/89	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/89	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/89	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/89	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/90	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/90	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/90	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/90	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/91	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/91	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/91	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/91	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/92	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/92	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/92	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/92	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/93	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	5/1/93	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	5/25/93	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/93	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	11/1/93	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/94	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/94	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/94	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/95	–	–	–	–	<0.005	<0.005	<0.005	<0.015	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/95	–	–	–	–	0.003	<0.002	<0.002	<0.002	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/13/95	<0.5	–	–	–	0.003	0.0006	<0.005	<0.005	–	–	–	–	–	–	–	0.0027	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.00078	–	–	–	–	–	–
	7/31/96	<0.1	–	–	<0.01	0.0022	0.0018	<0.001	0.0027	<0.0003	–	<0.0003	–	0.0015	<0.0003	<0.0003	0.00058	0.00051	<0.0003	<0.0003	–	<0.0003	–	–	–	–	–	–	–	–	–	<0.0003	<0.0003	0.00054	–	–	–	<0.0003	–
	12/16/96	0.31	–	–	<0.002	0.0042	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	–	0.0027	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.01	<0.001	<0.001	–	0.0052	–	–	<0.001	<0.001	0.0029	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.0032	–
	1/20/98	<0.1	–	–	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	–	–	<0.010	<0.005	<0.005	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.010	<0.005
	8/18/98	<0.1	–	–	–	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	–	–	<0.010	<0.005	<0.005	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.010	<0.005
	1/27/99	<0.1	–	–	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.005	–	–	<0.010	<0.005	<0.005	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.010	<0.005
													–																										
MW-104A	7/19/99	<0.5	–	–	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.0056	<0.001	<0.001	<0.001	0.0012	<0.001	<0.001	<0.001	<0.010	<0.001	–	<0.001	–	–	<0.010	<0.001	<0.001	–	<0.001	<0.001	0.0012	<0.001	<0.001	–	<0.0005	<0.001
	1/13/00	<0.5	–	–	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.0067	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	–	<0.001	–	–	<0.010	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.00057	<0.001
	8/2/00	<0.5	–	–	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0054	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.001	<0.001	<0.010	<0.001	<0.001	0.0018	<0.001	<0.001	–	<0.0005	<0.001

SEE NOTES AND EXPLANATIONS ON PAGE 9

TABLE 2
SUMMARY OF TOTAL HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) (MG/L)
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1 TPH-g	2 TPH-d	3 TRPH	4 MTBE	5 B	6 T	7 E	8 X	9 BDCM	10 BCM	11 Chloroform	12 Chloro ethane	13 c-1,2-DCE	14 1,2-DCB	15 Dichloro-difluoro methane	16 1,1-DCA	17 1,2-DCA	18 1,1-DCE	19 1,2-DCP	20 isoPB	21 MC	22 n-BB	23 t-BB	24 n-PB	25 1m naphthalene	26 2m naphthalene	27 Naphthalene	28 p-isoPT	29 sec-BB	30 Phenol	31 PCE	32 t-1,2-DCE	33 TCE	34 1,2,4-TMB	35 1,3,5-TMB	36 TOX	37 VC	38 CB
MW-504	12/1/93	--	--	--	--	11.0	1.3	1.8	9.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/94	--	--	--	--	8.6	2.1	<0.5	8.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/1/94	--	--	--	--	5.8	0.7	0.84	7.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/1/95	--	--	--	--	5.2	1.1	1.2	12.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/1/95	--	--	--	--	8.0	1.3	2.2	11.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/95	99.0	--	36.9	--	2.7	0.73	0.8	2.6	--	--	--	--	0.014	--	--	0.013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/1/96	80.0	--	--	0.37	3.4	1.4	0.96	3.7	<0.001	--	<0.001	--	0.02	<0.001	<0.001	0.004	0.02	<0.001	<0.001	--	<0.001	--	--	--	--	--	--	--	--	--	<0.001	0.00046	0.00078	--	--	--	0.0011	--
	12/18/96	33.0	--	--	<0.05	6.0	2.8	1.0	3.3	<0.25	<0.25	<0.25	--	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	--	0.35	--	--	2.3	0.37	<0.25	--	<0.25	<0.25	<0.25	5	2.1	--	<0.5	--
	1/21/98	30.0	--	--	<0.25	4.6	0.94	0.75	2.08	<0.25	<0.25	<0.25	--	<0.25	<0.25	<0.5	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	--	<0.25	--	--	0.36	<0.25	<0.25	--	<0.25	<0.25	<0.25	0.8	0.34	--	<0.5	<0.25
	8/20/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/28/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/19/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/10/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/31/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
OPERATION AREA 4: WEST TANK FARM AREA																																							
MW-101	8/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.18	--	--
	6/1/88	--	--	--	--	0.62	<0.005	<0.005	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/1/88	--	--	--	--	0.31	0.01	0.034	0.013	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/1/88	--	--	--	--	0.49	0.028	<0.005	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/92	--	--	--	--	0.44	<0.005	<0.005	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/1/92	--	--	--	--	0.34	<0.005	<0.005	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/1/92	--	--	--	--	0.29	<0.005	<0.005	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/1/93	--	--	--	--	0.2	<0.005	<0.005	<0.025	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/1/94	--	--	--	--	0.062	<0.005	0.005	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/1/95	--	--	--	--	0.11	<0.005	0.11	<0.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/1/95	--	--	--	--	0.18	<0.004	0.18	<0.004	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/95	2.4	--	<5	--	0.09	0.0059	0.0064	0.0029	--	--	--	--	0.045	--	--	0.0093	0.0018	0.067	<0.0005	--	0.0013	--	--	--	--	--	--	--	--	--	0.036	0.00097	0.1	--	--	--	<0.0005	--
	7/31/96	2.3	--	--	<0.01	0.13	0.014	0.13	0.014	<0.0003	--	<0.0003	--	0.35	<0.0003	<0.0003	0.0086	0.0016	0.052	<0.0003	--	<0.0003	--	--	--	--	--	--	--	--	--	24	<0.0003	0.041	--	--	--	<0.0003	--
	12/17/96	0.92	--	--	<0.002	<0.025	<0.05	<0.025	<0.05	<0.025	<0.025	<0.025	--	0.09	<0.025	<0.025	<0.025	<0.025	0.14	<0.025	<0.025	<0.025	<0.025	--	<0.025	--	--	<0.025	<0.025	<0.025	--	0.057	<0.025	0.34	<0.025	<0.025	--	<0.05	--
	1/19/98	1.4	--	--	<0.005	0.065	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.062	<0.005	<0.01	0.017	<0.005	<50	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.01	<0.005	<0.005	--	0.18	<0.005	0.32	<0.005	<0.005	--	<0.01	<0.005
	8/18/98	3.2	--	--	--	0.14	<0.005	0.015	0.0067	<0.005	<0.005	<0.005	--	0.052	<0.005	<0.01	<0.005	<0.005	0.092	<0.005	0.0064	<0.005	<0.005	--	<0.005	--	--	<0.01	<0.005	<0.005	--	0.034	<0.005	<0.005	<0.005	<0.005	--	<0.01	<0.005
	1/26/99	3.2	--	--	<0.005	0.0684	<0.005	0.00708	<0.005	<0.005	<0.005	<0.005	--	0.0719	<0.005	<0.01	0.0139	<0.005	0.0979	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.01	<0.005	<0.005	--	0.0193	<0.005	0.16	<0.005	<0.005	--	<0.01	<0.005
	7/19/99	1.3	--	--	<0.002	0.022	<0.002	0.0024	<0.002	<0.002	<0.002	<0.002	--	0.057	<0.002	<0.002	0.018	<0.001	0.150	<0.002	<0.002	<0.02	<0.002	--	<0.002	--	--	<0.02	<0.002	<0.002	--	0.078	0.0085	0.27	<0.002	<0.002	--	<0.001	<0.002
	1/10/00	0.69	--	--	<0.001	0.0092	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.025	<0.001	<0.001	0.012	0.0026	0.130	<0.001	<0.001	<0.010	<0.001	--	<0.001	--	--	<0.010	<0.001	<0.001	--	0.210	0.0035	0.260	<0.001	<0.001	--	<0.0005	<0.001
	8/3/00	<0.5	--	--	<0.002	0.024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.033	<0.002	<0.002	0.015	0.0036	0.092	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.010	<0.010	<0.020	<0.002	<0.002	<0.010	0.037	0.019	0.270	<0.002	<0.002	--	0.005	<0.002
MW-105	12/21/95	<0.5	--	<10	--	0.011	0.0017	0.00081	0.0037	--	--	--	--	0.0094	--	--	0.0045	0.0033	0.013	--	--	--	--	--	--	--	--	--	--	--	--	0.016	--	0.046	--	--	--	--	--
	7/31/96	0.65	--	--	<0.01	0.091	0.0018	0.002	0.0018	<0.003	--	<0.0003	--	0.0084	<0.0003	<0.0003	0.012	0.0014	0.02	<0.0003	--	<0.0003	--	--	--	--	--	--	--	--	--	0.024	<0.0003	0.033	--	--	--	<0.0003	--
	12/16/96	0.24	--	--	<0.002	0.014	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	--	0.01	<0.005	<0.005	<0.005	<0.005	0.05	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.005	<0.005	<0.005	--	0.08	<0.005	0.11	<0.005	<0.005	--	<0.01	--
	1/20/98	0.51	--	--	<0.005	0.021	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.025	<0.005	<0.01	0.022	<0.005	0.14	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.01	<0.005	<0.005	--	0.15	<0.005	0.21	<0.005	<0.005	--	<0.01	<0.005
	8/18/98	0.68	--	--	--	0.0536	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.0253	<0.005	<0.01	0.0154	<0.005	0.108	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.01	<0.005	<0.005	--	0.0967	<0.005	0.162	<0.005	<0.005	--	<0.01	<0.005
	1/25/99	0.53	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.022	<0.005	<0.01	0.014	<0.005	0.117	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.01	<0.005	<0.005	--	0.125	<0.005	0.187	<0.005	<0.005	--	0.00643	<0.005
	7/19/99	0.61	--	--	<0.001	0.0048	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.029	<0.001	<0.001	0.016	0.0034	0.130	<0.001	<0.001	<0.01	<0.001	--	<0.001	--	--	<0.01	<0.001	<0.001	--	0.078	0.015	0.280	<0.001	<0.001	--	<0.0005	<0.001
	1/10/00	0.9	--	--	<0.005	0.061	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.040	<0.005	<0.005	0.020	0.004	0.100	<0.005	<0.005	<0.050	<0.005	--	<0.005	--	--	<0.050	<0.005	<0.005	--	<0.005	0.062	0.130	<0.005	<0.005	--	<0.0025	<0.005
	7/31/00	0.58	--	--	<0.005	0.052	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.052	<0.005	<0.005	0.014	0.0095	0.061	<0.005	<0.005	<0.050	<0.005	<0.005	<0.005	<0.0095	<0.0095	<0.0095	<0.005	<0.005	<0.0095	<0.005	0.059	0.16	<0.005	<0.005	--	0.010	<0.005
MW-201	8/85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.1	--	--	--	--	--	--	--	--
	6/1/88	--	--	--	--	1.0	0.15	<0.005	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/1/88	--	--	--	--	0.52	0.21	0.11	0.4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/1/88	--	--	--	--	0.42	0.069	0.019	0.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/1/89	--	--	--	--	0.21	0.027	0.024	0.047	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/89	--	--	--	--	0.35	<0.005	<0.005	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/1/89	--	--	--	--	0.83	0.1	0.032	0.21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/1/89	--	--	--	--	0.51	0.076	0.024	0.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/1/90	--	--	--	--	0.35	0.038	0.029	0.085	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/90	--	--	--	--	0.22	0.049	0.084	0.083	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/1/90	--	--	--	--	0.34	0.015	0.02	0.073	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/1/90	--	--	--	--	0.24	0.012	0.007	0.055	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/1/91	--	--	--	--	0.5	<0.005	<0.005	0.24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/1/91	--	--	--	--	0.53	<0.005	<0.005	<0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/1/91	--	--	--	--	0.37	<0.005	<0.005	0.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/1/91	--	--	--	--	0.34	0.01	0.009	0.08	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

SEE NOTES AND EXPLANATIONS ON PAGE 9

TABLE 2
SUMMARY OF TOTAL HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) (MG/L)
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Monitoring Well ID	Date	TPH-g	TPH-d	TRPH	MTBE	B	T	E	X	BDCM	BCM	Chloroform	Chloro ethane	c-1,2-DCE	1,2-DCB	Dichloro-difluoro methane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCP	IsoPB	MC	n-BB	t-BB	n-PB	1m naphthalene	2m naphthalene	Napthalene	p-isoPT	sec-BB	Phenol	PCE	t-1,2-DCE	TCE	1,2,4-TMB	1,3,5-TMB	TOX	VC	CB
	6/1/92	–	–	–	–	0.025	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/92	–	–	–	–	0.35	<0.005	<0.005	0.13	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/92	–	–	–	–	1.15	<0.005	<0.005	0.56	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/93	–	–	–	–	0.56	0.077	<0.05	0.41	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/94	–	–	–	–	1.3	0.066	0.5	0.56	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/95	–	–	–	–	0.29	<0.005	<0.005	<0.015	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/95	–	–	–	–	1.1	0.028	0.13	0.14	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/13/95	9.0	–	<5	–	0.44	0.042	0.12	0.094	–	–	–	–	0.044	–	–	0.0094	0.0044	0.087	0.00081	–	0.0007	–	–	–	–	–	–	–	–	–	0.058	0.0017	0.11	–	–	–	–	–
	7/31/96	<0.1	–	–	<0.01	0.48	0.02	0.032	0.025	<0.0003	–	<0.0003	–	0.034	<0.0003	<0.0003	0.0094	0.0027	0.098	<0.0003	–	<0.0003	–	–	–	–	–	–	–	–	–	0.11	<0.0003	0.12	–	–	–	<0.0003	–
	12/17/96	3.7	–	–	<0.01	0.11	0.012	0.096	0.121	<0.01	<0.01	<0.01	–	0.089	<0.01	<0.01	<0.01	<0.01	0.17	<0.01	0.021	<0.01	<0.01	–	0.021	–	–	<0.01	<0.01	<0.01	–	0.21	<0.01	0.21	0.14	0.028	–	<0.02	–
	1/21/98	2.6	–	–	<0.005	0.22	0.014	0.087	0.017	<0.005	<0.005	<0.005	–	0.064	<0.005	<0.01	0.01	<0.005	0.1	<0.005	0.019	<0.005	<0.005	–	0.021	–	–	0.011	<0.005	<0.005	–	0.16	0.0053	0.18	0.02	0.012	–	<0.01	<0.005
	8/18/98	2.6	–	–	–	0.44	0.0086	0.02	0.013	<0.005	<0.005	<0.005	–	0.063	<0.005	<0.01	0.0063	<0.005	0.046	<0.005	0.0051	<0.005	<0.005	–	<0.005	–	–	0.011	<0.005	<0.005	–	0.016	<0.005	0.12	<0.005	<0.005	–	<0.01	<0.005
	7/19/99	2.8	–	–	<0.005	0.16	0.029	0.069	0.0546	<0.005	<0.005	<0.005	–	0.063	<0.005	<0.005	0.0093	<0.0025	0.061	<0.005	0.021	<0.05	<0.005	–	0.025	–	–	<0.050	0.005	<0.005	–	0.04	0.012	0.16	0.053	0.015	–	<0.0025	<0.005
	1/12/00	5.1	–	–	<0.005	0.520	0.014	0.053	0.016	<0.005	<0.005	<0.005	–	0.043	<0.005	<0.005	<0.005	<0.0025	0.019	<0.005	0.016	<0.050	<0.005	–	0.015	–	–	<0.050	0.0054	<0.005	–	<0.005	<0.005	0.038	0.032	<0.005	–	<0.0025	<0.005
	8/4/00	2.9	–	–	<0.005	0.570	0.015	0.061	0.021	<0.005	<0.005	<0.005	<0.0005	0.076	<0.005	<0.005	<0.005	<0.0025	0.019	<0.005	0.012	<0.050	<0.005	<0.005	0.012	<0.010	<0.010	<0.010	<0.005	<0.005	<0.010	<0.005	<0.005	0.032	0.033	<0.005	–	<0.0025	<0.005
MW-205	6/1/88	–	–	–	–	0.013	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/88	–	–	–	–	0.027	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/88	–	–	–	–	0.12	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/89	–	–	–	–	0.04	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/89	–	–	–	–	0.12	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/89	–	–	–	–	0.081	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/89	–	–	–	–	0.17	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/90	–	–	–	–	0.14	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/90	–	–	–	–	0.056	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/90	–	–	–	–	0.045	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/90	–	–	–	–	0.047	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/91	–	–	–	–	0.04	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/91	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/91	–	–	–	–	0.043	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/91	–	–	–	–	0.085	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/92	–	–	–	–	0.035	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/92	–	–	–	–	0.006	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/92	–	–	–	–	0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/92	–	–	–	–	0.01	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/93	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	5/1/93	–	–	–	–	0.022	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	5/25/93	–	–	–	–	0.022	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	11/1/93	–	–	–	–	0.032	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/94	–	–	–	–	<0.005	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/95	–	–	–	–	<0.005	<0.005	<0.005	<0.015	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/95	–	–	–	–	0.0053	<0.002	<0.002	<0.002	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/13/95	2.1	–	<5	–	0.11	0.0013	0.018	0.037	–	–	–	–	0.051	–	–	0.0073	0.002	0.022	–	–	0.00058	–	–	–	–	–	–	–	–	–	0.0028	0.0053	0.08	–	–	–	–	–
	7/31/96	<0.1	–	–	<0.01	0.0051	<0.002	<0.002	<0.002	<0.0003	–	<0.0003	–	0.03	<0.0003	<0.0003	0.0028	<0.0003	0.014	<0.0003	–	<0.0003	–	–	–	–	–	–	–	–	–	0.0035	<0.0003	0.084	–	–	–	<0.0003	–
	12/16/96	0.27	–	–	0.002	<0.002	<0.002	<0.002	<0.004	<0.002	<0.002	<0.002	–	0.035	<0.002	<0.002	<0.002	<0.002	0.0071	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	–	–	<0.002	<0.002	<0.002	–	<0.002	<0.002	0.045	<0.002	<0.002	–	<0.004	–
	1/20/98	0.19	–	–	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	0.027	<0.005	<0.010	<0.005	<0.005	0.0087	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	–	<0.010	<0.005	<0.005	–	<0.005	<0.005	0.048	<0.005	<0.005	–	<0.01	<0.005
	8/21/98	0.017	–	–	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	0.032	<0.005	<0.010	<0.005	<0.005	0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	–	<0.010	<0.005	<0.005	–	<0.005	<0.005	0.062	<0.005	<0.005	–	<0.01	<0.005
	1/26/99	0.22	–	–	<0.005	0.00687	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	0.0261	<0.005	<0.010	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	–	<0.010	<0.005	<0.005	–	<0.005	<0.005	0.0251	<0.005	<0.005	–	<0.01	<0.005
	7/19/99	<0.5	–	–	<0.001	0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.023	<0.001	<0.001	<0.001	<0.0005	0.0026	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	–	–	<0.010	<0.001	<0.001	–	<0.001	0.0018	0.012	<0.001	<0.001	–	<0.0005	<0.001
	1/11/00	0.790	–	–	<0.001	0.026	0.0013	0.002	0.0043	<0.001	<0.001	<0.001	–	0.013	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	0.0023	<0.010	<0.001	<0.001	0.0011	–	–	<0.010	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.013	<0.001
	8/2/00	<0.5	–	–	–	0.011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.006	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.0005	<0.001
Well 8	8/4/00	<0.5	–	–	<0.001	0.0028	<0.0046	<0.001	<0.0029	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–	–	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.0005	<0.001
ERATION AREA 5: LAKELAND PROPERTY																																							
MW-206	6/1/88	–	–	–	–	5.8	2.4	2.1	4.9	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
(ABANDONED)	9/1/88	–	–	–	–	4.2	1.0	2.0	6.6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/88	–	–	–	–	4.3	0.92	2.1	5.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/89	–	–	–	–	2.7	3.2	2.4	12.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/89	–	–	–	–	3.1	1.2	2.3	8.6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/89	–	–	–	–	4.5	0.62	2.4	6.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/89	–	–	–	–	3.2	1	2.0	6.6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

SEE NOTES AND EXPLANATIONS ON PAGE 9
P:\CENCO\3917-010\REPORT\Table 2

TABLE 2
SUMMARY OF TOTAL HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) (MG/L)
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Monitoring Well ID	Date	TPH-g	TPH-d	TRPH	MTBE	B	T	E	X	BDCM	BCM	Chloroform	Chloro ethane	c-1,2-DCE	1,2-DCB	Dichloro-difluoro methane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCP	isoPB	MC	n-BB	t-BB	n-PB	1m naphthalene	2m naphthalene	Napthalene	p-isoPT	sec-BB	Phenol	PCE	t-1,2-DCE	TCE	1,2,4-TMB	1,3,5-TMB	TOX	VC	CB
	3/1/90	–	–	–	–	3.7	1.7	2.6	9.4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/90	–	–	–	–	3.7	0.96	2.0	6.3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/90	–	–	–	–	5.1	2.1	2.3	6.8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/90	–	–	–	–	7.1	2.1	2.4	8.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/91	–	–	–	–	4.9	2.6	2.2	9.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/91	–	–	–	–	5.22	1.08	2.4	6.88	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/91	–	–	–	–	4.5	2.1	2.0	5.4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/91	–	–	–	–	3.4	0.72	2.5	4.74	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/92	–	–	–	–	2.0	0.47	2.5	4.87	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/92	–	–	–	–	3.2	0.42	2.1	2.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/92	–	–	–	–	9.9	1.4	3.2	7.3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/92	–	–	–	–	13.0	2.0	6.0	13	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/94	–	–	–	–	8.4	4.9	1.8	9.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/95	–	–	–	–	9.0	0.72	2.0	5.8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/95	–	–	–	–	6.2	0.8	1.6	3.6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/13/95	12.0	–	<5	–	0.11	0.016	0.032	0.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	7/31/96	33.0	–	–	0.51	0.57	0.11	0.42	0.49	<0.0003	–	<0.0003	–	0.02	<0.0003	<0.0003	0.0088	0.0058	0.022	<0.0003	–	<0.0003	–	–	–	–	–	–	–	–	–	<0.0003	<0.0003	0.0014	–	–	–	<0.0003	–
	12/18/96	8.2	–	–	<0.02	2.2	<0.1	1.2	0.34	<0.1	<0.1	<0.1	–	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	–	0.12	–	–	0.13	<0.1	<0.1	–	<0.1	<0.1	<0.1	0.19	0.14	–	<0.2	–
	1/21/98	13.0	–	–	<0.005	1.5	0.29	1.6	0.78	<0.005	<0.005	<0.005	–	0.13	<0.005	<0.01	<0.005	<0.005	0.082	<0.005	0.085	<0.005	0.017	–	0.22	–	–	0.059	0.005	0.011	–	<0.005	<0.005	<0.005	0.035	0.012	–	<0.01	0.05
	8/20/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	–	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	–	NS	–	–	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-501	3/1/95	–	–	–	–	4.2	0.23	1.0	2.7	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
(DESTROYED)	9/1/95	–	–	–	–	2.4	0.27	<0.2	<0.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/13/95	69.0	–	19.9	–	1.6	0.1	0.88	2.2	–	–	–	–	0.0085	–	–	0.0016	0.0032	0.001	0.0013	–	0.001	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	7/31/96	18.0	–	–	0.18	1.7	0.073	0.22	1.1	<0.0003	–	<0.0003	–	0.0072	<0.0003	<0.0003	0.00081	0.0013	<0.0003	0.001	–	<0.0003	–	–	–	–	–	–	–	–	–	<0.0003	<0.0003	0.00039	–	–	–	<0.0003	–
	12/18/96	6.8	–	–	<0.01	1.2	<0.05	0.51	0.65	<0.05	<0.05	<0.05	–	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.092	<0.05	<0.05	–	0.2	–	–	<0.05	<0.05	<0.05	–	<0.05	<0.05	<0.05	0.31	0.13	–	<0.1	–
	1/21/98	0.95	–	–	<0.005	0.26	<0.005	0.011	0.023	<0.005	<0.005	<0.005	–	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	–	0.0061	–	–	<0.01	<0.005	<0.005	–	<0.005	<0.005	<0.005	0.0093	<0.005	–	<0.01	<0.005
	8/20/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	–	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	–	NS	–	–	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/26/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	–	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	–	NS	–	–	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-501A	7/19/99	7.5	–	–	<0.025	1.3	<0.025	<0.025	0.025	<0.025	<0.025	<0.025	–	<0.025	<0.025	<0.025	<0.025	<0.013	<0.013	<0.013	0.041	<0.25	<0.025	–	0.052	–	–	<0.25	<0.025	<0.025	–	<0.025	<0.025	<0.025	<0.025	<0.025	–	<0.013	<0.025
	1/13/00	9.2	–	–	<0.010	1.6	0.018	<0.010	0.023	<0.010	<0.010	<0.010	–	<0.010	<0.010	<0.010	<0.010	<0.005	<0.010	<0.010	0.034	<0.100	<0.010	–	0.042	–	–	<0.100	<0.010	<0.010	–	<0.010	<0.010	<0.010	<0.010	<0.010	–	<0.005	<0.010
	8/2/00	7.1	–	–	–	0.98	0.011	0.012	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.005	<0.010	<0.010	0.085	<0.100	<0.010	<0.010	0.150	0.094	0.140	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	–	<0.005	<0.010
MW-502	6/1/88	–	–	–	–	0.95	0.079	0.062	0.016	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/88	–	–	–	–	1.3	0.18	2.8	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/88	–	–	–	–	6.5	0.86	1.5	5.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/89	–	–	–	–	5.3	1.2	1.9	7.1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/94	–	–	–	–	9.8	0.86	1.9	3.3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/94	–	–	–	–	8.4	1.6	1.6	6.0	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/95	–	–	–	–	18.0	0.48	2.1	7.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/95	–	–	–	–	15.0	0.69	3.3	8.8	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/13/95	220.0	–	41.1	–	6.9	0.95	3.3	8.5	–	–	–	–	0.0069	–	–	0.00089	0.0061	–	–	0.0011	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	7/31/96	110.0	–	–	1.0	13.0	0.4	1.8	6.8	<0.0003	–	<0.0003	–	0.0068	<0.0003	<0.0003	<0.0003	0.012	0.00076	<0.0003	–	<0.0003	–	–	–	–	–	–	–	–	–	<0.0003	<0.0003	0.00052	–	–	–	<0.0003	–
	12/18/96	30.0	–	–	<0.01	11.0	<0.5	2.1	0.57	<0.5	<0.5	<0.5	–	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	–	<0.5	–	–	<0.5	<0.5	<0.5	–	<0.5	<0.5	<0.5	<0.5	<0.5	–	<1	–
	1/22/98	24.0	–	–	70.0	7.8	0.13	1.3	0.921	<0.025	<0.025	<0.025	–	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.09	<0.025	<0.025	–	0.18	–	–	0.32	<0.025	<0.025	–	<0.025	<0.025	<0.025	0.3	0.07	–	<0.05	<0.025
	8/19/98	86.0	–	–	290.0	12.0	0.1	1.4	0.953	<0.005	<0.005	<0.005	–	0.01	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.067	<0.005	0.016	–	0.14	–	–	0.28	<0.005	0.01	–	<0.005	<0.005	<0.005	0.34	0.06	–	<0.01	<0.005
	1/26/99	120.0	–	–	119.0	8.8	0.0804	1.03	0.554	<0.005	<0.005	<0.005	–	0.0104	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.0767	<0.005	<0.005	–	0.135	–	–	0.255	<0.005	0.0151	–	<0.005	<0.005	<0.005	0.179	0.0471	–	<0.01	<0.005
	7/19/99	48.0	–	–	92.0	11.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	–	<5.0	<5.0	<5.0	<5.0	<2.5	<5.0	<5.0	<5.0	<50.0	<5.0	–	<5.0	–	–	<50.0	<5.0	<5.0	–	<5.0	<5.0	<5.0	<5.0	<5.0	–	<2.5	<5
	1/13/00	25.0	–	–	8.7	8.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	–	<1.0	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<10	<1.0	–	<1.0	–	–	<10	<1.0	<1.0	–	<1.0	<1.0	<1.0	<1.0	<1.0	–	<0.5	<1.0
	8/2/00	23.0	–	–	4.5	6.3	0.1	0.25	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.050	<0.1	<0.1	<1.0	<0.1	<0.1	<0.1	0.110	0.030	0.045	0.16	<0.1	<0.1	0.080	<0.1	<0.1	<0.1	<0.1	<0.1	–	<0.050	<0.1
MW-503	6/1/88	–	–	–	–	0.6	0.14	0.34	0.6	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
(ABANDONED)	9/1/88	–	–	–	–	0.8	0.28	0.3	0.91	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/88	–	–	–	–	1.5	0.57	0.38	0.96	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/89	–	–	–	–	0.4	0.19	0.36	0.78	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/89	–	–	–	–	0.6	0.34	0.63	1.2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/89	–	–	–	–	0.99	0.55	0.2	0.85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/89	–	–	–	–	0.27	0.18	0.18	0.56	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/90	–	–	–	–	0.31	0.14	0.14	0.28	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/90	–	–	–	–	0.034	0.024	0.11	0.19	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/90	–	–	–	–	0.17	0.11	0.14	0.27	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/90	–	–	–	–	2.1	1.3	0.1	2.3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/91	–	–	–	–	0.9	0.65	0.25	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

TABLE 2
SUMMARY OF TOTAL HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) (MG/L)
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1 TPH-g	2 TPH-d	3 TRPH	4 MTBE	5 B	6 T	7 E	8 X	9 BDCM	10 BCM	11 Chloroform	12 Chloro ethane	13 c-1,2-DCE	14 1,2-DCB	15 Dichloro-difluoro methane	16 1,1-DCA	17 1,2-DCA	18 1,1-DCE	19 1,2-DCP	20 isoPB	21 MC	22 n-BB	23 t-BB	24 n-PB	25 1m naphthalene	26 2m naphthalene	27 Napthalene	28 p-isoPT	29 sec-BB	30 Phenol	31 PCE	32 t-1,2-DCE	33 TCE	34 1,2,4-TMB	35 1,3,5-TMB	36 TOX	37 VC	38 CB
	6/1/91	--	--	--	--	1.04	0.7	0.33	1.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/1/92	--	--	--	--	3.3	0.75	0.34	1.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/1/93	--	--	--	--	2.9	0.4	<0.25	1.88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/1/94	--	--	--	--	0.24	0.022	0.066	0.079	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/1/95	--	--	--	--	0.39	0.055	0.1	0.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	9/1/95	--	--	--	--	0.53	0.093	0.13	0.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/95	8.2	--	<5.0	--	0.34	0.079	0.19	0.2	--	--	--	--	0.038	--	--	0.015	0.0065	0.12	0.00072	--	0.091	--	--	--	--	--	--	--	--	--	--	0.0012	0.085	--	--	--	0.0014	--
	7/31/96	5.1	--	--	<0.01	0.15	0.049	0.025	0.084	<0.0003	--	<0.0003	--	0.036	<0.0003	<0.0003	0.015	0.0031	0.15	<0.0003	--	<0.0003	--	--	--	--	--	--	--	--	--	0.09	<0.0003	0.13	--	--	--	<0.0003	--
	12/18/96	4.6	--	--	<0.02	0.21	0.019	0.14	0.056	<0.01	<0.01	<0.01	--	0.04	<0.01	<0.01	<0.01	<0.01	0.32	<0.01	0.044	<0.01	<0.01	--	0.048	--	--	0.028	<0.01	0.012	--	0.014	<0.01	0.27	0.063	0.023	--	<0.02	--
	1/21/98	3.1	--	--	<0.005	0.21	0.031	0.28	0.063	<0.005	<0.005	<0.005	--	0.067	<0.005	<0.01	0.0096	<0.005	0.21	<0.005	0.053	<0.005	0.006	--	0.068	--	--	0.017	<0.005	0.012	--	<0.005	0.027	0.46	0.0058	0.014	--	<0.01	<0.005
	8/19/98	0.96	--	--	--	0.072	0.0079	0.053	0.0076	<0.005	<0.005	<0.005	--	0.041	<0.005	<0.01	<0.005	<0.005	0.037	<0.005	0.011	<0.005	<0.005	--	0.014	--	--	0.0053	<0.005	<0.005	--	<0.005	0.071	0.063	0.005	<0.005	--	<0.01	<0.005
MW-503B	2/9/99	10.0	--	--	--	0.97	<0.05	0.42	<0.05	<0.05	<0.05	<0.05	--	0.11	<0.05	<0.1	<0.05	<0.05	0.061	<0.05	0.05	<0.05	<0.05	--	0.084	--	--	<0.05	<0.05	<0.05	--	<0.05	0.15	<0.05	<0.05	<0.05	--	<0.1	<0.05
	7/19/99	7.8	--	--	<0.02	0.43	<0.02	0.54	<0.02	<0.02	<0.02	<0.02	--	0.18	<0.02	<0.02	<0.02	<0.01	0.082	<0.02	0.073	<0.2	<0.02	--	0.130	--	--	<0.200	<0.020	0.020	--	<0.02	0.25	0.025	<0.02	<0.02	--	<0.01	<0.02
	1/14/00	14.0	--	--	<0.020	1.0	0.032	0.870	0.140	<0.020	<0.020	<0.020	--	0.210	<0.020	<0.020	<0.020	<0.010	0.090	<0.020	0.083	<0.200	<0.020	--	0.170	--	--	<0.200	<0.020	<0.020	--	<0.020	0.200	<0.020	<0.020	<0.020	--	<0.010	<0.02
	8/4/00	5.6	--	--	<0.010	0.61	0.019	0.5	0.035	<0.010	<0.010	<0.010	<0.010	0.140	<0.010	<0.010	<0.010	<0.005	0.036	<0.010	0.068	<0.010	<0.010	<0.010	0.1	<0.010	<0.010	0.023	<0.010	0.014	<0.010	<0.010	0.16	<0.010	<0.010	<0.010	--	<0.005	<0.010
OPERATION AREA 6: FORMER AST AREA AT WALKER PROPERTY																																							
W-3	11/1/89	--	<1	--	--	0.019	0.0026	0.0076	0.013	<0.0005	<0.0005	<0.0005	--	--	--	--	0.0025(A)	<0.0005	<0.0005	<0.0005	--	<0.0005	--	--	--	--	--	--	--	--	--	<0.0005	<0.0005	<0.0005	--	--	--	0.0071(A)	<0.0005
(ABANDONED)	1/1/90	--	--	--	--	<0.0005	<0.0005	<0.0005	0.0033	<0.001	<0.001	<0.0005	--	--	<0.002	<0.002	0.001	<0.0005	<0.0005	<0.0005	--	<0.002	--	--	--	--	--	--	--	--	--	<0.0005	<0.001	<0.0005	--	--	--	<0.002	<0.001
	3/1/90	--	--	--	--	0.0053	0.0045	<0.0005	<0.002	<0.001	<0.001	<0.0005	--	--	<0.002	<0.002	0.0005	<0.0005	<0.0005	<0.0005	--	<0.002	--	--	--	--	--	--	--	--	--	<0.0005	<0.001	<0.0005	--	--	--	<0.002	<0.001
	4/1/90*	--	--	--	--	0.0034	0.0045	<0.001	<0.001	<0.001	<0.001	<0.0005	--	<0.005	<0.002	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	--	<0.002	--	--	--	--	--	--	--	--	--	<0.0005	<0.001	<0.0005	--	--	--	<0.002	<0.001
	12/18/96	1.3	--	--	<0.01	0.59	<0.025	<0.025	<0.05	<0.025	<0.025	<0.025	--	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	--	<0.025	--	--	<0.025	<0.025	<0.025	--	<0.025	<0.025	<0.025	<0.025	<0.025	--	<0.05	--
	1/13/98	2.2	--	--	<0.005	0.28	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	0.006	<0.005	<0.005	<0.005	0.027	<0.005	<0.005	--	0.016	--	--	<0.01	<0.005	0.006	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.051	<0.005
	8/20/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-3A	1/13/98	4300.0	--	--	<200	150	<6	35	<12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/20/98	1.1	--	--	0.44	0.22	<0.025	0.033	<0.025	<0.025	<0.025	<0.025	--	<0.025	<0.025	<0.05	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	--	<0.025	--	--	0.35	<0.025	<0.025	--	<0.025	<0.025	<0.025	<0.025	<0.025	--	<0.05	<0.025
	1/28/99	0.69	--	--	0.34	0.16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.05	--	--	0.24	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.1	<0.05
	7/19/99	5.4	--	--	0.38	0.12	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	--	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	0.021	<0.2	0.025	--	0.026	--	--	<0.2	<0.02	<0.02	--	<0.02	<0.02	<0.02	0.037	<0.02	--	<0.01	<0.02
	1/13/00	14.0	--	--	0.210	0.140	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.005	<0.010	<0.010	<0.010	<0.100	<0.010	--	<0.010	--	--	<0.100	<0.010	<0.010	--	<0.010	<0.010	<0.010	<0.010	<0.010	--	0.007	<0.010
	8/4/00	3.4	--	--	0.220	0.170	<0.020	0.0084	<0.020	<0.020	<0.020	<0.020	0.0024	<0.020	<0.020	<0.020	<0.020	<0.001	<0.020	<0.020	0.014	<0.020	0.0097	<0.002	0.021	0.470	0.740	<0.050	<0.002	0.0073	<0.050	<0.002	<0.002	<0.002	0.002	0.002	--	0.0050	<0.002
OFF-SITE WELLS: WALKER PROPERTY																																							
W-1	11/1/89	--	<1	3.6	--	0.39	0.0039	0.0021	0.0064	<0.0005	<0.0006	<0.0005(A)	--	--	--	--	0.0035(A)	<0.0005(A)	0.0006(A)	<0.0005(A)	--	<0.0005(A)	--	--	--	--	--	--	--	--	--	<0.0005(A)	<0.0005(A)	<0.0005(A)	--	--	--	0.021	<0.0005
	3/1/90	--	--	--	--	0.14	<0.005	<0.005	<0.02	<0.01	<0.01	<0.005	--	--	<0.020	<0.020	<0.005	<0.005	<0.005	<0.005	--	<0.02	--	--	--	--	--	--	--	--	--	<0.005	<0.01	<0.005	--	--	--	<0.02	<0.01
	4/1/90*	--	--	--	--	0.2	0.012	0.012	0.0027	<0.005	<0.005	<0.005	--	<0.025	<0.020	<0.020	0.0016	<0.005	<0.005	<0.005	--	<0.005	--	--	--	--	--	--	--	--	--	<0.005	<0.005	<0.005	--	--	--	<0.005	<0.005
	12/18/96	0.8	--	--	<0.01	0.078	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.027	<0.005	<0.005	--	0.031	--	--	0.01	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.01	--
	1/14/98	1.1	--	--	<0.005	0.062	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.019	<0.005	<0.005	--	0.02	--	--	<0.01	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.016	<0.005
	8/20/98	1.2	--	--	0.014	0.079	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.0086	<0.005	<0.01	0.0084	<0.005	<0.005	<0.005	0.027	<0.005	<0.005	--	0.03	--	--	<0.01	<0.005	0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.026	<0.005
	1/29/99	1.4	--	--	<0.005	0.057	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.024	<0.005	<0.005	--	0.028	--	--	<0.01	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.018	<0.005
	7/19/99	1.5	--	--	<0.002	0.048	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.001	<0.002	<0.002	0.019	<0.020	0.0027	--	0.023	--	--	<0.02	<0.002	0.0044	--	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.001	<0.002
	1/13/00	1.7	--	--	0.0027	0.046	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.0012	<0.001	<0.001	0.0015	<0.0005	<0.001	<0.001	0.021	<0.010	0.0027	--	0.024	--	--	<0.010	<0.001	0.0039	--	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.013	<0.001
	8/3/00	0.880	--	--	0.010	0.029	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0016	<0.001	<0.001	0.0016	<0.0005	<0.001	<0.001	0.018	<0.010	0.0020	<0.001	0.018	0.041	0.061	<0.010	<0.001	0.0032	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.0073	<0.001
W-2	11/1/89	--	<1	--	--	0.078	0.0065	0.0065	0.005	<0.0005	<0.0005	<0.0005(A)	--	--	--	--	0.0043(A)	<0.0005(A)	<0.0005(A)	<0.0005(A)	--	<0.0005(A)	--	--	--	--	--	--	--	--	--	<0.0005(A)	<0.0005(A)	<0.0005(A)	--	--	--	0.075(A)	<0.0005
(ABANDONED)	3/1/90	--	--	--	--	0.062	<0.0005	<0.0005	<0.002	<0.001	<0.001	<0.0005	--	--	<0.002	<0.002	<0.0005	<0.0005	<0.0005	<0.0005	--	<0.002	--	--	--	--	--	--	--	--	--	<0.0005	<0.001	<0.0005	--	--	--	<0.002	<0.001
	4/1/90	--	--	--	--	0.083	0.026	0.004	0.0015	<0.005	<0.005	<0.0025	--	0.013	<0.001	<0.01	0.003	<0.0025	<0.0025	<0.0025	--	<0.005	--	--	--	--	--	--	--	--	--	<0.0025	<0.005	<0.0025	--	--	--	0.0059	<0.001
	12/18/96	0.56	--	--	<0.002	0.086	<0.002	<0.002	<0.004	<0.002	<0.002	<0.002	--	0.013	<0.002	<0.002	<0.002	<0.002	<0.001	<0.002	0.018	<0.002	<0.002	--	0.012	--	--	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	--	0.011	--
	1/14/98	0.7	--	--	<0.005	0.085	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.017	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.015	<0.005	<0.005	--	0.006	--	--	<0.01	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.027	<0.005
	8/20/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
W-4	3/1/90	--	--	--	--	0.12	<0.0005	0.019	<0.0005	<0.0005	<0.0005	<0.0005	--	0.0032	<0.0005	<0.0005	0.0083	<0.0005	<0.0005	<0.0005	--	<0.0005	--	--	--	--	--	--	--	--	--	<0.0005	<0.0005	<0.0005	--	--	--	<0.0005	<0.0005
	4/1/90	--	--	--	--	0.028	0.0014	0.0048	0.0022	<0.001	<0.001	<0.001	--	0.00081	<0.001	<0.0005	0.0023	<0.001	<0.001	<0.001	--	<0.002	--	--	--	--	--	--	--	--	--	<0.001	<0.001	<0.001	--	--	--	0.0043	<0.001
	12/18/96	0.42	--	--	<0.01	0.08	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.019	<0.005	<0.005	--	0.018	--	--	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.01	--
	1/14/98	0.92	--	--	<0.005	0.12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.028	<0.005	<0.005	--	0.027	--	--	<0.01	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.016	<0.005
	8/20/98	0.5	--	--	0.018	0.057	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.026	<0.005	<0.005	--	0.025	--	--	<0.01	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.0098	<0.005
	1/29/99	0.46	--	--	0.02	0.055	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.018	<0.005	<0.005	--	0.016	--	--	<0.01	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.011	<0.005
	7/19/99	0.71	--	--	<0.002	0.072	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.001	<0.002	<0.002	0.014	<0.02	<0.002	--	0.015	--	--	<0.02	<0.002	0.0027	--	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.001	<0.002
	1/13/00	0.66	--	--	<0.001	0.049	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.0013	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	0.0028	<0.010	<0.001	--	0.0016	--	--	<0.010	<0.001	0.0014	--	<0.001	<0.001	<0.010	<0.001	<0.001	--	0.013	<0.001
	8/3/00	<0.5	--	--	--	0.047	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0016	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	0.0088	<0.010	<0.001	<0.001	0.0023	<0.010	<0.010	<0.010	<0.001	0.0015	<0.010	<0.001	0.0012	<0.010	<0.001	<0.001	--	0.012	<0.001
EW-1	11/1/89	9.8	--	--	--	0.73	0.016	1.4(A)	1(A)	<0.005	<0.005	<0.005	--	--	--	--	<0.005	<0.005	<0.005	<0.005	--	<0.005	--		--	--	--	--	--	--	--	<0.005	0.0098	<0.005	--	--	--	0.029	<0.005
	3/1/90	--	--	--	--	1.8	0.3	1.8	0.62	<0.05	<0.05	<0.025	--	--	<0.1	<0.1	<0.025	<0.025	<0.025	<0.025	--	<0.1	--		--	--	--	--	--	--	--	<0.025	<0.05	<0.025	--	--	--	<0.1	<0.05

SEE NOTES AND EXPLANATIONS ON PAGE 9

TABLE 2
SUMMARY OF TOTAL HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) (MG/L)
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1 TPH-g	2 TPH-d	3 TRPH	4 MTBE	5 B	6 T	7 E	8 X	9 BDCM	10 BCM	11 Chloroform	12 Chloro ethane	13 c-1,2-DCE	14 1,2-DCB	15 Dichloro-difloro methane	16 1,1-DCA	17 1,2-DCA	18 1,1-DCE	19 1,2-DCP	20 isoPB	21 MC	22 n-BB	23 t-BB	24 n-PB	25 1m naphthalene	26 2m naphthalene	27 Napthalene	28 p-IsoPT	29 sec-BB	30 Phenol	31 PCE	32 t-1,2-DCE	33 TCE	34 1,2,4-TMB	35 1,3,5-TMB	36 TOX	37 VC	38 CB
	4/1/90	--	--	--	--	1.3	0.29	1.6	2.0	<0.02	<0.02	<0.02	--	0.011	<0.002	<0.02	<0.01	<0.01	<0.01	<0.01	--	<0.005	--		--	--	--	--	--	--	--	<0.001	0.02	<0.01	--	--	--	<0.02	<0.01
	8/21/98	5.0	--	--	<0.05	0.23	<0.05	0.63	0.17	<0.05	<0.05	<0.05	--	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	0.2	<0.05	<0.05		0.17	--	--	0.15	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.1	<0.05
	1/28/99	7.9	--	--	<0.05	0.11	<0.05	0.54	0.17	<0.05	<0.05	<0.05	--	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	0.17	<0.05	<0.05		0.15	--	--	0.13	<0.05	<0.05	--	<0.05	<0.05	<0.05	<0.05	<0.05	--	<0.1	<0.05
	7/19/99	8.0	--	--	<0.025	0.11	<0.025	1.0	0.34	<0.025	<0.025	<0.025	--	<0.025	<0.025	<0.025	<0.025	<0.013	<0.025	<0.025	0.2	<0.25	<0.025	--	0.16	--	--	<0.25	<0.025	<0.025	--	<0.025	<0.025	<0.025	<0.025	0.025	--	<0.013	<0.025
	1/13/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/31/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
OFF-SITE WELLS: METROPOLITAN STATE HOSPITAL																																							
MW-600	8/1/90	380.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
(ABANDONED)	2/20/91	0.0502	--	--	--	18.0	9.2	1.3	9.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/95	3500.0	--	912.0	--	23.0	40.0	18.0	101.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/1/96	210.0	--	--	<0.01	14.0	15.0	3.5	20.0	<0.001	--	<0.001	--	0.0038	<0.001	<0.001	0.00036	0.0055	<0.001	<0.001	--	<0.001	--	--	--	--	--	--	--	--	--	<0.001	<0.001	0.00053	--	--	--	<0.001	--
	12/19/96	87.0	--	--	<0.01	14.0	15.0	1.8	9.1	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	--	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	1.8	0.58	--	<1	--
	1/22/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/20/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/28/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-600A	7/19/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/10/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/31/00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-601	8/1/90	360.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
(ABANDONED)	2/20/91	0.024	--	--	--	12.0	4.9	1.9	11.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/13/95	3500.0	--	1110.0	--	18.0	17.0	130.0	100.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	8/1/96	250.0	--	--	<0.01	12.0	1.4	4.6	16.0	<0.001	--	<0.001	--	0.0044	<0.001	<0.001	0.0014	0.0029	<0.001	0.00085	--	<0.001	--	--	--	--	--	--	--	--	--	<0.001	<0.001	0.00051	--	--	--	0.0019	--
	12/19/96	70.0	--	--	<0.01	10.0	<0.5	1.6	4.0	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	<0.5	--	--	<0.5	<0.5	<0.5	--	<0.5	<0.5	<0.5	1.1	<0.5	--	<1	--
	1/22/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	8/20/98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/28/99	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	NS	--	--	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-601A	7/19/99	42.0	--	--	11.0	18.0	<5	<5	<5	<5	<5	<5	--	<5	<5	<5	<5	<2.5	<5	<5	<5	<50	<5	--	<5	--	--	<50	<5	<5	--	<5	<5	<5	<5	<5	--	<2.5	<5
	1/13/00	48.0	--	--	22.0	22.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0	<1.0	<1.0	<10.0	<1.0	--	<1.0	--	--	<10.0	<1.0	<1.0	--	<1.0	<1.0	<1.0	<1.0	<1.0	--	<0.5	<1.0
	8/3/00	34.0	--	--	5.60	21.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.015	0.025	0.069	<0.20	<0.20	<0.010	<0.20	<0.20	<0.20	<0.20	<0.20	--	<0.1	<0.20
MW-603	12/1/95	<0.5	--	<10	--	0.00098	0.0014	0.00062	0.0033	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/30/96	<0.1	--	--	0.002	0.0006	<0.0005	0.0014	<0.0005	0.0026	--	<0.0003	--	0.0064	<0.0003	<0.0003	0.0039	0.0095	0.03	<0.0003	--	<0.0003	--	--	--	--	--	--	--	--	--	0.053	<0.003	0.056	--	--	--	0.00045	--
	12/16/96	<0.1	--	--	<0.002	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	0.034	<0.005	<0.005	0.006	<0.005	--	<0.005	--	--	<0.005	<0.003	<0.005	--	0.037	<0.005	0.056	<0.005	<0.005	--	<0.01	--
	1/22/98	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.009	<0.005	<0.01	0.005	<0.005	0.063	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.010	<0.005	<0.005	--	0.059	<0.005	0.089	<0.005	<0.005	--	<0.01	<0.005
	8/19/98	<0.1	--	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	0.029	0.014	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.010	<0.005	<0.005	--	0.013	<0.005	0.031	<0.005	<0.005	--	<0.01	<0.005
	1/27/99	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	0.0053	<0.005	<0.01	<0.005	0.039	0.019	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.010	<0.005	<0.005	--	0.025	<0.005	0.042	<0.005	<0.005	--	<0.01	<0.005
	7/19/99	<0.5	--	--	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.0074	0.0021	<0.001	0.003	0.04	0.031	<0.001	<0.001	<0.010	<0.010	--	<0.001	--	--	<0.010	<0.001	<0.001	--	0.037	<0.001	0.062	<0.001	<0.001	--	<0.0005	<0.001
	1/11/00	<0.5	--	--	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.0064	<0.001	<0.001	0.0036	0.016	0.039	<0.001	<0.001	<0.010	<0.001	--	<0.001	--	--	<0.010	<0.001	<0.001	--	0.056	<0.001	0.074	<0.001	<0.001	--	<0.0005	<0.001
	7/31/00	<0.5	--	--	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0093	<0.001	<0.001	0.0067	0.0072	0.088	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	<0.011	<0.011	<0.011	<0.001	<0.001	<0.011	0.095	<0.001	0.110	<0.001	<0.001	--	0.00071	<0.001
MW-604	12/20/95	1.9	--	<10	--	0.16	0.0033	0.0078	0.021	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/30/96	0.9	--	--	0.0124	0.073	0.0078	<0.0005	0.009	<0.0003	--	<0.0003	--	0.00098	<0.0003	<0.0003	0.0017	0.0011	<0.0003	<0.0003	--	<0.0003	--	--	--	--	--	--	--	--	--	<0.0003	<0.0003	<0.0003	--	--	--	<0.0003	--
	12/17/96	0.71	--	--	<0.002	0.047	<0.002	<0.002	<0.004	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0057	<0.002	<0.002	--	0.0036	--	--	<0.002	<0.002	0.0022	--	<0.0020	<0.002	<0.002	<0.002	<0.002	--	<0.004	--
	1/22/98	0.41	--	--	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	--	<0.005	--	--	<0.010	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.01	--
	8/19/98	0.37	--	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.010	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.01	<0.005
	1/27/99	0.23	--	--	<0.005	0.025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.0064	<0.005	<0.005	--	<0.005	--	--	<0.010	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.01	<0.005
	7/19/99	0.500	--	--	<0.001	0.014	<0.001	<0.001	0.0013	<0.001	<0.001	<0.001	--	0.0042	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	0.0049	<0.010	<0.001	--	0.0013	--	--	<0.010	<0.001	0.0026	--	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.0005	<0.001
	1/11/00	0.750	--	--	<0.001	0.021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.0039	<0.001	<0.001	<0.001	0.00099	<0.001	<0.001	0.023	<0.010	<0.001	--	0.0082	--	--	<0.010	<0.001	0.0043	--	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.0005	<0.001
	8/3/00	0.560	--	--	0.030	0.100	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0087	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	0.019	<0.010	<0.001	<0.001	0.0011	<0.010	<0.010	<0.010	<0.001	0.0056	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	--	--	<0.001
MW-605	12/20/95	<1.0	--	--	--	0.01	<0.0005	<0.0005	0.0049	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/31/96	<0.1	--	--	<0.02	<0.0005	<0.0005	<0.0005	<0.0005	<0.0003	--	<0.0003	--	<0.0003	<0.0003	<0.0003	0.0012	<0.0003	0.0043	<0.0003	--	<0.0003	--	--	--	--	--	--	--	--	--	0.013	<0.0003	0.018	--	--	--	<0.0003	--
	12/16/96	<0.1	--	--	<0.002	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	--	--	<0.001	<0.001	<0.001	--	0.011	<0.001	2	<0.001	<0.001	--	<0.002	--
	1/22/98	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	0.006	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.010	<0.005	<0.005	--	0.014	<0.005	0.032	<0.005	<0.005	--	<0.01	<0.005
	8/19/98	<0.1	--	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.010	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.01	<0.005
	1/28/99	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.010	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.01	<0.005

TABLE 2
SUMMARY OF TOTAL HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) (MG/L)
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Monitoring Well ID	Date	TPH-g	TPH-d	TRPH	MTBE	B	T	E	X	BDCM	BCM	Chloroform	Chloro ethane	c-1,2-DCE	1,2-DCB	Dichloro-difluoro methane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCP	isoPB	MC	n-BB	t-BB	n-PB	1m naphthalene	2m naphthalene	Napthalene	p-isoPT	sec-BB	Phenol	PCE	t-1,2-DCE	TCE	1,2,4-TMB	1,3,5-TMB	TOX	VC	CB
	7/19/99	<0.5	--	--	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	--	<0.001	--	--	<0.010	<0.001	<0.001	--	0.0016	0.0032	<0.001	<0.001	<0.001	--	<0.0005	<0.001
	1/11/00	<0.5	--	--	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	0.001	<0.0005	0.0035	<0.001	<0.001	<0.010	<0.001	--	<0.001	--	--	<0.010	<0.001	<0.001	--	0.007	<0.001	0.036	<0.001	<0.001	--	<0.0005	<0.001
	8/2/00	<0.5	--	--	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0016	<0.0005	0.0046	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.001	<0.001	<0.010	0.022	<0.001	0.034	<0.001	<0.001	--	<0.01	<0.001
MW-606	12/19/95	<0.5	--	--	--	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/31/96	<0.1	--	--	<0.02	<0.0005	<0.0005	<0.0005	<0.0005	0.00036	--	0.00054	--	<0.0003	<0.0003	<0.0003	<0.0003	0.00096	<0.0003	<0.0003	--	<0.0003	--	--	--	--	--	--	--	--	--	<0.0003	<0.0003	<0.0003	--	--	--	<0.0003	--
	12/16/96	<0.1	--	--	<0.002	<0.001	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	--	--	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.002	--
	1/22/98	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.010	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.01	<0.005
	8/19/98	0.17	--	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.010	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.01	<0.005
	1/28/99	<0.1	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.010	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.01	<0.005
	7/19/99	<0.5	--	--	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	--	<0.001	--	--	<0.010	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.0005	<0.001
	1/11/00	<0.5	--	--	0.0012	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	--	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	--	<0.001	--	--	<0.010	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.0005	<0.001
	8/2/00	<0.5	--	--	--	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.0005	<0.001
MW-607	12/19/95	1.2	--	31	--	0.033	0.035	0.0017	0.0094	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/31/96	0.9	--	--	0.012	0.019	0.005	0.0028	0.008	<0.0003	--	<0.0003	--	<0.0003	<0.0003	<0.0003	0.00068	<0.0003	<0.0003	<0.0003	--	<0.0003	--	--	--	--	--	--	--	--	--	<0.0003	<0.0003	<0.0003	--	--	--	0.0011	--
	12/17/96	1.0	--	--	<0.002	0.021	<0.001	<0.001	<0.002	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.018	<0.001	0.0033	--	0.027	--	--	0.002	<0.001	0.0036	--	<0.001	<0.001	<0.001	<0.001	0.0017	--	<0.002	--
	1/22/98	1.2	--	--	0.400	0.220	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	--	<0.025	<0.025	<0.05	<0.025	0.22	<0.025	<0.025	<0.025	<0.025	<0.025	--	0.029	--	--	<0.05	<0.025	<0.025	--	<0.025	<0.025	<0.025	<0.025	<0.025	--	<0.05	<0.025
	8/19/98	0.36	--	--	0.012	0.017	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	--	--	<0.01	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.01	<0.005
	1/27/99	1.76	--	--	0.0062	0.220	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	0.015	<0.005	<0.005	--	0.025	--	--	<0.01	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.01	<0.005
	7/19/99	1.2	--	--	<0.005	0.260	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.005	<0.005	<0.005	<0.005	<0.0025	<0.005	<0.005	0.013	<0.05	0.0055	--	0.02	--	--	<0.05	<0.005	0.0052	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	<0.0025	<0.005
	1/11/00	1.2	--	--	0.0045	0.170	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.001	<0.002	<0.002	0.0086	<0.02	<0.002	--	0.0073	--	--	<0.02	<0.002	0.0033	--	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.001	<0.002
	7/31/00	0.54	--	--	0.0062	0.110	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.001	<0.002	<0.002	0.0073	<0.02	<0.002	<0.002	0.0038	<0.011	<0.011	<0.011	<0.002	0.0041	<0.011	<0.002	<0.002	<0.002	<0.002	<0.002	--	0.0011	<0.002
MW-A (ABANDONED)	2/20/91	0.0498	--	--	--	17	14	1.8	12.5	--	--	--	--	--	<0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	<0.25
MW-B (ABANDONED)	2/25/91	<1	--	--	--	3.5	0.03	0.18	0.467	--	--	--	--	--	<0.0005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	<0.0005
MW-1 (ABANDONED)	2/19/91	11	--	--	--	9.2	2.4	1.5	8.7	--	--	--	--	--	<0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	<0.05
MW-C (ABANDONED)	3/31/95	0.06	--	--	--	0.0006	0.014	<0.0005	0.0027	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	--
	7/11/95	<0.05	--	--	--	<0.0003	<0.0003	<0.0003	<0.0006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	--
	10/5/95	<0.5	--	--	--	<0.0003	<0.0003	<0.0003	<0.0006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		--	--	--	--	--	--	--	--
	12/8/95	<0.5	--	--	--	<0.0003	<0.0003	<0.0003	<0.0006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/7/96	<0.5	--	--	--	<0.0005	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/17/96	<0.5	--	--	<0.02	<0.0005	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-D (ABANDONED)	3/31/95	<0.05	--	--	--	<0.0005	0.0066	<0.0005	0.0016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/11/95	<0.05	--	--	--	<0.0003	<0.0003	<0.0003	<0.0006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/5/95	<0.5	--	--	--	<0.0003	<0.0003	<0.0003	<0.0006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/95	<0.5	--	--	--	<0.0003	<0.0003	<0.0003	<0.0006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/7/96	<0.5	--	--	--	<0.0005	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/17/96	<0.5	--	--	<0.02	<0.0005	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-E (ABANDONED)	3/31/95	0.06	--	--	--	0.0091	0.0066	0.0011	0.0023	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	7/11/95	<0.05	--	--	--	<0.0003	<0.0003	<0.0003	<0.0006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/5/95	<0.5	--	--	--	<0.0003	<0.0003	<0.0003	<0.0006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	12/8/95	<0.5	--	--	--	<0.0003	<0.0003	<0.0003	<0.0006	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/7/96	<0.5	--	--	--	<0.0005	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	6/17/96	<0.5	--	--	<0.02	<0.0005	<0.0005	<0.0005	<0.0015	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:

All concentrations reported in milligrams per liter (mg/L)

-- = Not analyzed

<0.001 = Not detected above the shown laboratory reporting limit.

• = Sample was analyzed by both EPA Methods 8010/8020 and 8240; highest detection value of the two analyses is shown

NS: Not sampled due to well damage, free product in well, or not scheduled for sampling.

= EPA Method 601/8010

= EPA Method 602/8020

Abbreviation:

TPH-g = Total Petroleum Hydrocarbons as Gasoline (Method 8020)
TPH-d = Total Petroleum Hydrocarbons as Diesel (Method 8015)
TRPH = Total Recoverable Petroleum Hydrocarbons
ASTM Method 2887 (unless otherwise indicated)
MTBE = Methyl tertiary butyl ether
B= Benzene
T= Toluene
E= Ethylbenzene
X= Total xylenes
BDCM= Bromodichloromethane
BCM= Bromochloromethane
c-1,2-DCE = cis-1,2-dichloroethene
CB= Chlorobenzene
1,2-DCB= 1,2 dichlorobenzene
1,1-DCA = 1,1- dichloroethane
1,2-DCA = 1,2-dichloroethane
1,1-DCE = 1,1-dichloroethene
1,2-DCP= 1,2-dichloropropane
iso-PB= iso-propylbenzene
MC= Methylene chloride
n-BB= n-Butylbenzene
n-PB= n-Propylbenzene
p-iso-PT= p-iso-Propyltoluene
sec-BB= sec-Butylbenzene
PCE = tetrachloroethene
t-1,2-DCE = trans-1,2-dichloroethene
TCE = trichloroethene
1,2,4-TMB= 1,2,4-Trimethylbenzene
1,3,5-TMB= 1,3,5-Trimethylbenzene
TOX = Total Halogenated Volatile Organics (ASTM Method 2885)
VC = Vinyl chloride
t-BB=Tertiary Butylbenzene

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TABLE 3
SUMMARY OF INTRINSIC BIOREMEDIATION PARAMETER RESULTS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Sampling Date	Total Heterotrophic Bacteria (cfu/ml)	Psuedomonas Bacteria (MPN/100)	Dissolved Oxygen (DO) (mg/L)	Oxidation-Reduction Potential (redox) (mV)	Methane (mg/L)	Ferrous Iron (mg/L)	Alkalinity (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)
MW-104A	7/22/99	520	ND	--	--	NS	0.2	851	<0.050	45
	1/13/00	ND	ND	0.16	-112	0.322	0.88	849	<0.10	35
	8/3/00	640	11	1.5	229	--	0.93	798	<0.10	59
MW-205	7/22/99	100	ND	--	--	--	0.5	648	<0.050	249
	1/11/00	40	ND	0.06	-95	2.24	0.95	771	<0.10	35
	8/3/00	2,200	36	1.7	265	--	<0.10	794	<0.10	51
MW-502	7/23/99	28,000	ND	--	--	--	5.5	808	<0.050	<2
	1/13/00	14,000	ND	0.04	-129	15.4	1.4	828	<0.10	4
	8/2/00	10	<1	1.7	147	--	0.85	834	<0.10	<2
MW-605	7/20/99	40	ND	--	--	--	<0.10	467	4.13	200
	1/11/00	18	ND	1.0	307	--	<0.10	486	5.2	181
	8/2/00	<1	<1	1.9	331	--	<0.10	530	5.8	203
MW-606	7/20/99	72	ND	--	--	--	<0.10	400	7.94	177
	1/11/00	2.0	ND	1.7	328	--	<0.10	390	8.6	236
	8/2/00	<1	<1	1.9	330	--	<0.10	406	8.8	260

Notes:

cfu/ml = Colony Forming Units Per Milliliter

MPN/100 = Most Probable Number of Bacteria Per 100 Milliliters of Sample

mg/L = Milligrams Per Liter
ND = Bacteria were Not Detected
-- = Not Sampled Due to Well Damage, Free Product in Well, or Not Scheduled for Sampling

TABLE 4
SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
OPERATION AREA 1: BLOOMFIELD PROPERTY					
MW-106	12/20/95	--	--	--	--
	7/31/96	--	--	--	--
	12/17/96	--	--	<0.002	--
	1/20/98	--	--	<0.01	--
	8/20/98	--	--	<0.01	--
	1/27/99	--	--	<0.01	--
	7/19/99	--	--	<0.01	--
	1/14/00	--	--	<0.010	--
	7/31/00	<0.010	<0.010	<0.010	<0.010
MW-107	12/1/95	--	--	--	--
	7/31/96	--	--	--	--
	12/17/96	--	--	<0.005	--
	1/20/98	--	--	<0.010	--
	8/20/98	--	--	<0.010	--
	1/27/99	--	--	<0.010	--
	7/19/99	--	--	<0.05	--
	1/12/00	--	--	<0.010	--
	7/31/00	**0.110**	**0.140**	<0.050	<0.011
MW-203	6/1/88	--	--	--	--
	9/1/88	--	--	--	--
	12/1/88	--	--	--	--
	3/1/89	--	--	--	--
	6/1/89	--	--	--	--
	9/1/89	--	--	--	--
	12/1/89	--	--	--	--
	3/1/90	--	--	--	--
	6/1/90	--	--	--	--
	9/1/90	--	--	--	--
	12/1/90	--	--	--	--
	3/1/91	--	--	--	--
	6/1/91	--	--	--	--
	9/1/91	--	--	--	--
	12/1/91	--	--	--	--
	3/1/92	--	--	--	--
	6/1/92	--	--	--	--

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TABLE 4
SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
	9/1/92	--	--	--	--
	12/1/92	--	--	--	--
	3/1/93	--	--	--	--
	5/1/93	--	--	--	--
	5/25/93	--	--	--	--
	9/1/93	--	--	--	--
	12/1/94	--	--	--	--
	3/1/95	--	--	--	--
	9/1/95	--	--	--	--
	12/13/95	--	--	--	--
	7/31/96	--	--	--	--
	12/17/96	--	--	<0.001	--
	1/20/98	--	--	<0.01	--
	8/20/98	--	--	<0.01	--
	1/27/99	--	--	<0.01	--
	7/19/99	--	--	<0.01	--
	1/12/00	--	--	<0.010	--
	7/31/00	<0.010	<0.010	<0.010	<0.010
OPERATION AREA 2: EAST TANK FARM AREA					
MW-103	8/85	--	--	--	--
	6/1/88	--	--	--	--
	9/1/88	--	--	--	--
	12/1/88	--	--	--	--
	3/1/89	--	--	--	--
	6/1/89	--	--	--	--
	9/1/89	--	--	--	--
	3/1/92	--	--	--	--
	6/1/92	--	--	--	--
	9/1/92	--	--	--	--
	12/1/92	--	--	--	--
	3/1/93	--	--	--	--
	5/1/93	--	--	--	--
	5/25/93	--	--	--	--
	9/1/93	--	--	--	--
	11/1/93	--	--	--	--
	12/1/94	--	--	--	--

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TABLE 4
SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
	3/1/95	--	--	--	--
	9/1/95	--	--	--	--
	12/13/95	--	--	--	--
	7/31/96	--	--	--	--
	12/17/96	--	--	<0.005	--
	1/21/98	--	--	<0.010	--
	8/19/98	--	--	<0.010	--
	1/27/99	--	--	<0.010	--
	7/19/99	--	--	<0.010	--
	1/12/00	--	--	<0.010	--
	8/4/00	<0.010	<0.010	<0.010	<0.010
MW-202	8/85	--	--	--	**1.9**
	11/1/93	--	--	--	--
	3/1/95	--	--	--	--
	9/1/95	--	--	--	--
	12/1/95	--	--	--	--
	7/31/96	--	--	--	--
	12/17/96	--	--	<0.05	--
	1/21/98	--	--	<0.010	--
	8/18/98	--	--	<0.010	--
	1/27/99	--	--	<0.010	--
	7/19/99	--	--	<0.02	--
	1/11/00	--	--	<0.010	--
	8/2/00	<0.010	<0.010	<0.010	<0.010
MW-204	6/1/88	--	--	--	--
	9/1/88	--	--	--	--
	12/1/88	--	--	--	--
	3/1/89	--	--	--	--
	6/1/89	--	--	--	--
	9/1/89	--	--	--	--
	12/1/89	--	--	--	--
	3/1/90	--	--	--	--
	6/1/90	--	--	--	--
	9/1/90	--	--	--	--
	12/1/90	--	--	--	--

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TABLE 4
SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
	3/1/91	--	--	--	--
	6/1/91	--	--	--	--
	9/1/91	--	--	--	--
	12/1/91	--	--	--	--
	3/1/92	--	--	--	--
	6/1/92	--	--	--	--
	9/1/92	--	--	--	--
	12/1/92	--	--	--	--
	4/1/93	--	--	--	--
	5/1/93	--	--	--	--
	5/25/93	--	--	--	--
	12/1/94	--	--	--	--
	3/1/95	--	--	--	--
	9/1/95	--	--	--	--
	12/13/95	--	--	--	--
	8/1/96	--	--	--	--
	12/17/96	--	--	<0.05	--
	1/21/98	--	--	**0.065**	--
	8/21/98	--	--	<0.1	--
	1/28/99	--	--	<0.1	--
	7/19/99	--	--	<0.1	--
	1/11/00	--	--	<0.100	--
	8/3/00	**0.064**	**0.088**	<0.010	<0.010
Well 7	8/4/00	--	--	<0.001	--
OPERATION AREA 3: PROCESSING AREA					
MW-104	6/1/88	--	--	--	--
(ABANDONED)	9/1/88	--	--	--	--
	12/1/88	--	--	--	--
	3/1/89	--	--	--	--
	6/1/89	--	--	--	--
	9/1/89	--	--	--	--
	12/1/89	--	--	--	--
	3/1/90	--	--	--	--
	6/1/90	--	--	--	--
	9/1/90	--	--	--	--
	12/1/90	--	--	--	--

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TABLE 4
SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
	3/1/91	--	--	--	--
	6/1/91	--	--	--	--
	9/1/91	--	--	--	--
	12/1/91	--	--	--	--
	3/1/92	--	--	--	--
	6/1/92	--	--	--	--
	9/1/92	--	--	--	--
	12/1/92	--	--	--	--
	3/1/93	--	--	--	--
	5/1/93	--	--	--	--
	5/25/93	--	--	--	--
	9/1/93	--	--	--	--
	11/1/93	--	--	--	--
	3/1/94	--	--	--	--
	6/1/94	--	--	--	--
	12/1/94	--	--	--	--
	3/1/95	--	--	--	--
	9/1/95	--	--	--	--
	12/13/95	--	--	--	--
	7/31/96	--	--	--	--
	12/16/96	--	--	<0.001	--
	1/20/98	--	--	<0.010	--
	8/18/98	--	--	<0.010	--
	1/27/99	--	--	<0.010	--
MW-104A	7/19/99	--	--	<0.010	--
	1/13/00	--	--	<0.010	--
	8/2/00	<0.010	<0.010	<0.010	<0.010
MW-504	12/1/93	--	--	--	--
	6/1/94	--	--	--	--
	12/1/94	--	--	--	--
	3/1/95	--	--	--	--
	9/1/95	--	--	--	--
	12/13/95	--	--	--	--
	8/1/96	--	--	--	--
	12/18/96	--	--	**2.3**	--

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TABLE 4
SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
	1/21/98	--	--	0.36	--
	8/20/98	--	--	NS	NS
	1/28/99	--	--	NS	NS
	7/19/99	--	--	NS	NS
	1/10/00	--	--	NS	NS
OPERATION AREA 4: WEST TANK FARM AREA					
MW-101	8/85	--	--	--	--
	6/1/88	--	--	--	--
	9/1/88	--	--	--	--
	12/1/88	--	--	--	--
	6/1/92	--	--	--	--
	9/1/92	--	--	--	--
	12/1/92	--	--	--	--
	3/1/93	--	--	--	--
	12/1/94	--	--	--	--
	3/1/95	--	--	--	--
	9/1/95	--	--	--	--
	12/13/95	--	--	--	--
	7/31/96	--	--	--	--
	12/17/96	--	--	<0.025	--
	1/19/98	--	--	<0.01	--
	8/18/98	--	--	<0.01	--
	1/26/99	--	--	<0.01	--
	7/19/99	--	--	<0.02	--
	1/10/00	--	--	<0.010	--
	8/3/00	<0.010	<0.010	<0.020	<0.010
MW-105	12/21/95	--	--	--	--
	7/31/96	--	--	--	--
	12/16/96	--	--	<0.005	--
	1/20/98	--	--	<0.01	--
	8/18/98	--	--	<0.01	--
	1/25/99	--	--	<0.01	--
	7/19/99	--	--	<0.01	--
	1/10/00	--	--	<0.050	--
	7/31/00	<0.0095	<0.0095	<0.0095	<0.0095

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TABLE 4
SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
MW-201	8/85	--	--	--	0.1
	6/1/88	--	--	--	--
	9/1/88	--	--	--	--
	12/1/88	--	--	--	--
	3/1/89	--	--	--	--
	6/1/89	--	--	--	--
	9/1/89	--	--	--	--
	12/1/89	--	--	--	--
	3/1/90	--	--	--	--
	6/1/90	--	--	--	--
	9/1/90	--	--	--	--
	12/1/90	--	--	--	--
	3/1/91	--	--	--	--
	6/1/91	--	--	--	--
	9/1/91	--	--	--	--
	12/1/91	--	--	--	--
	6/1/92	--	--	--	--
	9/1/92	--	--	--	--
	12/1/92	--	--	--	--
	3/1/93	--	--	--	--
	12/1/94	--	--	--	--
	3/1/95	--	--	--	--
	9/1/95	--	--	--	--
	12/13/95	--	--	--	--
	7/31/96	--	--	--	--
	12/17/96	--	--	<0.01	--
	1/21/98	--	--	**0.011**	--
	8/18/98	--	--	**0.011**	--
	7/19/99	--	--	<0.050	--
	1/12/00	--	--	<0.050	--
	8/4/00	<0.010	<0.010	<0.010	<0.010
MW-205	6/1/88	--	--	--	--
	9/1/88	--	--	--	--
	12/1/88	--	--	--	--
	3/1/89	--	--	--	--
	6/1/89	--	--	--	--

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SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
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Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
	9/1/89	--	--	--	--
	12/1/89	--	--	--	--
	3/1/90	--	--	--	--
	6/1/90	--	--	--	--
	9/1/90	--	--	--	--
	12/1/90	--	--	--	--
	3/1/91	--	--	--	--
	6/1/91	--	--	--	--
	9/1/91	--	--	--	--
	12/1/91	--	--	--	--
	3/1/92	--	--	--	--
	6/1/92	--	--	--	--
	9/1/92	--	--	--	--
	12/1/92	--	--	--	--
	3/1/93	--	--	--	--
	5/1/93	--	--	--	--
	5/25/93	--	--	--	--
	11/1/93	--	--	--	--
	12/1/94	--	--	--	--
	3/1/95	--	--	--	--
	9/1/95	--	--	--	--
	12/13/95	--	--	--	--
	7/31/96	--	--	--	--
	12/16/96	--	--	<0.002	--
	1/20/98	--	--	<0.010	--
	8/21/98	--	--	<0.010	--
	1/26/99	--	--	<0.010	--
	7/19/99	--	--	<0.010	--
	1/11/00	--	--	<0.010	--
	8/2/00	<0.010	<0.010	<0.010	<0.010
Well 8	8/4/00	--	--	<0.001	--
OPERATION AREA 5: LAKELAND PROPERTY					
MW-206	6/1/88	--	--	--	--
(ABANDONED)	9/1/88	--	--	--	--
	12/1/88	--	--	--	--
	3/1/89	--	--	--	--

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SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
	6/1/89	--	--	--	--
	9/1/89	--	--	--	--
	12/1/89	--	--	--	--
	3/1/90	--	--	--	--
	6/1/90	--	--	--	--
	9/1/90	--	--	--	--
	12/1/90	--	--	--	--
	3/1/91	--	--	--	--
	6/1/91	--	--	--	--
	9/1/91	--	--	--	--
	12/1/91	--	--	--	--
	3/1/92	--	--	--	--
	6/1/92	--	--	--	--
	9/1/92	--	--	--	--
	12/1/92	--	--	--	--
	12/1/94	--	--	--	--
	3/1/95	--	--	--	--
	9/1/95	--	--	--	--
	12/13/95	--	--	--	--
	7/31/96	--	--	--	--
	12/18/96	--	--	**0.13**	--
	1/21/98	--	--	**0.059**	--
	8/20/98	--	--	NS	NS
MW-501	3/1/95	--	--	--	--
(DESTROYED)	9/1/95	--	--	--	--
	12/13/95	--	--	--	--
	7/31/96	--	--	--	--
	12/18/96	--	--	<0.05	--
	1/21/98	--	--	<0.01	--
	8/20/98	--	--	NS	NS
	1/26/99	--	--	NS	NS
					--
MW-501A	7/19/99	--	--	<0.25	--
	1/13/00	--	--	<0.100	--
	8/2/00	**0.094**	**0.140**	<0.010	<0.010

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SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
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Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
MW-502	6/1/88	--	--	--	--
	9/1/88	--	--	--	--
	12/1/88	--	--	--	--
	3/1/89	--	--	--	--
	9/1/94	--	--	--	--
	12/1/94	--	--	--	--
	3/1/95	--	--	--	--
	9/1/95	--	--	--	--
	12/13/95	--	--	--	--
	7/31/96	--	--	--	--
	12/18/96	--	--	<0.5	--
	1/22/98	--	--	**0.32**	--
	8/19/98	--	--	**0.28**	--
	1/26/99	--	--	**0.255**	--
	7/19/99	--	--	<50.0	--
	1/13/00	--	--	<10	--
	8/2/00	**0.030**	**0.045**	**0.16**	**0.080**
MW-503	6/1/88	--	--	--	--
(ABANDONED)	9/1/88	--	--	--	--
	12/1/88	--	--	--	--
	3/1/89	--	--	--	--
	6/1/89	--	--	--	--
	9/1/89	--	--	--	--
	12/1/89	--	--	--	--
	3/1/90	--	--	--	--
	6/1/90	--	--	--	--
	9/1/90	--	--	--	--
	12/1/90	--	--	--	--
	3/1/91	--	--	--	--
	6/1/91	--	--	--	--
	12/1/92	--	--	--	--
	3/1/93	--	--	--	--
	12/1/94	--	--	--	--
	3/1/95	--	--	--	--
	9/1/95	--	--	--	--
	12/13/95	--	--	--	--

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SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
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Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
	7/31/96	--	--	--	--
	12/18/96	--	--	**0.028**	--
	1/21/98	--	--	**0.017**	--
	8/19/98	--	--	**0.0053**	--
MW-503B	2/9/99	--	--	<0.05	--
	7/19/99	--	--	<0.200	--
	1/14/00	--	--	<0.200	--
	8/4/00	<0.010	<0.010	**0.023**	<0.010
OPERATION AREA 6: FORMER AST AREA AT WALKER PROPERTY					
W-3	11/1/89	--	--	--	--
(ABANDONED)	1/1/90	--	--	--	--
	3/1/90	--	--	--	--
	4/1/90*	--	--	--	--
	12/18/96	--	--	<0.025	--
	1/13/98	--	--	<0.01	--
	8/20/98	--	--	NS	NS
W-3A	1/13/98	--	--	--	--
	8/20/98	--	--	**0.35**	--
	1/28/99	--	--	**0.24**	--
	7/19/99	--	--	<0.2	--
	1/13/00	--	--	<0.100	--
	8/4/00	**0.470**	**0.740**	<0.050	<0.050
OFF-SITE WELLS: WALKER PROPERTY					
W-1	11/1/89	--	--	--	--
	3/1/90	--	--	--	--
	4/1/90*	--	--	--	--
	12/18/96	--	--	**0.01**	--
	1/14/98	--	--	<0.01	--
	8/20/98	--	--	<0.01	--
	1/29/99	--	--	<0.01	--
	7/19/99	--	--	<0.02	--
	1/13/00	--	--	<0.010	--
	8/3/00	**0.041**	**0.061**	<0.010	<0.010

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SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
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Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
W-2	11/1/89	--	--	--	--
(ABANDONED)	3/1/90	--	--	--	--
	4/1/90	--	--	--	--
	12/18/96	--	--	<0.002	--
	1/14/98	--	--	<0.01	--
	8/20/98	--	--	NS	NS
W-4	3/1/90	--	--	--	--
	4/1/90	--	--	--	--
	12/18/96	--	--	<0.005	--
	1/14/98	--	--	<0.01	--
	8/20/98	--	--	<0.01	--
	1/29/99	--	--	<0.01	--
	7/19/99	--	--	<0.02	--
	1/13/00	--	--	<0.010	--
	8/3/00	<0.010	<0.010	<0.010	<0.010
EW-1	11/1/89	--	--	--	--
	3/1/90	--	--	--	--
	4/1/90	--	--	--	--
	8/21/98	--	--	**0.15**	--
	1/28/99	--	--	**0.13**	--
	7/19/99	--	--	<0.25	--
	8/3/00	NS	NS	NS	NS
OFF-SITE WELLS: METROPOLITAN STATE HOSPITAL					
MW-600	8/1/90	--	--	--	--
(ABANDONED)	2/20/91	--	--	--	--
	12/13/95	--	--	--	--
	8/1/96	--	--	--	--
	12/19/96	--	--	<0.5	--
	1/22/98	--	--	NS	NS
	8/20/98	--	--	NS	NS
	1/28/99	--	--	NS	NS
MW-600A	7/19/99	--	--	NS	NS
	1/10/00	--	--	NS	NS

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CENCO REFINING COMPANY
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Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
	8/3/00	NS	NS	NS	NS
MW-601	8/1/90	--	--	--	--
(ABANDONED)	2/20/91	--	--	--	--
	12/13/95	--	--	--	--
	8/1/96	--	--	--	--
	12/19/96	--	--	<0.5	--
	1/22/98	--	--	NS	NS
	8/20/98	--	--	NS	NS
	1/28/99	--	--	NS	NS
MW-601A	7/19/99	--	--	<50	--
	1/13/00	--	--	<10.0	--
	8/3/00	**0.015**	**0.025**	**0.069**	<0.010
MW-603	12/1/95	--	--	--	--
	7/30/96	--	--	--	--
	12/16/96	--	--	<0.005	--
	1/22/98	--	--	<0.010	--
	8/19/98	--	--	<0.010	--
	1/27/99	--	--	<0.010	--
	7/19/99	--	--	<0.010	--
	1/11/00	--	--	<0.010	--
	7/31/00	<0.011	<0.011	<0.011	<0.011
MW-604	12/20/95	--	--	--	--
	7/30/96	--	--	--	--
	12/17/96	--	--	<0.002	--
	1/22/98	--	--	<0.010	--
	8/19/98	--	--	<0.010	--
	1/27/99	--	--	<0.010	--
	7/19/99	--	--	<0.010	--
	1/11/00	--	--	<0.010	--
	8/3/00	<0.010	<0.010	<0.010	<0.010
MW-605	12/20/95	--	--	--	--
	7/31/96	--	--	--	--

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SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
	12/16/96	--	--	<0.001	--
	1/22/98	--	--	<0.010	--
	8/19/98	--	--	<0.010	--
	1/28/99	--	--	<0.010	--
	7/19/99	--	--	<0.010	--
	1/11/00	--	--	<0.010	--
	8/2/00	<0.010	<0.010	<0.010	<0.010
MW-606	12/19/95	--	--	--	--
	7/31/96	--	--	--	--
	12/16/96	--	--	<0.001	--
	1/22/98	--	--	<0.010	--
	8/19/98	--	--	<0.010	--
	1/28/99	--	--	<0.010	--
	7/19/99	--	--	<0.010	--
	1/11/00	--	--	<0.010	--
	8/2/00	<0.010	<0.010	<0.010	<0.010
MW-607	12/19/95	--	--	--	--
	7/31/96	--	--	--	--
	12/17/96	--	--	**0.002**	--
	1/22/98	--	--	<0.05	--
	8/19/98	--	--	<0.01	--
	1/27/99	--	--	<0.01	--
	7/19/99	--	--	<0.05	--
	1/11/00	--	--	<0.02	--
	7/31/00	<0.011	<0.011	<0.011	<0.011
MW-A (ABANDONED)	2/20/91	--	--	--	
MW-B (ABANDONED)	2/25/91	--	--	--	
MW-1 (ABANDONED)	2/19/91	--	--	--	

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SUMMARY OF HISTORICAL SEMI-VOLATILE ORGANIC COMPOUNDS (SVOC) RESULTS (MG/L) IN GROUNDWATER
CENCO REFINING COMPANY
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Monitoring Well ID	Date	1m naphthalene	2m naphthalene	Napthalene	Phenol
MW-C	3/31/95	--	--	--	
(ABANDONED)	7/11/95	--	--	--	
	10/5/95	--	--	--	
	12/8/95	--	--	--	--
	3/7/96	--	--	--	--
	6/17/96	--	--	--	--
MW-D	3/31/95	--	--	--	--
(ABANDONED)	7/11/95	--	--	--	--
	10/5/95	--	--	--	--
	12/8/95	--	--	--	--
	3/7/96	--	--	--	--
	6/17/96	--	--	--	--
MW-E	3/31/95	--	--	--	--
(ABANDONED)	7/11/95	--	--	--	--
	10/5/95	--	--	--	--
	12/8/95	--	--	--	--
	3/7/96	--	--	--	--
	6/17/96	--	--	--	--

NOTES:

All concentrations reported in milligrams per liter (mg/L)

-- = Not analyzed

<0.001 = Not detected above the shown laboratory reporting limit.

* = Sample was analyzed by both EPA Methods 8010/8020 and 8240; highest detection value of the two analyses is shown

NS: Not sampled due to well damage, free product in well, or not scheduled for sampling.

(A) = EPA Method 601/8010

(B) = EPA Method 602/8020

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TABLE 5
SUMMARY OF GROUNDWATER QUALITY RESULTS - METALS (MG/L)
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date Sampled	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
OPERATION AREA 1: BLOOMFIELD PROPERTY																		
MW-106	8/1/00	<0.003	<0.002	0.934	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	0.0275
MW-107	8/1/00	<0.003	<0.002	1.38	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	0.0180	<0.005	<0.005	<0.001	<0.005	0.0558
MW-203	8/1/00	<0.003	<0.002	0.981	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	0.00177	<0.005	0.0419
OPERATION AREA 2: EAST TANK FARM AREA																		
MW-103	8/4/00	<0.003	0.146	0.703	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	0.0122	<0.005	<0.001	<0.005	0.0281
MW-202	8/2/00	<0.003	<0.002	0.596	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	0.0171	<0.005	0.0021	<0.005	0.0388
MW-204	8/4/00	<0.003	0.427	0.251	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	0.0103	<0.005	<0.001	<0.005	0.0191
OPERATION AREA 3: PROCESSING AREA																		
MW-104A	8/2/00	<0.003	0.0636	0.623	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	0.00997	<0.005	<0.001	<0.005	0.0392
OPERATION AREA 4: WEST TANK FARM AREA																		
MW-101	8/3/00	<0.003	0.0794	0.0583	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	0.0140	<0.005	<0.001	<0.005	0.0334
MW-105	8/1/00	<0.003	0.191	0.228	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	0.0435
MW-201	8/4/00	<0.003	0.127	0.221	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	0.00783	<0.005	0.0140	<0.005	<0.001	<0.005	0.0171
MW-205	8/2/00	<0.003	0.0444	0.220	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	0.00139	<0.005	0.0449
OPERATION AREA 5: LAKELAND PROPERTY																		
MW-501A	8/2/00	<0.003	0.0319	0.795	<0.001	<0.001	<0.005	<0.005	0.00513	<0.005	<0.001	<0.005	<0.005	0.0152	<0.005	0.00285	<0.005	0.0260
MW-502	8/2/00	<0.003	0.271	0.331	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	0.0169	<0.005	0.00187	<0.005	0.0258
MW-503B	8/4/00	<0.003	0.0255	0.214	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	0.00874	<0.005	0.00104	<0.005	0.0294
OPERATION AREA 6: FORMER AST AREA AT WALKER PROPERTY																		
W-3A	8/4/00	<0.003	<0.002	1.62	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	0.0167	<0.005	0.00113	<0.005	0.0426
OFF-SITE WELLS: WALKER PROPERTY																		
W-1	8/3/00	<0.003	<0.002	1.17	<0.001	<0.001	<0.005	<0.005	0.0121	<0.005	<0.001	<0.005	<0.005	0.00975	<0.005	0.00199	<0.005	0.0187
W-4	8/3/00	<0.003	0.002	0.448	<0.001	<0.001	<0.005	<0.005	0.0195	<0.005	<0.001	<0.005	<0.005	0.0119	<0.005	<0.001	<0.005	0.0389
OFF-SITE WELLS: METROPOLITAN STATE HOSPITAL																		
MW-601A	8/3/00	<0.003	0.0239	0.456	<0.001	<0.001	<0.005	<0.005	0.0107	<0.005	<0.001	0.00678	<0.005	0.0129	<0.005	<0.001	<0.005	0.0271
MW-603	8/1/00	<0.003	0.00275	0.0615	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	0.00783	<0.005	<0.005	0.00119	<0.005	0.0315
MW-604	8/3/00	<0.003	<0.002	1.17	<0.001	<0.001	<0.005	<0.005	0.0118	<0.005	<0.001	<0.005	<0.005	0.0122	<0.005	0.00186	<0.005	0.0200
MW-605	8/2/00	<0.003	<0.002	0.0867	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	0.0144	<0.005	0.00111	<0.005	0.0452
MW-606	8/2/00	<0.003	<0.002	0.145	<0.001	<0.001	0.00634	<0.005	<0.010	0.00715	<0.001	<0.005	<0.005	0.0179	<0.005	0.00231	<0.005	0.022
MW-607	8/1/00	<0.003	<0.002	1.18	<0.001	<0.001	<0.005	<0.005	<0.010	<0.005	<0.001	<0.005	<0.005	<0.005	<0.005	0.00122	<0.005	0.0417

NOTES:

All concentrations reported in milligrams per liter (mg/L)

All analyses performed by EPA Method 6010B, except mercury. Mercury analyzed by EPA Method 7470A

-- = Not analyzed

<0.00x = Not detected above the shown laboratory reporting limit.

FX-9 Wells

FX-9 Wells

FX-9 Wells

APPENDIX A

CHAIN-OF-CUSTODY DOCUMENTATION AND CERTIFIED ANALYTICAL LABORATORY RESULTS

VeRsar INC.

CHAIN OF CUSTODY RECORD

0089

PROJECT NO.	PROJECT NAME	INDUSTRIAL HYGIENE SAMPLE (Y / N)
3917-019	CENCO REFINING CO.	

SAMPLERS: (Signature) Dale Anderson (Printed) DALE ANDERSON

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TPH-G 8015	VOCs - 8260	SVOCs 8270	PIBS METALS 6010/7471	ALKALINITY 310	Fe+2 3500 Fe-D	NITRATE 353	SULFATE 375	BACTERIA *	REMARKS
MW 205	8/2/00	0730		X		9	X	X	X	X	X	X	X	X		
MW 104 A	8/2/00	0910		X		9	↓	↓	↓	↓	↓	↓	↓	↓		
MW 502	8/2/00	1030		X		9	↓	↓	↓	↓	↓	↓	↓	↓		
MW 501 A	8/2/00	1140		X		6	X	X	X							
MW 605	8/2/00	1310		X		9	X	X	X	X	X	X	X	X		
MW 606	8/2/00	1430		X		9	X	X	X	X	X	X	X	X		
~~MW 202~~	~~8/2/00~~	~~1540~~		~~X~~		~~6~~	~~X~~	~~X~~	~~X~~							
MW 202	8/2/00	1540		X		2		X	X							
DUP 2	8/2/00	—		X		4	X	X								

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Dale Anderson	8/2/00 1600	Susan Mounts	Susan Mounts	080200 1650	Dale Black
(Printed) DALE ANDERSON		(Printed) Susan Mounts	(Printed) Susan Mounts		(Printed) DALE BLACK

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
Dale Black	8/2/00 1735		8/2 1735	* TOTAL HETEROTROPIC PSEUDONOMAS STD TAT METALS & Fe^{+2} FILTERED LMCL - RL
(Printed) DALE BLACK		(Printed)		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

Versar INC.

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	PARAMETERS	INDUSTRIAL HYGIENE SAMPLE Y / N
3917-019	CENCO REFINING CO.		

SAMPLERS: (Signature) Dale Anderson (Printed) DALE ANDERSON

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TPH-G 5015	VOCs 5260							REMARKS
MW 202	8/3/00	1540		X		4	X	X							INCL. MTBE

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Dale Anderson	8/3/00 0900	Dale Black			
(Printed) DALE ANDERSON		(Printed) DALE BLACK	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
Dale Black	8/3/00 9:45			STD TAT 1 MCL R.L.
(Printed) DALE BLACK		(Printed)		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

Calscience Environmental Laboratories, Inc.

August 10, 2000

Tim Berger
Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Subject: **Calscience Work Order No.: 00-08-0084**
Client Reference: CENCO Refining Company / 3917-019

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 08/02/00, and analyzed in accordance with the attached chain-of-custody.

Ferrous iron results for sample MW 205 were not reported because the holding time was exceeded. Similarly, Pseudomonas and HPC were not reported for samples MW 205 and MW 104A. These samples were resubmitted at a later time under separate chain of custody.

The results in this analytical report are limited to the samples tested, and any reproduction of this report must be made in its entirety.

If you have any questions regarding this report, require sampling supplies or field services, or information about our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Jody McInerney
Project Manager

William H. Christensen
Quality Assurance Manager

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.		Date Sampled:	08/02/00
7844 Madison Avenue, Suite 167		Date Received:	08/02/00
Fair Oaks, California 95628		Date Analyzed:	08/03/00
		Work Order No.:	00-08-0084
Attn: Tim Berger		Method:	EPA 310.0
RE: CENCO Refining Company / 3917-019		Page 1 of 1	

All concentrations are reported in mg/L (ppm).

Sample Number	Alkalinity Concentration	Reporting Limit
MW 205	794	5
MW 104A	798	5
MW 502	834	5
MW 605	530	5
MW 606	406	5

QA/QC

Sample Number	Sample Conc.	Duplicate Conc.	%RPD	Control Limits (%)
MW 606 (Duplicate)	406	394	3	0 - 25

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

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Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.		Date Sampled:	08/02/00
7844 Madison Avenue, Suite 167		Date Received:	08/02/00
Fair Oaks, California 95628		Date Analyzed:	08/03/00
		Work Order No.:	00-08-0084
Attn: Tim Berger		Method:	EPA 375.4
RE: CENCO Refining Company / 3917-019		Page 1 of 1	

All concentrations are reported in mg/L (ppm).

Sample Number	Sulfate Concentration	Reporting Limit
MW 205	51	4
MW 104A	59	4
MW 502	ND	2
MW 605	203	20
MW 606	260	20
Method Blank	ND	2

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

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Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/02/00
7844 Madison Avenue, Suite 167	Date Received:	08/02/00
Fair Oaks, California 95628	Date Analyzed:	08/03-04/00
	Work Order No.:	00-08-0084
Attn: Tim Berger		
RE: CENCO Refining Company / 3917-019	Page 1 of 8	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 205			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.0444	0.00200
Barium	EPA 6010B	0.220	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	ND	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00139	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0449	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/02/00
7844 Madison Avenue, Suite 167	Date Received:	08/02/00
Fair Oaks, California 95628	Date Analyzed:	08/03-04/00
	Work Order No.:	00-08-0084
Attn: Tim Berger		
RE: CENCO Refining Company / 3917-019	Page 2 of 8	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 104A			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.0636	0.00200
Barium	EPA 6010B	0.623	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.00997	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0392	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/02/00
7844 Madison Avenue, Suite 167	Date Received:	08/02/00
Fair Oaks, California 95628	Date Analyzed:	08/03-04/00
	Work Order No.:	00-08-0084
Attn: Tim Berger		
RE: CENCO Refining Company / 3917-019	Page 3 of 8	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 502			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.271	0.00200
Barium	EPA 6010B	0.331	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0169	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00187	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0258	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/02/00
7844 Madison Avenue, Suite 167	Date Received:	08/02/00
Fair Oaks, California 95628	Date Analyzed:	08/03-04/00
	Work Order No.:	00-08-0084
Attn: Tim Berger		
RE: CENCO Refining Company / 3917-019	Page 4 of 8	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 501A			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.0319	0.00200
Barium	EPA 6010B	0.795	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	0.00513	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0152	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00285	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0260	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/02/00
7844 Madison Avenue, Suite 167	Date Received:	08/02/00
Fair Oaks, California 95628	Date Analyzed:	08/03-04/00
	Work Order No.:	00-08-0084
Attn: Tim Berger		
RE: CENCO Refining Company / 3917-019	Page 5 of 8	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 605			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	0.0867	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0144	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00111	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0452	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/02/00
7844 Madison Avenue, Suite 167	Date Received:	08/02/00
Fair Oaks, California 95628	Date Analyzed:	08/03-04/00
	Work Order No.:	00-08-0084
Attn: Tim Berger		
RE: CENCO Refining Company / 3917-019	Page 6 of 8	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 606			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	0.145	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	0.00634	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	0.00715	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0179	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00231	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0220	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/02/00
7844 Madison Avenue, Suite 167	Date Received:	08/02/00
Fair Oaks, California 95628	Date Analyzed:	08/03-04/00
	Work Order No.:	00-08-0084
Attn: Tim Berger		
RE: CENCO Refining Company / 3917-019	Page 7 of 8	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 202			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	0.596	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0171	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00210	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0388	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.		Date Sampled:	NA
7844 Madison Avenue, Suite 167		Date Received:	NA
Fair Oaks, California 95628		Date Analyzed:	08/03-04/00
		Work Order No.:	00-08-0084
Attn: Tim Berger			
RE: CENCO Refining Company / 3917-019		Page 8 of 8	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: Method Blank			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	ND	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	ND	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	ND	0.0100

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Calscience Environmental Laboratories, Inc.

QUALITY ASSURANCE SUMMARY

Method EPA 375.4

Versar, Inc. | Work Order No.: 00-08-0084
Page 1 of 1 | Date Analyzed: 08/03/00

Matrix Spike/Matrix Spike Duplicate

Sample Spiked: 00-08-0102-10

Analyte	MS%REC	MSD%REC	Control Limits	%RPD	Control Limits
Sulfate	84	92	70 - 130	6	0 - 25

Laboratory Control Sample

Analyte	Conc. Added	Conc. Rec.	%REC	Control Limits
Sulfate	20.0	21.4	107	80 - 120

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Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/02/00
Work Order No: 00-08-0084
Preparation: N/A
Method: EPA 353.3

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 205	00-08-0084-1	Aqueous	08/02/00	N/A	08/03/00	000803NO31

Parameter	Result	RL	DF	Qual	Units
Nitrate-N	ND	0.10	1		mg/l

MW 104A	00-08-0084-2	Aqueous	08/02/00	N/A	08/03/00	000803NO31

Parameter	Result	RL	DF	Qual	Units
Nitrate-N	ND	0.10	1		mg/l

MW 502	00-08-0084-3	Aqueous	08/02/00	N/A	08/03/00	000803NO31

Parameter	Result	RL	DF	Qual	Units
Nitrate-N	ND	0.10	1		mg/l

MW 605	00-08-0084-5	Aqueous	08/02/00	N/A	08/03/00	000803NO31

Parameter	Result	RL	DF	Qual	Units
Nitrate-N	5.8	1.0	10		mg/l

MW 606	00-08-0084-6	Aqueous	08/02/00	N/A	08/03/00	000803NO31

Parameter	Result	RL	DF	Qual	Units
Nitrate-N	8.8	1.0	10		mg/l

Method Blank	099-05-001-709	Aqueous	N/A	N/A	08/03/00	000803NO31

Parameter	Result	RL	DF	Qual	Units
Nitrate-N	ND	0.10	1		mg/l

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/02/00
Work Order No: 00-08-0084
Preparation: N/A
Method: SM3500D

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 104A	00-08-0084-2	Aqueous	08/02/00	N/A	08/03/00	000803FE21

Parameter	Result	RL	DF	Qual	Units
Iron + 2	0.93	0.10	1		mg/l

MW 502	00-08-0084-3	Aqueous	08/02/00	N/A	08/03/00	000803FE21

Parameter	Result	RL	DF	Qual	Units
Iron + 2	0.85	0.10	1		mg/l

MW 605	00-08-0084-5	Aqueous	08/02/00	N/A	08/03/00	000803FE21

Parameter	Result	RL	DF	Qual	Units
Iron + 2	ND	0.10	1		mg/l

MW 606	00-08-0084-6	Aqueous	08/02/00	N/A	08/03/00	000803FE21

Parameter	Result	RL	DF	Qual	Units
Iron + 2	ND	0.10	1		mg/l

Method Blank	099-05-001-704	Aqueous	N/A	N/A	08/03/00	000803FE21

Parameter	Result	RL	DF	Qual	Units
Iron + 2	ND	0.10	1		mg/l

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/02/00
Work Order No: 00-08-0084
Preparation: EPA 5030B
Method: EPA 8015M

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 205	00-08-0084-1	Aqueous	08/02/00	N/A	08/03/00	00080301sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 104A	00-08-0084-2	Aqueous	08/02/00	N/A	08/04/00	00080401sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	88	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 502	00-08-0084-3	Aqueous	08/02/00	N/A	08/05/00	00080401sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	23000	13000	25	D	ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	97	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 501A	00-08-0084-4	Aqueous	08/02/00	N/A	08/04/00	00080301sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	7100	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	227	57-128	2

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/02/00
Work Order No: 00-08-0084
Preparation: EPA 5030B
Method: EPA 8015M

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 605	00-08-0084-5	Aqueous	08/02/00	N/A	08/03/00	00080301sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 606	00-08-0084-6	Aqueous	08/02/00	N/A	08/03/00	00080301sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	90	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 202	00-08-0084-7	Aqueous	08/02/00	N/A	08/04/00	00080301sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	1400	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	133	57-128	2

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
Dup 2	00-08-0084-8	Aqueous	08/02/00	N/A	08/10/00	00080901sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	1300	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	155	57-128	2

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/02/00
Work Order No: 00-08-0084
Preparation: EPA 5030B
Method: EPA 8015M

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	**098-03-006-575**	**Aqueous**	**N/A**	**N/A**	**08/03/00**	**00080301sa**

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	80	57-128	

Method Blank	098-03-006-578	Aqueous	N/A	N/A	08/04/00	00080401sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	88	57-128	

Method Blank	098-03-006-584	Aqueous	N/A	N/A	08/09/00	00080901sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	91	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 205	00-08-0084-1	08/02/00	Aqueous	08/03/00	08/08/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	74	15-138		Phenol-d6	79	17-141	
Nitrobenzene-d5	81	56-123		2-Fluorobiphenyl	72	45-120	
2,4,6-Tribromophenol	91	32-143		p-Terphenyl-d14	88	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 104A	00-08-0084-2	08/02/00	Aqueous	08/03/00	08/08/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	82	15-138		Phenol-d6	84	17-141	
Nitrobenzene-d5	88	56-123		2-Fluorobiphenyl	68	45-120	
2,4,6-Tribromophenol	93	32-143		p-Terphenyl-d14	91	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 502	00-08-0084-3	08/02/00	Aqueous	08/03/00	08/08/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	80	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	160	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	45	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	30	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	62	15-138		Phenol-d6	65	17-141	
Nitrobenzene-d5	78	56-123		2-Fluorobiphenyl	63	45-120	
2,4,6-Tribromophenol	85	32-143		p-Terphenyl-d14	81	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 501A	00-08-0084-4	08/02/00	Aqueous	08/03/00	08/08/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	140	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	94	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	82	15-138		Phenol-d6	83	17-141	
Nitrobenzene-d5	88	56-123		2-Fluorobiphenyl	70	45-120	
2,4,6-Tribromophenol	90	32-143		p-Terphenyl-d14	81	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 605	00-08-0084-5	08/02/00	Aqueous	08/03/00	08/08/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	75	15-138		Phenol-d6	78	17-141	
Nitrobenzene-d5	83	56-123		2-Fluorobiphenyl	65	45-120	
2,4,6-Tribromophenol	83	32-143		p-Terphenyl-d14	86	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 606	00-08-0084-6	08/02/00	Aqueous	08/03/00	08/08/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	79	15-138		Phenol-d6	83	17-141	
Nitrobenzene-d5	81	56-123		2-Fluorobiphenyl	66	45-120	
2,4,6-Tribromophenol	85	32-143		p-Terphenyl-d14	77	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 202	00-08-0084-7	08/02/00	Aqueous	08/03/00	08/08/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	78	15-138		Phenol-d6	81	17-141	
Nitrobenzene-d5	83	56-123		2-Fluorobiphenyl	65	45-120	
2,4,6-Tribromophenol	85	32-143		p-Terphenyl-d14	82	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	095-01-003-618	N/A	Aqueous	08/03/00	08/08/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	77	15-138		Phenol-d6	80	17-141	
Nitrobenzene-d5	83	56-123		2-Fluorobiphenyl	65	45-120	
2,4,6-Tribromophenol	79	32-143		p-Terphenyl-d14	74	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 205	00-08-0084-1	08/02/00	Aqueous	N/A	08/04/00	000804AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	11	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	6.0	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	109	86-118		Toluene-d8	106	88-110	
1,4-Bromofluorobenzene	101	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 104A	00-08-0084-2	08/02/00	Aqueous	N/A	08/04/00	000804AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	1.8	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	5.4	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	110	86-118		Toluene-d8	106	88-110	
1,4-Bromofluorobenzene	101	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 502	00-08-0084-3	08/02/00	Aqueous	N/A	08/04/00	000804AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	1000	100		ug/L	1,3-Dichloropropane	ND	100	100		ug/L
Benzene	6300	50	100		ug/L	2,2-Dichloropropane	ND	100	100		ug/L
Bromobenzene	ND	100	100		ug/L	1,1-Dichloropropene	ND	100	100		ug/L
Bromochloromethane	ND	100	100		ug/L	c-1,3-Dichloropropene	ND	50	100		ug/L
Bromodichloromethane	ND	100	100		ug/L	t-1,3-Dichloropropene	ND	50	100		ug/L
Bromoform	ND	100	100		ug/L	Ethylbenzene	250	100	100		ug/L
Bromomethane	ND	100	100		ug/L	2-Hexanone	ND	1000	100		ug/L
2-Butanone	ND	1000	100		ug/L	Isopropylbenzene	ND	100	100		ug/L
n-Butylbenzene	ND	100	100		ug/L	p-Isopropyltoluene	ND	100	100		ug/L
sec-Butylbenzene	ND	100	100		ug/L	Methylene Chloride	ND	1000	100		ug/L
tert-Butylbenzene	ND	100	100		ug/L	4-Methyl-2-Pentanone	ND	1000	100		ug/L
Carbon Disulfide	ND	1000	100		ug/L	Naphthalene	ND	1000	100		ug/L
Carbon Tetrachloride	ND	50	100		ug/L	n-Propylbenzene	110	100	100		ug/L
Chlorobenzene	ND	100	100		ug/L	Styrene	ND	100	100		ug/L
Chloroethane	ND	100	100		ug/L	1,1,1,2-Tetrachloroethane	ND	100	100		ug/L
Chloroform	ND	100	100		ug/L	1,1,2,2-Tetrachloroethane	ND	100	100		ug/L
Chloromethane	ND	100	100		ug/L	Tetrachloroethene	ND	100	100		ug/L
2-Chlorotoluene	ND	100	100		ug/L	Toluene	100	100	100		ug/L
4-Chlorotoluene	ND	100	100		ug/L	1,2,3-Trichlorobenzene	ND	100	100		ug/L
Dibromochloromethane	ND	100	100		ug/L	1,2,4-Trichlorobenzene	ND	100	100		ug/L
1,2-Dibromo-3-Chloropropane	ND	500	100		ug/L	1,1,1-Trichloroethane	ND	100	100		ug/L
1,2-Dibromoethane	ND	100	100		ug/L	1,1,2-Trichloroethane	ND	100	100		ug/L
Dibromomethane	ND	100	100		ug/L	Trichloroethene	ND	100	100		ug/L
1,2-Dichlorobenzene	ND	100	100		ug/L	Trichlorofluoromethane	ND	1000	100		ug/L
1,3-Dichlorobenzene	ND	100	100		ug/L	1,2,3-Trichloropropane	ND	100	100		ug/L
1,4-Dichlorobenzene	ND	100	100		ug/L	1,2,4-Trimethylbenzene	ND	100	100		ug/L
Dichlorodifluoromethane	ND	100	100		ug/L	1,3,5-Trimethylbenzene	ND	100	100		ug/L
1,1-Dichloroethane	ND	100	100		ug/L	Vinyl Acetate	ND	1000	100		ug/L
1,2-Dichloroethane	ND	50	100		ug/L	Vinyl Chloride	ND	50	100		ug/L
1,1-Dichloroethene	ND	100	100		ug/L	p/m-Xylene	200	100	100		ug/L
c-1,2-Dichloroethene	ND	100	100		ug/L	o-Xylene	ND	100	100		ug/L
t-1,2-Dichloroethene	ND	100	100		ug/L	Methyl-tert-Butyl Ether	4500	100	100		ug/L
1,2-Dichloropropane	ND	100	100		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	113	86-118		Toluene-d8	104	88-110	
1,4-Bromofluorobenzene	100	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 501A	00-08-0084-4	08/02/00	Aqueous	N/A	08/04/00	000804AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	100	10		ug/L	1,3-Dichloropropane	ND	10	10		ug/L
Benzene	980	5	10		ug/L	2,2-Dichloropropane	ND	10	10		ug/L
Bromobenzene	ND	10	10		ug/L	1,1-Dichloropropene	ND	10	10		ug/L
Bromochloromethane	ND	10	10		ug/L	c-1,3-Dichloropropene	ND	5.0	10		ug/L
Bromodichloromethane	ND	10	10		ug/L	t-1,3-Dichloropropene	ND	5.0	10		ug/L
Bromoform	ND	10	10		ug/L	Ethylbenzene	12	10	10		ug/L
Bromomethane	ND	10	10		ug/L	2-Hexanone	ND	100	10		ug/L
2-Butanone	ND	100	10		ug/L	Isopropylbenzene	85	10	10		ug/L
n-Butylbenzene	ND	10	10		ug/L	p-Isopropyltoluene	ND	10	10		ug/L
sec-Butylbenzene	ND	10	10		ug/L	Methylene Chloride	ND	100	10		ug/L
tert-Butylbenzene	ND	10	10		ug/L	4-Methyl-2-Pentanone	ND	100	10		ug/L
Carbon Disulfide	ND	100	10		ug/L	Naphthalene	ND	100	10		ug/L
Carbon Tetrachloride	ND	5.0	10		ug/L	n-Propylbenzene	150	10	10		ug/L
Chlorobenzene	ND	10	10		ug/L	Styrene	ND	10	10		ug/L
Chloroethane	ND	10	10		ug/L	1,1,1,2-Tetrachloroethane	ND	10	10		ug/L
Chloroform	ND	10	10		ug/L	1,1,2,2-Tetrachloroethane	ND	10	10		ug/L
Chloromethane	ND	10	10		ug/L	Tetrachloroethene	ND	10	10		ug/L
2-Chlorotoluene	ND	10	10		ug/L	Toluene	11	10	10		ug/L
4-Chlorotoluene	ND	10	10		ug/L	1,2,3-Trichlorobenzene	ND	10	10		ug/L
Dibromochloromethane	ND	10	10		ug/L	1,2,4-Trichlorobenzene	ND	10	10		ug/L
1,2-Dibromo-3-Chloropropane	ND	50	10		ug/L	1,1,1-Trichloroethane	ND	10	10		ug/L
1,2-Dibromoethane	ND	10	10		ug/L	1,1,2-Trichloroethane	ND	10	10		ug/L
Dibromomethane	ND	10	10		ug/L	Trichloroethene	ND	10	10		ug/L
1,2-Dichlorobenzene	ND	10	10		ug/L	Trichlorofluoromethane	ND	100	10		ug/L
1,3-Dichlorobenzene	ND	10	10		ug/L	1,2,3-Trichloropropane	ND	10	10		ug/L
1,4-Dichlorobenzene	ND	10	10		ug/L	1,2,4-Trimethylbenzene	ND	10	10		ug/L
Dichlorodifluoromethane	ND	10	10		ug/L	1,3,5-Trimethylbenzene	ND	10	10		ug/L
1,1-Dichloroethane	ND	10	10		ug/L	Vinyl Acetate	ND	100	10		ug/L
1,2-Dichloroethane	ND	5.0	10		ug/L	Vinyl Chloride	ND	5.0	10		ug/L
1,1-Dichloroethene	ND	10	10		ug/L	p/m-Xylene	14	10	10		ug/L
c-1,2-Dichloroethene	ND	10	10		ug/L	o-Xylene	ND	10	10		ug/L
t-1,2-Dichloroethene	ND	10	10		ug/L	Methyl-tert-Butyl Ether	ND	10	10		ug/L
1,2-Dichloropropane	ND	10	10		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	86-118		Toluene-d8	107	88-110	
1,4-Bromofluorobenzene	101	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 605	00-08-0084-5	08/02/00	Aqueous	N/A	08/04/00	000804AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	22	1	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	34	1	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	1.6	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	4.6	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	112	86-118		Toluene-d8	105	88-110	
1,4-Bromofluorobenzene	100	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 606	00-08-0084-6	08/02/00	Aqueous	N/A	08/04/00	000804AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	1.4	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	112	86-118		Toluene-d8	105	88-110	
1,4-Bromofluorobenzene	99	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 202	00-08-0084-7	08/02/00	Aqueous	N/A	08/04/00	000804AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	41	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	35	1	1		ug/L
n-Butylbenzene	1.9	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	23	1	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	1.8	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	10	1	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	11	1	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	1.8	1.0	1		ug/L
c-1,2-Dichloroethene	4.6	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	106	86-118		Toluene-d8	108	88-110	
1,4-Bromofluorobenzene	103	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Dup 2	00-08-0084-8	08/02/00	Aqueous	N/A	08/10/00	000809BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	19	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	35	1	1		ug/L
n-Butylbenzene	2.1	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	24	1	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	2.2	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	11	1	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	9.3	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	1.6	1.0	1		ug/L
c-1,2-Dichloroethene	4.4	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	91	86-118		Toluene-d8	90	88-110	
1,4-Bromofluorobenzene	102	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	099-10-006-604	N/A	Aqueous	N/A	08/04/00	000804AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	86-118		Toluene-d8	104	88-110	
1,4-Bromofluorobenzene	100	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	099-10-006-616	N/A	Aqueous	N/A	08/10/00	000809BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	91	86-118		Toluene-d8	93	88-110	
1,4-Bromofluorobenzene	100	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/02/00
Work Order No: 00-08-0084
Preparation: Total Digestion
Method: EPA 6010B

Project: CENCO Refining Company / 3917-019

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0059-6	Aqueous	ICP 3300	08/03/00	08/04/00	080300ms4

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	129	124	80-120	4	0-20	3
Arsenic	124	119	80-120	4	0-20	3
Barium	96	94	80-120	2	0-20	
Beryllium	94	93	80-120	2	0-20	
Cadmium	84	82	80-120	3	0-20	
Chromium (Total)	85	82	80-120	3	0-20	
Cobalt	78	76	80-120	3	0-20	3
Copper	145	142	80-120	2	0-20	3
Lead	77	75	80-120	3	0-20	3
Molybdenum	94	91	80-120	3	0-20	
Nickel	78	75	80-120	3	0-20	3
Selenium	130	123	80-120	5	0-20	3
Silver	140	136	80-120	3	0-20	3
Thallium	79	77	80-120	2	0-20	3
Vanadium	97	94	80-120	3	0-20	
Zinc	121	118	80-120	2	0-20	3

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	SM3500D

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW 205	Aqueous	8453	N/A	08/03/00	000803FE21

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Iron + 2	102	96	70-130	7	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 353.3

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW 205	Aqueous	8453	N/A	08/03/00	000803NO31

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate-N	76	76	70-130	0	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/02/00
Work Order No: 00-08-0084
Preparation: Total Digestion
Method: EPA 7470A

Project: CENCO Refining Company / 3917-019

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0086-41	Aqueous	Mercury	08/03/00	08/03/00	080300ms4

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	95	96	71-134	1	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	EPA 5030B
Method:	EPA 8015M

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW 605	Aqueous	GC 29	N/A	08/03/00	00080301ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	103	103	68-122	1	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/02/00
Work Order No: 00-08-0084
Preparation: EPA 5030B
Method: EPA 8015M

Project: CENCO Refining Company / 3917-019

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0126-1	Aqueous	GC 29	N/A	08/04/00	00080401ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	114	110	68-122	4	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 8260B

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0055-7	Aqueous	GC/MS L	N/A	08/04/00	00080055-7

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	111	109	72-127	2	0-25	
Carbon Tetrachloride	114	112	70-130	1	0-25	
Chlorobenzene	112	109	72-131	3	0-25	
1,2-Dichlorobenzene	109	109	70-130	1	0-25	
1,1-Dichloroethene	112	111	69-127	1	0-25	
Toluene	112	110	75-124	2	0-25	
Trichloroethene	112	108	60-137	3	0-25	
Vinyl Chloride	110	109	70-130	0	0-25	
Methyl-tert-Butyl Ether	104	105	80-120	0	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	SM3500D

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-05-001-704	Aqueous	8453	08/03/00		000803FE21

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Iron + 2	1.00	0.987	99	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 353.3

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-05-001-709	Aqueous	8453	08/03/00		000803NO31

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Nitrate-N	0.500	0.490	98	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	Total Digestion
Method:	EPA 7470A

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-008-303	Aqueous	Mercury	08/03/00	000803 L	000803lcs4

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Mercury	0.0100	0.0100	100	90-122	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/02/00
Work Order No: 00-08-0084
Preparation: Total Digestion
Method: EPA 6010B

Project: CENCO Refining Company / 3917-019

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-1,321	Aqueous	ICP 3300	08/04/00	000803-I	000803lc4a

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	1.00	0.914	91	80-120	
Arsenic	1.00	0.912	91	80-120	
Barium	1.00	1.08	108	80-120	
Beryllium	1.00	1.00	100	80-120	
Cadmium	1.00	1.03	103	80-120	
Chromium (Total)	1.00	0.978	98	80-120	
Cobalt	1.00	1.03	103	80-120	
Copper	1.00	1.05	105	80-120	
Lead	1.00	0.998	100	80-120	
Molybdenum	1.00	1.02	102	80-120	
Nickel	1.00	1.03	104	80-120	
Selenium	1.00	1.01	101	80-120	
Silver	0.500	0.491	98	80-120	
Thallium	1.00	1.11	111	80-120	
Vanadium	1.00	0.992	99	80-120	
Zinc	1.00	1.19	119	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/02/00
Work Order No: 00-08-0084
Preparation: EPA 3520B
Method: EPA 8270C

Project: CENCO Refining Company / 3917-019

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-003-618	Aqueous	GC/MS J	08/03/00	08/08/00	00080310

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	87	84	12-151	4	0-23	
2-Chlorophenol	84	81	45-135	4	0-18	
1,4-Dichlorobenzene	74	70	36-118	5	0-26	
N-Nitroso-di-n-propylamine	84	81	52-128	4	0-13	
1,2,4-Trichlorobenzene	78	75	42-120	4	0-21	
4-Chloro-3-Methylphenol	85	82	20-150	3	0-40	
Acenaphthene	81	81	51-137	1	0-11	
4-Nitrophenol	91	86	20-150	6	0-40	
2,4-Dinitrotoluene	89	85	25-143	4	0-36	
Pentachlorophenol	92	82	20-150	12	0-40	
Pyrene	75	73	45-135	2	0-20	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	EPA 5030B
Method:	EPA 8015M

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-575	Aqueous	GC 29	N/A	08/03/00	00080301sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	110	106	79-115	4	0-19	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	EPA 5030B
Method:	EPA 8015M

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-578	Aqueous	GC 29	N/A	08/04/00	00080401sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	113	112	79-115	1	0-19	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/02/00
Work Order No:	00-08-0084
Preparation:	N/A
Method:	EPA 8260B

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-10-006-604	Aqueous	GC/MS L	08/04/00	04AUG003	000804AW

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Benzene	50	55.5	111	72-127	
Carbon Tetrachloride	50	56.1	112	70-130	
Chlorobenzene	50	55.0	110	72-131	
1,2-Dichlorobenzene	50	54.8	110	70-130	
1,1-Dichloroethene	50	55.1	110	69-127	
Toluene	50	55.3	111	75-124	
Trichloroethene	50	56.2	112	60-137	
Vinyl Chloride	50	54.8	110	79-118	
Methyl-tert-Butyl Ether	50	52.7	105	80-120	

Calscience Environmental Laboratories, Inc.

GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 00-08-0084

Qualifier	Definition
2	Surrogate spike compound was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Spike or Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
D	The sample data was reported from a diluted analysis.
ND	Not detected at indicated reporting limit.

VeRsar INC.

CHAIN OF CUSTODY RECORD

0034

PROJECT NO.	PROJECT NAME
3917-019	CENCO REFINING CO.

SAMPLERS: (Signature) Dale Anderson (Printed) DALE ANDERSON

INDUSTRIAL HYGIENE SAMPLE: Y / N

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TPH-G 8015	VOC 8260 w/MTBE	SVOC 8270	METALS 6010/7471					REMARKS
MW 105	8/1/00	0915		X		6	X	X	X	X					
MW 203	8/1/00	1100		X		6	X	X	X	X					
MW 107	8/1/00	1215		X		6	X	X	X	X					
MW 106	8/1/00	1345		X		6	X	X	X	X					
MW 603	8/1/00	1515		X		6	X	X	X	X					
MW 607	8/1/00	1630		X		6	X	X	X	X					
~~TB 1~~	~~8/1/00~~	~~0800~~		~~X~~		~~1~~	~~X~~	~~X~~							
DUPLICATE 1	8/1/00			X		4	X	X							

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Dale Anderson	8/1/00 1655	[signature]			
(Printed) DALE ANDERSON		(Printed) D BAILEY	(Printed)		(Printed)
Relinquished by: (Signature) [signature]	Date / Time 8/1/00 1730	Received for Laboratory by: (Signature) [signature]	Date / Time 8/1/00 1730	Remarks STD TAT <MCL REPORT LIMITS	
(Printed) D BAILEY		(Printed) N-Cruise			

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

Calscience
Environmental
Laboratories, Inc.

RECEIVED
AUG 12 2000

August 09, 2000

Tim Berger
Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Subject: **Calscience Work Order No.:** **00-08-0034**
Client Reference: **CENCO/3917-019**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 08/01/00, and analyzed in accordance with the attached chain-of-custody.

For EPA 7470A mercury analysis, the MS/MSD recoveries were out of control. A post digestion spike and spike duplicate were analyzed and also were out of control. Therefore samples were analyzed for mercury by method of standard additions (MSA).

The results in this analytical report are limited to the samples tested, and any reproduction of this report must be made in its entirety.

If you have any questions regarding this report, require sampling supplies or field services, or information about our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Jody McInerney
Project Manager

William H. Christensen
Quality Assurance Manager

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/01/00
7844 Madison Avenue, Suite 167	Date Received:	08/01/00
Fair Oaks, California 95628	Date Analyzed:	08/03-08/00
	Work Order No.:	00-08-0034
Attn: Tim Berger		
RE: CENCO/3917-019	Page 1 of 7	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 105			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.191	0.00200
Barium	EPA 6010B	0.228	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A*	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	ND	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0435	0.0100

* Analysis by method of standard additions.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/01/00
7844 Madison Avenue, Suite 167	Date Received:	08/01/00
Fair Oaks, California 95628	Date Analyzed:	08/03-08/00
	Work Order No.:	00-08-0034
Attn: Tim Berger		
RE: CENCO/3917-019	Page 2 of 7	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 203			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	0.981	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A*	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	ND	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00177	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0419	0.0100

* Analysis by method of standard additions.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.		Date Sampled:	08/01/00
7844 Madison Avenue, Suite 167		Date Received:	08/01/00
Fair Oaks, California 95628		Date Analyzed:	08/03-08/00
		Work Order No.:	00-08-0034
Attn: Tim Berger			
RE: CENCO/3917-019		Page 3 of 7	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 107			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	1.38	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A*	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	0.0180	0.00500
Selenium	EPA 6010B	ND	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0558	0.0100

* Analysis by method of standard additions.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/01/00
7844 Madison Avenue, Suite 167	Date Received:	08/01/00
Fair Oaks, California 95628	Date Analyzed:	08/03-08/00
	Work Order No.:	00-08-0034
Attn: Tim Berger		
RE: CENCO/3917-019	Page 4 of 7	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 106			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	0.934	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A*	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	ND	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0275	0.0100

* Analysis by method of standard additions.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/01/00
7844 Madison Avenue, Suite 167	Date Received:	08/01/00
Fair Oaks, California 95628	Date Analyzed:	08/03-08/00
	Work Order No.:	00-08-0034
Attn: Tim Berger		
RE: CENCO/3917-019	Page 5 of 7	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 603			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.00275	0.00200
Barium	EPA 6010B	0.0615	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A*	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	0.00783	0.00500
Selenium	EPA 6010B	ND	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00119	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0315	0.0100

* Analysis by method of standard additions.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.		Date Sampled:	08/01/00
7844 Madison Avenue, Suite 167		Date Received:	08/01/00
Fair Oaks, California 95628		Date Analyzed:	08/03-08/00
		Work Order No.:	00-08-0034
Attn: Tim Berger			
RE: CENCO/3917-019		Page 6 of 7	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 607			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	1.18	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A*	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	ND	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00122	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0417	0.0100

* Analysis by method of standard additions.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.		Date Sampled:	NA
7844 Madison Avenue, Suite 167		Date Received:	NA
Fair Oaks, California 95628		Date Analyzed:	08/02-03/00
		Work Order No.:	00-08-0034
Attn: Tim Berger			
RE: CENCO/3917-019		Page 7 of 7	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: Method Blank			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	ND	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	ND	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	ND	0.0100

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/01/00
Work Order No: 00-08-0034
Preparation: EPA 5030B
Method: EPA 8015M

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-105	00-08-0034-1	Aqueous	08/01/00	N/A	08/02/00	00080201sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	580	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	99	57-128	

MW-203	00-08-0034-2	Aqueous	08/01/00	N/A	08/02/00	00080201sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	95	57-128	

MW-107	00-08-0034-3	Aqueous	08/01/00	N/A	08/02/00	00080201sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	1700	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	190	57-128	2

MW-106	00-08-0034-4	Aqueous	08/01/00	N/A	08/02/00	00080201sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	102	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/01/00
Work Order No: 00-08-0034
Preparation: EPA 5030B
Method: EPA 8015M

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-603	00-08-0034-5	Aqueous	08/01/00	N/A	08/02/00	00080201sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	99	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-607	00-08-0034-6	Aqueous	08/01/00	N/A	08/02/00	00080201sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	540	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	126	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
DUPLICATE 1	00-08-0034-7	Aqueous	08/01/00	N/A	08/02/00	00080201sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	97	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	098-03-006-574	Aqueous	N/A	N/A	08/02/00	00080201sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	107	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/01/00
Work Order No: 00-08-0034
Preparation: EPA 3520B
Method: EPA 8270C

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-105	00-08-0034-1	08/01/00	Aqueous	08/02/00	08/04/00	0008026

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	9.5	0.95		ug/L	2,4-Dinitrophenol	ND	48	0.95		ug/L
Aniline	ND	9.5	0.95		ug/L	4-Nitrophenol	ND	9.5	0.95		ug/L
Phenol	ND	9.5	0.95		ug/L	Dibenzofuran	ND	9.5	0.95		ug/L
Bis(2-Chloroethyl) Ether	ND	24	0.95		ug/L	2,4-Dinitrotoluene	ND	9.5	0.95		ug/L
2-Chlorophenol	ND	9.5	0.95		ug/L	2,6-Dinitrotoluene	ND	9.5	0.95		ug/L
1,3-Dichlorobenzene	ND	9.5	0.95		ug/L	Diethyl Phthalate	ND	9.5	0.95		ug/L
1,4-Dichlorobenzene	ND	9.5	0.95		ug/L	4-Chlorophenyl-Phenyl Ether	ND	9.5	0.95		ug/L
Benzyl Alcohol	ND	9.5	0.95		ug/L	Fluorene	ND	9.5	0.95		ug/L
1,2-Dichlorobenzene	ND	9.5	0.95		ug/L	4-Nitroaniline	ND	9.5	0.95		ug/L
2-Methylphenol	ND	9.5	0.95		ug/L	Azobenzene	ND	9.5	0.95		ug/L
Bis(2-Chloroisopropyl) Ether	ND	9.5	0.95		ug/L	4,6-Dinitro-2-Methylphenol	ND	48	0.95		ug/L
3/4-Methylphenol	ND	9.5	0.95		ug/L	N-Nitrosodiphenylamine	ND	9.5	0.95		ug/L
N-Nitroso-di-n-propylamine	ND	9.5	0.95		ug/L	4-Bromophenyl-Phenyl Ether	ND	9.5	0.95		ug/L
Hexachloroethane	ND	9.5	0.95		ug/L	Hexachlorobenzene	ND	9.5	0.95		ug/L
Nitrobenzene	ND	24	0.95		ug/L	Pentachlorophenol	ND	9.5	0.95		ug/L
Isophorone	ND	9.5	0.95		ug/L	Phenanthrene	ND	9.5	0.95		ug/L
2-Nitrophenol	ND	9.5	0.95		ug/L	Anthracene	ND	9.5	0.95		ug/L
2,4-Dimethylphenol	ND	9.5	0.95		ug/L	Di-n-Butyl Phthalate	ND	9.5	0.95		ug/L
Benzoic Acid	ND	48	0.95		ug/L	Fluoranthene	ND	9.5	0.95		ug/L
Bis(2-Chloroethoxy) Methane	ND	9.5	0.95		ug/L	Benzidine	ND	48	0.95		ug/L
2,4-Dichlorophenol	ND	9.5	0.95		ug/L	Pyrene	ND	9.5	0.95		ug/L
1,2,4-Trichlorobenzene	ND	9.5	0.95		ug/L	Pyridine	ND	9.5	0.95		ug/L
Naphthalene	ND	9.5	0.95		ug/L	Butyl Benzyl Phthalate	ND	9.5	0.95		ug/L
4-Chloroaniline	ND	9.5	0.95		ug/L	3,3'-Dichlorobenzidine	ND	24	0.95		ug/L
Hexachloro-1,3-Butadiene	ND	9.5	0.95		ug/L	Benzo (a) Anthracene	ND	9.5	0.95		ug/L
4-Chloro-3-Methylphenol	ND	9.5	0.95		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	9.5	0.95		ug/L
2-Methylnaphthalene	ND	9.5	0.95		ug/L	Chrysene	ND	9.5	0.95		ug/L
Hexachlorocyclopentadiene	ND	24	0.95		ug/L	Di-n-Octyl Phthalate	ND	9.5	0.95		ug/L
2,4,6-Trichlorophenol	ND	9.5	0.95		ug/L	Benzo (b) Fluoranthene	ND	9.5	0.95		ug/L
2,4,5-Trichlorophenol	ND	9.5	0.95		ug/L	Benzo (k) Fluoranthene	ND	9.5	0.95		ug/L
2-Chloronaphthalene	ND	9.5	0.95		ug/L	Benzo (a) Pyrene	ND	9.5	0.95		ug/L
2-Nitroaniline	ND	9.5	0.95		ug/L	Benzo (g,h,i) Perylene	ND	9.5	0.95		ug/L
Dimethyl Phthalate	ND	9.5	0.95		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	9.5	0.95		ug/L
Acenaphthylene	ND	9.5	0.95		ug/L	Dibenz (a,h) Anthracene	ND	9.5	0.95		ug/L
3-Nitroaniline	ND	9.5	0.95		ug/L	1-Methylnaphthalene	ND	9.5	0.95		ug/L
Acenaphthene	ND	9.5	0.95		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	77	15-138		Phenol-d6	90	17-141	
Nitrobenzene-d5	89	56-123		2-Fluorobiphenyl	72	45-120	
2,4,6-Tribromophenol	84	32-143		p-Terphenyl-d14	88	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-203	00-08-0034-2	08/01/00	Aqueous	08/02/00	08/04/00	0008026

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	71	15-138		Phenol-d6	84	17-141	
Nitrobenzene-d5	91	56-123		2-Fluorobiphenyl	74	45-120	
2,4,6-Tribromophenol	82	32-143		p-Terphenyl-d14	96	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-107	00-08-0034-3	08/01/00	Aqueous	08/02/00	08/04/00	0008026

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	11	1.05		ug/L	2,4-Dinitrophenol	ND	53	1.05		ug/L
Aniline	ND	11	1.05		ug/L	4-Nitrophenol	ND	11	1.05		ug/L
Phenol	ND	11	1.05		ug/L	Dibenzofuran	ND	11	1.05		ug/L
Bis(2-Chloroethyl) Ether	ND	26	1.05		ug/L	2,4-Dinitrotoluene	ND	11	1.05		ug/L
2-Chlorophenol	ND	11	1.05		ug/L	2,6-Dinitrotoluene	ND	11	1.05		ug/L
1,3-Dichlorobenzene	ND	11	1.05		ug/L	Diethyl Phthalate	ND	11	1.05		ug/L
1,4-Dichlorobenzene	ND	11	1.05		ug/L	4-Chlorophenyl-Phenyl Ether	ND	11	1.05		ug/L
Benzyl Alcohol	ND	11	1.05		ug/L	Fluorene	ND	11	1.05		ug/L
1,2-Dichlorobenzene	ND	11	1.05		ug/L	4-Nitroaniline	ND	11	1.05		ug/L
2-Methylphenol	ND	11	1.05		ug/L	Azobenzene	ND	11	1.05		ug/L
Bis(2-Chloroisopropyl) Ether	ND	11	1.05		ug/L	4,6-Dinitro-2-Methylphenol	ND	53	1.05		ug/L
3/4-Methylphenol	ND	11	1.05		ug/L	N-Nitrosodiphenylamine	ND	11	1.05		ug/L
N-Nitroso-di-n-propylamine	ND	11	1.05		ug/L	4-Bromophenyl-Phenyl Ether	ND	11	1.05		ug/L
Hexachloroethane	ND	11	1.05		ug/L	Hexachlorobenzene	ND	11	1.05		ug/L
Nitrobenzene	ND	26	1.05		ug/L	Pentachlorophenol	ND	11	1.05		ug/L
Isophorone	ND	11	1.05		ug/L	Phenanthrene	ND	11	1.05		ug/L
2-Nitrophenol	ND	11	1.05		ug/L	Anthracene	ND	11	1.05		ug/L
2,4-Dimethylphenol	ND	11	1.05		ug/L	Di-n-Butyl Phthalate	ND	11	1.05		ug/L
Benzoic Acid	ND	53	1.05		ug/L	Fluoranthene	ND	11	1.05		ug/L
Bis(2-Chloroethoxy) Methane	ND	11	1.05		ug/L	Benzidine	ND	53	1.05		ug/L
2,4-Dichlorophenol	ND	11	1.05		ug/L	Pyrene	ND	11	1.05		ug/L
1,2,4-Trichlorobenzene	ND	11	1.05		ug/L	Pyridine	ND	11	1.05		ug/L
Naphthalene	ND	11	1.05		ug/L	Butyl Benzyl Phthalate	ND	11	1.05		ug/L
4-Chloroaniline	ND	11	1.05		ug/L	3,3'-Dichlorobenzidine	ND	26	1.05		ug/L
Hexachloro-1,3-Butadiene	ND	11	1.05		ug/L	Benzo (a) Anthracene	ND	11	1.05		ug/L
4-Chloro-3-Methylphenol	ND	11	1.05		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	11	1.05		ug/L
2-Methylnaphthalene	140	11	1.05		ug/L	Chrysene	ND	11	1.05		ug/L
Hexachlorocyclopentadiene	ND	26	1.05		ug/L	Di-n-Octyl Phthalate	ND	11	1.05		ug/L
2,4,6-Trichlorophenol	ND	11	1.05		ug/L	Benzo (b) Fluoranthene	ND	11	1.05		ug/L
2,4,5-Trichlorophenol	ND	11	1.05		ug/L	Benzo (k) Fluoranthene	ND	11	1.05		ug/L
2-Chloronaphthalene	ND	11	1.05		ug/L	Benzo (a) Pyrene	ND	11	1.05		ug/L
2-Nitroaniline	ND	11	1.05		ug/L	Benzo (g,h,i) Perylene	ND	11	1.05		ug/L
Dimethyl Phthalate	ND	11	1.05		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	11	1.05		ug/L
Acenaphthylene	ND	11	1.05		ug/L	Dibenz (a,h) Anthracene	ND	11	1.05		ug/L
3-Nitroaniline	ND	11	1.05		ug/L	1-Methylnaphthalene	110	11	1.05		ug/L
Acenaphthene	ND	11	1.05		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	83	15-138		Phenol-d6	95	17-141	
Nitrobenzene-d5	94	56-123		2-Fluorobiphenyl	76	45-120	
2,4,6-Tribromophenol	93	32-143		p-Terphenyl-d14	99	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-106	00-08-0034-4	08/01/00	Aqueous	08/02/00	08/04/00	0008026

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	78	15-138		Phenol-d6	93	17-141	
Nitrobenzene-d5	92	56-123		2-Fluorobiphenyl	78	45-120	
2,4,6-Tribromophenol	85	32-143		p-Terphenyl-d14	96	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-603	00-08-0034-5	08/01/00	Aqueous	08/02/00	08/04/00	0008026

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	11	1.05		ug/L	2,4-Dinitrophenol	ND	53	1.05		ug/L
Aniline	ND	11	1.05		ug/L	4-Nitrophenol	ND	11	1.05		ug/L
Phenol	ND	11	1.05		ug/L	Dibenzofuran	ND	11	1.05		ug/L
Bis(2-Chloroethyl) Ether	ND	26	1.05		ug/L	2,4-Dinitrotoluene	ND	11	1.05		ug/L
2-Chlorophenol	ND	11	1.05		ug/L	2,6-Dinitrotoluene	ND	11	1.05		ug/L
1,3-Dichlorobenzene	ND	11	1.05		ug/L	Diethyl Phthalate	ND	11	1.05		ug/L
1,4-Dichlorobenzene	ND	11	1.05		ug/L	4-Chlorophenyl-Phenyl Ether	ND	11	1.05		ug/L
Benzyl Alcohol	ND	11	1.05		ug/L	Fluorene	ND	11	1.05		ug/L
1,2-Dichlorobenzene	ND	11	1.05		ug/L	4-Nitroaniline	ND	11	1.05		ug/L
2-Methylphenol	ND	11	1.05		ug/L	Azobenzene	ND	11	1.05		ug/L
Bis(2-Chloroisopropyl) Ether	ND	11	1.05		ug/L	4,6-Dinitro-2-Methylphenol	ND	53	1.05		ug/L
3/4-Methylphenol	ND	11	1.05		ug/L	N-Nitrosodiphenylamine	ND	11	1.05		ug/L
N-Nitroso-di-n-propylamine	ND	11	1.05		ug/L	4-Bromophenyl-Phenyl Ether	ND	11	1.05		ug/L
Hexachloroethane	ND	11	1.05		ug/L	Hexachlorobenzene	ND	11	1.05		ug/L
Nitrobenzene	ND	26	1.05		ug/L	Pentachlorophenol	ND	11	1.05		ug/L
Isophorone	ND	11	1.05		ug/L	Phenanthrene	ND	11	1.05		ug/L
2-Nitrophenol	ND	11	1.05		ug/L	Anthracene	ND	11	1.05		ug/L
2,4-Dimethylphenol	ND	11	1.05		ug/L	Di-n-Butyl Phthalate	ND	11	1.05		ug/L
Benzoic Acid	ND	53	1.05		ug/L	Fluoranthene	ND	11	1.05		ug/L
Bis(2-Chloroethoxy) Methane	ND	11	1.05		ug/L	Benzidine	ND	53	1.05		ug/L
2,4-Dichlorophenol	ND	11	1.05		ug/L	Pyrene	ND	11	1.05		ug/L
1,2,4-Trichlorobenzene	ND	11	1.05		ug/L	Pyridine	ND	11	1.05		ug/L
Naphthalene	ND	11	1.05		ug/L	Butyl Benzyl Phthalate	ND	11	1.05		ug/L
4-Chloroaniline	ND	11	1.05		ug/L	3,3'-Dichlorobenzidine	ND	26	1.05		ug/L
Hexachloro-1,3-Butadiene	ND	11	1.05		ug/L	Benzo (a) Anthracene	ND	11	1.05		ug/L
4-Chloro-3-Methylphenol	ND	11	1.05		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	11	1.05		ug/L
2-Methylnaphthalene	ND	11	1.05		ug/L	Chrysene	ND	11	1.05		ug/L
Hexachlorocyclopentadiene	ND	26	1.05		ug/L	Di-n-Octyl Phthalate	ND	11	1.05		ug/L
2,4,6-Trichlorophenol	ND	11	1.05		ug/L	Benzo (b) Fluoranthene	ND	11	1.05		ug/L
2,4,5-Trichlorophenol	ND	11	1.05		ug/L	Benzo (k) Fluoranthene	ND	11	1.05		ug/L
2-Chloronaphthalene	ND	11	1.05		ug/L	Benzo (a) Pyrene	ND	11	1.05		ug/L
2-Nitroaniline	ND	11	1.05		ug/L	Benzo (g,h,i) Perylene	ND	11	1.05		ug/L
Dimethyl Phthalate	ND	11	1.05		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	11	1.05		ug/L
Acenaphthylene	ND	11	1.05		ug/L	Dibenz (a,h) Anthracene	ND	11	1.05		ug/L
3-Nitroaniline	ND	11	1.05		ug/L	1-Methylnaphthalene	ND	11	1.05		ug/L
Acenaphthene	ND	11	1.05		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	65	15-138		Phenol-d6	78	17-141	
Nitrobenzene-d5	83	56-123		2-Fluorobiphenyl	79	45-120	
2,4,6-Tribromophenol	78	32-143		p-Terphenyl-d14	93	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-607	00-08-0034-6	08/01/00	Aqueous	08/02/00	08/04/00	0008026

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	11	1.05		ug/L	2,4-Dinitrophenol	ND	53	1.05		ug/L
Aniline	ND	11	1.05		ug/L	4-Nitrophenol	ND	11	1.05		ug/L
Phenol	ND	11	1.05		ug/L	Dibenzofuran	ND	11	1.05		ug/L
Bis(2-Chloroethyl) Ether	ND	26	1.05		ug/L	2,4-Dinitrotoluene	ND	11	1.05		ug/L
2-Chlorophenol	ND	11	1.05		ug/L	2,6-Dinitrotoluene	ND	11	1.05		ug/L
1,3-Dichlorobenzene	ND	11	1.05		ug/L	Diethyl Phthalate	ND	11	1.05		ug/L
1,4-Dichlorobenzene	ND	11	1.05		ug/L	4-Chlorophenyl-Phenyl Ether	ND	11	1.05		ug/L
Benzyl Alcohol	ND	11	1.05		ug/L	Fluorene	ND	11	1.05		ug/L
1,2-Dichlorobenzene	ND	11	1.05		ug/L	4-Nitroaniline	ND	11	1.05		ug/L
2-Methylphenol	ND	11	1.05		ug/L	Azobenzene	ND	11	1.05		ug/L
Bis(2-Chloroisopropyl) Ether	ND	11	1.05		ug/L	4,6-Dinitro-2-Methylphenol	ND	53	1.05		ug/L
3/4-Methylphenol	ND	11	1.05		ug/L	N-Nitrosodiphenylamine	ND	11	1.05		ug/L
N-Nitroso-di-n-propylamine	ND	11	1.05		ug/L	4-Bromophenyl-Phenyl Ether	ND	11	1.05		ug/L
Hexachloroethane	ND	11	1.05		ug/L	Hexachlorobenzene	ND	11	1.05		ug/L
Nitrobenzene	ND	26	1.05		ug/L	Pentachlorophenol	ND	11	1.05		ug/L
Isophorone	ND	11	1.05		ug/L	Phenanthrene	ND	11	1.05		ug/L
2-Nitrophenol	ND	11	1.05		ug/L	Anthracene	ND	11	1.05		ug/L
2,4-Dimethylphenol	ND	11	1.05		ug/L	Di-n-Butyl Phthalate	ND	11	1.05		ug/L
Benzoic Acid	ND	53	1.05		ug/L	Fluoranthene	ND	11	1.05		ug/L
Bis(2-Chloroethoxy) Methane	ND	11	1.05		ug/L	Benzidine	ND	53	1.05		ug/L
2,4-Dichlorophenol	ND	11	1.05		ug/L	Pyrene	ND	11	1.05		ug/L
1,2,4-Trichlorobenzene	ND	11	1.05		ug/L	Pyridine	ND	11	1.05		ug/L
Naphthalene	ND	11	1.05		ug/L	Butyl Benzyl Phthalate	ND	11	1.05		ug/L
4-Chloroaniline	ND	11	1.05		ug/L	3,3'-Dichlorobenzidine	ND	26	1.05		ug/L
Hexachloro-1,3-Butadiene	ND	11	1.05		ug/L	Benzo (a) Anthracene	ND	11	1.05		ug/L
4-Chloro-3-Methylphenol	ND	11	1.05		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	11	1.05		ug/L
2-Methylnaphthalene	ND	11	1.05		ug/L	Chrysene	ND	11	1.05		ug/L
Hexachlorocyclopentadiene	ND	26	1.05		ug/L	Di-n-Octyl Phthalate	ND	11	1.05		ug/L
2,4,6-Trichlorophenol	ND	11	1.05		ug/L	Benzo (b) Fluoranthene	ND	11	1.05		ug/L
2,4,5-Trichlorophenol	ND	11	1.05		ug/L	Benzo (k) Fluoranthene	ND	11	1.05		ug/L
2-Chloronaphthalene	ND	11	1.05		ug/L	Benzo (a) Pyrene	ND	11	1.05		ug/L
2-Nitroaniline	ND	11	1.05		ug/L	Benzo (g,h,i) Perylene	ND	11	1.05		ug/L
Dimethyl Phthalate	ND	11	1.05		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	11	1.05		ug/L
Acenaphthylene	ND	11	1.05		ug/L	Dibenz (a,h) Anthracene	ND	11	1.05		ug/L
3-Nitroaniline	ND	11	1.05		ug/L	1-Methylnaphthalene	ND	11	1.05		ug/L
Acenaphthene	ND	11	1.05		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	83	15-138		Phenol-d6	98	17-141	
Nitrobenzene-d5	96	56-123		2-Fluorobiphenyl	81	45-120	
2,4,6-Tribromophenol	86	32-143		p-Terphenyl-d14	95	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	095-01-003-615		Aqueous	08/02/00	08/04/00	0008026

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	9.5	0.95		ug/L	2,4-Dinitrophenol	ND	48	0.95		ug/L
Aniline	ND	9.5	0.95		ug/L	4-Nitrophenol	ND	9.5	0.95		ug/L
Phenol	ND	9.5	0.95		ug/L	Dibenzofuran	ND	9.5	0.95		ug/L
Bis(2-Chloroethyl) Ether	ND	24	0.95		ug/L	2,4-Dinitrotoluene	ND	9.5	0.95		ug/L
2-Chlorophenol	ND	9.5	0.95		ug/L	2,6-Dinitrotoluene	ND	9.5	0.95		ug/L
1,3-Dichlorobenzene	ND	9.5	0.95		ug/L	Diethyl Phthalate	ND	9.5	0.95		ug/L
1,4-Dichlorobenzene	ND	9.5	0.95		ug/L	4-Chlorophenyl-Phenyl Ether	ND	9.5	0.95		ug/L
Benzyl Alcohol	ND	9.5	0.95		ug/L	Fluorene	ND	9.5	0.95		ug/L
1,2-Dichlorobenzene	ND	9.5	0.95		ug/L	4-Nitroaniline	ND	9.5	0.95		ug/L
2-Methylphenol	ND	9.5	0.95		ug/L	Azobenzene	ND	9.5	0.95		ug/L
Bis(2-Chloroisopropyl) Ether	ND	9.5	0.95		ug/L	4,6-Dinitro-2-Methylphenol	ND	48	0.95		ug/L
3/4-Methylphenol	ND	9.5	0.95		ug/L	N-Nitrosodiphenylamine	ND	9.5	0.95		ug/L
N-Nitroso-di-n-propylamine	ND	9.5	0.95		ug/L	4-Bromophenyl-Phenyl Ether	ND	9.5	0.95		ug/L
Hexachloroethane	ND	9.5	0.95		ug/L	Hexachlorobenzene	ND	9.5	0.95		ug/L
Nitrobenzene	ND	24	0.95		ug/L	Pentachlorophenol	ND	9.5	0.95		ug/L
Isophorone	ND	9.5	0.95		ug/L	Phenanthrene	ND	9.5	0.95		ug/L
2-Nitrophenol	ND	9.5	0.95		ug/L	Anthracene	ND	9.5	0.95		ug/L
2,4-Dimethylphenol	ND	9.5	0.95		ug/L	Di-n-Butyl Phthalate	ND	9.5	0.95		ug/L
Benzoic Acid	ND	48	0.95		ug/L	Fluoranthene	ND	9.5	0.95		ug/L
Bis(2-Chloroethoxy) Methane	ND	9.5	0.95		ug/L	Benzidine	ND	48	0.95		ug/L
2,4-Dichlorophenol	ND	9.5	0.95		ug/L	Pyrene	ND	9.5	0.95		ug/L
1,2,4-Trichlorobenzene	ND	9.5	0.95		ug/L	Pyridine	ND	9.5	0.95		ug/L
Naphthalene	ND	9.5	0.95		ug/L	Butyl Benzyl Phthalate	ND	9.5	0.95		ug/L
4-Chloroaniline	ND	9.5	0.95		ug/L	3,3'-Dichlorobenzidine	ND	24	0.95		ug/L
Hexachloro-1,3-Butadiene	ND	9.5	0.95		ug/L	Benzo (a) Anthracene	ND	9.5	0.95		ug/L
4-Chloro-3-Methylphenol	ND	9.5	0.95		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	9.5	0.95		ug/L
2-Methylnaphthalene	ND	9.5	0.95		ug/L	Chrysene	ND	9.5	0.95		ug/L
Hexachlorocyclopentadiene	ND	24	0.95		ug/L	Di-n-Octyl Phthalate	ND	9.5	0.95		ug/L
2,4,6-Trichlorophenol	ND	9.5	0.95		ug/L	Benzo (b) Fluoranthene	ND	9.5	0.95		ug/L
2,4,5-Trichlorophenol	ND	9.5	0.95		ug/L	Benzo (k) Fluoranthene	ND	9.5	0.95		ug/L
2-Chloronaphthalene	ND	9.5	0.95		ug/L	Benzo (a) Pyrene	ND	9.5	0.95		ug/L
2-Nitroaniline	ND	9.5	0.95		ug/L	Benzo (g,h,i) Perylene	ND	9.5	0.95		ug/L
Dimethyl Phthalate	ND	9.5	0.95		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	9.5	0.95		ug/L
Acenaphthylene	ND	9.5	0.95		ug/L	Dibenz (a,h) Anthracene	ND	9.5	0.95		ug/L
3-Nitroaniline	ND	9.5	0.95		ug/L	1-Methylnaphthalene	ND	9.5	0.95		ug/L
Acenaphthene	ND	9.5	0.95		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	82	15-138		Phenol-d6	93	17-141	
Nitrobenzene-d5	88	56-123		2-Fluorobiphenyl	74	45-120	
2,4,6-Tribromophenol	83	32-143		p-Terphenyl-d14	92	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-105	00-08-0034-1	08/01/00	Aqueous		08/03/00	000803AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	50	5		ug/L	1,3-Dichloropropane	ND	5.0	5		ug/L
Benzene	5.2	2.5	5		ug/L	2,2-Dichloropropane	ND	5.0	5		ug/L
Bromobenzene	ND	5.0	5		ug/L	1,1-Dichloropropene	ND	5.0	5		ug/L
Bromochloromethane	ND	5.0	5		ug/L	c-1,3-Dichloropropene	ND	2.5	5		ug/L
Bromodichloromethane	ND	5.0	5		ug/L	t-1,3-Dichloropropene	ND	2.5	5		ug/L
Bromoform	ND	5.0	5		ug/L	Ethylbenzene	ND	5.0	5		ug/L
Bromomethane	ND	5.0	5		ug/L	2-Hexanone	ND	50	5		ug/L
2-Butanone	ND	50	5		ug/L	Isopropylbenzene	ND	5.0	5		ug/L
n-Butylbenzene	ND	5.0	5		ug/L	p-Isopropyltoluene	ND	5.0	5		ug/L
sec-Butylbenzene	ND	5.0	5		ug/L	Methylene Chloride	ND	50	5		ug/L
tert-Butylbenzene	ND	5.0	5		ug/L	4-Methyl-2-Pentanone	ND	50	5		ug/L
Carbon Disulfide	ND	50	5		ug/L	Naphthalene	ND	50	5		ug/L
Carbon Tetrachloride	ND	2.5	5		ug/L	n-Propylbenzene	ND	5.0	5		ug/L
Chlorobenzene	ND	5.0	5		ug/L	Styrene	ND	5.0	5		ug/L
Chloroethane	ND	5.0	5		ug/L	1,1,1,2-Tetrachloroethane	ND	5.0	5		ug/L
Chloroform	ND	5.0	5		ug/L	1,1,2,2-Tetrachloroethane	7.7	5.0	5		ug/L
Chloromethane	ND	5.0	5		ug/L	Tetrachloroethene	ND	5.0	5		ug/L
2-Chlorotoluene	ND	5.0	5		ug/L	Toluene	ND	5.0	5		ug/L
4-Chlorotoluene	ND	5.0	5		ug/L	1,2,3-Trichlorobenzene	ND	5.0	5		ug/L
Dibromochloromethane	ND	5.0	5		ug/L	1,2,4-Trichlorobenzene	ND	5.0	5		ug/L
1,2-Dibromo-3-Chloropropane	ND	25	5		ug/L	1,1,1-Trichloroethane	ND	5.0	5		ug/L
1,2-Dibromoethane	ND	5.0	5		ug/L	1,1,2-Trichloroethane	23	5	5		ug/L
Dibromomethane	ND	5.0	5		ug/L	Trichloroethene	160	5	5		ug/L
1,2-Dichlorobenzene	ND	5.0	5		ug/L	Trichlorofluoromethane	ND	50	5		ug/L
1,3-Dichlorobenzene	ND	5.0	5		ug/L	1,2,3-Trichloropropane	ND	5.0	5		ug/L
1,4-Dichlorobenzene	ND	5.0	5		ug/L	1,2,4-Trimethylbenzene	ND	5.0	5		ug/L
Dichlorodifluoromethane	ND	5.0	5		ug/L	1,3,5-Trimethylbenzene	ND	5.0	5		ug/L
1,1-Dichloroethane	14	5	5		ug/L	Vinyl Acetate	ND	50	5		ug/L
1,2-Dichloroethane	9.5	2.5	5		ug/L	Vinyl Chloride	10	2	5		ug/L
1,1-Dichloroethene	62	5	5		ug/L	p/m-Xylene	ND	5.0	5		ug/L
c-1,2-Dichloroethene	52	5	5		ug/L	o-Xylene	ND	5.0	5		ug/L
t-1,2-Dichloroethene	59	5	5		ug/L	Methyl-tert-Butyl Ether	ND	5.0	5		ug/L
1,2-Dichloropropane	ND	5.0	5		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	99	86-118		Toluene-d8	101	88-110	
1,4-Bromofluorobenzene	101	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-203	00-08-0034-2	08/01/00	Aqueous		08/03/00	000803AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	9.7	0.5	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	0.51	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	16	1	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	86-118		Toluene-d8	100	88-110	
1,4-Bromofluorobenzene	99	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-107	00-08-0034-3	08/01/00	Aqueous		08/03/00	000803AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	50	5		ug/L	1,3-Dichloropropane	ND	5.0	5		ug/L
Benzene	250	2	5		ug/L	2,2-Dichloropropane	ND	5.0	5		ug/L
Bromobenzene	ND	5.0	5		ug/L	1,1-Dichloropropene	ND	5.0	5		ug/L
Bromochloromethane	ND	5.0	5		ug/L	c-1,3-Dichloropropene	ND	2.5	5		ug/L
Bromodichloromethane	ND	5.0	5		ug/L	t-1,3-Dichloropropene	ND	2.5	5		ug/L
Bromoform	ND	5.0	5		ug/L	Ethylbenzene	20	5	5		ug/L
Bromomethane	ND	5.0	5		ug/L	2-Hexanone	ND	50	5		ug/L
2-Butanone	ND	50	5		ug/L	Isopropylbenzene	48	5	5		ug/L
n-Butylbenzene	ND	5.0	5		ug/L	p-Isopropyltoluene	ND	5.0	5		ug/L
sec-Butylbenzene	8.6	5.0	5		ug/L	Methylene Chloride	ND	50	5		ug/L
tert-Butylbenzene	ND	5.0	5		ug/L	4-Methyl-2-Pentanone	ND	50	5		ug/L
Carbon Disulfide	ND	50	5		ug/L	Naphthalene	ND	50	5		ug/L
Carbon Tetrachloride	ND	2.5	5		ug/L	n-Propylbenzene	49	5	5		ug/L
Chlorobenzene	ND	5.0	5		ug/L	Styrene	ND	5.0	5		ug/L
Chloroethane	ND	5.0	5		ug/L	1,1,1,2-Tetrachloroethane	ND	5.0	5		ug/L
Chloroform	ND	5.0	5		ug/L	1,1,2,2-Tetrachloroethane	ND	5.0	5		ug/L
Chloromethane	ND	5.0	5		ug/L	Tetrachloroethene	ND	5.0	5		ug/L
2-Chlorotoluene	ND	5.0	5		ug/L	Toluene	ND	5.0	5		ug/L
4-Chlorotoluene	ND	5.0	5		ug/L	1,2,3-Trichlorobenzene	ND	5.0	5		ug/L
Dibromochloromethane	ND	5.0	5		ug/L	1,2,4-Trichlorobenzene	ND	5.0	5		ug/L
1,2-Dibromo-3-Chloropropane	ND	25	5		ug/L	1,1,1-Trichloroethane	ND	5.0	5		ug/L
1,2-Dibromoethane	ND	5.0	5		ug/L	1,1,2-Trichloroethane	ND	5.0	5		ug/L
Dibromomethane	ND	5.0	5		ug/L	Trichloroethene	ND	5.0	5		ug/L
1,2-Dichlorobenzene	ND	5.0	5		ug/L	Trichlorofluoromethane	ND	50	5		ug/L
1,3-Dichlorobenzene	ND	5.0	5		ug/L	1,2,3-Trichloropropane	ND	5.0	5		ug/L
1,4-Dichlorobenzene	ND	5.0	5		ug/L	1,2,4-Trimethylbenzene	ND	5.0	5		ug/L
Dichlorodifluoromethane	ND	5.0	5		ug/L	1,3,5-Trimethylbenzene	ND	5.0	5		ug/L
1,1-Dichloroethane	8.3	5.0	5		ug/L	Vinyl Acetate	ND	50	5		ug/L
1,2-Dichloroethane	ND	2.5	5		ug/L	Vinyl Chloride	53	2	5		ug/L
1,1-Dichloroethene	ND	5.0	5		ug/L	p/m-Xylene	ND	5.0	5		ug/L
c-1,2-Dichloroethene	43	5	5		ug/L	o-Xylene	ND	5.0	5		ug/L
t-1,2-Dichloroethene	59	5	5		ug/L	Methyl-tert-Butyl Ether	ND	5.0	5		ug/L
1,2-Dichloropropane	ND	5.0	5		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	86-118		Toluene-d8	101	88-110	
1,4-Bromofluorobenzene	101	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-106	00-08-0034-4	08/01/00	Aqueous		08/03/00	000803AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	5.3	0.5	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	1.0	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	2.1	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	2.7	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	25	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	26	1	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	21	1	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	86-118		Toluene-d8	102	88-110	
1,4-Bromofluorobenzene	106	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-603	00-08-0034-5	08/01/00	Aqueous		08/03/00	000803AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	95	1	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	110	1	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	6.7	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	7.2	0.5	1		ug/L	Vinyl Chloride	0.71	0.50	1		ug/L
1,1-Dichloroethene	88	1	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	9.3	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	86-118		Toluene-d8	101	88-110	
1,4-Bromofluorobenzene	100	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/01/00
Work Order No: 00-08-0034
Preparation: N/A
Method: EPA 8260B

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-607	00-08-0034-6	08/01/00	Aqueous		08/03/00	000803AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	20	2		ug/L	1,3-Dichloropropane	ND	2.0	2		ug/L
Benzene	110	1	2		ug/L	2,2-Dichloropropane	ND	2.0	2		ug/L
Bromobenzene	ND	2.0	2		ug/L	1,1-Dichloropropene	ND	2.0	2		ug/L
Bromochloromethane	ND	2.0	2		ug/L	c-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromodichloromethane	ND	2.0	2		ug/L	t-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromoform	ND	2.0	2		ug/L	Ethylbenzene	ND	2.0	2		ug/L
Bromomethane	ND	2.0	2		ug/L	2-Hexanone	ND	20	2		ug/L
2-Butanone	ND	20	2		ug/L	Isopropylbenzene	7.3	2.0	2		ug/L
n-Butylbenzene	ND	2.0	2		ug/L	p-Isopropyltoluene	ND	2.0	2		ug/L
sec-Butylbenzene	4.1	2.0	2		ug/L	Methylene Chloride	ND	20	2		ug/L
tert-Butylbenzene	ND	2.0	2		ug/L	4-Methyl-2-Pentanone	ND	20	2		ug/L
Carbon Disulfide	ND	20	2		ug/L	Naphthalene	ND	20	2		ug/L
Carbon Tetrachloride	ND	1.0	2		ug/L	n-Propylbenzene	3.8	2.0	2		ug/L
Chlorobenzene	ND	2.0	2		ug/L	Styrene	ND	2.0	2		ug/L
Chloroethane	ND	2.0	2		ug/L	1,1,1,2-Tetrachloroethane	ND	2.0	2		ug/L
Chloroform	ND	2.0	2		ug/L	1,1,2,2-Tetrachloroethane	ND	2.0	2		ug/L
Chloromethane	ND	2.0	2		ug/L	Tetrachloroethene	ND	2.0	2		ug/L
2-Chlorotoluene	ND	2.0	2		ug/L	Toluene	ND	2.0	2		ug/L
4-Chlorotoluene	ND	2.0	2		ug/L	1,2,3-Trichlorobenzene	ND	2.0	2		ug/L
Dibromochloromethane	ND	2.0	2		ug/L	1,2,4-Trichlorobenzene	ND	2.0	2		ug/L
1,2-Dibromo-3-Chloropropane	ND	10	2		ug/L	1,1,1-Trichloroethane	ND	2.0	2		ug/L
1,2-Dibromoethane	ND	2.0	2		ug/L	1,1,2-Trichloroethane	ND	2.0	2		ug/L
Dibromomethane	ND	2.0	2		ug/L	Trichloroethene	ND	2.0	2		ug/L
1,2-Dichlorobenzene	ND	2.0	2		ug/L	Trichlorofluoromethane	ND	20	2		ug/L
1,3-Dichlorobenzene	ND	2.0	2		ug/L	1,2,3-Trichloropropane	ND	2.0	2		ug/L
1,4-Dichlorobenzene	ND	2.0	2		ug/L	1,2,4-Trimethylbenzene	ND	2.0	2		ug/L
Dichlorodifluoromethane	ND	2.0	2		ug/L	1,3,5-Trimethylbenzene	ND	2.0	2		ug/L
1,1-Dichloroethane	ND	2.0	2		ug/L	Vinyl Acetate	ND	20	2		ug/L
1,2-Dichloroethane	ND	1.0	2		ug/L	Vinyl Chloride	1.1	1.0	2		ug/L
1,1-Dichloroethene	ND	2.0	2		ug/L	p/m-Xylene	ND	2.0	2		ug/L
c-1,2-Dichloroethene	ND	2.0	2		ug/L	o-Xylene	ND	2.0	2		ug/L
t-1,2-Dichloroethene	ND	2.0	2		ug/L	Methyl-tert-Butyl Ether	6.2	2.0	2		ug/L
1,2-Dichloropropane	ND	2.0	2		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	86-118		Toluene-d8	100	88-110	
1,4-Bromofluorobenzene	102	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
DUPLICATE 1	00-08-0034-7	08/01/00	Aqueous	N/A	08/03/00	000803AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	16	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	14	1	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	86-118		Toluene-d8	102	88-110	
1,4-Bromofluorobenzene	102	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/01/00
Work Order No: 00-08-0034
Preparation: N/A
Method: EPA 8260B

Project: CENCO/3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	099-10-006-597		Aqueous		08/03/00	000803AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	99	86-118		Toluene-d8	101	88-110	
1,4-Bromofluorobenzene	100	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO/3917-019

Date Received: 08/01/00
Work Order No: 00-08-0034
Preparation: Total Digestion
Method: EPA 6010B

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0033-26	Aqueous	ICP 3300	08/02/00	08/03/00	080200ms6

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	102	104	80-120	2	0-20	
Arsenic	99	101	80-120	2	0-20	
Barium	102	104	80-120	2	0-20	
Beryllium	98	100	80-120	2	0-20	
Cadmium	100	102	80-120	2	0-20	
Chromium (Total)	97	99	80-120	2	0-20	
Cobalt	101	102	80-120	2	0-20	
Copper	100	102	80-120	2	0-20	
Lead	98	100	80-120	2	0-20	
Molybdenum	100	102	80-120	3	0-20	
Nickel	102	104	80-120	2	0-20	
Selenium	100	102	80-120	1	0-20	
Silver	96	97	80-120	1	0-20	
Thallium	103	106	80-120	2	0-20	
Vanadium	98	100	80-120	2	0-20	
Zinc	101	104	80-120	3	0-20	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO/3917-019

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	Filtered
Method:	EPA 7470A

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-107	Aqueous	Mercury	08/02/00	08/02/00	080200ms2

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	58	58	71-134	1	0-14	3

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO/3917-019

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	EPA 5030B
Method:	EPA 8015M

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0043-1	Aqueous	GC 1	N/A	08/02/00	00080201ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	93	95	68-122	2	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO/3917-019

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	N/A
Method:	EPA 8260B

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0017-1	Aqueous	GC/MS C	N/A	08/03/00	0008001701

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	107	72-127	3	0-25	
Carbon Tetrachloride	108	107	70-130	1	0-25	
Chlorobenzene	105	106	72-131	1	0-25	
1,2-Dichlorobenzene	105	105	70-130	1	0-25	
1,1-Dichloroethene	98	99	69-127	1	0-25	
Toluene	106	106	75-124	0	0-25	
Trichloroethene	107	106	60-137	2	0-25	
Vinyl Chloride	93	98	70-130	5	0-25	
Methyl-tert-Butyl Ether	100	99	80-120	1	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO/3917-019

Date Received: 08/01/00
Work Order No: 00-08-0034
Preparation: Total Digestion
Method: EPA 6010B

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-1,318	Aqueous	ICP 3300	08/03/00	000802-I	000802Ic6a

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	1.00	0.890	89	80-120	
Arsenic	1.00	0.905	90	80-120	
Barium	1.00	1.03	103	80-120	
Beryllium	1.00	0.990	99	80-120	
Cadmium	1.00	1.02	102	80-120	
Chromium (Total)	1.00	0.983	98	80-120	
Cobalt	1.00	1.02	102	80-120	
Copper	1.00	1.01	101	80-120	
Lead	1.00	0.992	99	80-120	
Molybdenum	1.00	1.01	101	80-120	
Nickel	1.00	1.03	103	80-120	
Selenium	1.00	1.02	102	80-120	
Silver	0.500	0.493	99	80-120	
Thallium	1.00	1.06	106	80-120	
Vanadium	1.00	0.988	99	80-120	
Zinc	1.00	1.03	103	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO/3917-019

Date Received: 08/01/00
Work Order No: 00-08-0034
Preparation: Total Digestion
Method: EPA 7470A

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-302	Aqueous	Mercury	08/02/00	08/02/00	000802lcs2

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	101	102	90-122	1	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO/3917-019

Date Received: 08/01/00
Work Order No: 00-08-0034
Preparation: EPA 5030B
Method: EPA 8015M

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-574	Aqueous	GC 1	N/A	08/02/00	00080201sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	99	97	79-115	2	0-19	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO/3917-019

Date Received: 08/01/00
Work Order No: 00-08-0034
Preparation: EPA 3520B
Method: EPA 8270C

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-003-615	Aqueous	GC/MS F	08/02/00	08/04/00	0008026

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	86	92	12-151	6	0-23	
2-Chlorophenol	86	92	45-135	7	0-18	
1,4-Dichlorobenzene	73	77	36-118	6	0-26	
N-Nitroso-di-n-propylamine	89	98	52-128	10	0-13	
1,2,4-Trichlorobenzene	76	83	42-120	9	0-21	
4-Chloro-3-Methylphenol	96	103	20-150	7	0-40	
Acenaphthene	81	88	51-137	8	0-11	
4-Nitrophenol	92	100	20-150	8	0-40	
2,4-Dinitrotoluene	83	91	25-143	10	0-36	
Pentachlorophenol	73	80	20-150	10	0-40	
Pyrene	100	108	45-135	8	0-20	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO/3917-019

Date Received:	08/01/00
Work Order No:	00-08-0034
Preparation:	N/A
Method:	EPA 8260B

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-10-006-597	Aqueous	GC/MS C	08/03/00	03AUG004	000803AW

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Benzene	50	54.6	109	72-127	
Carbon Tetrachloride	50	53.3	106	70-130	
Chlorobenzene	50	52.3	105	72-131	
1.2-Dichlorobenzene	50	52.2	104	70-130	
1,1-Dichloroethene	50	50.2	100	69-127	
Toluene	50	53.2	106	75-124	
Trichloroethene	50	54.0	108	60-137	
Vinyl Chloride	50	48.2	96	79-118	
Methyl-tert-Butyl Ether	50	51.4	103	80-120	

Calscience Environmental Laboratories, Inc.

GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 00-08-0034

Qualifier	Definition
2	Surrogate spike compound was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Spike or Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
ND	Not detected at indicated reporting limit.

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

VeRsar INC.

CHAIN OF CUSTODY RECORD

183

PROJECT NO.	PROJECT NAME
3917-019	CENCO REFINING CO

SAMPLERS: *(Signature)* Dale Anderson (Printed) DALE ANDERSON

PARAMETERS: TPH-G 5015 | VOCs 8260 | SVOCs 8270 | DISS. METALS 6010/7471

INDUSTRIAL HYGIENE SAMPLE: Y / N

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TPH-G 5015	VOCs 8260	SVOCs 8270	DISS. METALS 6010/7471					REMARKS
MW 201	8/4/00	0700		X		6	X	X	X	X					
MW 204	8/4/00	0830		X		6	↓	↓	↓	↓					
MW 103	8/4/00	0945		X		6	↓	↓	↓	↓					
MW 503B	8/4/00	1110		X		6	↓	↓	↓	↓					
MW 23A	8/4/00	1250		X		6	↓	↓	↓	↓					
WELL 7	8/4/00	1355		X		5	X	X							
WELL 8	8/4/00	1500		X		5	X	X							
TB	8/4/00	0700		X		2	X	X							

Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date / Time	Received by: *(Signature)*
Dale Anderson	8/4/00 1650	Budiono Kristanto		8/4/00 1650	
(Printed) DALE ANDERSON		(Printed) BUDIONO KRISTANTO	(Printed)		(Printed)

Relinquished by: *(Signature)*	Date / Time	Received for Laboratory by: *(Signature)*	Date / Time	Remarks
Budiono Kristanto			8/4 1735	STD TAT < MCLs RP INCLUDE MTBE DISS. METALS FILTERED IN FIELD
(Printed)		(Printed)		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

Versar INC.

CHAIN OF CUSTODY RECORD

183

PROJECT NO.	PROJECT NAME	INDUSTRIAL HYGIENE SAMPLE
3917-019	CENCO REFINING CO	Y / N

SAMPLERS: (Signature) Dale Anderson (Printed) DALE ANDERSON

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TPH-G 5015	VOCs 8260	SVOCs 8270	DISS. METALS 6010/7471					REMARKS
MW 201	8/4/00	0700		X		6	X	X	X	X					
MW 204	8/4/00	0830		X		6	↓	↓	↓	↓					
MW 103	8/4/00	0945		X		6	↓	↓	↓	↓					
MW 503B	8/4/00	1110		X		6	↓	↓	↓	↓					
MW 23A	8/4/00	1250		X		6	↓	↓	↓	↓					
WELL 7	8/4/00	1355		X		5	X	X							
WELL 8	8/4/00	1500		X		5	X	X							
TB	8/4/00	0700		X		2	X	X							

RECEIVED AUG 17 2000

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Dale Anderson	8/4/00 1650	Budiono Kristanto		8/4/00 1650	
(Printed) DALE ANDERSON		(Printed) BUDIONO KRISTANTO	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
Budiono Kristanto			8/4 1735	STD TAT < MCLs RP INCLUDE MTBE DISS. METALS FILTERED IN FIELD
(Printed)		(Printed)		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

Calscience
Environmental
Laboratories, Inc.

August 11, 2000

Tim Berger
Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Subject: **Calscience Work Order No.: 00-08-0183**
Client Reference: CENCO Refining Company / 3917-019

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 08/04/00 and analyzed in accordance with the attached chain-of-custody.

The results in this analytical report are limited to the samples tested and any reproduction of this report must be made in its entirety.

If you have any questions regarding this report, require sampling supplies or field services, or information on our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Jody McInerney
Project Manager

William H. Christensen
Quality Assurance Manager

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

ANALYTICAL REPORT

Versar, Inc.		Date Sampled:	08/04/00
7844 Madison Avenue, Suite 167		Date Received:	08/04/00
Fair Oaks, California 95628		Date Analyzed:	08/07-08/00
		Work Order No.:	00-08-0183
Attn: Tim Berger			
RE: CENCO Refining Company / 3917-019		Page 1 of 6	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 201			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.127	0.00200
Barium	EPA 6010B	0.221	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	0.00783	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0140	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0171	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.		Date Sampled:	08/04/00
7844 Madison Avenue, Suite 167		Date Received:	08/04/00
Fair Oaks, California 95628		Date Analyzed:	08/07-08/00
		Work Order No.:	00-08-0183
Attn: Tim Berger			
RE: CENCO Refining Company / 3917-019		Page 2 of 6	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 204			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.427	0.00200
Barium	EPA 6010B	0.251	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0103	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0191	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/04/00
7844 Madison Avenue, Suite 167	Date Received:	08/04/00
Fair Oaks, California 95628	Date Analyzed:	08/07-08/00
	Work Order No.:	00-08-0183
Attn: Tim Berger		
RE: CENCO Refining Company / 3917-019	Page 3 of 6	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 103			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.146	0.00200
Barium	EPA 6010B	0.703	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0122	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0281	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/04/00
7844 Madison Avenue, Suite 167	Date Received:	08/04/00
Fair Oaks, California 95628	Date Analyzed:	08/07-08/00
	Work Order No.:	00-08-0183
Attn: Tim Berger		
RE: CENCO Refining Company / 3917-019	Page 4 of 6	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 503B			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.0255	0.00200
Barium	EPA 6010B	0.214	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.00874	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00104	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0294	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/04/00
7844 Madison Avenue, Suite 167	Date Received:	08/04/00
Fair Oaks, California 95628	Date Analyzed:	08/07-08/00
	Work Order No.:	00-08-0183
Attn: Tim Berger		
RE: CENCO Refining Company / 3917-019	Page 5 of 6	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: W-3A			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	1.62	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0167	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00113	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0426	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	NA
7844 Madison Avenue, Suite 167	Date Received:	NA
Fair Oaks, California 95628	Date Analyzed:	08/07-08/00
	Work Order No.:	00-08-0183
Attn: Tim Berger		
RE: CENCO Refining Company / 3917-019	Page 6 of 6	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: Method Blank			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	ND	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	ND	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	ND	0.0100

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-201	00-08-0183-1	08/04/00	Aqueous	08/07/00	08/09/00	0008073

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	89	15-138		Phenol-d6	92	17-141	
Nitrobenzene-d5	108	56-123		2-Fluorobiphenyl	85	45-120	
2,4,6-Tribromophenol	112	32-143		p-Terphenyl-d14	99	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-204	00-08-0183-2	08/04/00	Aqueous	08/07/00	08/09/00	0008073

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	88	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	64	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	90	15-138		Phenol-d6	93	17-141	
Nitrobenzene-d5	108	56-123		2-Fluorobiphenyl	86	45-120	
2,4,6-Tribromophenol	107	32-143		p-Terphenyl-d14	97	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-103	00-08-0183-3	08/04/00	Aqueous	08/07/00	08/10/00	0008073

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	75	15-138		Phenol-d6	58	17-141	
Nitrobenzene-d5	107	56-123		2-Fluorobiphenyl	92	45-120	
2,4,6-Tribromophenol	97	32-143		p-Terphenyl-d14	91	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 503B	00-08-0183-4	08/04/00	Aqueous	08/07/00	08/10/00	0008073

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	23	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	62	15-138		Phenol-d6	68	17-141	
Nitrobenzene-d5	91	56-123		2-Fluorobiphenyl	78	45-120	
2,4,6-Tribromophenol	82	32-143		p-Terphenyl-d14	87	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
W-3A	00-08-0183-5	08/04/00	Aqueous	08/07/00	08/10/00	0008073

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	50	5		ug/L	2,4-Dinitrophenol	ND	250	5		ug/L
Aniline	ND	50	5		ug/L	4-Nitrophenol	ND	50	5		ug/L
Phenol	ND	50	5		ug/L	Dibenzofuran	ND	50	5		ug/L
Bis(2-Chloroethyl) Ether	ND	130	5		ug/L	2,4-Dinitrotoluene	ND	50	5		ug/L
2-Chlorophenol	ND	50	5		ug/L	2,6-Dinitrotoluene	ND	50	5		ug/L
1,3-Dichlorobenzene	ND	50	5		ug/L	Diethyl Phthalate	ND	50	5		ug/L
1,4-Dichlorobenzene	ND	50	5		ug/L	4-Chlorophenyl-Phenyl Ether	ND	50	5		ug/L
Benzyl Alcohol	ND	50	5		ug/L	Fluorene	ND	50	5		ug/L
1,2-Dichlorobenzene	ND	50	5		ug/L	4-Nitroaniline	ND	50	5		ug/L
2-Methylphenol	ND	50	5		ug/L	Azobenzene	ND	50	5		ug/L
Bis(2-Chloroisopropyl) Ether	ND	50	5		ug/L	4,6-Dinitro-2-Methylphenol	ND	250	5		ug/L
3/4-Methylphenol	ND	50	5		ug/L	N-Nitrosodiphenylamine	ND	50	5		ug/L
N-Nitroso-di-n-propylamine	ND	50	5		ug/L	4-Bromophenyl-Phenyl Ether	ND	50	5		ug/L
Hexachloroethane	ND	50	5		ug/L	Hexachlorobenzene	ND	50	5		ug/L
Nitrobenzene	ND	130	5		ug/L	Pentachlorophenol	ND	50	5		ug/L
Isophorone	ND	50	5		ug/L	Phenanthrene	ND	50	5		ug/L
2-Nitrophenol	ND	50	5		ug/L	Anthracene	ND	50	5		ug/L
2,4-Dimethylphenol	ND	50	5		ug/L	Di-n-Butyl Phthalate	ND	50	5		ug/L
Benzoic Acid	ND	250	5		ug/L	Fluoranthene	ND	50	5		ug/L
Bis(2-Chloroethoxy) Methane	ND	50	5		ug/L	Benzidine	ND	250	5		ug/L
2,4-Dichlorophenol	ND	50	5		ug/L	Pyrene	ND	50	5		ug/L
1,2,4-Trichlorobenzene	ND	50	5		ug/L	Pyridine	ND	50	5		ug/L
Naphthalene	ND	50	5		ug/L	Butyl Benzyl Phthalate	ND	50	5		ug/L
4-Chloroaniline	ND	50	5		ug/L	3,3'-Dichlorobenzidine	ND	130	5		ug/L
Hexachloro-1,3-Butadiene	ND	50	5		ug/L	Benzo (a) Anthracene	ND	50	5		ug/L
4-Chloro-3-Methylphenol	ND	50	5		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	50	5		ug/L
2-Methylnaphthalene	740	50	5		ug/L	Chrysene	ND	50	5		ug/L
Hexachlorocyclopentadiene	ND	130	5		ug/L	Di-n-Octyl Phthalate	ND	50	5		ug/L
2,4,6-Trichlorophenol	ND	50	5		ug/L	Benzo (b) Fluoranthene	ND	50	5		ug/L
2,4,5-Trichlorophenol	ND	50	5		ug/L	Benzo (k) Fluoranthene	ND	50	5		ug/L
2-Chloronaphthalene	ND	50	5		ug/L	Benzo (a) Pyrene	ND	50	5		ug/L
2-Nitroaniline	ND	50	5		ug/L	Benzo (g,h,i) Perylene	ND	50	5		ug/L
Dimethyl Phthalate	ND	50	5		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	50	5		ug/L
Acenaphthylene	ND	50	5		ug/L	Dibenz (a,h) Anthracene	ND	50	5		ug/L
3-Nitroaniline	ND	50	5		ug/L	1-Methylnaphthalene	470	50	5		ug/L
Acenaphthene	ND	50	5		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	104	15-138		Phenol-d6	102	17-141	
Nitrobenzene-d5	119	56-123		2-Fluorobiphenyl	125	45-120	2
2,4,6-Tribromophenol	106	32-143		p-Terphenyl-d14	118	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	095-01-003-619	N/A	Aqueous	08/07/00	08/09/00	0008073

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	79	15-138		Phenol-d6	86	17-141	
Nitrobenzene-d5	104	56-123		2-Fluorobiphenyl	88	45-120	
2,4,6-Tribromophenol	105	32-143		p-Terphenyl-d14	93	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-201	00-08-0183-1	08/04/00	Aqueous	N/A	08/09/00	000808BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	50	5		ug/L	1,3-Dichloropropane	ND	5.0	5		ug/L
Benzene	570	2	5		ug/L	2,2-Dichloropropane	ND	5.0	5		ug/L
Bromobenzene	ND	5.0	5		ug/L	1,1-Dichloropropene	ND	5.0	5		ug/L
Bromochloromethane	ND	5.0	5		ug/L	c-1,3-Dichloropropene	ND	2.5	5		ug/L
Bromodichloromethane	ND	5.0	5		ug/L	t-1,3-Dichloropropene	ND	2.5	5		ug/L
Bromoform	ND	5.0	5		ug/L	Ethylbenzene	61	5	5		ug/L
Bromomethane	ND	5.0	5		ug/L	2-Hexanone	ND	50	5		ug/L
2-Butanone	ND	50	5		ug/L	Isopropylbenzene	12	5	5		ug/L
n-Butylbenzene	ND	5.0	5		ug/L	p-Isopropyltoluene	ND	5.0	5		ug/L
sec-Butylbenzene	ND	5.0	5		ug/L	Methylene Chloride	ND	50	5		ug/L
tert-Butylbenzene	ND	5.0	5		ug/L	4-Methyl-2-Pentanone	ND	50	5		ug/L
Carbon Disulfide	ND	50	5		ug/L	Naphthalene	ND	50	5		ug/L
Carbon Tetrachloride	ND	2.5	5		ug/L	n-Propylbenzene	12	5	5		ug/L
Chlorobenzene	ND	5.0	5		ug/L	Styrene	ND	5.0	5		ug/L
Chloroethane	ND	5.0	5		ug/L	1,1,1,2-Tetrachloroethane	ND	5.0	5		ug/L
Chloroform	ND	5.0	5		ug/L	1,1,2,2-Tetrachloroethane	ND	5.0	5		ug/L
Chloromethane	ND	5.0	5		ug/L	Tetrachloroethene	ND	5.0	5		ug/L
2-Chlorotoluene	ND	5.0	5		ug/L	Toluene	15	5	5		ug/L
4-Chlorotoluene	ND	5.0	5		ug/L	1,2,3-Trichlorobenzene	ND	5.0	5		ug/L
Dibromochloromethane	ND	5.0	5		ug/L	1,2,4-Trichlorobenzene	ND	5.0	5		ug/L
1,2-Dibromo-3-Chloropropane	ND	25	5		ug/L	1,1,1-Trichloroethane	ND	5.0	5		ug/L
1,2-Dibromoethane	ND	5.0	5		ug/L	1,1,2-Trichloroethane	ND	5.0	5		ug/L
Dibromomethane	ND	5.0	5		ug/L	Trichloroethene	32	5	5		ug/L
1,2-Dichlorobenzene	ND	5.0	5		ug/L	Trichlorofluoromethane	ND	50	5		ug/L
1,3-Dichlorobenzene	ND	5.0	5		ug/L	1,2,3-Trichloropropane	ND	5.0	5		ug/L
1,4-Dichlorobenzene	ND	5.0	5		ug/L	1,2,4-Trimethylbenzene	33	5	5		ug/L
Dichlorodifluoromethane	ND	5.0	5		ug/L	1,3,5-Trimethylbenzene	ND	5.0	5		ug/L
1,1-Dichloroethane	ND	5.0	5		ug/L	Vinyl Acetate	ND	50	5		ug/L
1,2-Dichloroethane	ND	2.5	5		ug/L	Vinyl Chloride	ND	2.5	5		ug/L
1,1-Dichloroethene	19	5	5		ug/L	p/m-Xylene	21	5	5		ug/L
c-1,2-Dichloroethene	76	5	5		ug/L	o-Xylene	ND	5.0	5		ug/L
t-1,2-Dichloroethene	ND	5.0	5		ug/L	Methyl-tert-Butyl Ether	ND	5.0	5		ug/L
1,2-Dichloropropane	ND	5.0	5		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	86-118		Toluene-d8	110	88-110	
1,4-Bromofluorobenzene	106	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-204	00-08-0183-2	08/04/00	Aqueous	N/A	08/09/00	000808BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	50	5		ug/L	1,3-Dichloropropane	ND	5.0	5		ug/L
Benzene	400	2	5		ug/L	2,2-Dichloropropane	ND	5.0	5		ug/L
Bromobenzene	ND	5.0	5		ug/L	1,1-Dichloropropene	ND	5.0	5		ug/L
Bromochloromethane	ND	5.0	5		ug/L	c-1,3-Dichloropropene	ND	2.5	5		ug/L
Bromodichloromethane	ND	5.0	5		ug/L	t-1,3-Dichloropropene	ND	2.5	5		ug/L
Bromoform	ND	5.0	5		ug/L	Ethylbenzene	12	5	5		ug/L
Bromomethane	ND	5.0	5		ug/L	2-Hexanone	ND	50	5		ug/L
2-Butanone	ND	50	5		ug/L	Isopropylbenzene	8.2	5.0	5		ug/L
n-Butylbenzene	ND	5.0	5		ug/L	p-Isopropyltoluene	ND	5.0	5		ug/L
sec-Butylbenzene	ND	5.0	5		ug/L	Methylene Chloride	ND	50	5		ug/L
tert-Butylbenzene	ND	5.0	5		ug/L	4-Methyl-2-Pentanone	ND	50	5		ug/L
Carbon Disulfide	ND	50	5		ug/L	Naphthalene	ND	50	5		ug/L
Carbon Tetrachloride	ND	2.5	5		ug/L	n-Propylbenzene	21	5	5		ug/L
Chlorobenzene	ND	5.0	5		ug/L	Styrene	ND	5.0	5		ug/L
Chloroethane	ND	5.0	5		ug/L	1,1,1,2-Tetrachloroethane	ND	5.0	5		ug/L
Chloroform	ND	5.0	5		ug/L	1,1,2,2-Tetrachloroethane	ND	5.0	5		ug/L
Chloromethane	ND	5.0	5		ug/L	Tetrachloroethene	ND	5.0	5		ug/L
2-Chlorotoluene	ND	5.0	5		ug/L	Toluene	ND	5.0	5		ug/L
4-Chlorotoluene	ND	5.0	5		ug/L	1,2,3-Trichlorobenzene	ND	5.0	5		ug/L
Dibromochloromethane	ND	5.0	5		ug/L	1,2,4-Trichlorobenzene	ND	5.0	5		ug/L
1,2-Dibromo-3-Chloropropane	ND	25	5		ug/L	1,1,1-Trichloroethane	ND	5.0	5		ug/L
1,2-Dibromoethane	ND	5.0	5		ug/L	1,1,2-Trichloroethane	ND	5.0	5		ug/L
Dibromomethane	ND	5.0	5		ug/L	Trichloroethene	ND	5.0	5		ug/L
1,2-Dichlorobenzene	ND	5.0	5		ug/L	Trichlorofluoromethane	ND	50	5		ug/L
1,3-Dichlorobenzene	ND	5.0	5		ug/L	1,2,3-Trichloropropane	ND	5.0	5		ug/L
1,4-Dichlorobenzene	ND	5.0	5		ug/L	1,2,4-Trimethylbenzene	ND	5.0	5		ug/L
Dichlorodifluoromethane	ND	5.0	5		ug/L	1,3,5-Trimethylbenzene	ND	5.0	5		ug/L
1,1-Dichloroethane	ND	5.0	5		ug/L	Vinyl Acetate	ND	50	5		ug/L
1,2-Dichloroethane	ND	2.5	5		ug/L	Vinyl Chloride	ND	2.5	5		ug/L
1,1-Dichloroethene	ND	5.0	5		ug/L	p/m-Xylene	10	5	5		ug/L
c-1,2-Dichloroethene	ND	5.0	5		ug/L	o-Xylene	ND	5.0	5		ug/L
t-1,2-Dichloroethene	ND	5.0	5		ug/L	Methyl-tert-Butyl Ether	ND	5.0	5		ug/L
1,2-Dichloropropane	ND	5.0	5		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	86-118		Toluene-d8	104	88-110	
1,4-Bromofluorobenzene	107	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-103	00-08-0183-3	08/04/00	Aqueous	N/A	08/09/00	000808BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	3.5	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	3.9	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	1.2	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	1.5	0.5	1		ug/L	Vinyl Chloride	0.75	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	2.9	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	86-118		Toluene-d8	106	88-110	
1,4-Bromofluorobenzene	107	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 503B	00-08-0183-4	08/04/00	Aqueous	N/A	08/09/00	000808BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	100	10		ug/L	1,3-Dichloropropane	ND	10	10		ug/L
Benzene	610	5	10		ug/L	2,2-Dichloropropane	ND	10	10		ug/L
Bromobenzene	ND	10	10		ug/L	1,1-Dichloropropene	ND	10	10		ug/L
Bromochloromethane	ND	10	10		ug/L	c-1,3-Dichloropropene	ND	5.0	10		ug/L
Bromodichloromethane	ND	10	10		ug/L	t-1,3-Dichloropropene	ND	5.0	10		ug/L
Bromoform	ND	10	10		ug/L	Ethylbenzene	500	10	10		ug/L
Bromomethane	ND	10	10		ug/L	2-Hexanone	ND	100	10		ug/L
2-Butanone	ND	100	10		ug/L	Isopropylbenzene	68	10	10		ug/L
n-Butylbenzene	ND	10	10		ug/L	p-Isopropyltoluene	ND	10	10		ug/L
sec-Butylbenzene	14	10	10		ug/L	Methylene Chloride	ND	100	10		ug/L
tert-Butylbenzene	ND	10	10		ug/L	4-Methyl-2-Pentanone	ND	100	10		ug/L
Carbon Disulfide	ND	100	10		ug/L	Naphthalene	ND	100	10		ug/L
Carbon Tetrachloride	ND	5.0	10		ug/L	n-Propylbenzene	100	10	10		ug/L
Chlorobenzene	ND	10	10		ug/L	Styrene	ND	10	10		ug/L
Chloroethane	ND	10	10		ug/L	1,1,1,2-Tetrachloroethane	ND	10	10		ug/L
Chloroform	ND	10	10		ug/L	1,1,2,2-Tetrachloroethane	ND	10	10		ug/L
Chloromethane	ND	10	10		ug/L	Tetrachloroethene	ND	10	10		ug/L
2-Chlorotoluene	ND	10	10		ug/L	Toluene	19	10	10		ug/L
4-Chlorotoluene	ND	10	10		ug/L	1,2,3-Trichlorobenzene	ND	10	10		ug/L
Dibromochloromethane	ND	10	10		ug/L	1,2,4-Trichlorobenzene	ND	10	10		ug/L
1,2-Dibromo-3-Chloropropane	ND	50	10		ug/L	1,1,1-Trichloroethane	ND	10	10		ug/L
1,2-Dibromoethane	ND	10	10		ug/L	1,1,2-Trichloroethane	ND	10	10		ug/L
Dibromomethane	ND	10	10		ug/L	Trichloroethene	ND	10	10		ug/L
1,2-Dichlorobenzene	ND	10	10		ug/L	Trichlorofluoromethane	ND	100	10		ug/L
1,3-Dichlorobenzene	ND	10	10		ug/L	1,2,3-Trichloropropane	ND	10	10		ug/L
1,4-Dichlorobenzene	ND	10	10		ug/L	1,2,4-Trimethylbenzene	ND	10	10		ug/L
Dichlorodifluoromethane	ND	10	10		ug/L	1,3,5-Trimethylbenzene	ND	10	10		ug/L
1,1-Dichloroethane	ND	10	10		ug/L	Vinyl Acetate	ND	100	10		ug/L
1,2-Dichloroethane	ND	5.0	10		ug/L	Vinyl Chloride	ND	5.0	10		ug/L
1,1-Dichloroethene	36	10	10		ug/L	p/m-Xylene	35	10	10		ug/L
c-1,2-Dichloroethene	140	10	10		ug/L	o-Xylene	ND	10	10		ug/L
t-1,2-Dichloroethene	160	10	10		ug/L	Methyl-tert-Butyl Ether	ND	10	10		ug/L
1,2-Dichloropropane	ND	10	10		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	106	86-118		Toluene-d8	107	88-110	
1,4-Bromofluorobenzene	107	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
W-3A	00-08-0183-5	08/04/00	Aqueous	N/A	08/09/00	000808BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	20	2		ug/L	1,3-Dichloropropane	ND	2.0	2		ug/L
Benzene	170	1	2		ug/L	2,2-Dichloropropane	ND	2.0	2		ug/L
Bromobenzene	ND	2.0	2		ug/L	1,1-Dichloropropene	ND	2.0	2		ug/L
Bromochloromethane	ND	2.0	2		ug/L	c-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromodichloromethane	ND	2.0	2		ug/L	t-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromoform	ND	2.0	2		ug/L	Ethylbenzene	8.4	2.0	2		ug/L
Bromomethane	ND	2.0	2		ug/L	2-Hexanone	ND	20	2		ug/L
2-Butanone	ND	20	2		ug/L	Isopropylbenzene	14	2	2		ug/L
n-Butylbenzene	9.7	2.0	2		ug/L	p-Isopropyltoluene	ND	2.0	2		ug/L
sec-Butylbenzene	7.3	2.0	2		ug/L	Methylene Chloride	ND	20	2		ug/L
tert-Butylbenzene	ND	2.0	2		ug/L	4-Methyl-2-Pentanone	ND	20	2		ug/L
Carbon Disulfide	ND	20	2		ug/L	Naphthalene	ND	20	2		ug/L
Carbon Tetrachloride	ND	1.0	2		ug/L	n-Propylbenzene	21	2	2		ug/L
Chlorobenzene	ND	2.0	2		ug/L	Styrene	ND	2.0	2		ug/L
Chloroethane	2.4	2.0	2		ug/L	1,1,1,2-Tetrachloroethane	ND	2.0	2		ug/L
Chloroform	ND	2.0	2		ug/L	1,1,2,2-Tetrachloroethane	ND	2.0	2		ug/L
Chloromethane	ND	2.0	2		ug/L	Tetrachloroethene	ND	2.0	2		ug/L
2-Chlorotoluene	ND	2.0	2		ug/L	Toluene	ND	2.0	2		ug/L
4-Chlorotoluene	ND	2.0	2		ug/L	1,2,3-Trichlorobenzene	ND	2.0	2		ug/L
Dibromochloromethane	ND	2.0	2		ug/L	1,2,4-Trichlorobenzene	ND	2.0	2		ug/L
1,2-Dibromo-3-Chloropropane	ND	10	2		ug/L	1,1,1-Trichloroethane	ND	2.0	2		ug/L
1,2-Dibromoethane	ND	2.0	2		ug/L	1,1,2-Trichloroethane	ND	2.0	2		ug/L
Dibromomethane	ND	2.0	2		ug/L	Trichloroethene	ND	2.0	2		ug/L
1,2-Dichlorobenzene	ND	2.0	2		ug/L	Trichlorofluoromethane	ND	20	2		ug/L
1,3-Dichlorobenzene	ND	2.0	2		ug/L	1,2,3-Trichloropropane	ND	2.0	2		ug/L
1,4-Dichlorobenzene	ND	2.0	2		ug/L	1,2,4-Trimethylbenzene	2.0	2.0	2		ug/L
Dichlorodifluoromethane	ND	2.0	2		ug/L	1,3,5-Trimethylbenzene	2.0	2.0	2		ug/L
1,1-Dichloroethane	ND	2.0	2		ug/L	Vinyl Acetate	ND	20	2		ug/L
1,2-Dichloroethane	ND	1.0	2		ug/L	Vinyl Chloride	5.0	1.0	2		ug/L
1,1-Dichloroethene	ND	2.0	2		ug/L	p/m-Xylene	ND	2.0	2		ug/L
c-1,2-Dichloroethene	ND	2.0	2		ug/L	o-Xylene	ND	2.0	2		ug/L
t-1,2-Dichloroethene	ND	2.0	2		ug/L	Methyl-tert-Butyl Ether	220	2	2		ug/L
1,2-Dichloropropane	ND	2.0	2		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	86-118		Toluene-d8	105	88-110	
1,4-Bromofluorobenzene	109	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
WELL 7	00-08-0183-6	08/04/00	Aqueous	N/A	08/09/00	000808BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	1.2	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	86-118		Toluene-d8	105	88-110	
1,4-Bromofluorobenzene	103	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
WELL 8	00-08-0183-7	08/04/00	Aqueous	N/A	08/09/00	000808BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	16	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	2.8	0.5	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	4.6	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	1.4	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	1.5	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	86-118		Toluene-d8	106	88-110	
1,4-Bromofluorobenzene	100	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
TB	00-08-0183-8	08/04/00	Aqueous	N/A	08/09/00	000808BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	109	86-118		Toluene-d8	105	88-110	
1,4-Bromofluorobenzene	98	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Company / 3917-009

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	099-10-006-615	N/A	Aqueous	N/A	08/09/00	000808BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	86-118		Toluene-d8	108	88-110	
1,4-Bromofluorobenzene	98	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/04/00
Work Order No: 00-08-0183
Preparation: Total Digestion
Method: EPA 6010B

Project: CENCO Refining Company / 3917-019

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0198-5	Aqueous	ICP 3300	08/07/00	08/08/00	080700ms6

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	103	97	80-120	6	0-20	
Arsenic	102	96	80-120	6	0-20	
Barium	96	90	80-120	5	0-20	
Beryllium	102	96	80-120	6	0-20	
Cadmium	96	91	80-120	5	0-20	
Chromium (Total)	97	92	80-120	5	0-20	
Cobalt	93	89	80-120	5	0-20	
Copper	98	92	80-120	6	0-20	
Lead	94	89	80-120	6	0-20	
Molybdenum	99	94	80-120	5	0-20	
Nickel	94	89	80-120	5	0-20	
Selenium	98	93	80-120	6	0-20	
Silver	99	94	80-120	5	0-20	
Thallium	98	94	80-120	5	0-20	
Vanadium	100	95	80-120	5	0-20	
Zinc	98	93	80-120	6	0-20	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	Filtered
Method:	EPA 7470A

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-201	Aqueous	Mercury	08/07/00	08/07/00	080700ms1

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	77	77	71-134	0	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/04/00
Work Order No: 00-08-0183
Preparation: EPA 5030B
Method: EPA 8015M

Project: CENCO Refining Company / 3917-019

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0173-1	Aqueous	GC 1	N/A	08/07/00	00080701ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	90	82	68-122	9	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/04/00
Work Order No: 00-08-0183
Preparation: N/A
Method: EPA 8260B

Project: CENCO Refining Company / 3917-019

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
WELL 8	Aqueous	GC/MS M	N/A	08/09/00	000801837

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	112	111	72-127	1	0-25	
Carbon Tetrachloride	97	99	70-130	2	0-25	
Chlorobenzene	103	100	72-131	3	0-25	
1,2-Dichlorobenzene	107	108	70-130	0	0-25	
1,1-Dichloroethene	98	94	69-127	4	0-25	
Toluene	114	111	75-124	2	0-25	
Trichloroethene	113	110	60-137	2	0-25	
Vinyl Chloride	87	90	70-130	3	0-25	
Methyl-tert-Butyl Ether	110	107	80-120	2	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/04/00
Work Order No: 00-08-0183
Preparation: Filtered
Method: EPA 6010B

Project: CENCO Refining Company / 3917-019

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-1,326	Aqueous	ICP 3300	08/08/00	000807-I	000807Ic6a

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	1.00	0.884	88	80-120	
Arsenic	1.00	0.914	91	80-120	
Barium	1.00	1.02	102	80-120	
Beryllium	1.00	0.999	100	80-120	
Cadmium	1.00	1.02	102	80-120	
Chromium (Total)	1.00	0.997	100	80-120	
Cobalt	1.00	1.02	102	80-120	
Copper	1.00	0.992	99	80-120	
Lead	1.00	1.00	100	80-120	
Molybdenum	1.00	1.01	101	80-120	
Nickel	1.00	1.04	104	80-120	
Selenium	1.00	0.985	98	80-120	
Silver	0.500	0.495	99	80-120	
Thallium	1.00	1.05	105	80-120	
Vanadium	1.00	0.991	99	80-120	
Zinc	1.00	1.02	102	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/04/00
Work Order No: 00-08-0183
Preparation: Total Digestion
Method: EPA 7470A

Project: CENCO Refining Company / 3917-019

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-008-305	Aqueous	Mercury	08/07/00	000807 I	000807lcs1

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Mercury	0.0100	0.00984	98	90-122	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	EPA 5030B
Method:	EPA 8015M

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-581	Aqueous	GC 1	N/A	08/07/00	00080701sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	92	99	79-115	8	0-19	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Company / 3917-019

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	EPA 3520B
Method:	EPA 8270C

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-003-619	Aqueous	GC/MS J	08/07/00	08/10/00	0008073

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	90	93	12-151	2	0-23	
2-Chlorophenol	89	91	45-135	2	0-18	
1,4-Dichlorobenzene	68	68	36-118	0	0-26	
N-Nitroso-di-n-propylamine	97	95	52-128	2	0-13	
1,2,4-Trichlorobenzene	76	75	42-120	1	0-21	
4-Chloro-3-Methylphenol	88	93	20-150	5	0-40	
Acenaphthene	91	93	51-137	2	0-11	
4-Nitrophenol	81	102	20-150	23	0-40	
2,4-Dinitrotoluene	97	101	25-143	5	0-36	
Pentachlorophenol	85	99	20-150	15	0-40	
Pyrene	87	81	45-135	7	0-20	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/04/00
Work Order No: 00-08-0183
Preparation: N/A
Method: EPA 8260B

Project: CENCO Refining Company / 3917-019

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-10-006-615	Aqueous	GC/MS M	08/09/00	08AUG028	000808BW

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Benzene	50	55.2	110	72-127	
Carbon Tetrachloride	50	51.0	102	70-130	
Chlorobenzene	50	50.3	100	72-131	
1,2-Dichlorobenzene	50	54.0	108	70-130	
1,1-Dichloroethene	50	48.7	97	69-127	
Toluene	50	56.2	112	75-124	
Trichloroethene	50	54.2	108	60-137	
Vinyl Chloride	50	44.8	90	79-118	
Methyl-tert-Butyl Ether	50	55.4	111	80-120	

Calscience Environmental Laboratories, Inc.

GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 00-08-0183

Qualifier	Definition
2	Surrogate spike compound was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
D	The sample data was reported from a diluted analysis.
ND	Not detected at indicated reporting limit.

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/04/00
Work Order No: 00-08-0183
Preparation: EPA 5030B
Method: EPA 8015M

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-201	00-08-0183-1	Aqueous	08/04/00	N/A	08/07/00	00080701sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	2900	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	143	57-128	2

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-204	00-08-0183-2	Aqueous	08/04/00	N/A	08/07/00	00080701sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	1300	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	119	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW-103	00-08-0183-3	Aqueous	08/04/00	N/A	08/07/00	00080701sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	520	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	108	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 503B	00-08-0183-4	Aqueous	08/04/00	N/A	08/07/00	00080701sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	5600	5000	10	D	ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	116	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/04/00
Work Order No: 00-08-0183
Preparation: EPA 5030B
Method: EPA 8015M

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
W-3A	00-08-0183-5	Aqueous	08/04/00	N/A	08/07/00	00080701sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	3400	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	122	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
WELL 7	00-08-0183-6	Aqueous	08/04/00	N/A	08/07/00	00080701sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	102	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
WELL 8	00-08-0183-7	Aqueous	08/04/00	N/A	08/08/00	00080701sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
TB	00-08-0183-8	Aqueous	08/04/00	N/A	08/08/00	00080701sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	97	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/04/00
Work Order No:	00-08-0183
Preparation:	EPA 5030B
Method:	EPA 8015M

Project: CENCO Refining Company / 3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	**098-03-006-581**	**Aqueous**	**N/A**	**N/A**	**08/07/00**	**00080701sa**

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	90	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

TO: SILLIKER L

CALS-AD-11-SCA-000007

AIN OF CUSTODY RECORD

8/3/00

1 OF 1

LABORATORY CLIENT: CALSCIENCE ENVIRONMENTAL LABS, INC.
ADDRESS: 7440 LINCOLN WAY
CITY: GARDEN GROVE, CA 92841-1432
TEL: 714-895-5494 FAX: 714-894-7501 E-MAIL

CLIENT PROJECT NAME/NUMBER: 00-08-0084
P.O. NO.:
PROJECT CONTACT: Jody McInerney
QUOTE NO.:
SAMPLER(S): (SIGNATURE)

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48HR ☐ 72 HR ☐ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___

SPECIAL INSTRUCTIONS
*MATRIX CODE: WW = Wastewater
DW = Drinking Water

Standard TAT
Fax results

1507850 -

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX*	NO. OF CONT.	Total & Fecal Coliform	SM9213E	Pseudomonas	SM9215B	HTP
49	~~MW502~~ Cancel per Desta	8/2/00	1030	W	1		X		X	
52	MW605	↓	1310	↓	1		X		X	
53	MW606	↓	1430	↓	1		X		X	
	~~MW205~~	8/2/00	0730	W	1					
	~~MW104A~~ Cancel per Desta	↓	0910	↓	1					

will call with instructions ↓

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	[signature]	8/3/00	10:30 AM
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

SILLIKER LABORATORIES
OF SOUTHERN CALIFORNIA

1139 East Dominguez, Suite I
Carson, CA 90746
310-637-7121 Fax 310-637-2953

FOOD SAFETY • QUALITY • NUTRITION

CERTIFICATE OF ANALYSIS

COA No:	SCA-15036334-0
Supersedes:	None
COA Date	8/10/00
Page 1 of 1	

TO:
Ms. Jody McInerney
Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Received From:	Garden Grove, CA
Received Date:	8/3/00
P.O.# / ID:	Garden Grove
Location of Test: (except where noted)	Carson, CA

Analytical Results

Desc. 1: Sample ID: MW502 **Desc. 4:** Matrix:W **Laboratory ID:** 150185049
Desc. 2: Date: 08/02/00 **Desc. 5:** Project #:00-08-0084 **Condition Rec'd:** NORMAL
Desc. 3: Time: 1030 **Temp Rec'd (°C):** 21.0

Analyte	Result	Units	Method Reference	Test Date	Loc.
Heterotrophic Plate Count	10	/mL	SMEWW, 19th ed.	8/6/00	
Pseudomonas aeruginosa - Filtration	<1	/100mL	SMEWW, 19th ed.	8/10/00	

Desc. 1: Sample ID: MW605 **Desc. 4:** Matrix:W **Laboratory ID:** 150185052
Desc. 2: Date: 08/02/00 **Desc. 5:** Project #:00-08-0084 **Condition Rec'd:** NORMAL
Desc. 3: Time: 1310 **Temp Rec'd (°C):** 21.0

Analyte	Result	Units	Method Reference	Test Date	Loc.
Heterotrophic Plate Count	<1	/mL	SMEWW, 19th ed.	8/6/00	
Pseudomonas aeruginosa - Filtration	<1	/100mL	SMEWW, 19th ed.	8/10/00	

Desc. 1: Sample ID: MW606 **Desc. 4:** Matrix:W **Laboratory ID:** 150185053
Desc. 2: Date: 08/02/00 **Desc. 5:** Project #:00-08-0084 **Condition Rec'd:** NORMAL
Desc. 3: Time: 1430 **Temp Rec'd (°C):** 21.0

Analyte	Result	Units	Method Reference	Test Date	Loc.
Heterotrophic Plate Count	<1	/mL	SMEWW, 19th ed.	8/6/00	
Pseudomonas aeruginosa - Filtration	<1	/100mL	SMEWW, 19th ed.	8/10/00	

Vidhya Gangar
Vidhya Gangar Laboratory Director

The results of these tests relate only to the samples tested. This report shall not be reproduced except in full, without the written approval of the laboratory.

Versar INC. (127)

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME	INDUSTRIAL HYGIENE SAMPLE
3917-019	CENCO REFINING CO.	Y / N

SAMPLERS: (Signature) Dale Anderson (Printed) DALE ANDERSON

FIELD SAMPLE NUMBER	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TPH-G 8015 VOCs 8260	SVOCs 8270	DISS. METALS 6010/7471	TOTAL HEXAVALENTS	PSEUDOMONAS	FERROUS			REMARKS
W-4	8/3/00	0755		X		6	X	X	X						
W-1	8/3/00	0915		X		6	↓	↓	↓						
MW 604	8/3/00	1030		X		6	↓	↓	↓						
MW 601A	8/3/00	1145		X		6	↓	↓	↓						
MW 101	8/3/00	1515		X		6	↓	↓	↓						
MW 205	8/3/00	1545		X		2				X	X	X			
MW 104A	8/3/00	1600		X		1				X	X				
TB	8/3/00					2	X	X							
DUP 3	8/3/00	—		X		4	X	X							

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Dale Anderson	8/3/00 16:24	Budiono Kristianto			
(Printed) DALE ANDERSON		(Printed)	(Printed)		(Printed)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
Budiono Kristianto	8/3/00 17:03	[signature]	8/3 1703	STD TAT LMCLs R.A. INCLUDE MTBE
(Printed) BUDIONO KRISTIANTO		(Printed)		

Distribution: Original Plus One Accompanies Shipment (white and yellow); Copy to Coordinator Field Files (pink).

Calscience
Environmental
Laboratories, Inc.

August 10, 2000

Tim Berger
Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Subject: **Calscience Work Order No.: 00-08-0127**
Client Reference: CENCO Refining Co. / 3917-019

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 08/03/00 and analyzed in accordance with the attached chain-of-custody.

The results in this analytical report are limited to the samples tested and any reproduction of this report must be made in its entirety.

If you have any questions regarding this report, require sampling supplies or field services, or information on our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Jody McInerney
Project Manager

William H. Christensen
Quality Assurance Manager

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/03/00
7844 Madison Avenue, Suite 167	Date Received:	08/03/00
Fair Oaks, California 95628	Date Analyzed:	08/04-07/00
	Work Order No.:	00-08-0127
Attn: Tim Berger		
RE: CENCO Refining Co. / 3917-019	Page 1 of 6	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: W-4			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.00203	0.00200
Barium	EPA 6010B	0.448	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	0.0195	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0119	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0389	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/03/00
7844 Madison Avenue, Suite 167	Date Received:	08/03/00
Fair Oaks, California 95628	Date Analyzed:	08/04-07/00
	Work Order No.:	00-08-0127
Attn: Tim Berger		
RE: CENCO Refining Co. / 3917-019	Page 2 of 6	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: W-1			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	1.17	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	0.0121	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.00975	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00199	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0187	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.		Date Sampled:	08/03/00
7844 Madison Avenue, Suite 167		Date Received:	08/03/00
Fair Oaks, California 95628		Date Analyzed:	08/04-07/00
		Work Order No.:	00-08-0127
Attn: Tim Berger			
RE: CENCO Refining Co. / 3917-019		Page 3 of 6	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 604			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	1.17	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	0.0118	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0122	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	0.00186	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0200	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.		Date Sampled:	08/03/00
7844 Madison Avenue, Suite 167		Date Received:	08/03/00
Fair Oaks, California 95628		Date Analyzed:	08/04-07/00
		Work Order No.:	00-08-0127
Attn: Tim Berger			
RE: CENCO Refining Co. / 3917-019		Page 4 of 6	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 601A			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.239	0.00200
Barium	EPA 6010B	0.456	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	0.0107	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	0.00678	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0129	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0271	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	08/03/00
7844 Madison Avenue, Suite 167	Date Received:	08/03/00
Fair Oaks, California 95628	Date Analyzed:	08/04-07/00
	Work Order No.:	00-08-0127
Attn: Tim Berger		
RE: CENCO Refining Co. / 3917-019	Page 5 of 6	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: MW 101			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	0.0794	0.00200
Barium	EPA 6010B	0.0583	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	0.0140	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	0.0334	0.0100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.	Date Sampled:	NA
7844 Madison Avenue, Suite 167	Date Received:	NA
Fair Oaks, California 95628	Date Analyzed:	08/04-07/00
	Work Order No.:	00-08-0127
Attn: Tim Berger		
RE: CENCO Refining Co. / 3917-019	Page 6 of 6	

All concentrations are reported in mg/L (ppm). Analyses for metals were conducted on an unaltered sample.

Analyte	Method	Concentration	Reporting Limit
Sample Number: Method Blank			
Antimony	EPA 6010B	ND	0.00300
Arsenic	EPA 6010B	ND	0.00200
Barium	EPA 6010B	ND	0.0100
Beryllium	EPA 6010B	ND	0.00100
Cadmium	EPA 6010B	ND	0.00100
Chromium	EPA 6010B	ND	0.00500
Cobalt	EPA 6010B	ND	0.00500
Copper	EPA 6010B	ND	0.0100
Lead	EPA 6010B	ND	0.00500
Mercury	EPA 7470A	ND	0.00100
Molybdenum	EPA 6010B	ND	0.00500
Nickel	EPA 6010B	ND	0.00500
Selenium	EPA 6010B	ND	0.00500
Silver	EPA 6010B	ND	0.00500
Thallium	EPA 6010B	ND	0.00100
Vanadium	EPA 6010B	ND	0.00500
Zinc	EPA 6010B	ND	0.0100

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/03/00
Work Order No: 00-08-0127
Preparation: N/A
Method: SM3500D

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 205	**00-08-0127-6**	**Aqueous**	**08/03/00**	**N/A**	**08/03/00**	**000803FE21**

Parameter	Result	RL	DF	Qual	Units
Iron + 2	ND	0.10	1		mg/l

Method Blank	**099-05-001-704**	**Aqueous**	**N/A**	**N/A**	**08/03/00**	**000803FE21**

Parameter	Result	RL	DF	Qual	Units
Iron + 2	ND	0.10	1		mg/l

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/03/00
Work Order No: 00-08-0127
Preparation: EPA 5030B
Method: EPA 8015M

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
W-4	00-08-0127-1	Aqueous	08/03/00	N/A	08/04/00	00080401sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	105	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
W-1	00-08-0127-2	Aqueous	08/03/00	N/A	08/04/00	00080401sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	880	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	121	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 604	00-08-0127-3	Aqueous	08/03/00	N/A	08/04/00	00080401sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	560	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	128	57-128	

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 601A	00-08-0127-4	Aqueous	08/03/00	N/A	08/05/00	00080401sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	34000	5000	10	D	ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	96	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/03/00
Work Order No: 00-08-0127
Preparation: EPA 5030B
Method: EPA 8015M

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 101	00-08-0127-5	Aqueous	08/03/00	N/A	08/04/00	00080401sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	108	57-128	

DUP 3	00-08-0127-9	Aqueous	08/03/00	N/A	08/04/00	00080401sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	940	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	118	57-128	

Method Blank	098-03-006-578	Aqueous	N/A	N/A	08/04/00	00080401sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	88	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
W-4	00-08-0127-1	08/03/00	Aqueous	08/03/00	08/08/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	78	15-138		Phenol-d6	78	17-141	
Nitrobenzene-d5	87	56-123		2-Fluorobiphenyl	69	45-120	
2,4,6-Tribromophenol	86	32-143		p-Terphenyl-d14	84	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
W-1	00-08-0127-2	08/03/00	Aqueous	08/03/00	08/08/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	61	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	41	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	83	15-138		Phenol-d6	85	17-141	
Nitrobenzene-d5	89	56-123		2-Fluorobiphenyl	60	45-120	
2,4,6-Tribromophenol	91	32-143		p-Terphenyl-d14	85	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 604	00-08-0127-3	08/03/00	Aqueous	08/03/00	08/08/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	80	15-138		Phenol-d6	77	17-141	
Nitrobenzene-d5	89	56-123		2-Fluorobiphenyl	73	45-120	
2,4,6-Tribromophenol	90	32-143		p-Terphenyl-d14	91	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 601A	00-08-0127-4	08/03/00	Aqueous	08/03/00	08/08/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	69	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	25	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	15	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	85	15-138		Phenol-d6	90	17-141	
Nitrobenzene-d5	90	56-123		2-Fluorobiphenyl	69	45-120	
2,4,6-Tribromophenol	97	32-143		p-Terphenyl-d14	86	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 101	00-08-0127-5	08/03/00	Aqueous	08/03/00	08/09/00	00080310

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	81	15-138		Phenol-d6	81	17-141	
Nitrobenzene-d5	83	56-123		2-Fluorobiphenyl	72	45-120	
2,4,6-Tribromophenol	83	32-143		p-Terphenyl-d14	85	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	EPA 3520B
Method:	EPA 8270C

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	**095-01-003-618**	**N/A**	**Aqueous**	**08/03/00**	**08/08/00**	**00080310**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	77	15-138		Phenol-d6	80	17-141	
Nitrobenzene-d5	83	56-123		2-Fluorobiphenyl	65	45-120	
2,4,6-Tribromophenol	79	32-143		p-Terphenyl-d14	74	46-133	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
W-4	00-08-0127-1	08/03/00	Aqueous	N/A	08/08/00	000807BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	47	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	8.8	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	1.5	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	2.3	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	1.6	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	12	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	1.2	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	92	86-118		Toluene-d8	103	88-110	
1,4-Bromofluorobenzene	98	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
W-1	00-08-0127-2	08/03/00	Aqueous	N/A	08/08/00	000807BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	29	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	18	1	1		ug/L
n-Butylbenzene	2.0	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	3.2	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	18	1	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	1.6	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	7.3	0.5	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	1.6	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	10	1	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	92	86-118		Toluene-d8	108	88-110	
1,4-Bromofluorobenzene	94	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 604	00-08-0127-3	08/03/00	Aqueous	N/A	08/08/00	000808AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	100	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	19	1	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	5.6	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	1.1	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	8.7	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	30	1	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	86-118		Toluene-d8	108	88-110	
1,4-Bromofluorobenzene	107	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 601A	00-08-0127-4	08/03/00	Aqueous	N/A	08/08/00	000808AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	2000	200		ug/L	1,3-Dichloropropane	ND	200	200		ug/L
Benzene	21000	100	200		ug/L	2,2-Dichloropropane	ND	200	200		ug/L
Bromobenzene	ND	200	200		ug/L	1,1-Dichloropropene	ND	200	200		ug/L
Bromochloromethane	ND	200	200		ug/L	c-1,3-Dichloropropene	ND	100	200		ug/L
Bromodichloromethane	ND	200	200		ug/L	t-1,3-Dichloropropene	ND	100	200		ug/L
Bromoform	ND	200	200		ug/L	Ethylbenzene	ND	200	200		ug/L
Bromomethane	ND	200	200		ug/L	2-Hexanone	ND	2000	200		ug/L
2-Butanone	ND	2000	200		ug/L	Isopropylbenzene	ND	200	200		ug/L
n-Butylbenzene	ND	200	200		ug/L	p-Isopropyltoluene	ND	200	200		ug/L
sec-Butylbenzene	ND	200	200		ug/L	Methylene Chloride	ND	2000	200		ug/L
tert-Butylbenzene	ND	200	200		ug/L	4-Methyl-2-Pentanone	ND	2000	200		ug/L
Carbon Disulfide	ND	2000	200		ug/L	Naphthalene	ND	2000	200		ug/L
Carbon Tetrachloride	ND	100	200		ug/L	n-Propylbenzene	ND	200	200		ug/L
Chlorobenzene	ND	200	200		ug/L	Styrene	ND	200	200		ug/L
Chloroethane	ND	200	200		ug/L	1,1,1,2-Tetrachloroethane	ND	200	200		ug/L
Chloroform	ND	200	200		ug/L	1,1,2,2-Tetrachloroethane	ND	200	200		ug/L
Chloromethane	ND	200	200		ug/L	Tetrachloroethene	ND	200	200		ug/L
2-Chlorotoluene	ND	200	200		ug/L	Toluene	ND	200	200		ug/L
4-Chlorotoluene	ND	200	200		ug/L	1,2,3-Trichlorobenzene	ND	200	200		ug/L
Dibromochloromethane	ND	200	200		ug/L	1,2,4-Trichlorobenzene	ND	200	200		ug/L
1,2-Dibromo-3-Chloropropane	ND	1000	200		ug/L	1,1,1-Trichloroethane	ND	200	200		ug/L
1,2-Dibromoethane	ND	200	200		ug/L	1,1,2-Trichloroethane	ND	200	200		ug/L
Dibromomethane	ND	200	200		ug/L	Trichloroethene	ND	200	200		ug/L
1,2-Dichlorobenzene	ND	200	200		ug/L	Trichlorofluoromethane	ND	2000	200		ug/L
1,3-Dichlorobenzene	ND	200	200		ug/L	1,2,3-Trichloropropane	ND	200	200		ug/L
1,4-Dichlorobenzene	ND	200	200		ug/L	1,2,4-Trimethylbenzene	ND	200	200		ug/L
Dichlorodifluoromethane	ND	200	200		ug/L	1,3,5-Trimethylbenzene	ND	200	200		ug/L
1,1-Dichloroethane	ND	200	200		ug/L	Vinyl Acetate	ND	2000	200		ug/L
1,2-Dichloroethane	ND	100	200		ug/L	Vinyl Chloride	ND	100	200		ug/L
1,1-Dichloroethene	ND	200	200		ug/L	p/m-Xylene	ND	200	200		ug/L
c-1,2-Dichloroethene	ND	200	200		ug/L	o-Xylene	ND	200	200		ug/L
t-1,2-Dichloroethene	ND	200	200		ug/L	Methyl-tert-Butyl Ether	5600	200	200		ug/L
1,2-Dichloropropane	ND	200	200		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	86-118		Toluene-d8	106	88-110	
1,4-Bromofluorobenzene	100	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
MW 101	00-08-0127-5	08/03/00	Aqueous	N/A	08/08/00	000808AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	20	2		ug/L	1,3-Dichloropropane	ND	2.0	2		ug/L
Benzene	24	1	2		ug/L	2,2-Dichloropropane	ND	2.0	2		ug/L
Bromobenzene	ND	2.0	2		ug/L	1,1-Dichloropropene	ND	2.0	2		ug/L
Bromochloromethane	ND	2.0	2		ug/L	c-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromodichloromethane	ND	2.0	2		ug/L	t-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromoform	ND	2.0	2		ug/L	Ethylbenzene	ND	2.0	2		ug/L
Bromomethane	ND	2.0	2		ug/L	2-Hexanone	ND	20	2		ug/L
2-Butanone	ND	20	2		ug/L	Isopropylbenzene	ND	2.0	2		ug/L
n-Butylbenzene	ND	2.0	2		ug/L	p-Isopropyltoluene	ND	2.0	2		ug/L
sec-Butylbenzene	ND	2.0	2		ug/L	Methylene Chloride	ND	20	2		ug/L
tert-Butylbenzene	ND	2.0	2		ug/L	4-Methyl-2-Pentanone	ND	20	2		ug/L
Carbon Disulfide	ND	20	2		ug/L	Naphthalene	ND	20	2		ug/L
Carbon Tetrachloride	ND	1.0	2		ug/L	n-Propylbenzene	ND	2.0	2		ug/L
Chlorobenzene	ND	2.0	2		ug/L	Styrene	ND	2.0	2		ug/L
Chloroethane	ND	2.0	2		ug/L	1,1,1,2-Tetrachloroethane	ND	2.0	2		ug/L
Chloroform	ND	2.0	2		ug/L	1,1,2,2-Tetrachloroethane	ND	2.0	2		ug/L
Chloromethane	ND	2.0	2		ug/L	Tetrachloroethene	37	2	2		ug/L
2-Chlorotoluene	ND	2.0	2		ug/L	Toluene	ND	2.0	2		ug/L
4-Chlorotoluene	ND	2.0	2		ug/L	1,2,3-Trichlorobenzene	ND	2.0	2		ug/L
Dibromochloromethane	ND	2.0	2		ug/L	1,2,4-Trichlorobenzene	ND	2.0	2		ug/L
1,2-Dibromo-3-Chloropropane	ND	10	2		ug/L	1,1,1-Trichloroethane	ND	2.0	2		ug/L
1,2-Dibromoethane	ND	2.0	2		ug/L	1,1,2-Trichloroethane	ND	2.0	2		ug/L
Dibromomethane	ND	2.0	2		ug/L	Trichloroethene	270	2	2		ug/L
1,2-Dichlorobenzene	ND	2.0	2		ug/L	Trichlorofluoromethane	ND	20	2		ug/L
1,3-Dichlorobenzene	ND	2.0	2		ug/L	1,2,3-Trichloropropane	ND	2.0	2		ug/L
1,4-Dichlorobenzene	ND	2.0	2		ug/L	1,2,4-Trimethylbenzene	ND	2.0	2		ug/L
Dichlorodifluoromethane	ND	2.0	2		ug/L	1,3,5-Trimethylbenzene	ND	2.0	2		ug/L
1,1-Dichloroethane	15	2	2		ug/L	Vinyl Acetate	ND	20	2		ug/L
1,2-Dichloroethane	3.6	1.0	2		ug/L	Vinyl Chloride	5.0	1.0	2		ug/L
1,1-Dichloroethene	92	2	2		ug/L	p/m-Xylene	ND	2.0	2		ug/L
c-1,2-Dichloroethene	33	2	2		ug/L	o-Xylene	ND	2.0	2		ug/L
t-1,2-Dichloroethene	19	2	2		ug/L	Methyl-tert-Butyl Ether	ND	2.0	2		ug/L
1,2-Dichloropropane	ND	2.0	2		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	86-118		Toluene-d8	109	88-110	
1,4-Bromofluorobenzene	99	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
TB	00-08-0127-8	08/03/00	Aqueous	N/A	08/08/00	000807BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	86-118		Toluene-d8	102	88-110	
1,4-Bromofluorobenzene	90	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
DUP 3	00-08-0127-9	08/03/00	Aqueous	N/A	08/09/00	000808AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	31	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	19	1	1		ug/L
n-Butylbenzene	2.1	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	3.6	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	18	1	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	2.3	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	7.5	0.5	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	1.8	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	14	1	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	86-118		Toluene-d8	109	88-110	
1,4-Bromofluorobenzene	107	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	099-10-006-609	N/A	Aqueous	N/A	08/08/00	000807BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	86-118		Toluene-d8	104	88-110	
1,4-Bromofluorobenzene	88	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	EPA 8260B

Project: CENCO Refining Co. / 3917-019

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	099-10-006-613	N/A	Aqueous	N/A	08/08/00	000808AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	106	86-118		Toluene-d8	107	88-110	
1,4-Bromofluorobenzene	100	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Co. / 3917-019

Date Received: 08/03/00
Work Order No: 00-08-0127
Preparation: Total Digestion
Method: EPA 6010B

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0115-3	Aqueous	ICP 3300	08/04/00	08/07/00	080400ms4

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	105	102	80-120	3	0-20	
Arsenic	105	102	80-120	3	0-20	
Barium	98	96	80-120	2	0-20	
Beryllium	99	97	80-120	2	0-20	
Cadmium	96	94	80-120	2	0-20	
Chromium (Total)	98	96	80-120	2	0-20	
Cobalt	92	90	80-120	2	0-20	
Copper	93	91	80-120	2	0-20	
Lead	93	91	80-120	3	0-20	
Molybdenum	100	97	80-120	3	0-20	
Nickel	93	90	80-120	2	0-20	
Selenium	97	96	80-120	1	0-20	
Silver	103	100	80-120	3	0-20	
Thallium	98	95	80-120	3	0-20	
Vanadium	102	100	80-120	2	0-20	
Zinc	108	98	80-120	9	0-20	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Co. / 3917-019

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	Filtered
Method:	EPA 7470A

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-4	Aqueous	Mercury	08/04/00	08/04/00	080400ms3

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	79	78	71-134	1	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Co. / 3917-019

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	SM3500D

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0129-2	Aqueous	8453	N/A	08/03/00	000803FE22

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Iron + 2	92	96	70-130	4	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Co. / 3917-019

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	EPA 5030B
Method:	EPA 8015M

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0126-1	Aqueous	GC 29	N/A	08/04/00	00080401ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	114	110	68-122	4	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Co. / 3917-019

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	EPA 8260B

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0059-2	Aqueous	GC/MS M	N/A	08/08/00	000800592

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	103	72-127	2	0-25	
Carbon Tetrachloride	92	93	70-130	1	0-25	
Chlorobenzene	107	104	72-131	2	0-25	
1,2-Dichlorobenzene	107	105	70-130	3	0-25	
1,1-Dichloroethene	95	94	69-127	2	0-25	
Toluene	107	105	75-124	2	0-25	
Trichloroethene	103	101	60-137	2	0-25	
Vinyl Chloride	83	84	70-130	1	0-25	
Methyl-tert-Butyl Ether	106	102	80-120	3	0-25	

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Quality Control - Spike/Spike Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Date Received: 08/03/00
Work Order No: 00-08-0127
Preparation: N/A
Method: EPA 8260B

Project: CENCO Refining Co. / 3917-019

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-08-0173-1	Aqueous	GC/MS M	N/A	08/09/00	000801731

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	110	112	72-127	2	0-25	
Carbon Tetrachloride	92	100	70-130	9	0-25	
Chlorobenzene	101	102	72-131	1	0-25	
1,2-Dichlorobenzene	107	108	70-130	1	0-25	
1,1-Dichloroethene	97	96	69-127	0	0-25	
Toluene	111	113	75-124	2	0-25	
Trichloroethene	109	112	60-137	3	0-25	
Vinyl Chloride	88	92	70-130	4	0-25	
Methyl-tert-Butyl Ether	112	116	80-120	4	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Co. / 3917-019

Date Received: 08/03/00
Work Order No: 00-08-0127
Preparation: Total Digestion
Method: EPA 6010B

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
097-01-003-1,323	Aqueous	ICP 3300	08/07/00	000804-I	000804lcs4

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Antimony	1.00	0.890	89	80-120	
Arsenic	1.00	0.914	91	80-120	
Barium	1.00	1.03	103	80-120	
Beryllium	1.00	0.988	99	80-120	
Cadmium	1.00	1.02	102	80-120	
Chromium (Total)	1.00	1.00	100	80-120	
Cobalt	1.00	1.03	103	80-120	
Copper	1.00	0.989	99	80-120	
Lead	1.00	0.999	100	80-120	
Molybdenum	1.00	1.00	100	80-120	
Nickel	1.00	1.04	104	80-120	
Selenium	1.00	1.00	100	80-120	
Silver	0.500	0.494	99	80-120	
Thallium	1.00	1.04	104	80-120	
Vanadium	1.00	0.995	100	80-120	
Zinc	1.00	1.19	119	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Co. / 3917-019

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	Filtered
Method:	EPA 7470A

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-04-008-304	Aqueous	Mercury	08/04/00	000804 I	000804lcs3

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Mercury	0.0100	0.00961	96	90-122	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Co. / 3917-019

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	SM3500D

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-05-001-704	Aqueous	8453	08/03/00		000803FE21

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Iron + 2	1.00	0.987	99	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Co. / 3917-019

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	EPA 5030B
Method:	EPA 8015M

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-578	Aqueous	GC 29	N/A	08/04/00	00080401sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	113	112	79-115	1	0-19	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Co. / 3917-019

Date Received: 08/03/00
Work Order No: 00-08-0127
Preparation: EPA 3520B
Method: EPA 8270C

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-003-618	Aqueous	GC/MS J	08/03/00	08/08/00	00080310

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	87	84	12-151	4	0-23	
2-Chlorophenol	84	81	45-135	4	0-18	
1,4-Dichlorobenzene	74	70	36-118	5	0-26	
N-Nitroso-di-n-propylamine	84	81	52-128	4	0-13	
1,2,4-Trichlorobenzene	78	75	42-120	4	0-21	
4-Chloro-3-Methylphenol	85	82	20-150	3	0-40	
Acenaphthene	81	81	51-137	1	0-11	
4-Nitrophenol	91	86	20-150	6	0-40	
2,4-Dinitrotoluene	89	85	25-143	4	0-36	
Pentachlorophenol	92	82	20-150	12	0-40	
Pyrene	75	73	45-135	2	0-20	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Co. / 3917-019

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	EPA 8260B

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-10-006-609	Aqueous	GC/MS M	08/07/00	07AUG027	000807BW

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Benzene	50	53.3	107	72-127	
Carbon Tetrachloride	50	48.4	97	70-130	
Chlorobenzene	50	53.8	108	72-131	
1,2-Dichlorobenzene	50	53.1	106	70-130	
1,1-Dichloroethene	50	48.5	97	69-127	
Toluene	50	53.8	108	75-124	
Trichloroethene	50	51.8	104	60-137	
Vinyl Chloride	50	43.7	87	79-118	
Methyl-tert-Butyl Ether	50	49.0	98	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Versar, Inc.
7844 Madison Avenue, Suite 167
Fair Oaks, California 95628

Project: CENCO Refining Co. / 3917-019

Date Received:	08/03/00
Work Order No:	00-08-0127
Preparation:	N/A
Method:	EPA 8260B

LCS Sample Number	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-10-006-613	Aqueous	GC/MS M	08/08/00	08AUG003	000808AW

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Benzene	50	56.1	112	72-127	
Carbon Tetrachloride	50	50.6	101	70-130	
Chlorobenzene	50	51.5	103	72-131	
1,2-Dichlorobenzene	50	55.8	112	70-130	
1,1-Dichloroethene	50	49.4	99	69-127	
Toluene	50	57.5	115	75-124	
Trichloroethene	50	56.0	112	60-137	
Vinyl Chloride	50	46.4	93	79-118	
Methyl-tert-Butyl Ether	50	55.1	110	80-120	

Calscience Environmental Laboratories, Inc.

GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 00-08-0127

Qualifier	Definition
D	The sample data was reported from a diluted analysis.
ND	Not detected at indicated reporting limit.

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
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Silliker

CALS-AD-11-SCA-000008

CHAIN OF CUSTODY RECORD

Date 8/3/00

Page 1 of 1

LABORATORY CLIENT:

ADDRESS:

CITY STATE ZIP

TEL: FAX: E-MAIL:

CLIENT PROJECT NAME / NUMBER: 00-08-0127

PROJECT CONTACT: Jody McInerney

SAMPLER(S): (SIGNATURE)

P.O. NO.:

QUOTE NO.:

LAB USE ONLY

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___ / ___ / ___.

SPECIAL INSTRUCTIONS
Std TAT; FAX results

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) (O)	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B)	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	ICP/MS METALS (6020)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	CH_4 / TGNMO (25.1)	FIXED GASES (25.1) or (D1946)	Pseudomonas	HPC → See Previous Project for methods		
1507853 18	MW205		8/3/00	1545	W	1																X	X		
19	MW 104A		↓	1600	W	1																X	X		

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	[signature]	8/3/00	1625
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date:	Time:

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CERTIFICATE OF ANALYSIS

COA No:	SCA-15036335-0
Supersedes:	None
COA Date	8/10/00
Page 1 of 1	

TO:
Ms. Jody McInerney
Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

AUG 15 2000

Received From:	Garden Grove, CA
Received Date:	8/3/00
P.O.# / ID:	Garden Grove
Location of Test: (except where noted)	Carson, CA

Analytical Results

Desc. 1: Sample ID: MW205 **Desc. 4:** Matrix:W **Laboratory ID:** 150185318
Desc. 2: Date: 08/03/00 **Desc. 5:** Project #:00-08-0127 **Condition Rec'd:** NORMAL
Desc. 3: Time: 1545 **Temp Rec'd (°C):** 7.1

Analyte	Result	Units	Method Reference	Test Date	Loc.
Heterotrophic Plate Count	2200	/mL	SMEWW, 19th ed.	8/6/00	
Pseudomonas aeruginosa - Filtration	11	/100mL	SMEWW, 19th ed.	8/10/00	

Desc. 1: Sample ID: MW104A **Desc. 4:** Matrix:W **Laboratory ID:** 150185319
Desc. 2: Date: 08/03/00 **Desc. 5:** Project #:00-08-0127 **Condition Rec'd:** NORMAL
Desc. 3: Time: 1600 **Temp Rec'd (°C):** 7.1

Analyte	Result	Units	Method Reference	Test Date	Loc.
Heterotrophic Plate Count	640	/mL	SMEWW, 19th ed.	8/6/00	
Pseudomonas aeruginosa - Filtration	36	/100mL	SMEWW, 19th ed.	8/10/00	

Vidhya Gangar
Vidhya Gangar Laboratory Director

The results of these tests relate only to the samples tested. This report shall not be reproduced except in full, without the written approval of the laboratory.

APPENDIX B

GROUNDWATER MONITORING WELL PURGE TABLES AND SAMPLING LOGS

FLUID LEVEL MEASUREMENT FORM

Project Number: 3917-019	**Site Name:** CENCO Refining Company
Date: 7-31-00	**Measure Device/ID No.:** VERSAR RED SOLONIST

Monitoring Well ID	Time	Depth to Water	Free Product Measurement (KECK INTERFACE PROBE) First Fluid Level	Second Fluid Level	Thickness	Notes (OVM)
104A	1215	81.5				18 PPM
MW 105	1224	80.72				0
201	1238	82.44				18
101	1243	81.20				126.0
205	1252	81.60				104
204	1305	87.17				121
202	1322	86.78				13
606	1421	82.12				4
605	1435	79.54				NR
603	1438	78.00				NR
607	1450	92.02				NR
604	1500	94.21				NR
601A	1517	82.83	82.70	82.72	.02	NR VISIBLE VAPORS FROM WELL HEAD
600A	1526	—	78.58	78.99	.40	NR " "
502	1601	83.48				NR
501A	1605	83.24				NR
503B	1754	84.17				NR
504	1803	—	83.96	84.90	.94	NR VISIBLE VAPORS STRONG ODOR
103	1812	85.80				NR
106	1820	85.18				NR
107	1828	91.90				NR
203	1832	90.60				NR
W-1	1840	94.00				NR
W-4	1845	96.88				NR
W3A	1855	—	97.10	97.14	.04	NR
EW-1	1910		89.14	91.72	2.58	NR DARK NAPL ON PROBE

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW101	**Date(s) Purged:** 8/3/00
OVM - Ambient: 0	**Purge Method:** VAC TRUCK
OVM - Vault: 76	**Purge Rate:**
OVM - Casing: 76	**Date & Time Sampled:** 8/3/00 1515
Water Level - Initial: 81.23 @ 1430	**Purged & Sampled:** Dale Anderson
Water Level - Final: 81.35	**Sampling Method:** Disposable Bailer
Well Depth: 95 RECHECKED 90.2	**Free Product:** 0
Well Diameter: 4 inch	**Sheen:** 0
Well Casing Volume: 10.3	**Odor:** SLIGHT HYDRO

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1448	4	27.38	7.54	1860	313	2.44	Low
1450	7	24.75	7.55	1870	309	2.06	Low
1452	10	23.79	7.56	1860	291	1.90	"
1455	14	23.43	7.56	1880	274	2.09	"
1456	18	23.55	7.56	1880	244	1.98	"
1458	21	23.46	7.56	1900	224	2.04	"
1500	24	23.86	7.53	1910	195	1.72	"
1502	28	23.39	7.55	1880	194	2.27	"
1504	31	23.74	7.57	1820	175	2.0	"
1515	Sample						

STINGER SET @ 90' bgs

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 103	**Date(s) Purged:** 8/4/00
OVM - Ambient: 13	**Purge Method:** VAC TRUCK
OVM - Vault: 16	**Purge Rate:**
OVM - Casing: 14	**Date & Time Sampled:** 8/4/00 0943
Water Level - Initial: 85.86 0906	**Purged & Sampled:** Dale Anderson
Water Level - Final: 85.86 0938	**Sampling Method:** Disposable Bailer
Well Depth: 94.1	**Free Product:**
Well Diameter: 4 inch	**Sheen:**
Well Casing Volume: 5.4	**Odor:**

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
0928	2	24.58	7.67	2180	314	2.48	HIGH
0929	4	24.33	7.65	2200	314	2.27	569
0930	6	24.49	7.65	2260	312	2.20	HIGH
0931	8	24.46	7.63	2260	310	1.86	MOD
0932	10	24.62	7.65	2260	308	2.0	31.1
0933	12	24.44	7.63	2260	305	1.98	~~2.8~~ MOD
0934	14	24.58	7.63	2250	303	2.11	251
0935	16	24.44	7.63	2260	301	2.06	MOD
0936	18	24.46	7.65	2260	298	2.43	"
0945	Sample						

Stinger set 90' +5'

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 104A	**Date(s) Purged:** 8/2/00
OVM - Ambient: 0	**Purge Method:** VAC TRUCK
OVM - Vault: 0	**Purge Rate:**
OVM - Casing: 0	**Date & Time Sampled:** 8/2/00 0910
Water Level - Initial: 81.54' @ 08:20	**Purged & Sampled:** Dale Anderson
Water Level - Final: 81.85 @ 0900	**Sampling Method:** Disposable Bailer
Well Depth: 97.0'	**Free Product:**
Well Diameter: 4 inch	**Sheen:**
Well Casing Volume: 10.18	**Odor:**

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
0843	3	24.65	7.85	2380	289	2.05	Low
0844	6	24.60	7.87	2320	286	1.51	"
0846	10	24.34	7.87	2250	282	1.56	"
0848	13	24.43	7.85	2230	270	1.54	"
0850	16	24.38	7.84	2200	259	1.45	
0852	20	NR	NR	NR	NR	NR	Low
0854	23	24.50	7.82	2200	241	1.58	"
0855	26	25.11	7.79	2180	225	1.36	"
0858	31	25.28	7.79	2160	222	1.66	"
0910	Sample						

SINGLE SET @ 90' bgs

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 105	**Date(s) Purged:** 8/1/00
OVM - Ambient: NR	**Purge Method:** VAC TRUCK
OVM - Vault: NR	**Purge Rate:**
OVM - Casing: NR	**Date & Time Sampled:** 8/1/00 0915
Water Level - Initial: 80.79 @ 0814	**Purged & Sampled:** Dale Anderson
Water Level - Final: 81.80	**Sampling Method:** Disposable Bailer
Well Depth: 98.95	**Free Product:** Ø
Well Diameter: 4 inch	**Sheen:** Ø
Well Casing Volume: 12 GAL	**Odor:** Ø

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (~~µ~~mhos) mS	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
~~0814~~ 0834	4	22.14	7.56	1.146	373	1.61	CLEAR
0836	8	19.47	7.76	2.15	326	2.02	"
0838	12	20.83	7.98	2.20	299	1.70	"
0842	16	21.55	7.84	1.97	281	1.60	LOW
0847	20	21.24	7.85	2.24	269	1.72	"
0851	24	21.45	7.85	2.25	253	1.81	"
0855	28	21.97	7.87	2.25	243	1.96	"
0900	32	23.24	7.87	2.16	248	1.44	"
0904	36	22.42	7.91	2.16	247	1.89	"
0915	Sample						

STINGER SET AT 90' BGS

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW106	**Date(s) Purged:** 8/1/00
OVM - Ambient: NR	**Purge Method:** VAC TRUCK
OVM - Vault: NR	**Purge Rate:**
OVM - Casing: NR	**Date & Time Sampled:** 8/1/00 1345
Water Level - Initial: 85.15 @ 1252	**Purged & Sampled:** Dale Anderson
Water Level - Final: 86.6 @ 1323	**Sampling Method:** Disposable Bailer
Well Depth: 106.50	**Free Product:** Ø
Well Diameter: 4 inch	**Sheen:** Ø
Well Casing Volume: 14.	**Odor:** Ø

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (~~µm~~mhos) mM	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1258	~~14~~ 5	29.16	7.83	2.12	308	2.04	Low
1301	~~8~~ 10	26.46	7.92	2.14	302	1.87	"
1304	15	26.27	7.91	2.13	300	1.72	"
1307	20	26.10	7.91	2.12	297	1.94	"
1310	25	26.27	7.91	2.12	295	1.59	"
1314	30	27.15	7.90	2.11	292	1.59	"
1316	35	26.52	7.93	2.11	291	1.84	"
1319	40	26.51	7.92	2.11	292	1.76	"
1322	45	26.70	7.92	2.11	292	2.04	"
1345	Sample						

STINGER SET 95' bgs

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 107	**Date(s) Purged:** 8/1/00
OVM - Ambient: NR	**Purge Method:** VAC TRUCK
OVM - Vault: NR	**Purge Rate:**
OVM - Casing: NR	**Date & Time Sampled:** 8/1/00 1215
Water Level - Initial: 91.9' @ 1130	**Purged & Sampled:** Dale Anderson
Water Level - Final: 92.20	**Sampling Method:** Disposable Bailer
Well Depth: 107.3'	**Free Product:** Ø
Well Diameter: 4 inch	**Sheen:** Ø
Well Casing Volume: 10 gal	**Odor:** Ø

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity ~~(µmhos)~~ mS/cm	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1145	3	27.59	7.79	3.12	288	1.98	Low
1148	6	25.22	7.86	3.16	268	1.50	"
1150	10	24.56	7.87	3.17	257	1.74	"
1153	13	25.35	7.85	3.15	233	1.29	"
1155	16	24.70	7.85	3.16	228	1.61	"
1158	20	24.78	7.83	3.14	222	1.42	"
1200	23	24.88	7.83	3.16	226	1.62	"
1202	28	24.70	7.84	3.16	223	1.80	"
1205	30	25.00	7.84	3.16	219	1.70	
1215	Sample						

STINGER AT 100' bgs

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 201	**Date(s) Purged:** 8/4/00
OVM - Ambient: 0	**Purge Method:** VAC TRUCK
OVM - Vault: 2	**Purge Rate:**
OVM - Casing: 2	**Date & Time Sampled:** 8/4/00 0700
Water Level - Initial: 82.55 – 0625	**Purged & Sampled:** Dale Anderson
Water Level - Final: 82.55 6:47	**Sampling Method:** Disposable Bailer
Well Depth: 101.48	**Free Product:** ~~0~~
Well Diameter: 4 inch	**Sheen:** ~~0~~
Well Casing Volume: 12.4	**Odor:** SLIGHT HYDRO

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
0622	5	21.26	7.66	1890	289	2.60	103
0625	10	20.52	7.69	1850	295	1.95	209
0627	14	20.49	7.68	1870	300	1.98	~~213~~ NR
0629	18	20.68	7.66	1850	302	1.90	213
0631	22	20.77	7.64	1830	305	182	48.9
0634	26	20.83	7.63	1870	308	1.90	34.1
0636	30	NR	NR	NR	NR	NR	NR
0639	34	20.94	7.58	1870	312	1.71	92.1
641	38	20.87	7.58	1880	313	1.98	79.0
0700	Sample						

STINGER set at 90' bgs

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 202	**Date(s) Purged:** 8/2/00
OVM - Ambient: 2	**Purge Method:** VAC TRUCK
OVM - Vault: 10	**Purge Rate:**
OVM - Casing: 92	**Date & Time Sampled:** 8/2/00 1540
Water Level - Initial: 86.85 1456	**Purged & Sampled:** Dale Anderson
Water Level - Final: ~~88.98~~ 88.0 @ 1532	**Sampling Method:** Disposable Bailer
Well Depth: 92.3	**Free Product:**
Well Diameter: 4 inch	**Sheen:**
Well Casing Volume: 4	**Odor:**

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1515	2	30.26	7.57	2240	220	1.32	LOW
1516	3	27.24	7.56	2240	152	1.37	LOW
1517	4	25.58	7.58	2240	89	1.30	"
1518	5	24.52	7.55	2070	47	1.77	"
1519	6	24.03	7.63	2230	10	1.51	"
1520	7	23.57	7.72	2160	36	1.71	"
1524	10	23.41	7.65	2210	158	1.89	"
1527	12.9	23.33	7.60	2210	202	2.25	"
1540	Sample						

88.05 80% STINGER @ 90'

DUPLICATE 2 COLLECTED

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 203	**Date(s) Purged:** 8/1/00
OVM - Ambient: 0	**Purge Method:** VAC TRUCK
OVM - Vault: 46	**Purge Rate:**
OVM - Casing: 46	**Date & Time Sampled:** 8/1/00 1100
Water Level - Initial: 90.6 @ 951	**Purged & Sampled:** Dale Anderson
Water Level - Final: 90.7	**Sampling Method:** Disposable Bailer
Well Depth: 106.6'	**Free Product:** 0
Well Diameter: 4 inch	**Sheen:** 0
Well Casing Volume: 10.05	**Odor:** 0

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (~~µmhos~~ mS)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1023	3.5	25.89	7.78	2.20	342	2.39	LOW
1026	7	24.35	7.93	2.30	310	1.37	"
1030	10.5	25.08	7.98	2.39	297	2.09	"
1034	14	23.85	7.97	2.38	295	2.05	"
1037	17.5	23.21	7.98	2.38	294	2.08	"
1040	21	23.96	7.90	2.36	287	1.70	"
1043	24.5	24.38	7.99	2.38	285	1.82	"
1047	28	24.63	7.97	2.38	286	1.77	
1051	31.5	24.81	8.01	2.38	286	1.95	
1100	Sample						

STINGER AT 95' bgs

DUPLICATE 1 COLLECTED

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 204	**Date(s) Purged:** 8/4/00
OVM - Ambient: 0 ppm	**Purge Method:** VAC TRUCK
OVM - Vault: 44 ppm	**Purge Rate:**
OVM - Casing: 44 ppm	**Date & Time Sampled:** 8/4/00 0830
Water Level - Initial: 87.30 @ 0733	**Purged & Sampled:** Dale Anderson
Water Level - Final: 87.20 @ 0828	**Sampling Method:** Disposable Bailer
Well Depth: 106.6	**Free Product:** Ø
Well Diameter: 4 inch	**Sheen:** Ø
Well Casing Volume: 13	**Odor:** SLIGHT HYDRO

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
0758	4	22.31	7.77	1950	305	1.60	LOW
0800	8	22.48	7.75	1980	309	1.91	"
0804	13	23.52	7.67	1990	313	1.47	"
0808	17	22.91	7.73	2010	314	1.93	"
0811	21	23.68	7.71	200	314	1.67	"
~~0819~~	26	NR	NR	NR	NR	NR	"
0819	30	24.08	7.62	2010	318	1.59	"
0823	35	24.11	7.65	2030	318	1.81	"
0826	39	24.64	7.62	2040	316	1.68	"
0830	Sample						

Stinger set at 95' bgs

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 205	**Date(s) Purged:** 8/2/00
OVM - Ambient: 0 ppm	**Purge Method:** VAC TRUCK
OVM - Vault: 3 ppm	**Purge Rate:**
OVM - Casing: 3 ppm	**Date & Time Sampled:** 8/2/00 0730
Water Level - Initial: 81.72 @ 0648	**Purged & Sampled:** Dale Anderson
Water Level - Final: 81.74 @ 0724	**Sampling Method:** Disposable Bailer
Well Depth: 98'	**Free Product:** 0
Well Diameter: 4 inch	**Sheen:** 0
Well Casing Volume: 11 gal	**Odor:**

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
0708	4	22.10	7.88	1760	254	1.69	LOW
0710	8	22.0	7.90	1780	258	1.77	"
0712	12	21.79	7.89	1680	263	1.57	"
0714	16	21.85	7.88	1690	265	1.70	"
0715	20	21.69	7.88	1690	267	1.79	"
0717	24	21.91	7.88	1640	265	1.59	"
0719	27	22.11	7.87	1690	265	1.87	"
0721	30	22.20	7.87	1660	264	1.81	"
0722	33	22.29	7.87	1710	265	~~2.18~~	"
0730	Sample						

STINGER SET @ 90'

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: 501A	**Date(s) Purged:** 8/2/00
OVM - Ambient: 6 ppm	**Purge Method:** VAC TRUCK
OVM - Vault: 84 ppm	**Purge Rate:**
OVM - Casing: 178 ppm	**Date & Time Sampled:** 8/2/00 1140
Water Level - Initial: 83.33' @ 1053	**Purged & Sampled:** Dale Anderson
Water Level - Final: 83.35' @ 1132	**Sampling Method:** Disposable Bailer
Well Depth: 92'	**Free Product:** Ø
Well Diameter: 4 inch	**Sheen:** Ø
Well Casing Volume: 6 g	**Odor:** MOD HYDROCARBON

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity STD (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1116	2	25.45	7.50	2090	172	1.25	211
1119	4	24.75	7.55	2120	97	1.31	412
1121	6	23.59	7.57	2140	62	1.53	406
1123	8	23.16	7.57	2170	68	1.61	395
1124	10	23.00	7.58	2180	67	1.83	303
1126	12	23.41	7.60	2180	43	1.63	303
1127	14	23.44	7.59	2180	10	1.68	256
1129	16	23.35	7.59	2190	-2	1.47	210
1131	18	23.33	7.59	2180	-15	1.41	178
1140	Sample						

Stinger set at 85' bgs

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW502	**Date(s) Purged:** 8/2/00
OVM - Ambient: NR	**Purge Method:** VAC TRUCK
OVM - Vault: NR	**Purge Rate:**
OVM - Casing: NR	**Date & Time Sampled:** 8/2/00 1030
Water Level - Initial: 83.44 @ 0945	**Purged & Sampled:** Dale Anderson
Water Level - Final: 83.45 1020	**Sampling Method:** Disposable Bailer
Well Depth: 100.22	**Free Product:**
Well Diameter: 4 inch	**Sheen:**
Well Casing Volume: 11	**Odor:**

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1004	3	26.58	7.66	2190	274	2.04	Low
1005	6	24.78	7.65	2230	214	1.51	Low
1007	10	24.15	7.66	2210	208	1.75	"
1009	13	23.94	7.66	2220	190	1.5	"
1010	16	23.91	7.66	2200	153	1.70	"
1012	20	24.02	7.66	2160	144	1.71	"
1014	24	24.21	7.65	2140	127	1.77	"
1016	28	24.30	7.66	2110	142	1.49	"
1018	33	24.27	7.66	2110	134	1.96	"
1030	Sample						

SMNGen Set at 90' bgs

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 503 B	**Date(s) Purged:** 8/4/00
OVM - Ambient: 0	**Purge Method:** VAC TRUCK
OVM - Vault: 0	**Purge Rate:**
OVM - Casing:	**Date & Time Sampled:** 8/4/00 1110
Water Level - Initial: 84.96 1016	**Purged & Sampled:** Dale Anderson
Water Level - Final: 84.60 1101	**Sampling Method:** Disposable Bailer
Well Depth: 108.7	**Free Product:**
Well Diameter: 4 inch	**Sheen:**
Well Casing Volume: 15.5	**Odor:**

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1035	5	24.98	7.62	1457	289	1.78	LOW
1038	10	23.38	7.64	1450	289	1.87	"
NR	15	NR	NR	NR	NR	NR	"
1044	20	23.66	7.59	1429	283	1.51	"
1047	25	23.28	7.61	1459	281	1.93	"
1049	30	23.14	7.63	1482	279	2.02	"
1051	35	23.29	7.62	1530	278	1.96	"
1055	40	23.33	7.61	1472	279	2.32	"
1059	45	23.10	7.60	1510	279	1.94	"
1100	47	23.12	7.60	1510	278	1.86	"
1110	Sample						

SET STRESS at 90'

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: 661 A	**Date(s) Purged:** 8/3/00
OVM - Ambient: 0 ppm	**Purge Method:** VAC TRUCK
OVM - Vault: 61 ppm	**Purge Rate:**
OVM - Casing: 52 ppm	**Date & Time Sampled:** 8/3/00 1145
Water Level - Initial: ~~29.9 @ 1107~~ 82 *	**Purged & Sampled:** Dale Anderson
Water Level - Final: 83.0	**Sampling Method:** Disposable Bailer
Well Depth: 89.50	**Free Product:** 0
Well Diameter: 4 inch	**Sheen:** YES ~~MODERATE~~ SLIGHT
Well Casing Volume: 6.3	**Odor:** STRONG HYDROCARBON

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1126	2	27.65	7.48	2040	308	2.11	LOW
1128	4	25.21	7.49	2140	300	2.05	"
1129	6	24.31	7.49	2100	279	1.96	"
1131	8	24.14	7.48	2140	252	1.95	"
1133	10	24.07	7.48	2110	225	1.77	"
1135	12	24.03	7.48	2070	203	1.64	"
1136	14	23.82	7.47	2000	186	1.62	"
1138	16	23.89	7.40	2113	185	1.84	"
1141	19	24.21	7.48	2030	164	1.72	"
1145	Sample						

STINGER @ 85' bgs

* MISREAD TAPE ON INITIAL LEVEL

73.65

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 603	**Date(s) Purged:** 8/1/00
OVM - Ambient: NR	**Purge Method:** VAC TRUCK
OVM - Vault: NR	**Purge Rate:**
OVM - Casing: NR	**Date & Time Sampled:** 8/1/00 1515
Water Level - Initial: 78.07 @ 1422	**Purged & Sampled:** Dale Anderson
Water Level - Final: 78.10 1502	**Sampling Method:** Disposable Bailer
Well Depth: 96.5'	**Free Product:** Ø
Well Diameter: 4 inch	**Sheen:** Ø
Well Casing Volume: 12 g	**Odor:** Ø

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (~~um~~mhos) mm	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1440	4	27.54	7.78	1.76	277	2.10	LOW
1443	8	24.63	7.83	1.77	279	1.76	"
1446	12	23.74	7.86	1.77	283	1.94	"
1448	16	23.48	7.86	1.77	284	1.80	"
1451	20	23.29	7.87	1.77	286	1.90	"
1454	24	24.07	7.87	1.76	286	1.58	"
1456	28	23.93	7.88	1.77	285	1.92	"
1458	32	23.74	7.88	1.77	282	2.13	"
1501	36	24.02	7.85	1.77	284	2.04	"
1515	Sample						

STINGER AT 85 bgs

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 604	**Date(s) Purged:** 8/3/00
OVM - Ambient: NR	**Purge Method:** VAC TRUCK
OVM - Vault: NR	**Purge Rate:**
OVM - Casing: NR	**Date & Time Sampled:** 8/3/00 1030
Water Level - Initial: 94.3' @ 0950	**Purged & Sampled:** Dale Anderson
Water Level - Final: 94.3 @ 1023	**Sampling Method:** Disposable Bailer
Well Depth: 103'	**Free Product:** Ø
Well Diameter: 4 inch	**Sheen:** Ø
Well Casing Volume: 6	**Odor:** SLIGHT HYDROCARBON

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1010	2	NR	NR	NR	NR	NR	~~[illegible]~~ LOW
1011	4	23.84	7.58	2390	335	1.95	LOW
1012	6	23.84	7.58	2380	333	2.25	"
1014	8	23.74	7.58	2370	329	1.67	"
1015	10	23.33	7.53	2390	327	1.60	"
1016	12	23.23	7.57	2390	325	1.90	"
1018	14	23.29	7.57	2390	322	1.90	"
1020	16	23.36	7.57	2380	318	1.70	"
1021	18	23.47	7.59	2380	314	1.66	"
1030	Sample						

STINGER @ 100'

IRON 250

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 605	**Date(s) Purged:** 8/2/00
OVM - Ambient: NR	**Purge Method:** VAC TRUCK
OVM - Vault: NR	**Purge Rate:**
OVM - Casing: NR	**Date & Time Sampled:** 8/2/00 1310
Water Level - Initial: 79.62 @ 1230	**Purged & Sampled:** Dale Anderson
Water Level - Final: 79.65 @ 1300	**Sampling Method:** Disposable Bailer
Well Depth: 93.73'	**Free Product:** Ø
Well Diameter: 4 inch	**Sheen:** Ø
Well Casing Volume: 9.2	**Odor:** Ø

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1240	3	27.71	7.69	1860	309	1.67	Low
1242	6	24.41	7.72	1910	315	1.74	Low
1244	9	24.35	7.69	1910	319	1.92	"
1247	12	24.45	7.68	1850	326	2.01	"
1250	15	23.90	7.65	1860	329	1.79	"
1253	18	23.69	7.64	1840	332	1.83	"
1255	21	24.39	7.65	1940	331	2.00	"
1257	24	23.51	7.67	1870	330	1.82	"
1259	28	23.57	7.67	1860	331	1.83	"
1310	Sample						

Stinger Set @ 85' bgs

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 606	**Date(s) Purged:** 8/2/00
OVM - Ambient: NR	**Purge Method:** VAC TRUCK
OVM - Vault: NR	**Purge Rate:**
OVM - Casing: NR	**Date & Time Sampled:** 8/2/00 1430
Water Level - Initial: 82.2 @ 1334	**Purged & Sampled:** Dale Anderson
Water Level - Final: 82.66 @ 1415	**Sampling Method:** Disposable Bailer
Well Depth: 98.95	**Free Product:** Ø
Well Diameter: 4 inch	**Sheen:** Ø
Well Casing Volume: 11 8	**Odor:** Ø

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1353	5	27.30	7.72	1840	315	1.23	LOW
1356	8	24.30	7.78	1820	316	1.95	"
1358	11	24.12	7.75	1850	320	1.65	"
1402	15	24.01	7.73	1780	325	1.82	"
1405	19	24.01	7.76	1840	325	1.73	"
1406	22	23.97	7.79	1840	326	1.85	"
1410	26	24.29	7.76	1780	328	1.81	"
1413	30	24.11	7.75	1860	330	1.93	"
1416	33	24.28	7.75	1830	331	1.89	"
1430	Sample						

SINGLE SET @ 90'

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: MW 607	**Date(s) Purged:** 8/1/00
OVM - Ambient: NR	**Purge Method:** VAC TRUCK
OVM - Vault: NR	**Purge Rate:**
OVM - Casing: NR	**Date & Time Sampled:** 8/1/00 1630
Water Level - Initial: 92.10 @ 1537	**Purged & Sampled:** Dale Anderson
Water Level - Final: 92.20 @ 1420	**Sampling Method:** Disposable Bailer
Well Depth: 106.5'	**Free Product:** Ø
Well Diameter: 4 inch	**Sheen:** Ø
Well Casing Volume: 9.4	**Odor:** Ø

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (~~µ~~mhos) MM	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1600	4	25.66	7.70	2.41	272	2.03	MOD
1604	7	23.45	7.75	2.44	264	1.70	"
1606	10	23.36	7.76	2.42	265	1.86	"
1608	13	22.90	7.76	2.43	259	1.69	"
1610	16	23.08	7.72	2.34	261	1.91	"
1612	19	23.39	7.75	2.43	258	1.90	"
1614	21	23.14	7.73	2.43	242	1.72	"
1616	25	23.40	7.74	2.42	242	1.66	Low
1619	29	23.80	7.73	2.43	241	1.50	"
1630	Sample						

STINGER @ 100' bgs

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: W-1	**Date(s) Purged:** 8/3/00
OVM - Ambient: NR	**Purge Method:** VAC TRUCK
OVM - Vault: NR	**Purge Rate:**
OVM - Casing: NR	**Date & Time Sampled:** 8/3/00 0915
Water Level - Initial: 94.05 @ 0831	**Purged & Sampled:** Dale Anderson
Water Level - Final: 94.3 @ 0906	**Sampling Method:** Disposable Bailer
Well Depth: 132	**Free Product:** 0
Well Diameter: 4 inch	**Sheen:**
Well Casing Volume: 25 gal	**Odor:**

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
0836	10	23.25	7.69	2460	323	2.25	Low
0840	20	23.29	7.65	2470	305	1.75	"
0844	30	23.08	7.66	2370	290	1.92	"
0848	40	23.95	7.58	2430	266	1.67	"
0854	50	22.58	7.65	2410	263	1.88	"
0858	60	22.82	7.64	2490	249	1.96	"
0900	65	23.03	7.65	2520	231	1.71	"
0902	70	23.02	7.65	2450	225	2.09	"
0904	75	23.11	7.66	2510	211	1.92	"
0915	Sample						

SINGLE set at 110' bgs

DUPLICATE #3 COLLECTED

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: W-3A	**Date(s) Purged:** 8/4/00
OVM - Ambient:	**Purge Method:** VAC TRUCK
OVM - Vault:	**Purge Rate:**
OVM - Casing:	**Date & Time Sampled:** 8/4/00 1256
Water Level - Initial: 97.14 7/31/00	**Purged & Sampled:** Dale Anderson
Water Level - Final: 97.35 @ 1274	**Sampling Method:** Disposable Bailer
Well Depth: 117.7	**Free Product:** YES (MEASURED ON 7/31/00
Well Diameter: 4 inch	**Sheen:** YES
Well Casing Volume: 11.5	**Odor:** STRONG HYDROCARBON

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1202	4	27.59	7.57	2460	144	1.33	MOD
1205	8	24.56	7.56	2480	69	1.45	"
1208	12	24.67	7.58	2470	29	1.25	"
1211	16	24.33	7.61	2580	16	1.56	"
1216	20	24.23	7.63	2530	93	1.32	"
1223	24	24.60	7.52	2580	98	1.18	"
1226	28	25.32	7.58	2580	20	0.96	"
1232	32	25.03	7.63	2530	28	1.48	"
1240	36	25.45	7.60	2520	61	1.43	"
1250							

SHINGER @ 105

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: W-4	**Date(s) Purged:** 8/3/00
OVM - Ambient: 0	**Purge Method:** VAC TRUCK
OVM - Vault: 0	**Purge Rate:**
OVM - Casing: 0	**Date & Time Sampled:** 8/3/00 0755
Water Level - Initial: 96.93' @ 0645	**Purged & Sampled:** Dale Anderson
Water Level - Final: 97.10' @ 0746	**Sampling Method:** Disposable Bailer
Well Depth: 131.8	**Free Product:** ~~0~~
Well Diameter: 4 inch	**Sheen:**
Well Casing Volume: 23	**Odor:**

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
0715	10	21.68	7.86	2150	289	2.31	Low
0720	20	21.52	7.84	2210	295	1.84	"
0725	30	22.27	7.74	2320	300	1.84	"
0730	40	21.86	7.73	2370	303	1.70	"
0735	50	21.96	7.71	2430	304	1.73	"
NR	55	NR	NR	NR	NR	NR	"
0740	60	22.14	7.69	2440	305	1.57	"
0743	65	21.95	7.70	2450	305	1.92	"
0745	70	21.88	7.71	2370	306	~~2.04~~	"
						1.88	
0755	Sample						

STINGER SET @ 110' bgs

Versar INC.

MONITORING WELL PURGE TABLE

Project Number: 3917-019	**Site Name:** Cenco Refining Company
Well Number: WELL 7	**Date(s) Purged:** 8/4/00
OVM - Ambient: NR	**Purge Method:** DEDICATED PUMP
OVM - Vault: NA	**Purge Rate:**
OVM - Casing: NA	**Date & Time Sampled:** 8/4/00 1355
Water Level - Initial: 97.3 1333	**Purged & Sampled:** Dale Anderson
Water Level - Final: 224 @ 1358	**Sampling Method:** Disposable Bailer
Well Depth: ≈ 600'	**Free Product:** Ø
Well Diameter: ~~4 inch~~ 10 IN	**Sheen:** Ø
Well Casing Volume: 274 g	**Odor:** Ø

Time	Purge Water Removed (gal)	Temperature (degrees Celcius)	pH	Electrical Conductivity (µmhos)	Oxidation - Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
1347	600 g	28.36	9.80	1019	121	1.08	MOD
1349	1,050	26.84	9.48	1079	94	.93	LOW
1350	1300	26.70	9.22	1152	82	.85	"
1352	1400	26.89	8.87	1274	69	.74	"
1355	Sample	29.57	8.44	1345	NR	NR	"

w.c 502.7

π (25) 502.7 = 39461

.174 = 274

.4166

200

175' at 2:05

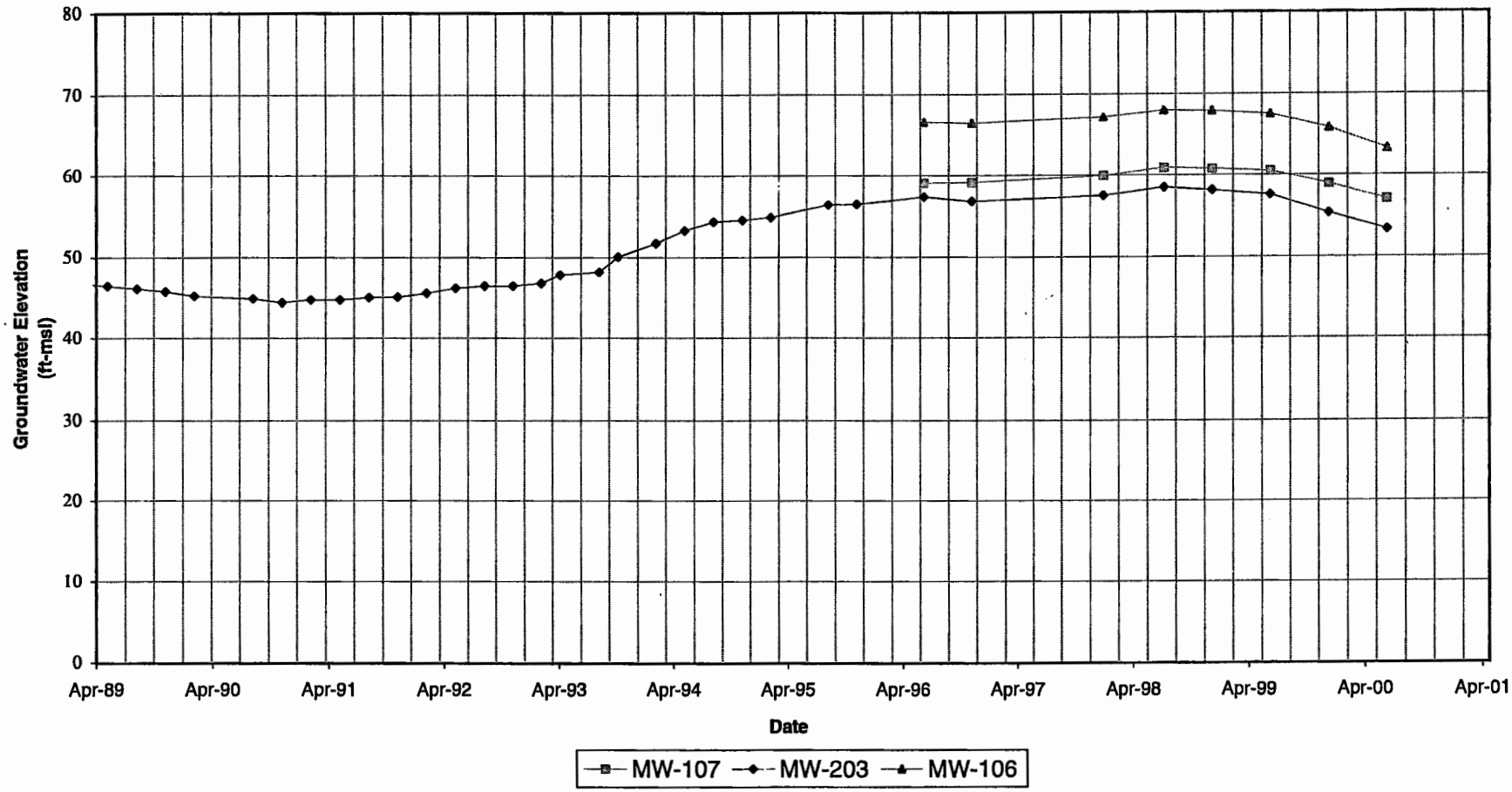
115' @ 2:21

APPENDIX C

HISTORICAL GROUNDWATER ELEVATIONS

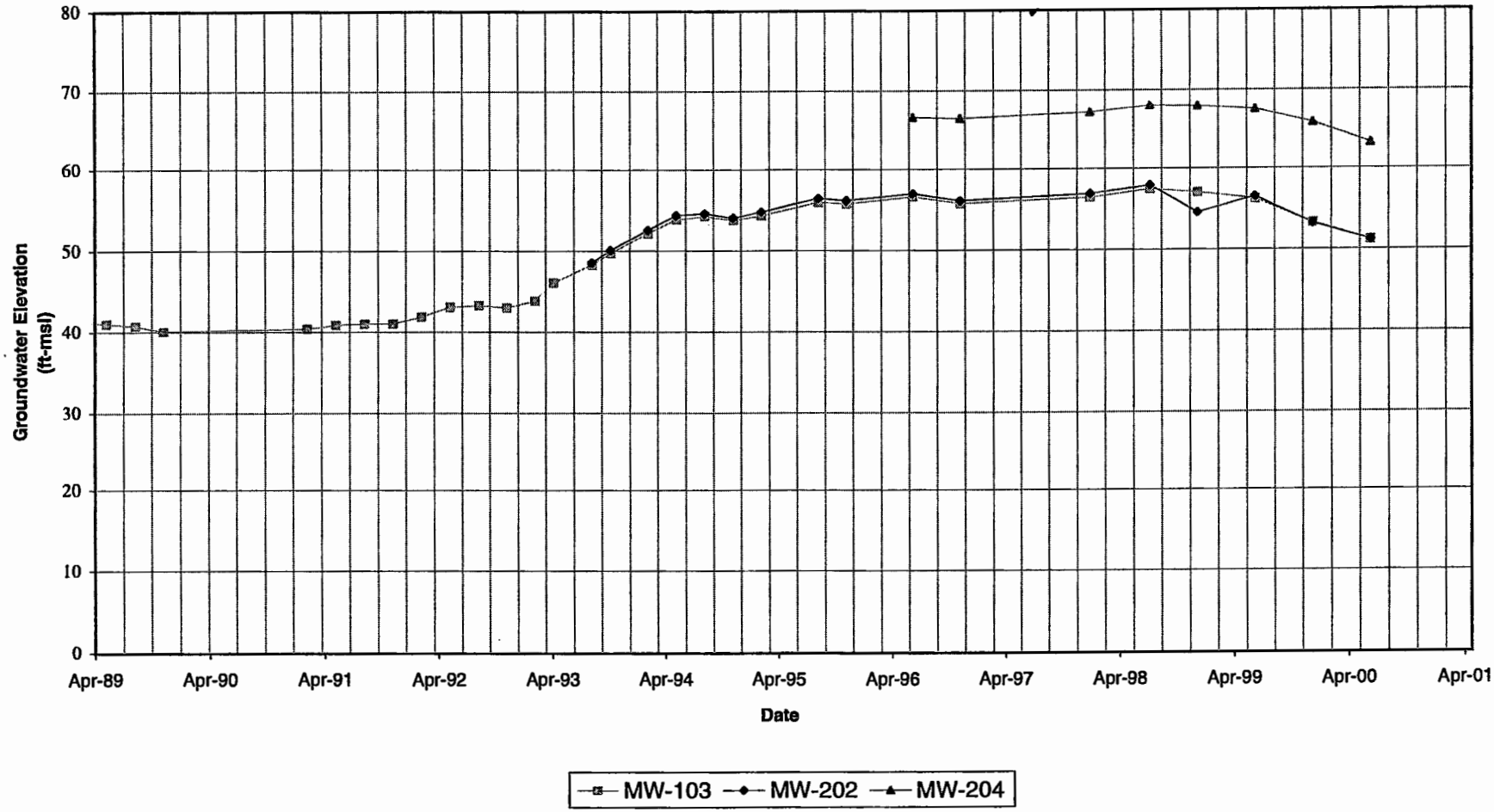
HISTORICAL GROUNDWATER ELEVATIONS
OPERATIONAL AREA 1: BLOOMFIELD PROPERTY

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



HISTORICAL GROUNDWATER ELEVATIONS
OPERATIONAL AREA 2: EAST TANK FARM AREA

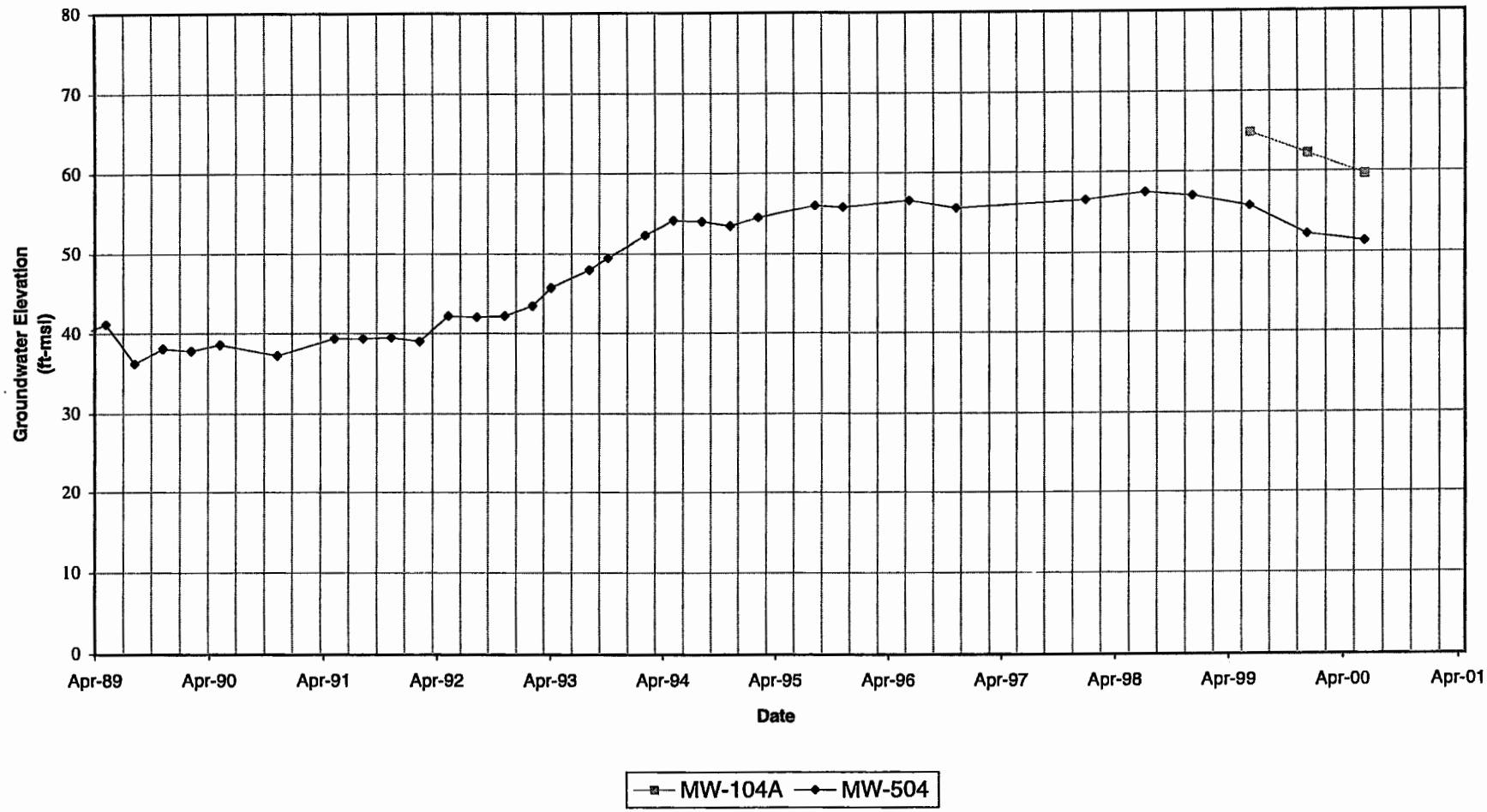
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

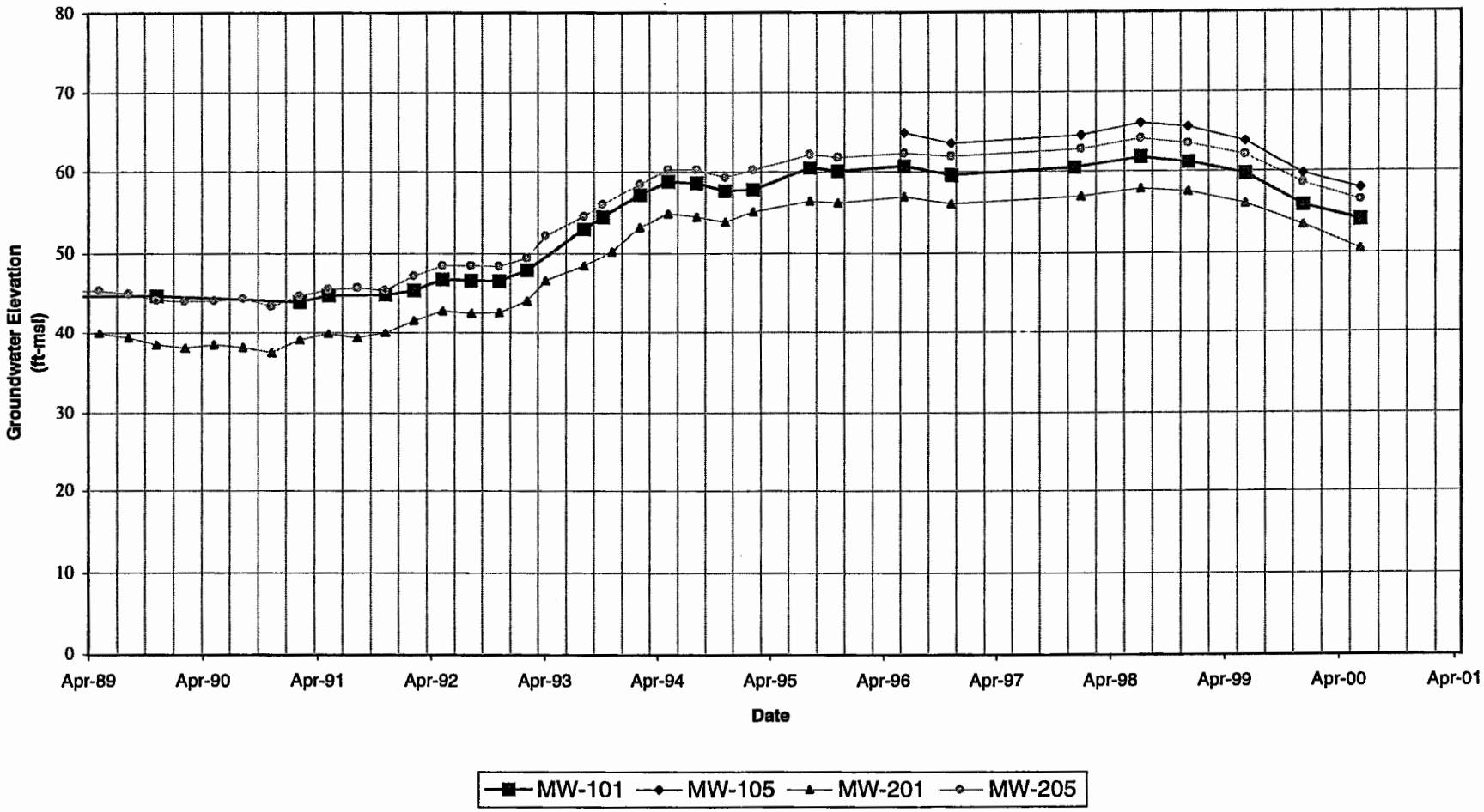
HISTORICAL GROUNDWATER ELEVATIONS
OPERATIONAL AREA 3: PROCESSING AREA

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



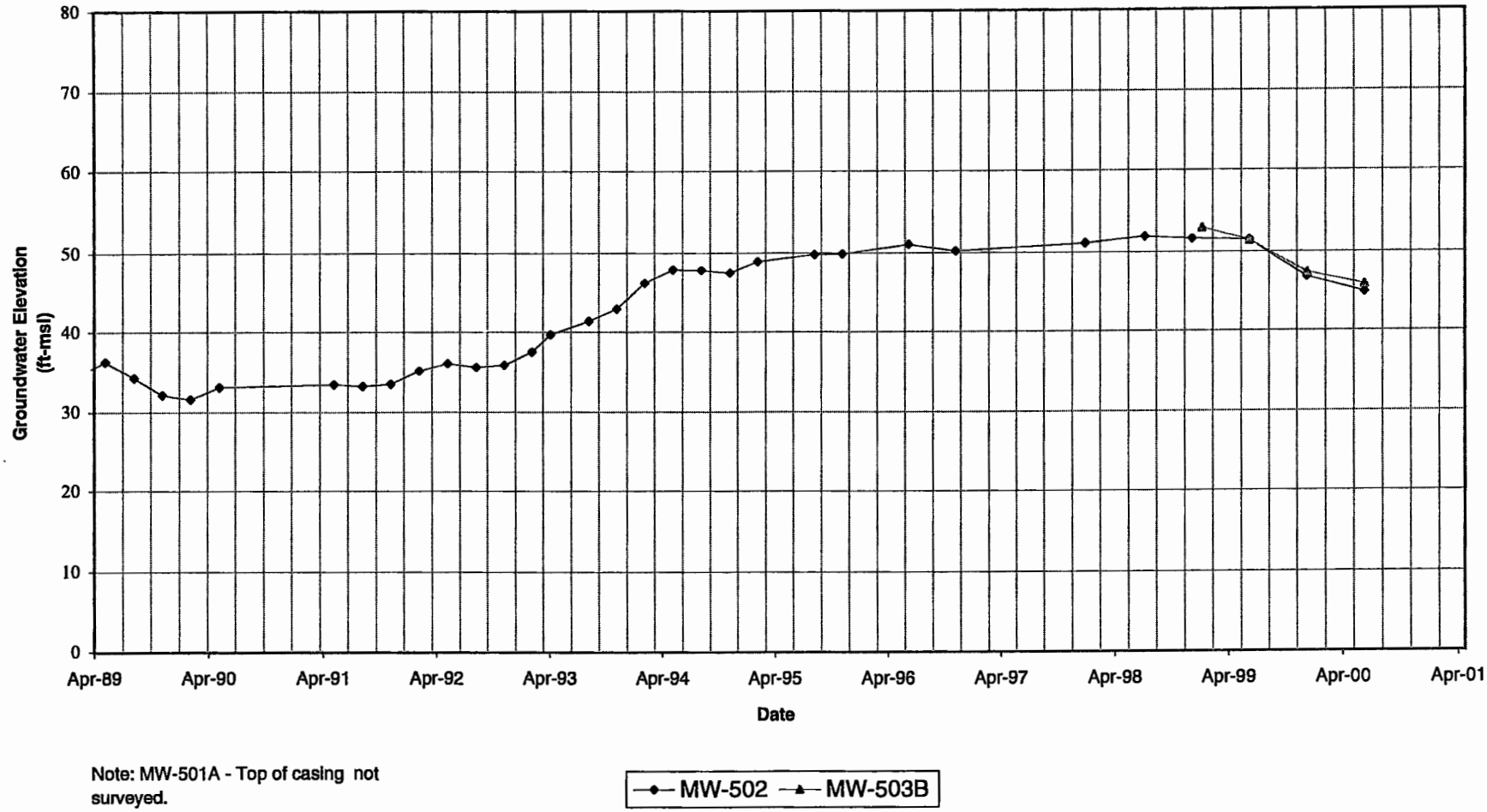
HISTORICAL GROUNDWATER ELEVATIONS
OPERATIONAL AREA 4: WEST TANK FARM AREA

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



HISTORICAL GROUNDWATER ELEVATIONS
OPERATIONAL AREA 5: LAKELAND PROPERTY

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

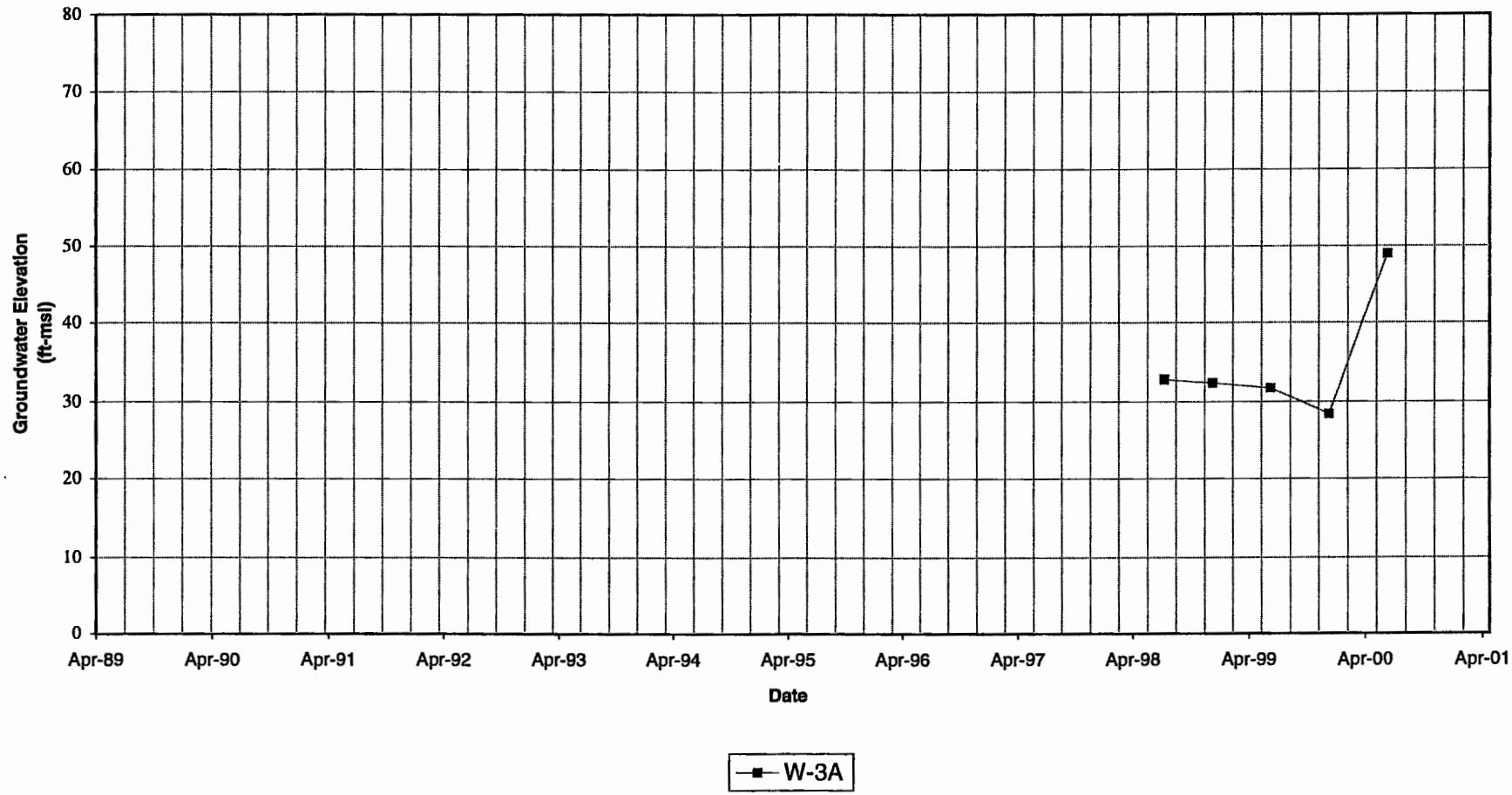


Note: MW-501A - Top of casing not surveyed.

Versar INC.

HISTORICAL GROUNDWATER ELEVATIONS
OPERATIONAL AREA 6: FORMER AST AREA AT WALKER PROPERTY

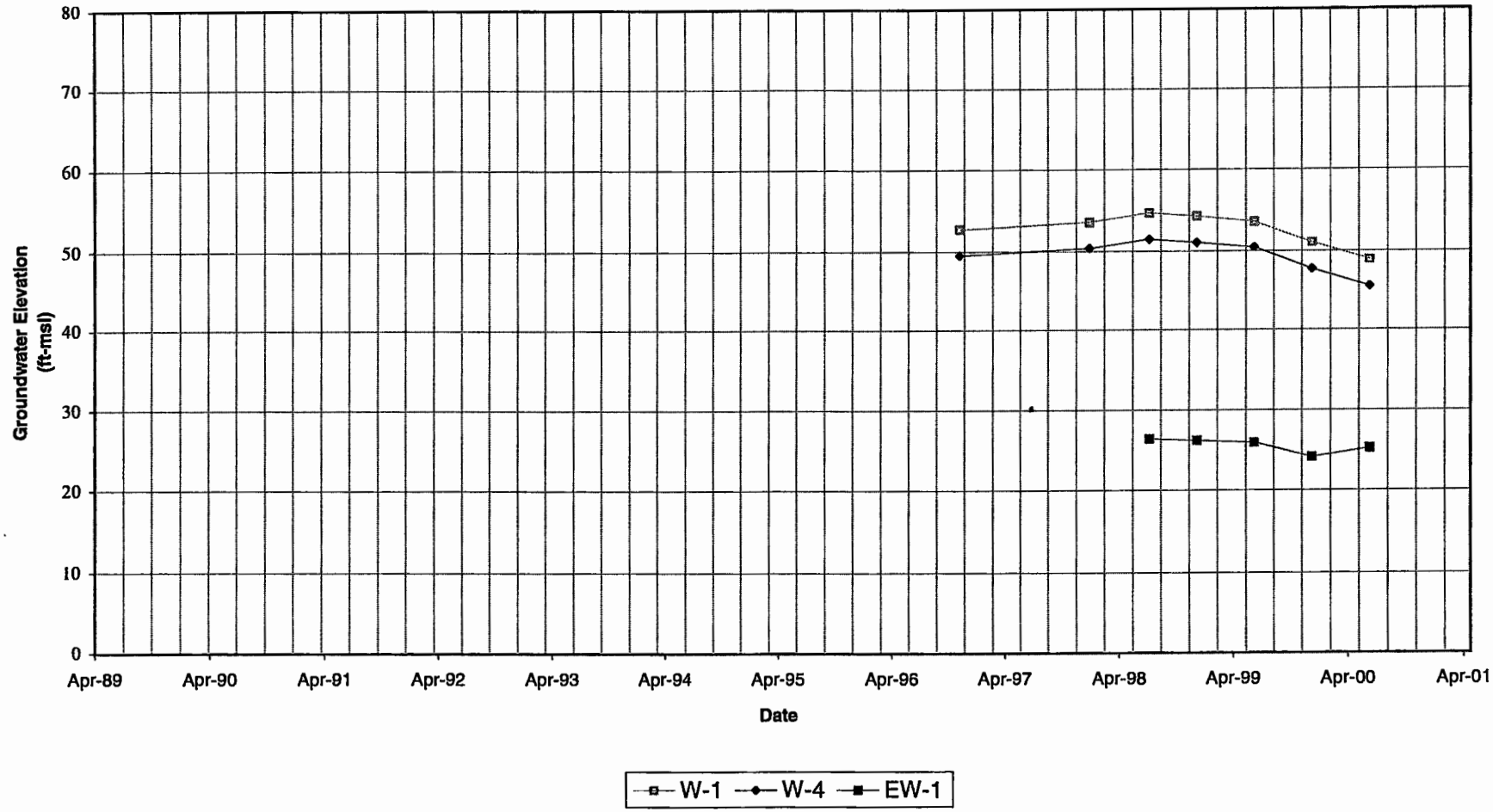
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

HISTORICAL GROUNDWATER ELEVATIONS
OFF-SITE WELLS: WALKER PROPERTY

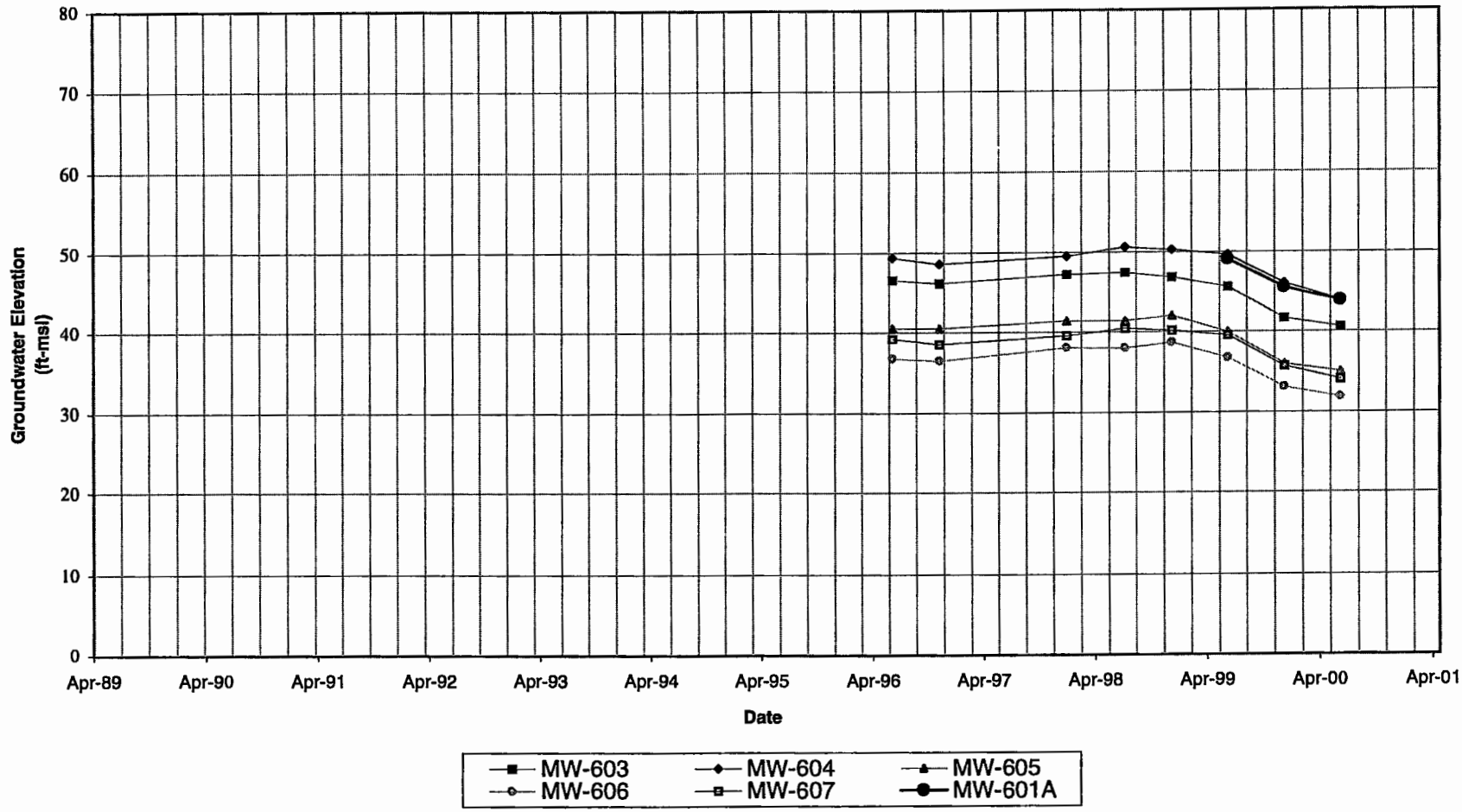
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

HISTORICAL GROUNDWATER ELEVATIONS
OFF-SITE WELLS: METROPOLITAN STATE HOSPITAL

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



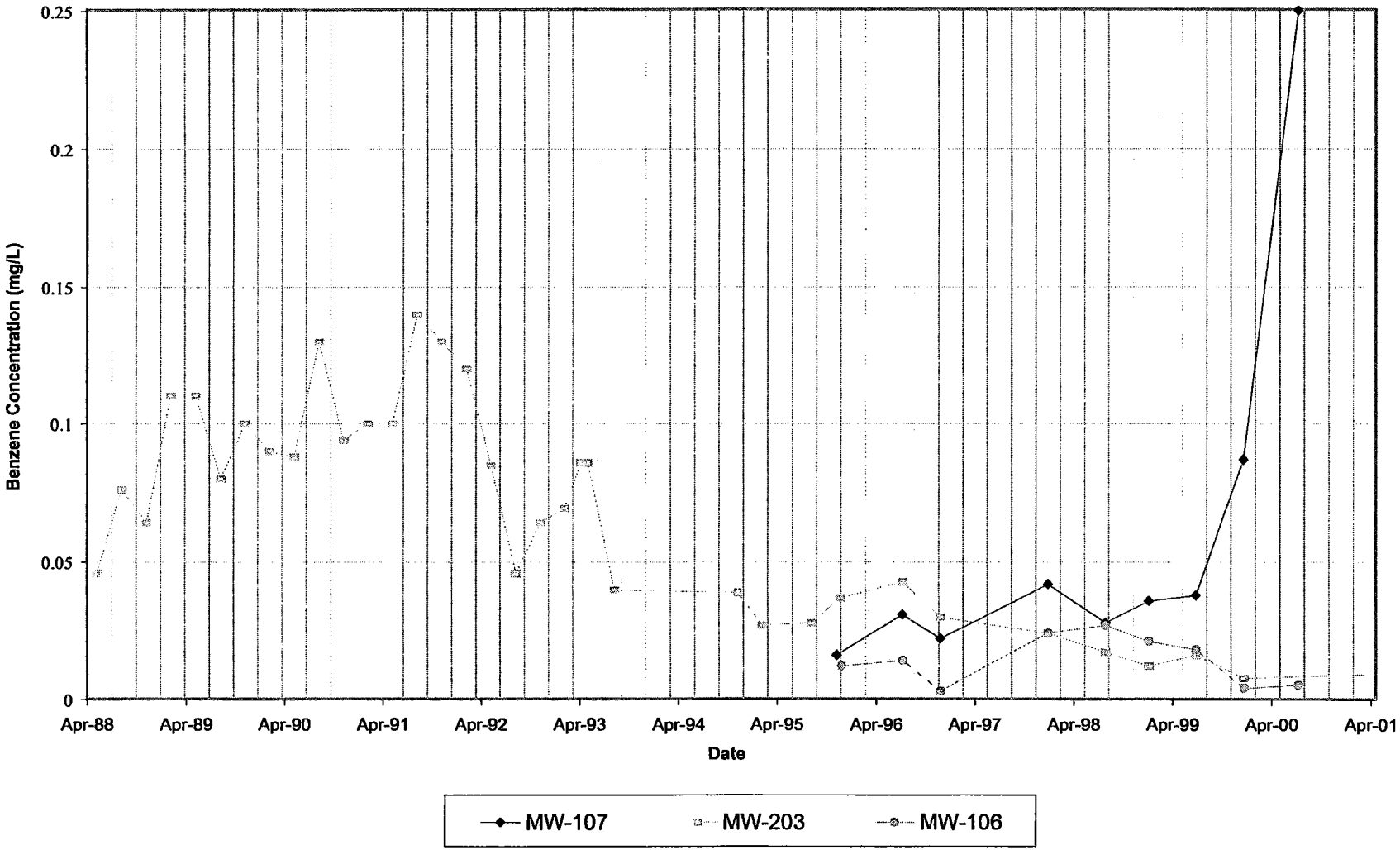
APPENDIX D

BENZENE CONCENTRATION TRENDS IN GROUNDWATER

Versar INC.

BENZENE CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 1: BLOOMFIELD PROPERTY

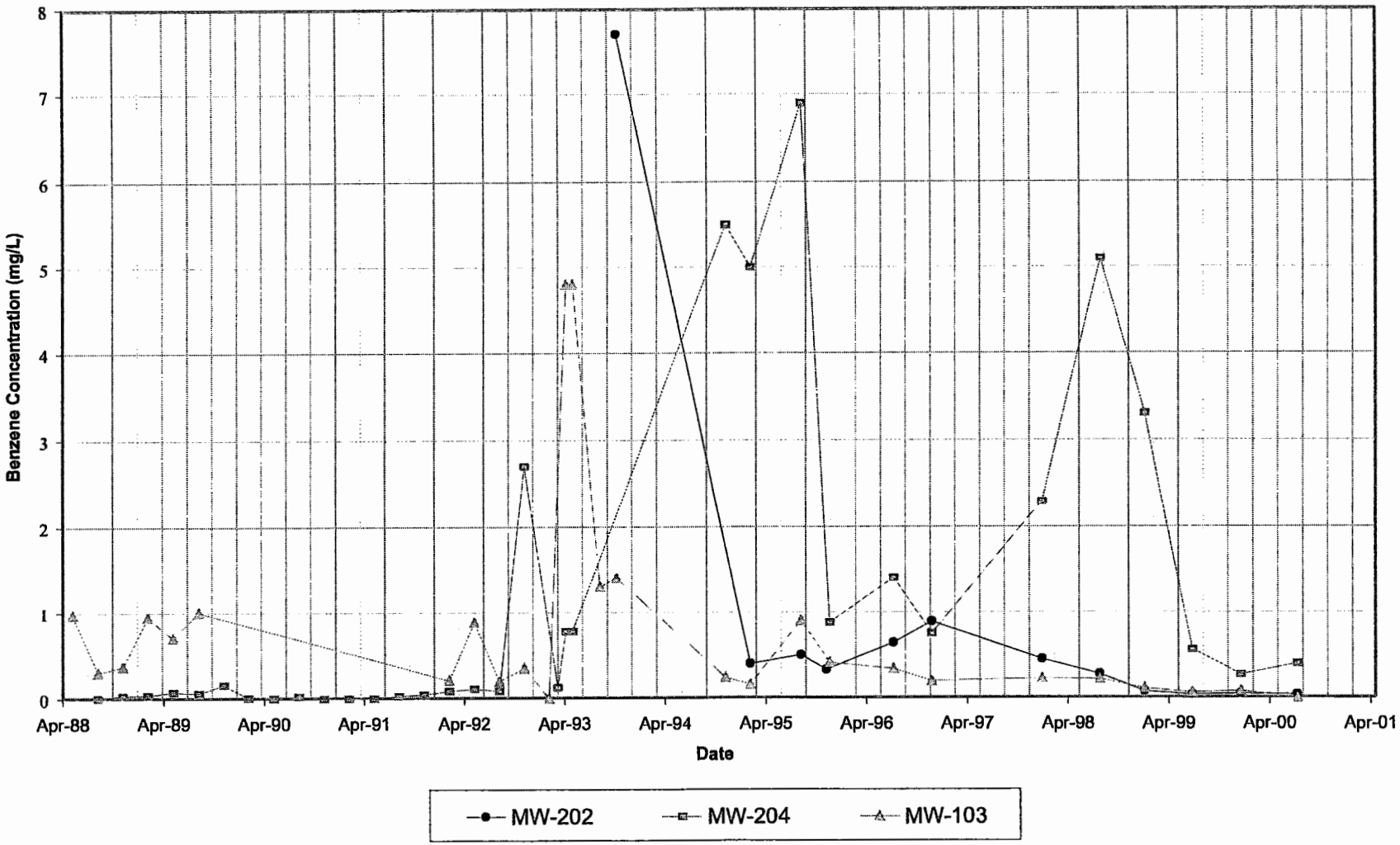
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BENZENE CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 2: EAST TANK FARM AREA

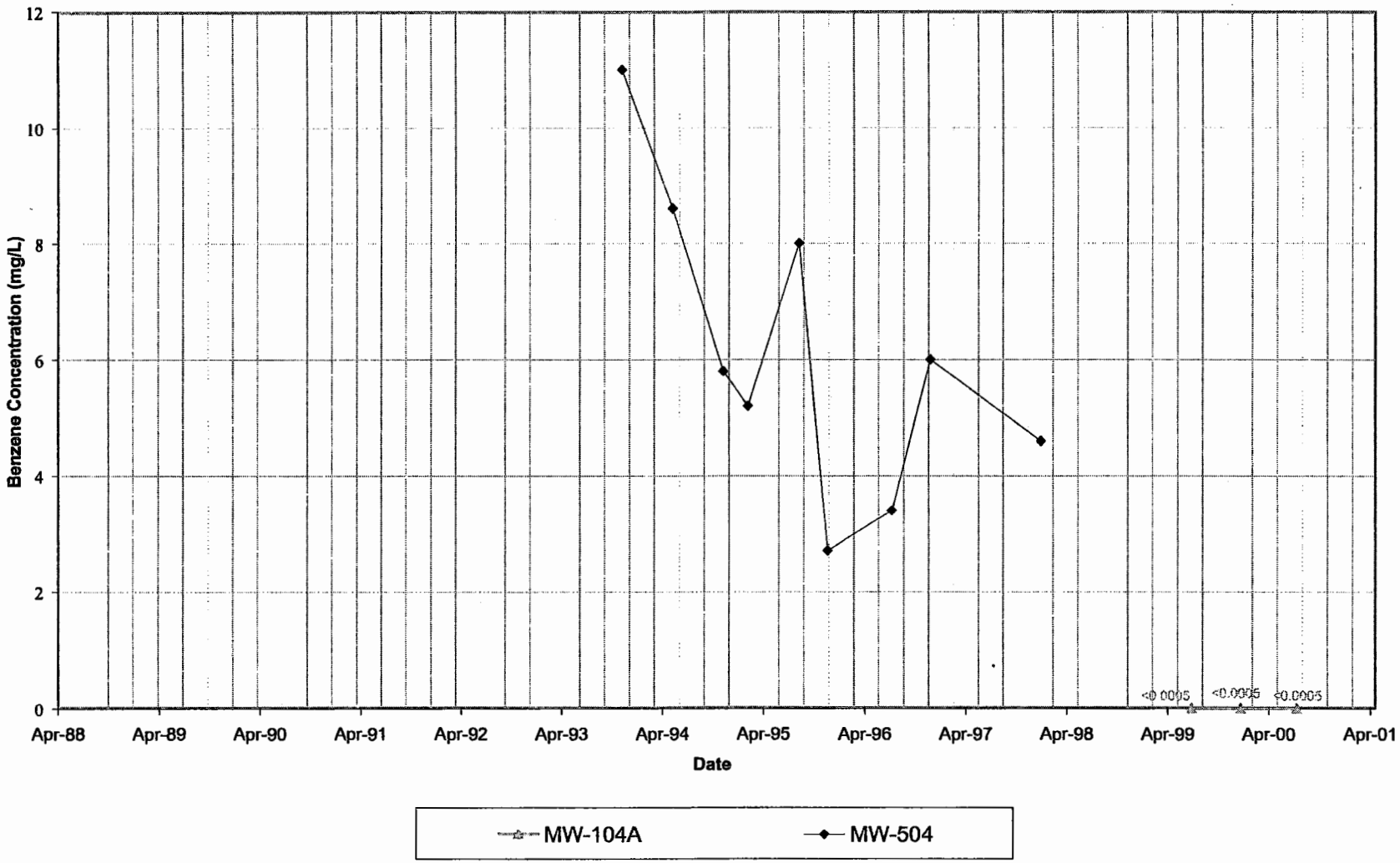
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BENZENE CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 3: PROCESSING AREA

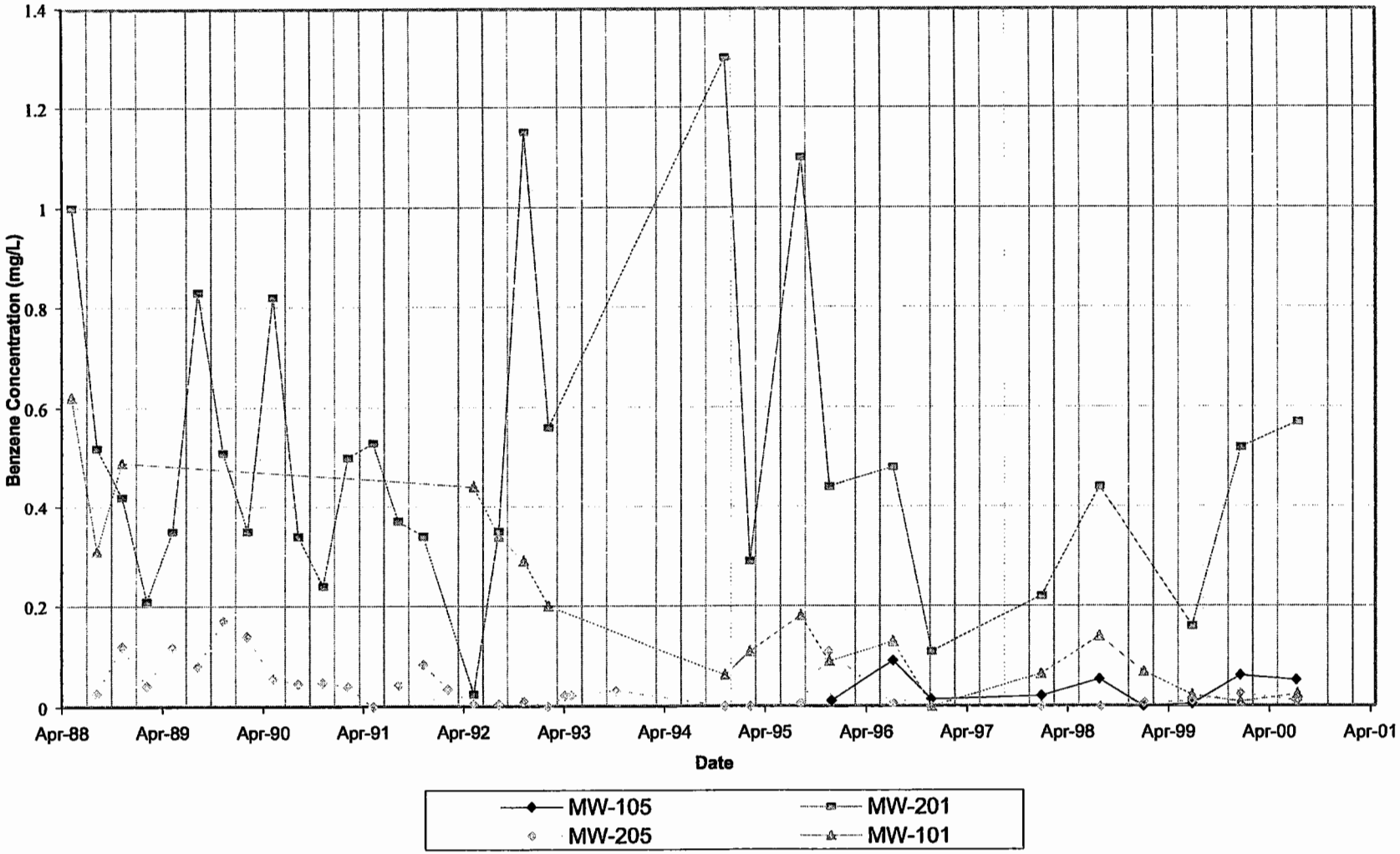
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BENZENE CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 4: WEST TANK FARM AREA

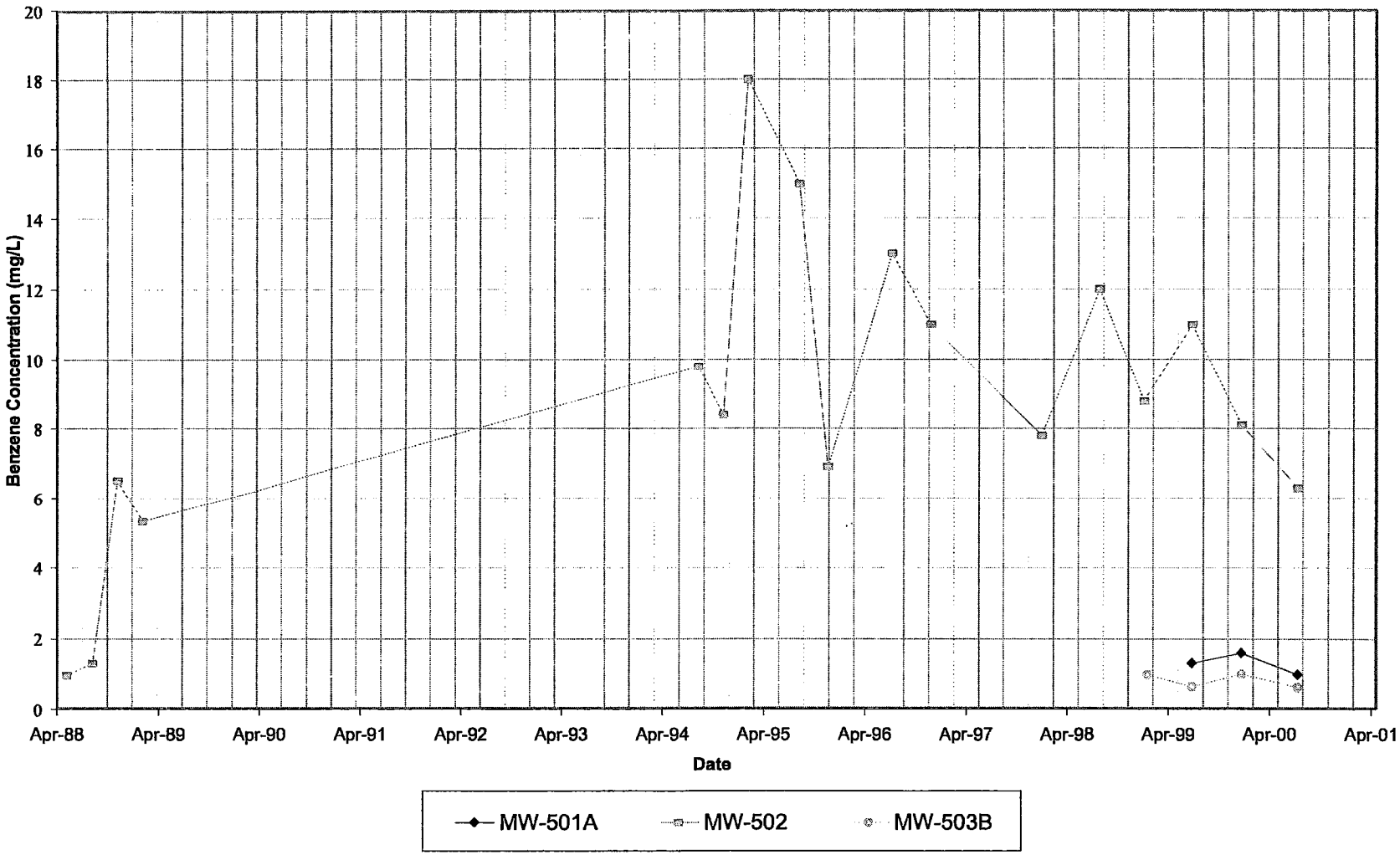
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BENZENE CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 5: LAKELAND PROPERTY

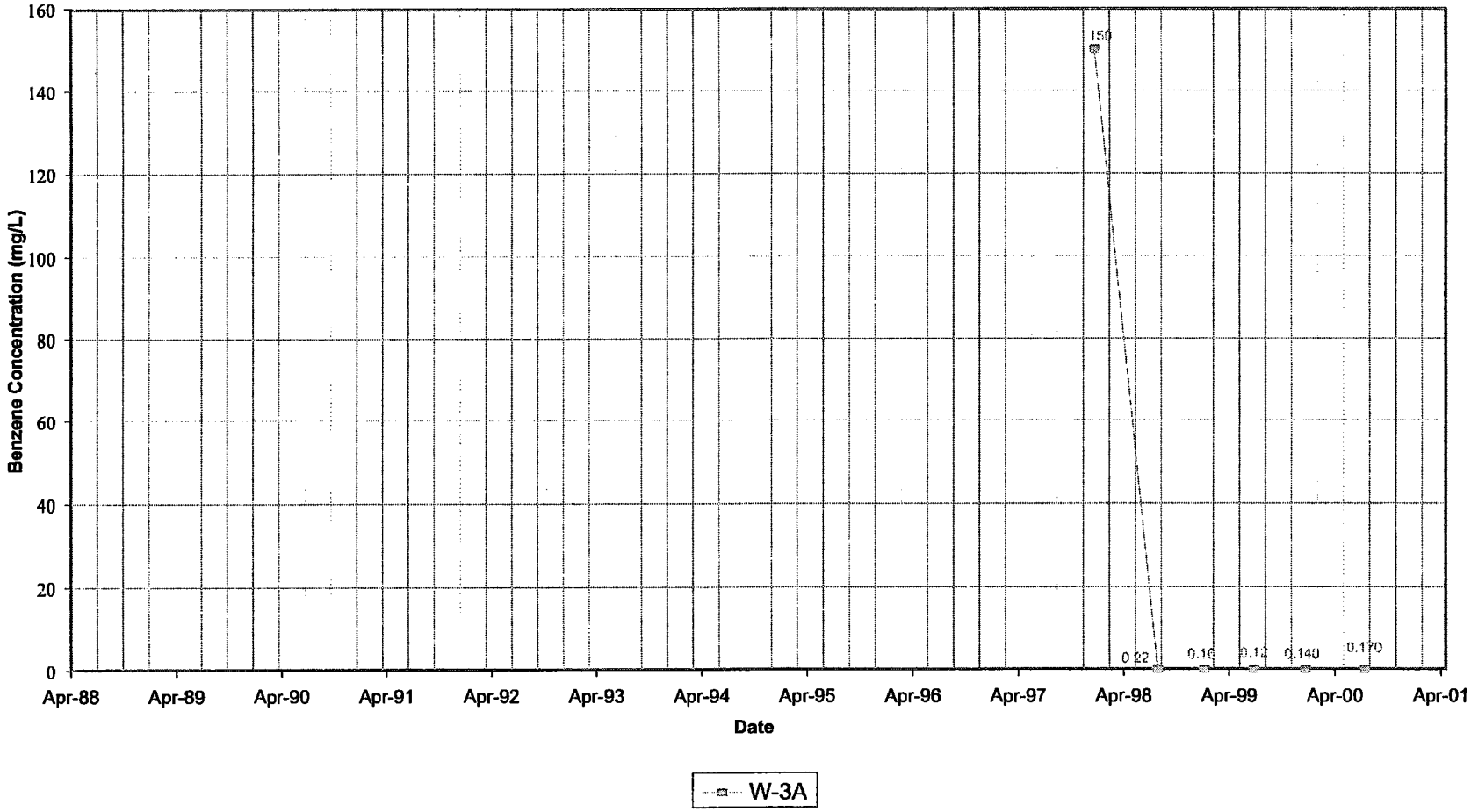
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BENZENE CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 6: FORMER AST AREA AT WALKER PROPERTY

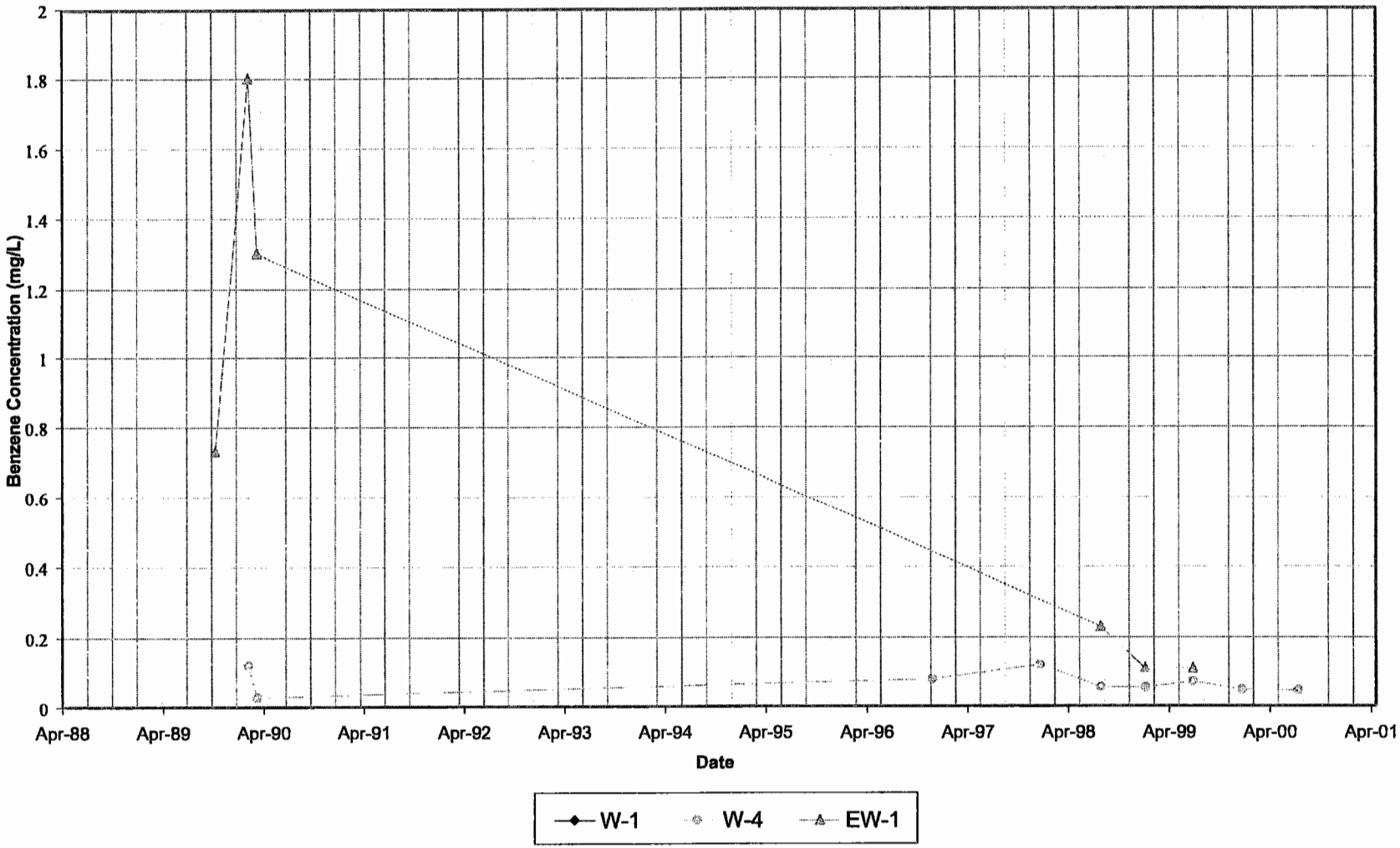
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BENZENE CONCENTRATION TRENDS IN GROUNDWATER
OFF-SITE WELLS: WALKER PROPERTY

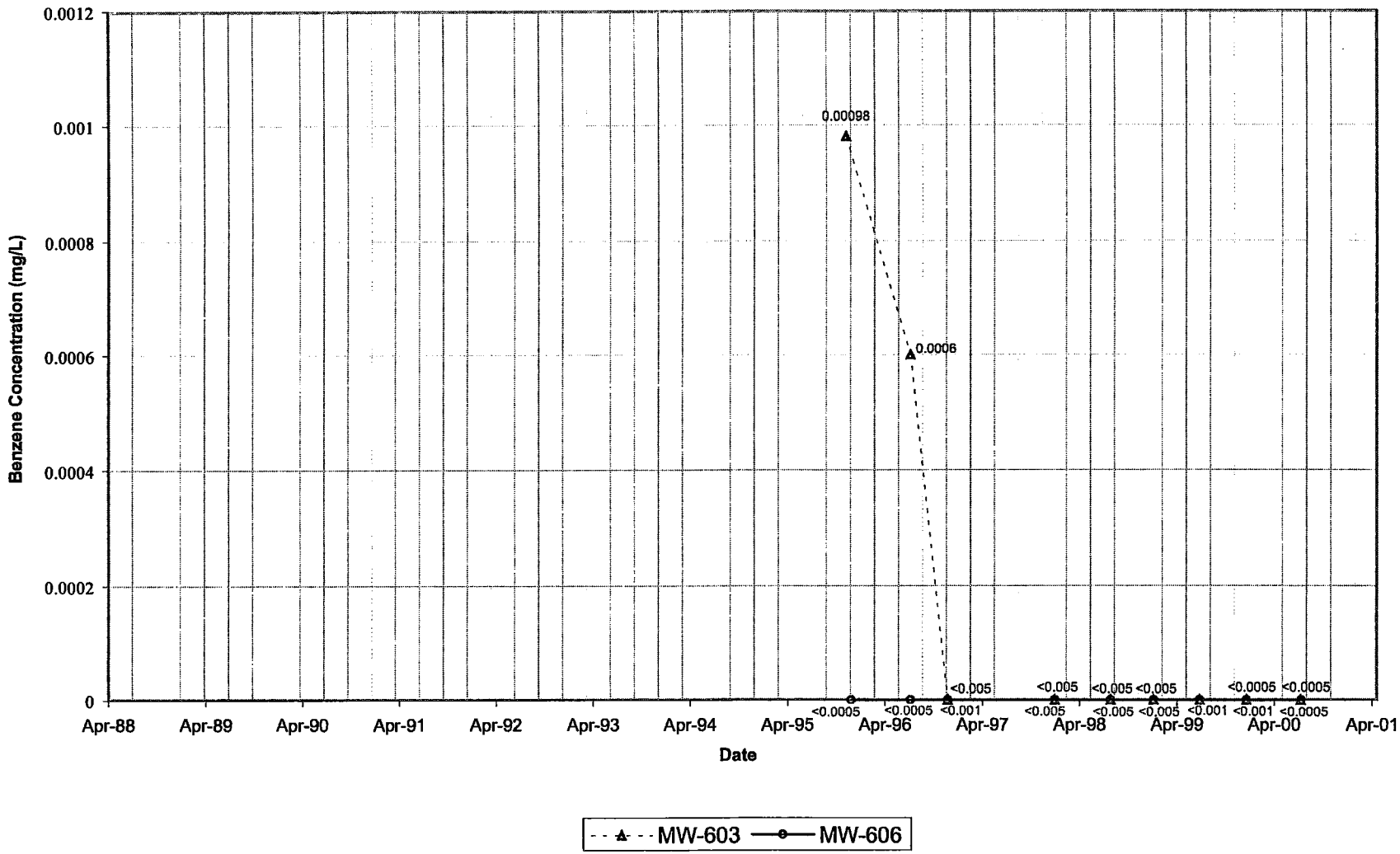
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BENZENE CONCENTRATION TRENDS IN GROUNDWATER OFF-SITE WELLS: METROPOLITAN STATE HOSPITAL

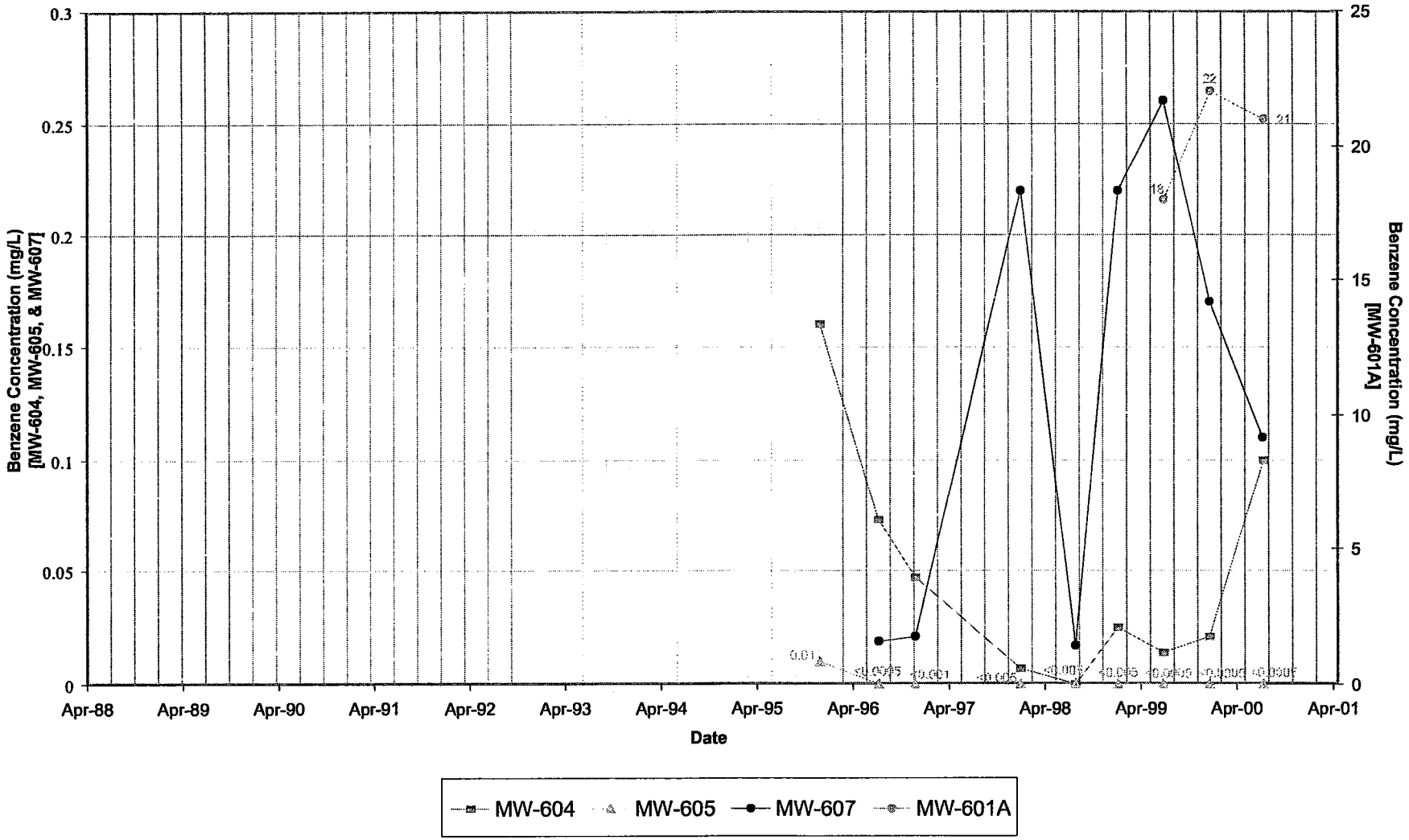
CENCO REFINING COMPANY SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BENZENE CONCENTRATION TRENDS IN GROUNDWATER OFF-SITE WELLS: METROPOLITAN STATE HOSPITAL

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



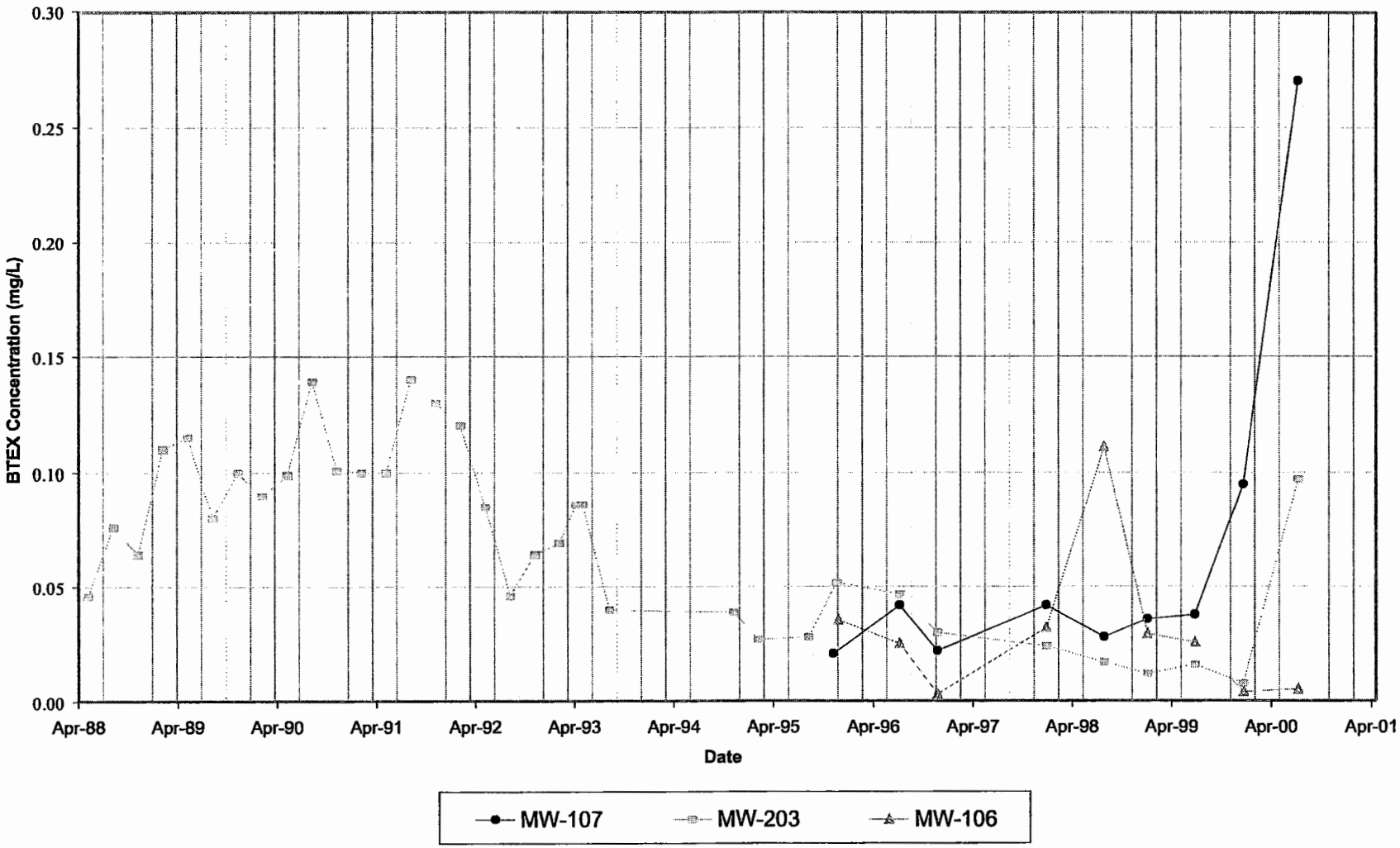
APPENDIX E

BTEX CONCENTRATION TRENDS IN GROUNDWATER

Versar INC.

BTEX CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 1: BLOOMFIELD PROPERTY

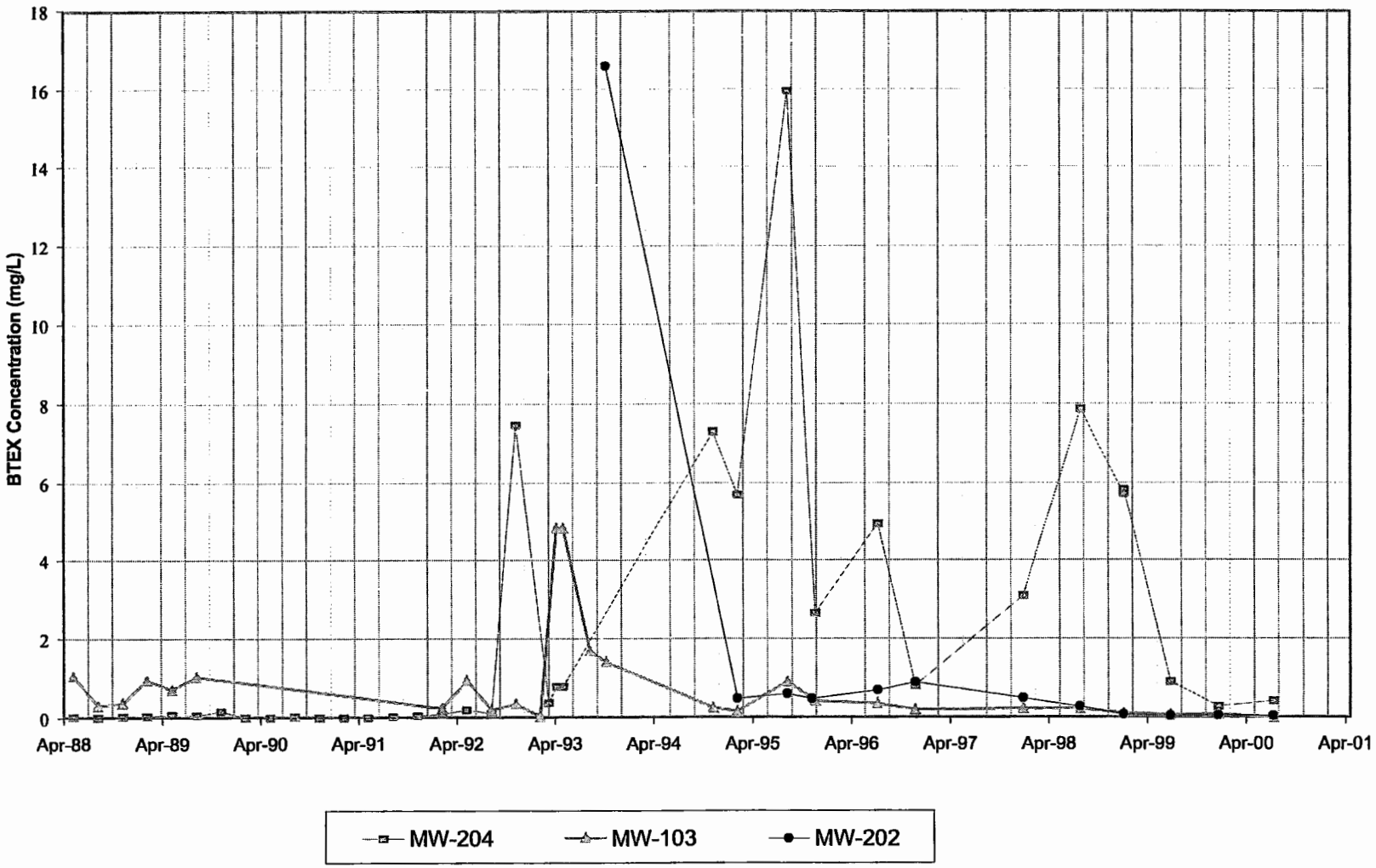
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BTEX CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 2: EAST TANK FARM AREA

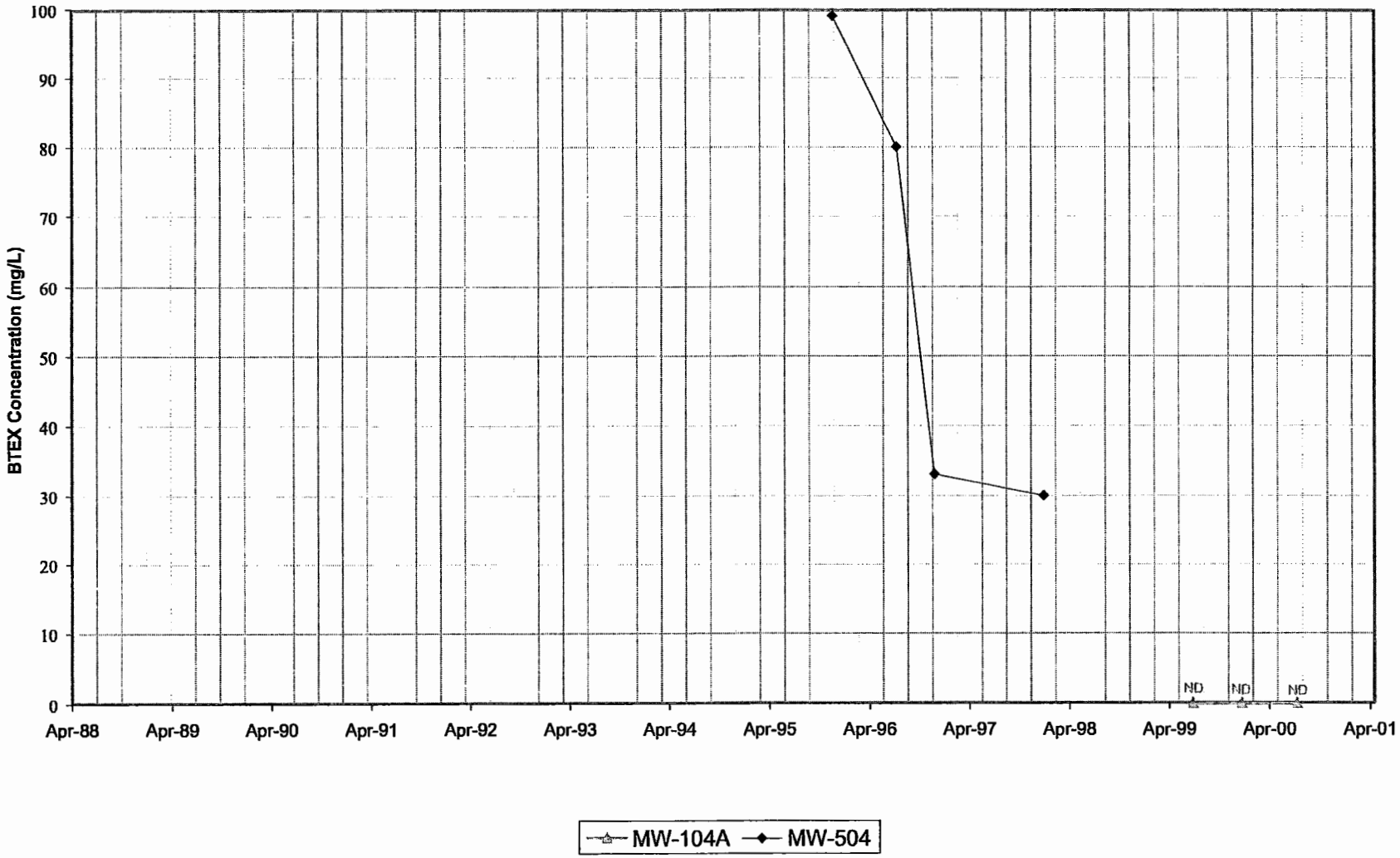
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BTEX CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 3: PROCESSING AREA

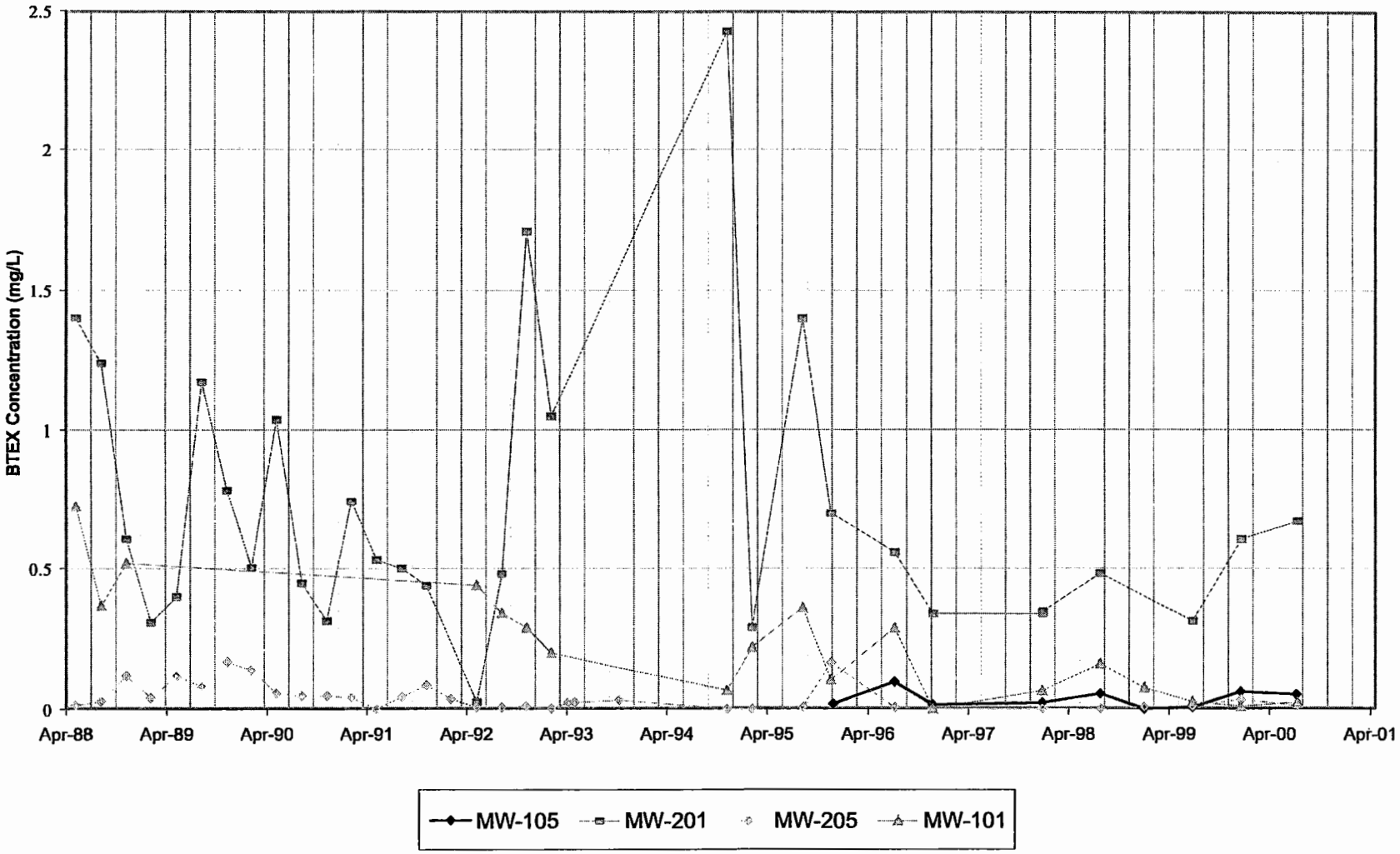
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BTEX CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 4: WEST TANK FARM AREA

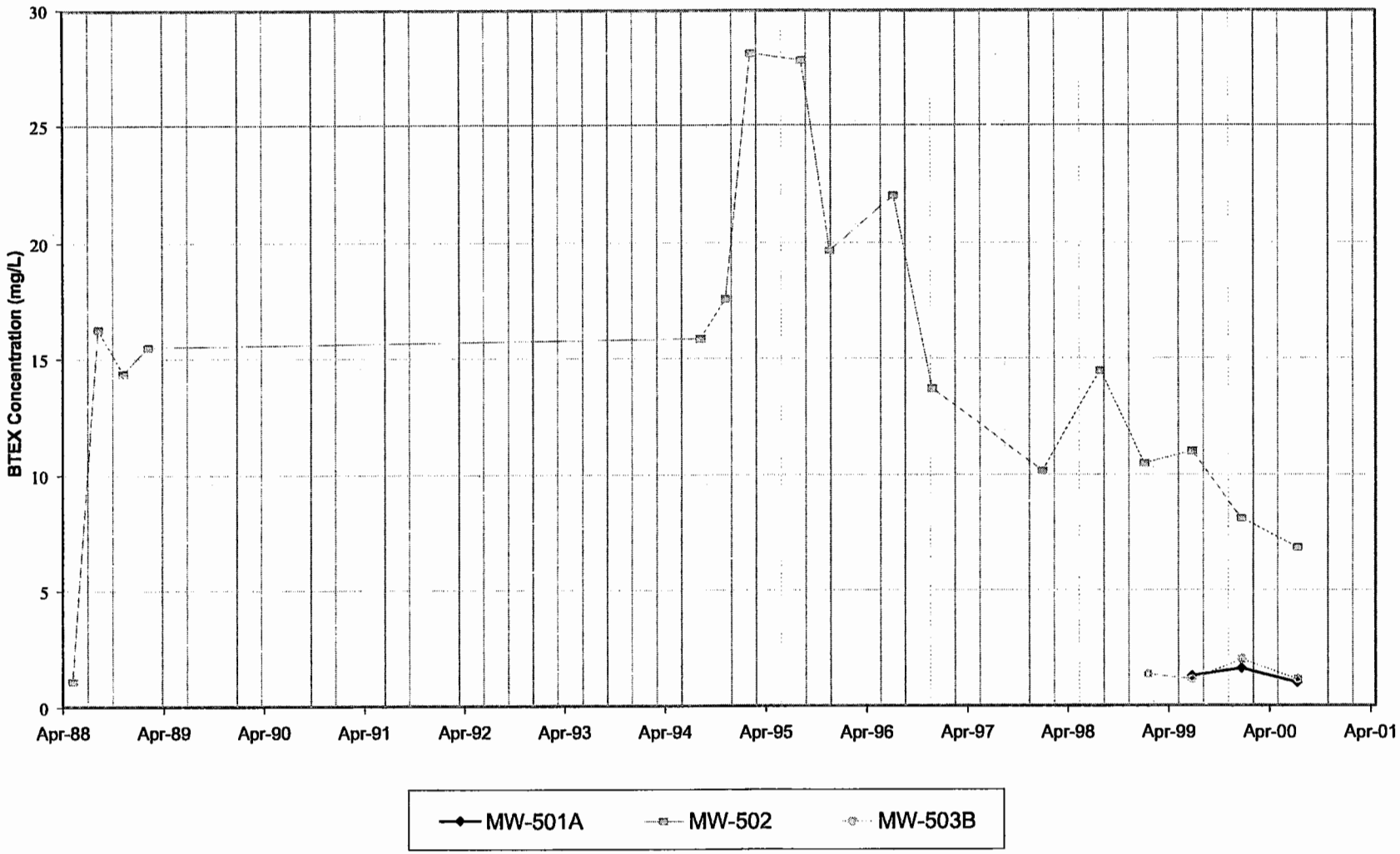
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BTEX CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 5: LAKELAND PROPERTY

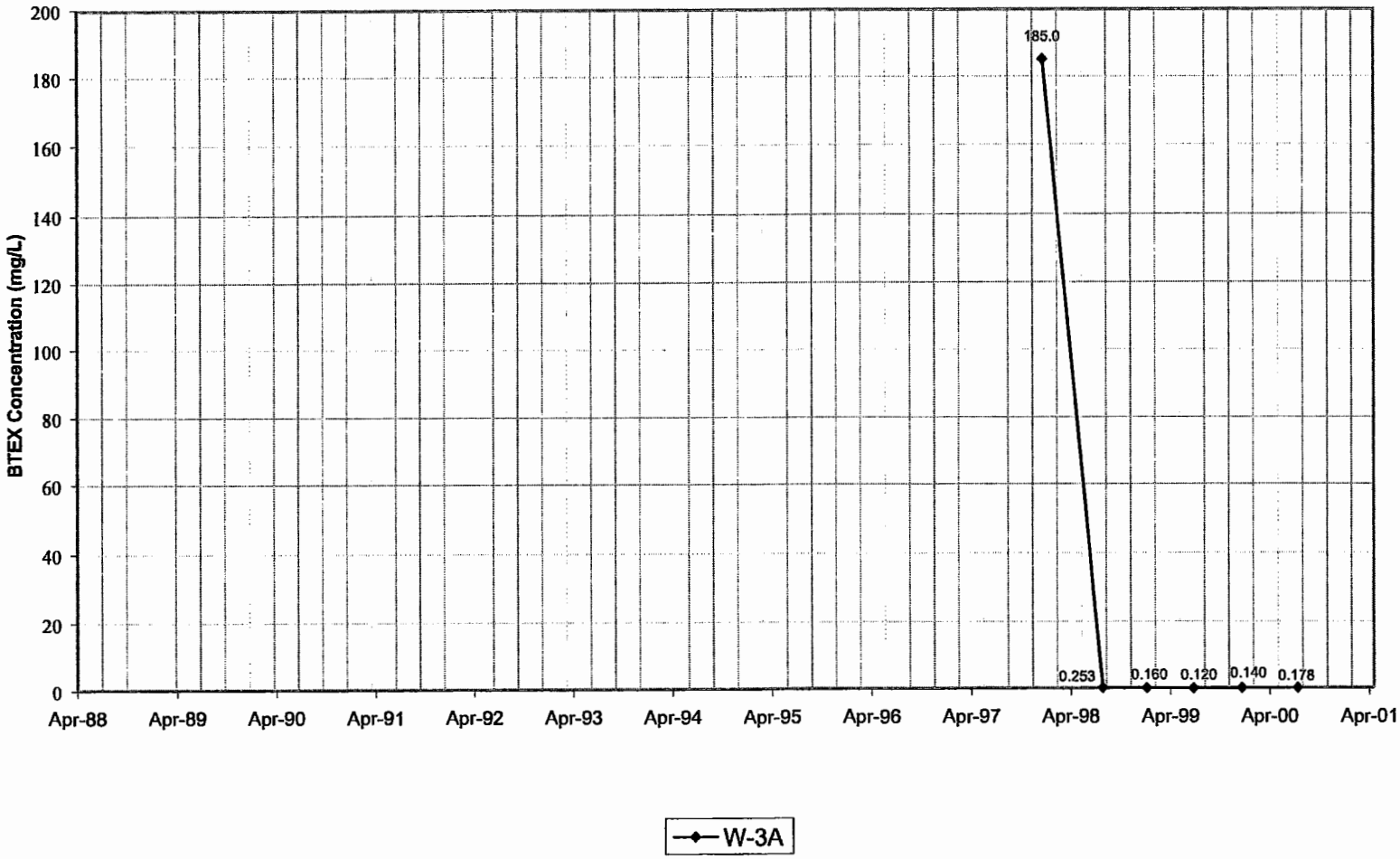
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BTEX CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 6: FORMER AST AREA AT WALKER PROPERTY

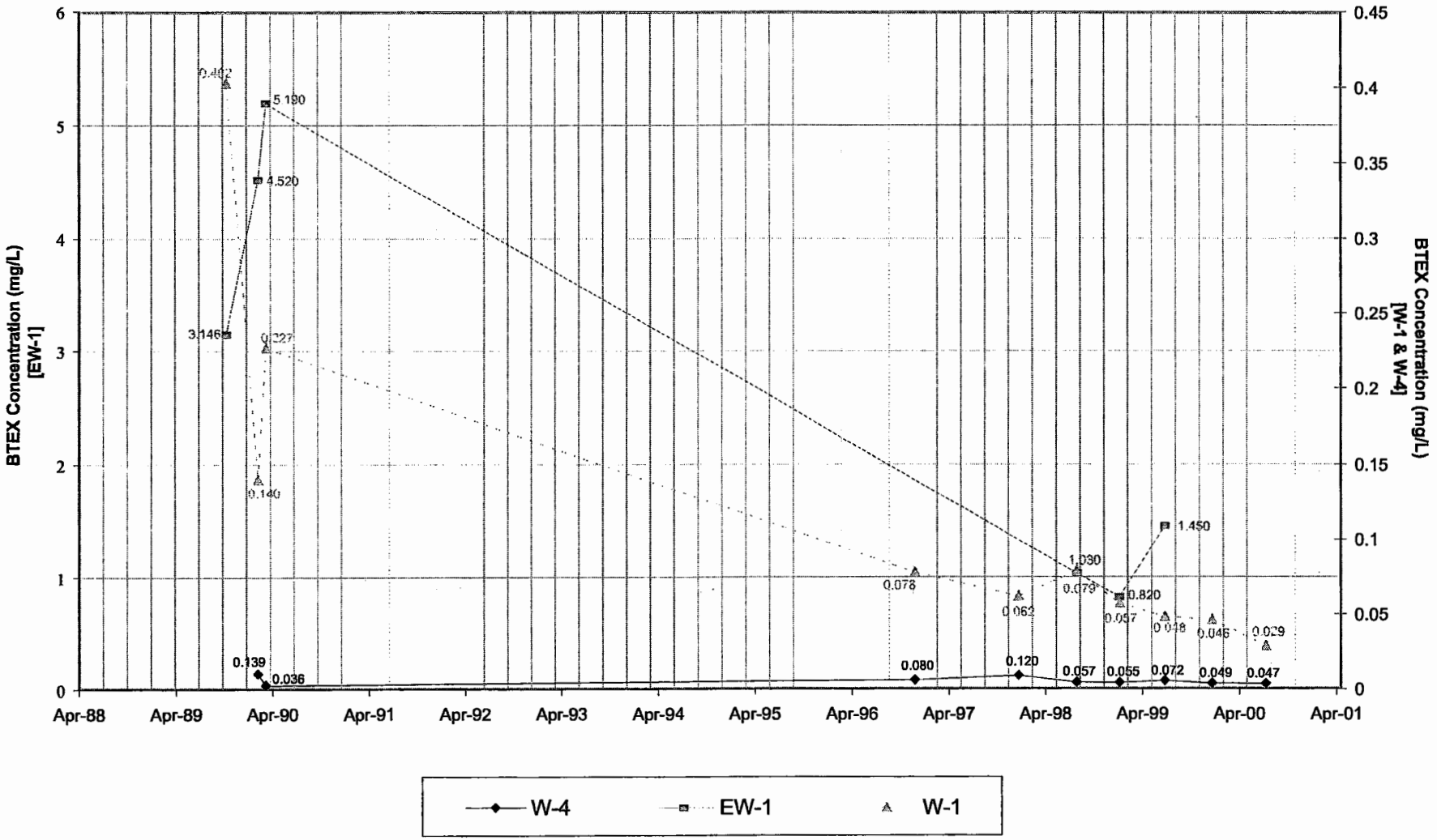
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BTEX CONCENTRATION TRENDS IN GROUNDWATER
OFF-SITE WELLS: WALKER PROPERTY

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



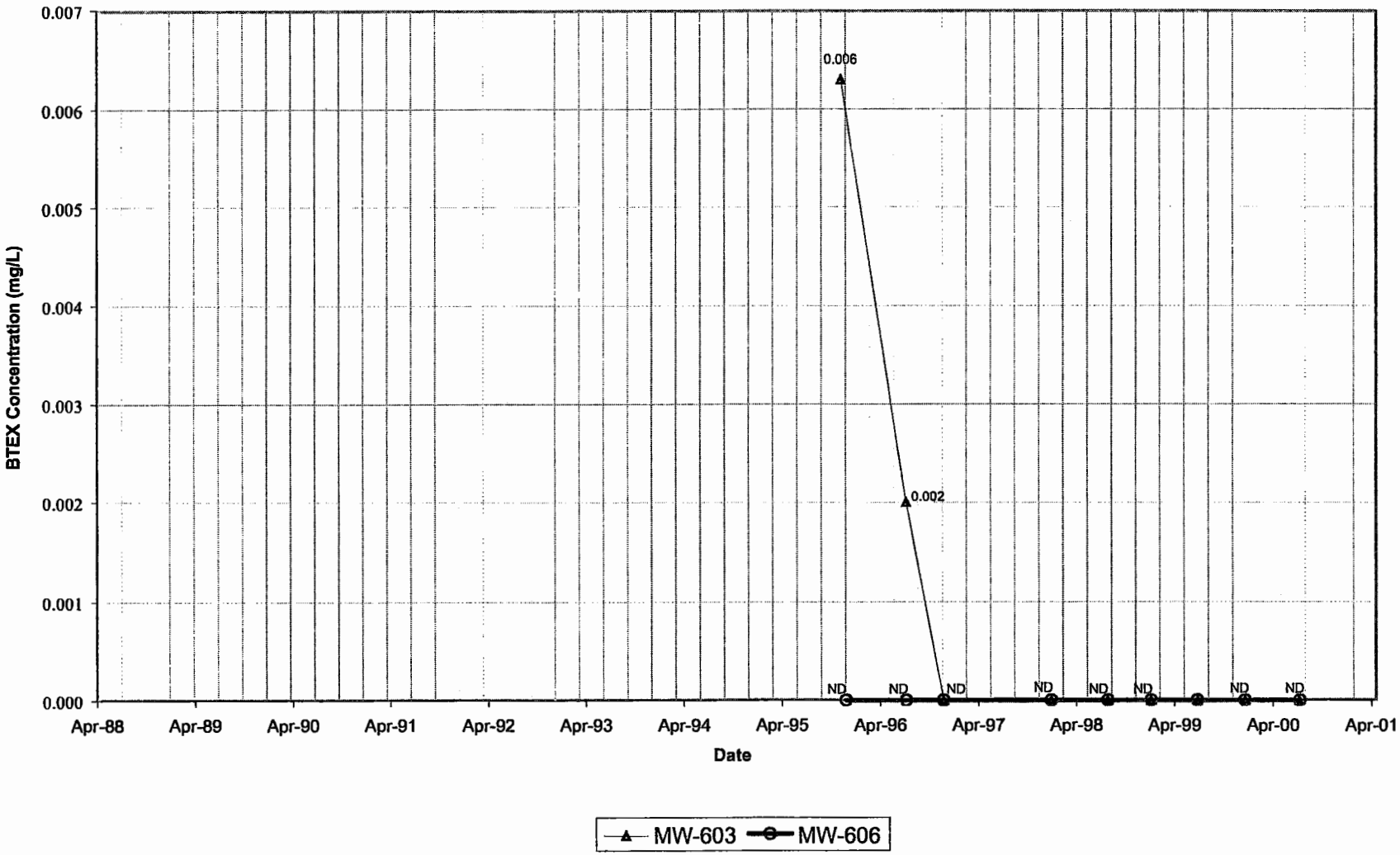
P:/CENCO/3917-015/REPORT/BTEXgrph/Walker

12/28/00

Versar INC.

BTEX CONCENTRATION TRENDS IN GROUNDWATER OFF-SITE WELLS: METROPOLITAN STATE HOSPITAL

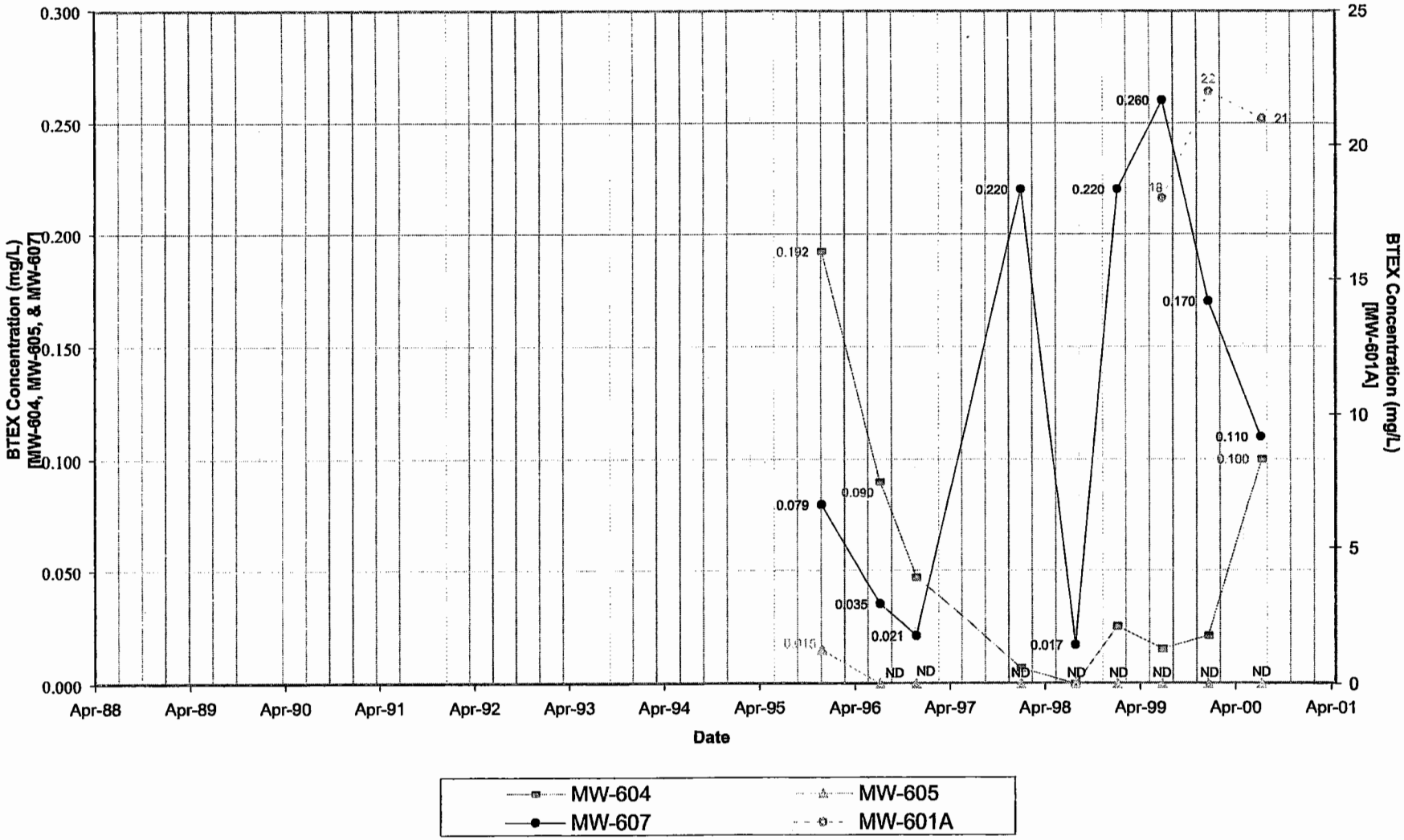
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

BTEX CONCENTRATION TRENDS IN GROUNDWATER
OFF-SITE WELLS: METROPOLITAN STATE HOSPITAL

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



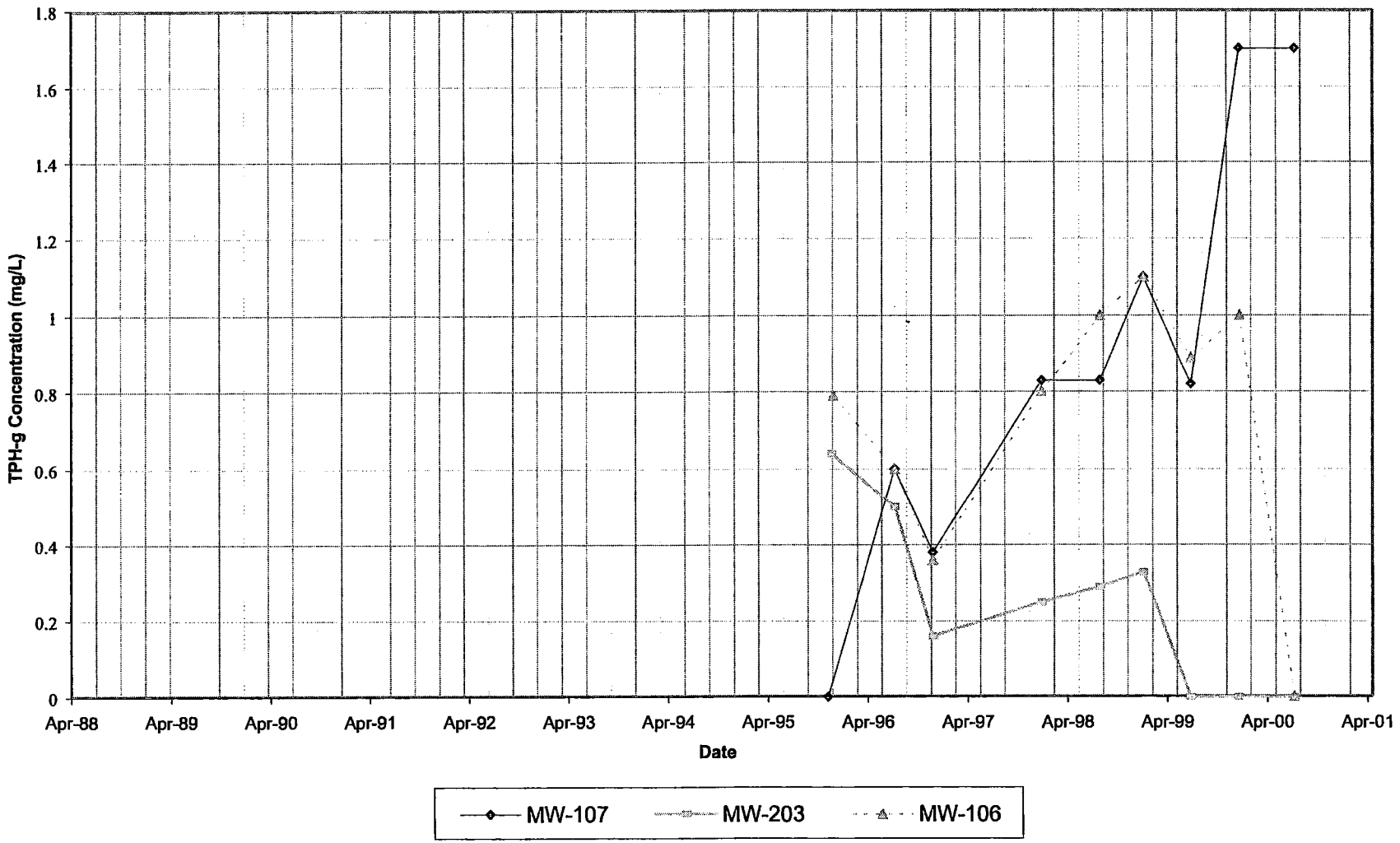
APPENDIX F

TPH-GAS CONCENTRATION TRENDS IN GROUNDWATER

Versar INC.

TPH-GAS CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 1: BLOOMFIELD PROPERTY

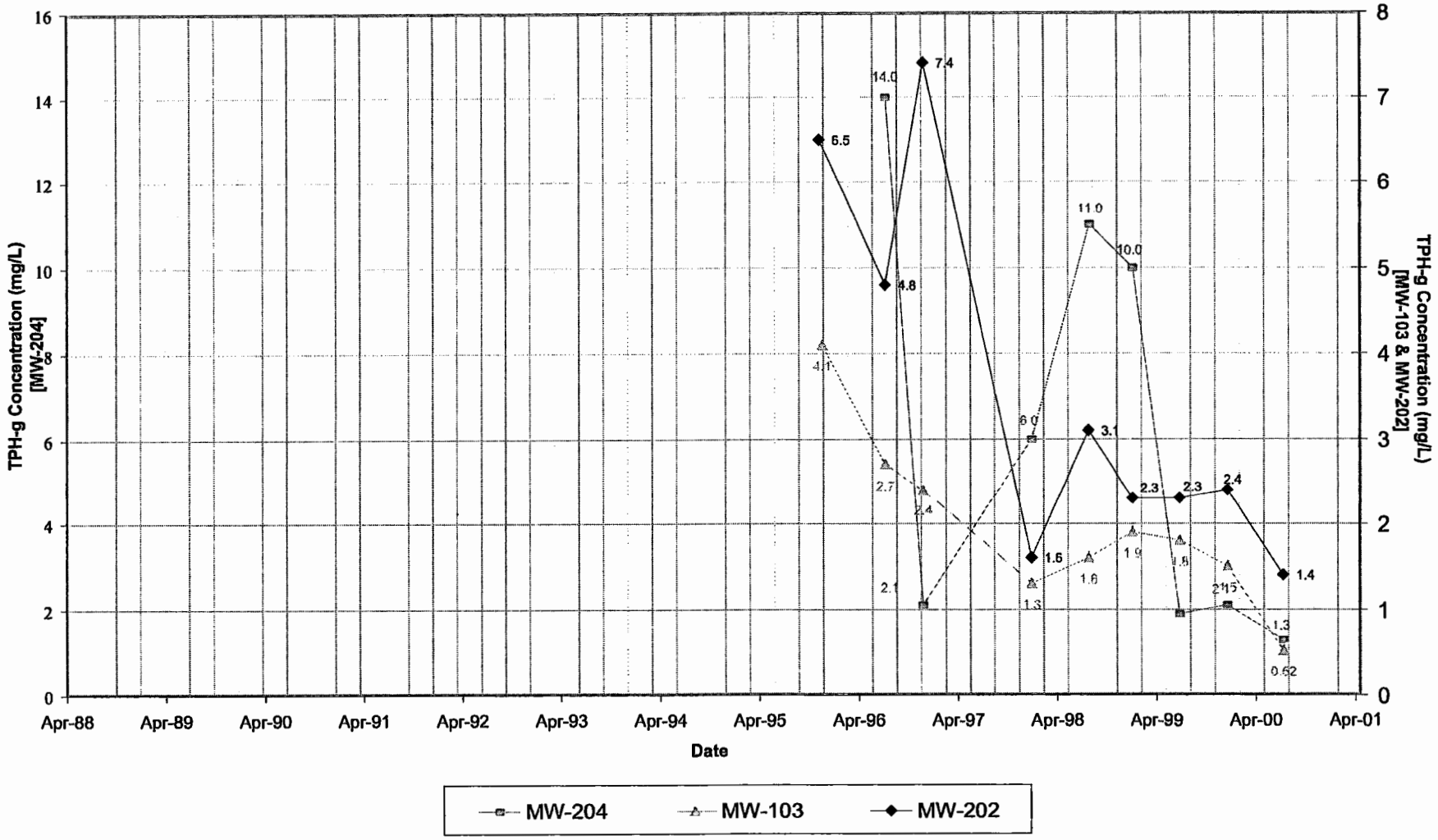
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

TPH-GAS CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 2: EAST TANK FARM AREA

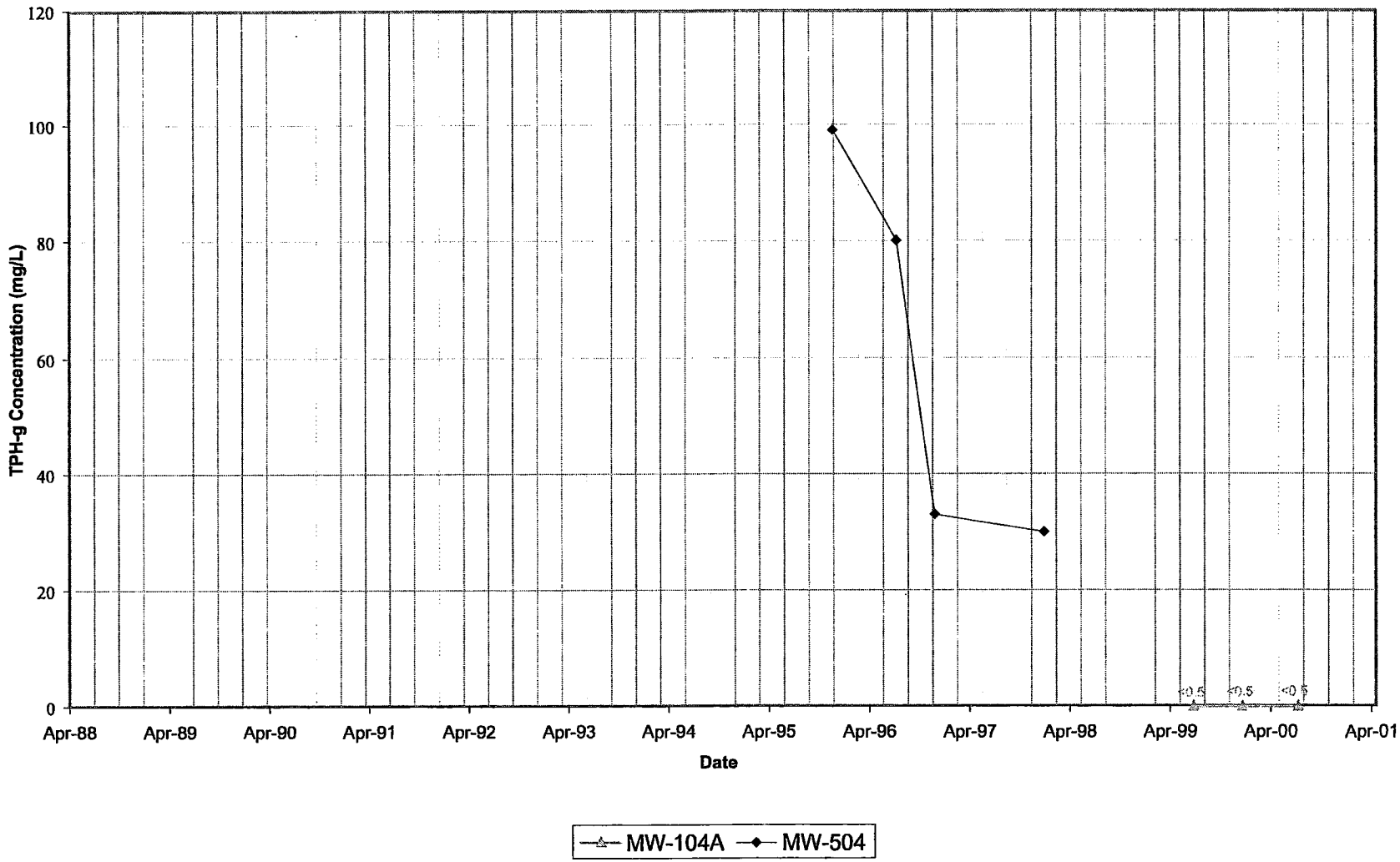
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

TPH-GAS CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 3: PROCESSING AREA

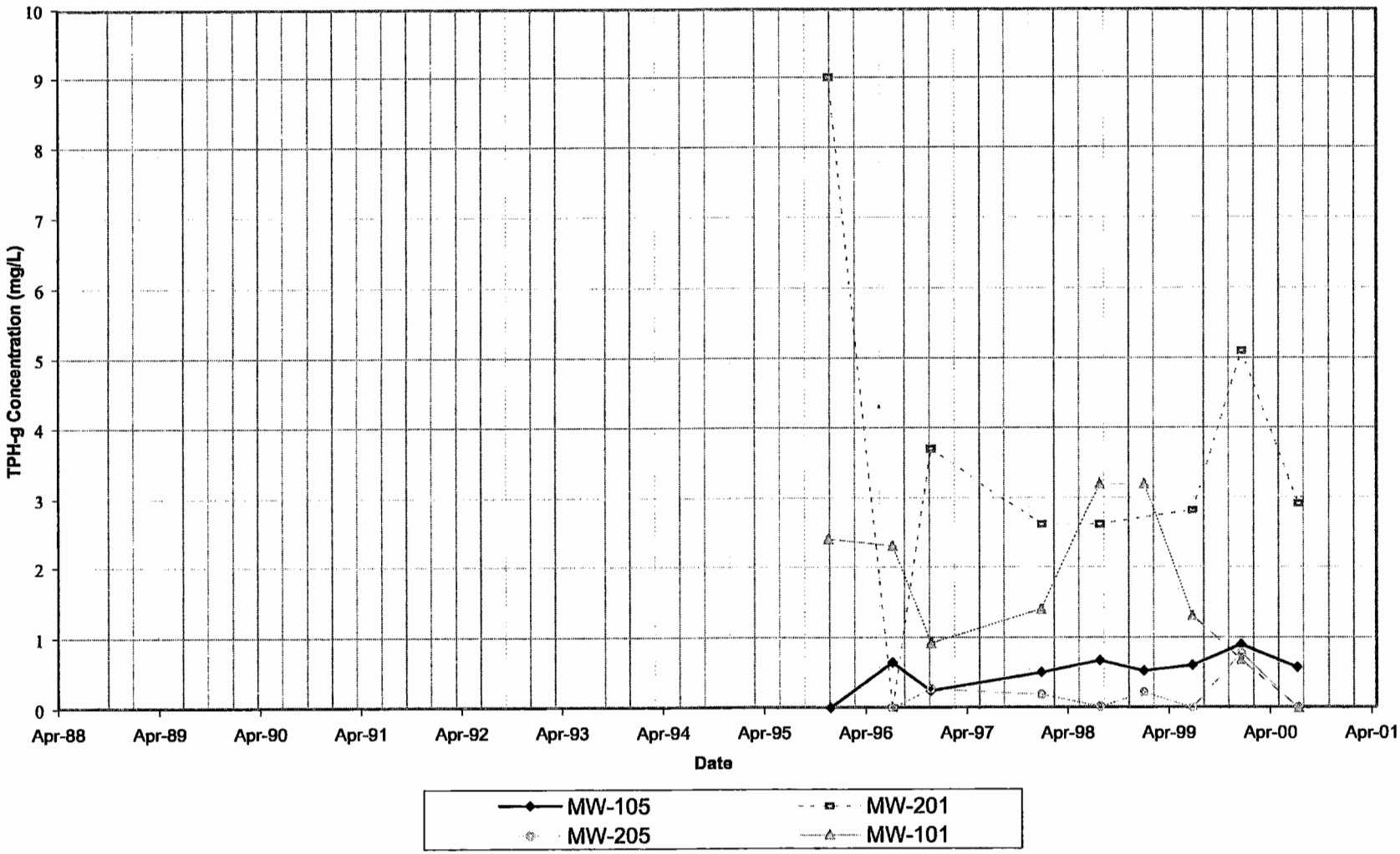
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

TPH-GAS CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 4: WEST TANK FARM AREA

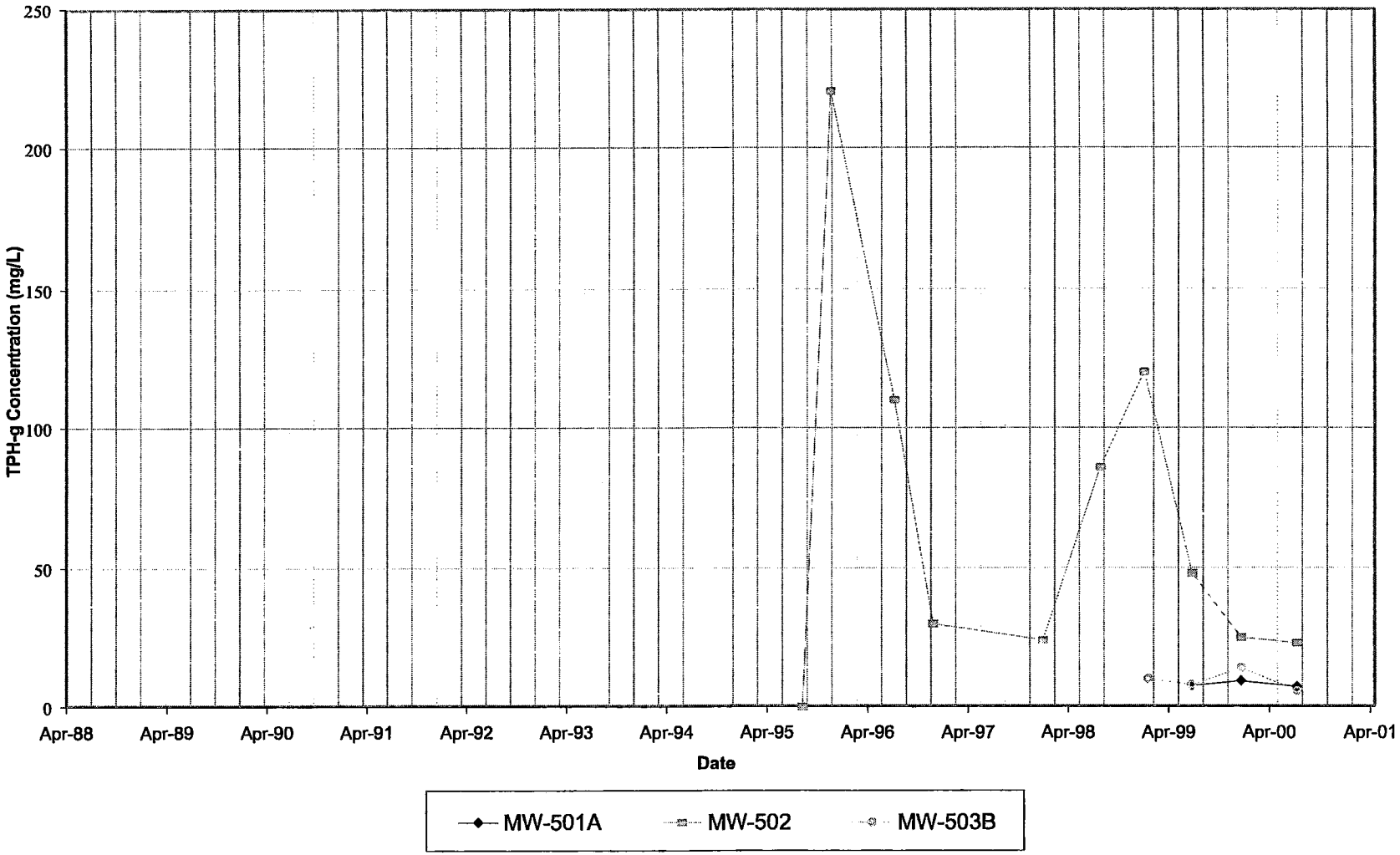
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

TPH-GAS CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 5: LAKELAND PROPERTY

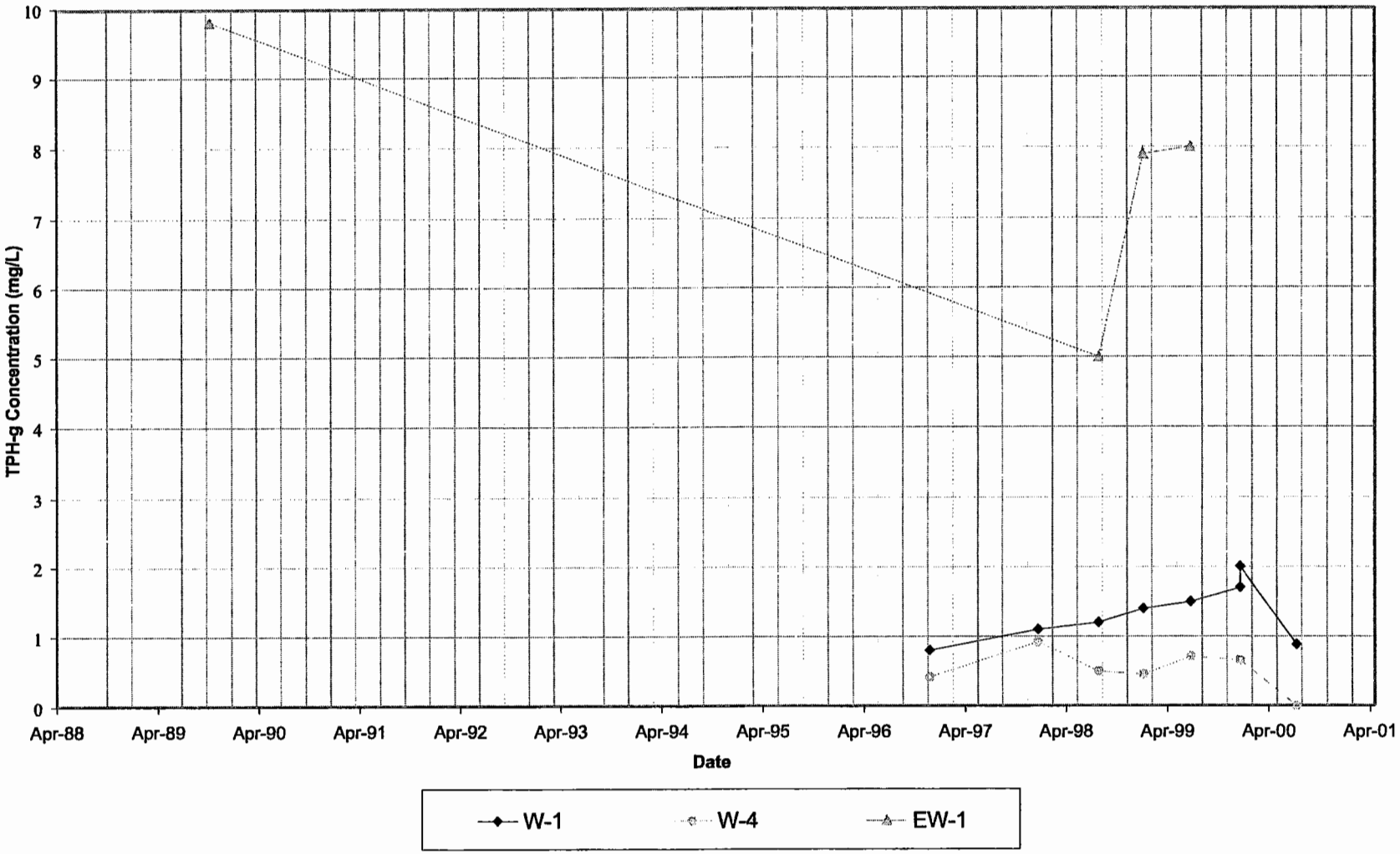
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

TPH-GAS CONCENTRATION TRENDS IN GROUNDWATER
OFF-SITE WELLS: WALKER PROPERTY

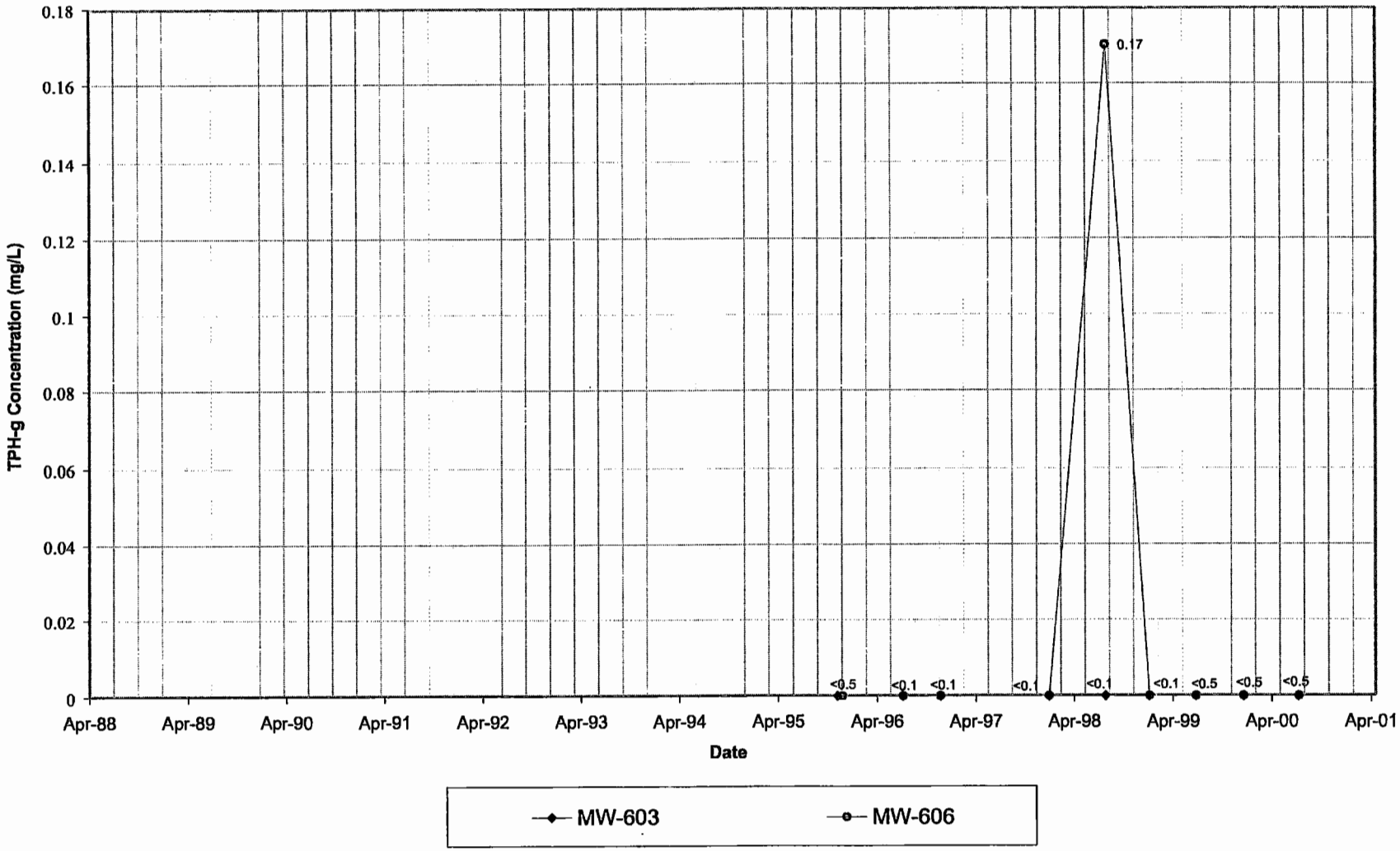
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

TPH-GAS CONCENTRATION TRENDS IN GROUNDWATER OFF-SITE WELLS: METROPOLITAN STATE HOSPITAL

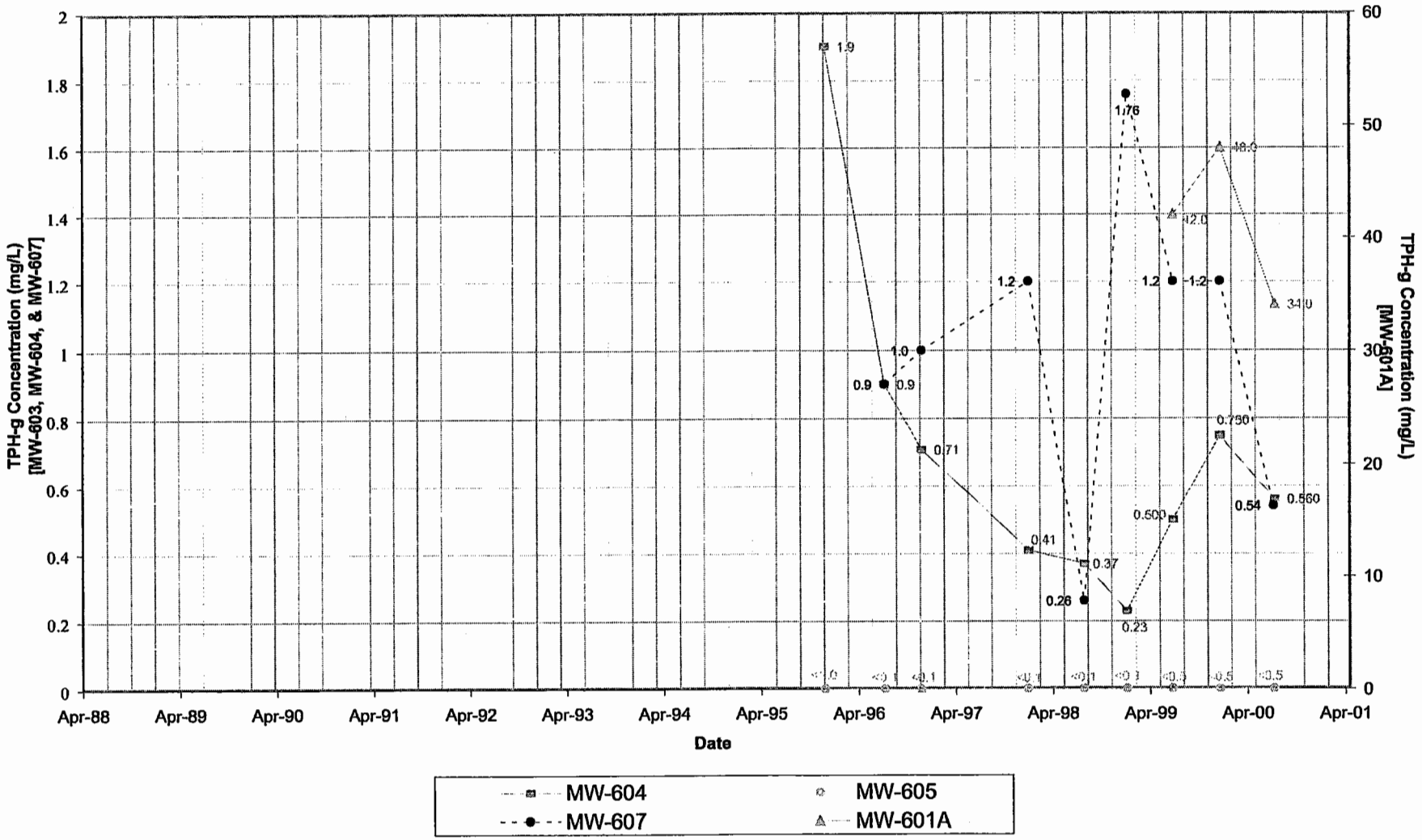
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

TPH-GAS CONCENTRATION TRENDS IN GROUNDWATER OFF-SITE WELLS: METROPOLITAN STATE HOSPITAL

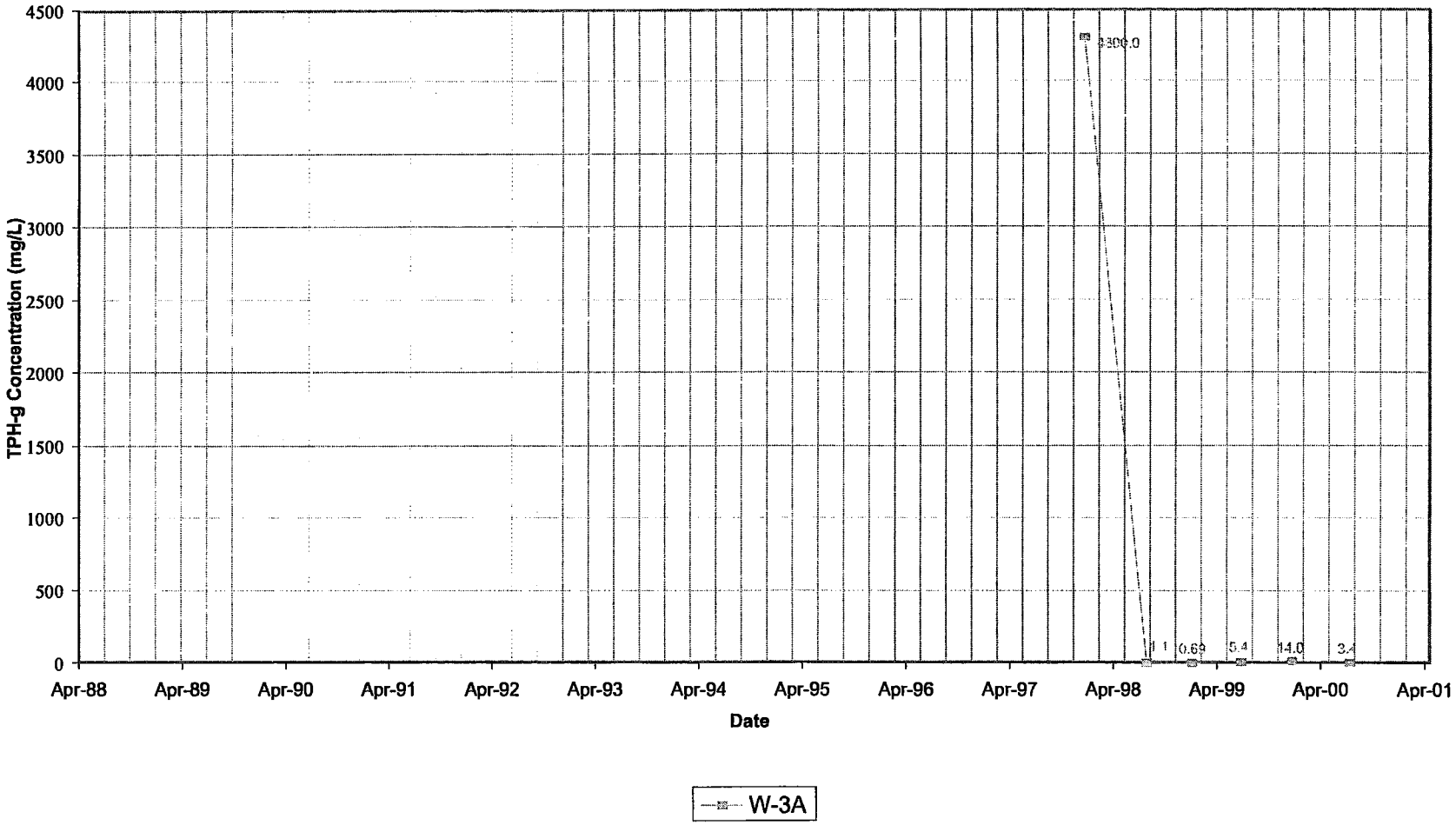
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



Versar INC.

TPH-GAS CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 6: FORMER AST AREA AT WALKER PROPERTY

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



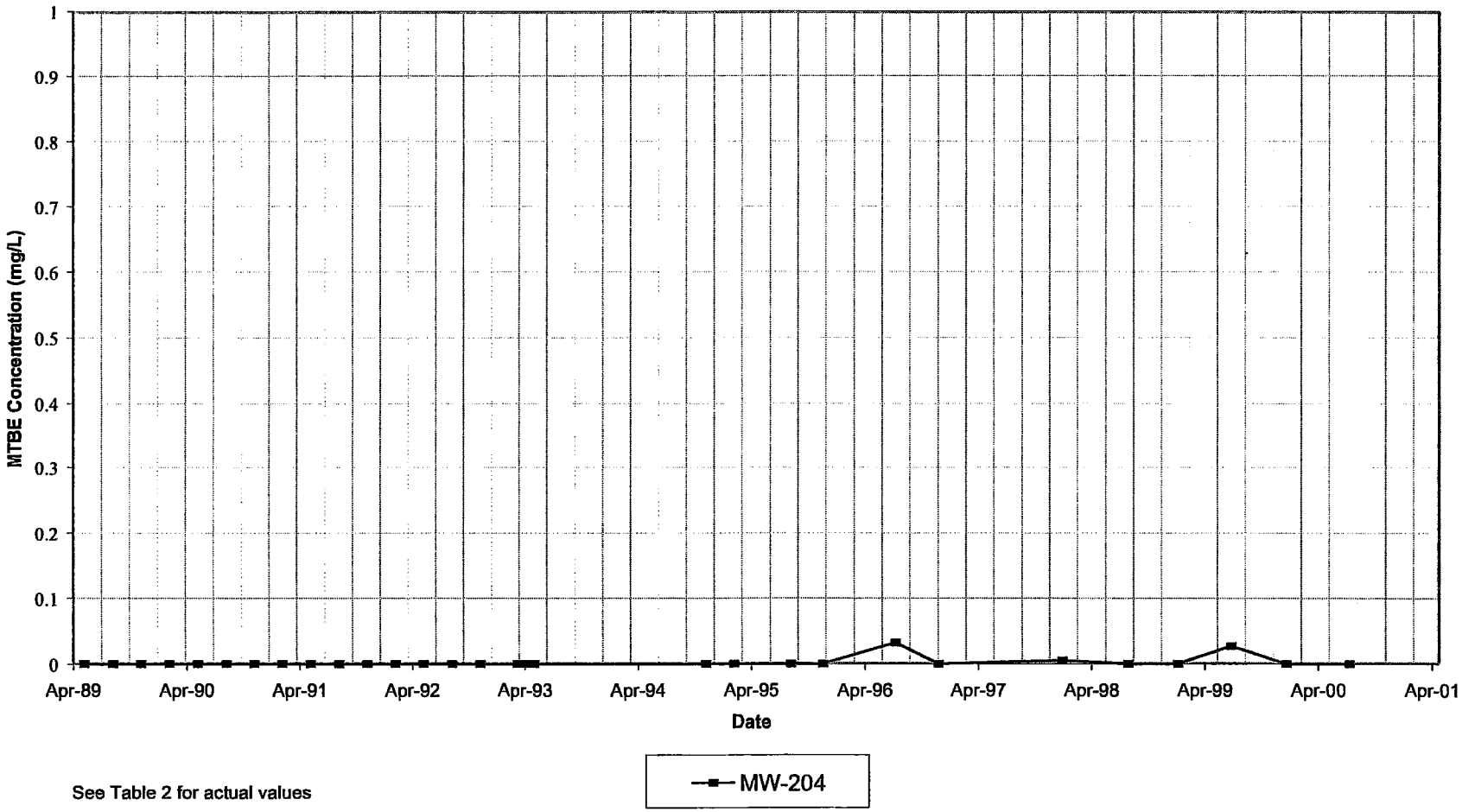
APPENDIX G

MTBE CONCENTRATION TRENDS IN GROUNDWATER

Versar INC.

MTBE CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 2: EAST TANK FARM PROPERTY

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

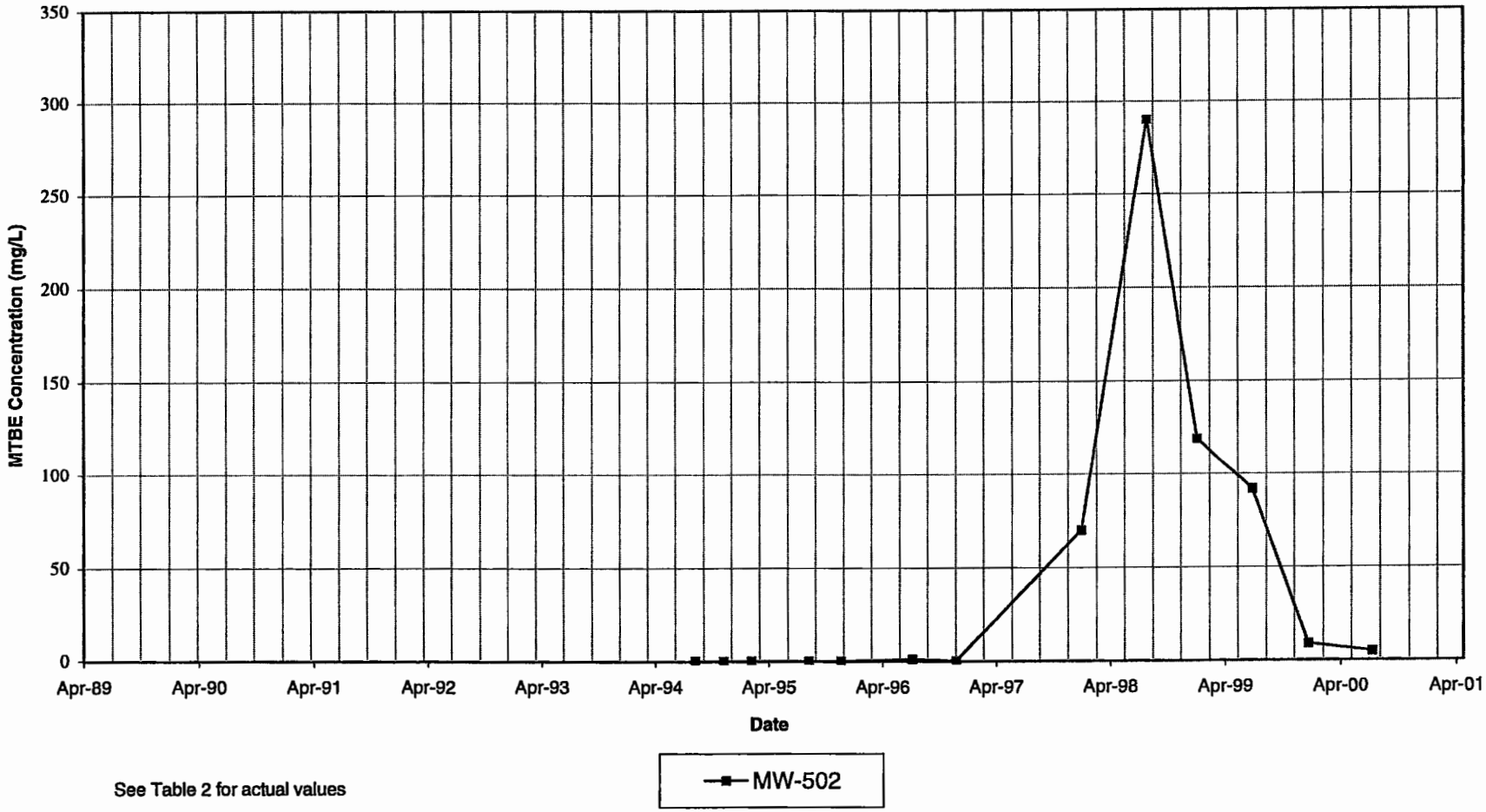


See Table 2 for actual values

Versar INC.

MTBE CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 5: LAKELAND PROPERTY

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

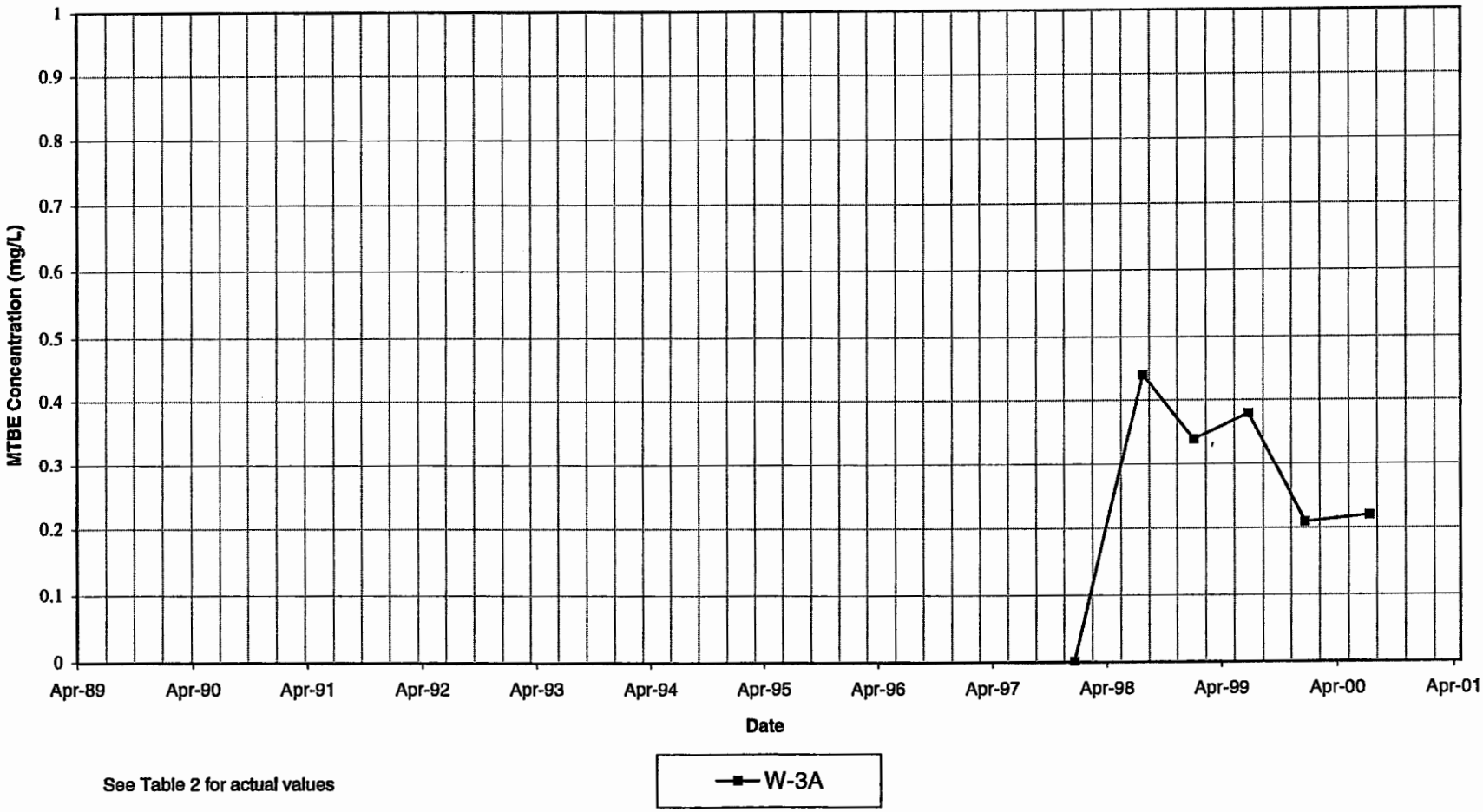


See Table 2 for actual values

Versar INC.

MTBE CONCENTRATION TRENDS IN GROUNDWATER
OPERATIONAL AREA 6: FORMER AST AREA AT WALKER PROPERTY

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

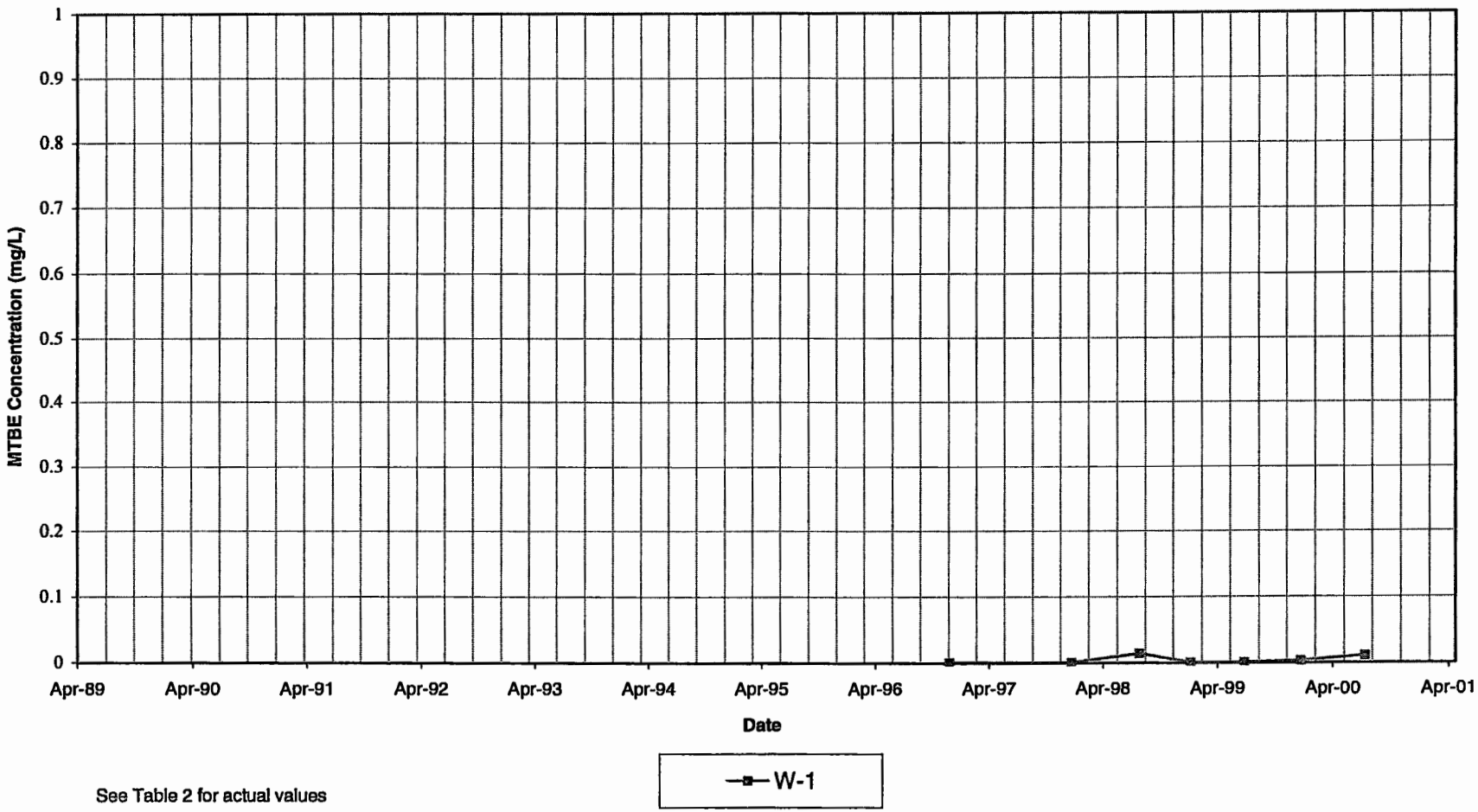


See Table 2 for actual values

Versar INC.

MTBE CONCENTRATION TRENDS IN GROUNDWATER
OFF-SITE WELLS: WALKER PROPERTY

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

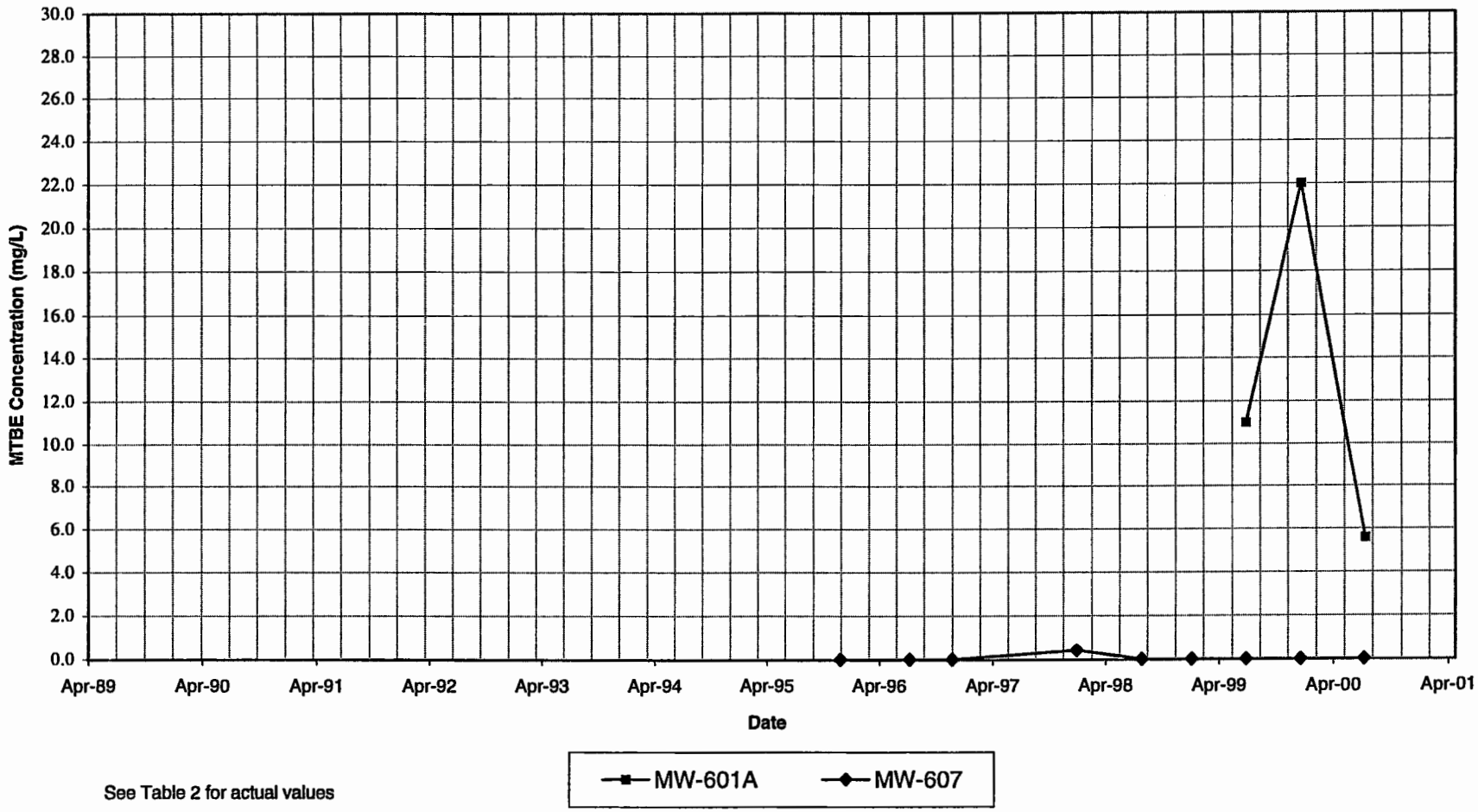


See Table 2 for actual values

Versar INC.

MTBE CONCENTRATION TRENDS IN GROUNDWATER
OFF-SITE WELLS: METROPOLITAN STATE HOSPITAL

CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA



See Table 2 for actual values

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-101	Jun-88	134.98	88.66	ND	46.32	--
	Sep-88	134.98	89.29	ND	45.69	--
	Dec-88	134.98	90.10	ND	44.88	--
	Mar-89	134.98	90.28	ND	44.70	--
	Dec-89	134.98	90.29	ND	44.69	--
	Mar-91	134.98	91.09	ND	43.89	--
	Jun-91	134.98	90.24	ND	44.74	--
	Dec-91	135.23	90.40	ND	44.83	--
	Mar-92	135.23	89.87	ND	45.36	--
	Jun-92	135.23	88.47	ND	46.76	--
	Sep-92	135.23	88.60	ND	46.63	--
	Dec-92	135.23	88.69	ND	46.54	--
	Mar-93	135.23	87.35	ND	47.88	--
	Sep-93	135.23	82.34	82.33	52.90	0.01
	Nov-93	135.23	80.83	80.82	54.41	0.01
	Mar-94	135.23	78.10	78.08	57.15	0.02
	Jun-94	135.23	76.38	76.37	58.86	0.01
	Sep-94	135.23	76.64	76.63	58.60	0.01
	Dec-94	135.23	77.57	ND	57.66	--
	Mar-95	135.23	77.46	ND	57.77	--
	Sep-95	135.23	74.75	ND	60.48	--
	Dec-95	135.23	75.15	ND	60.08	--
	Jul-96	135.23	74.55	ND	60.68	--
	Dec-96	135.23	75.61	ND	59.62	--
	Jan-98	135.23	74.72	ND	60.51	--
	Aug-98	135.23	73.45	ND	61.78	--
	Jan-99	135.23	74.03	ND	61.20	--
	Jul-99	135.23	75.53	ND	59.70	--
	Jan-00	135.23	79.40	ND	55.83	--
	Jul-00	135.23	81.20	ND	54.03	--
MW-103	Jun-88	136.95	93.36	ND	43.59	--
	Sep-88	136.95	93.82	ND	43.13	--
	Dec-88	136.95	94.76	ND	42.19	--
	Mar-89	136.95	95.68	ND	41.27	--
	Jun-89	136.95	95.92	ND	41.03	--
	Sep-89	136.95	96.20	ND	40.75	--
	Dec-89	136.95	96.90	ND	40.05	--
	Mar-91	136.95	96.51	ND	40.44	--
	Jun-91	136.95	96.08	ND	40.87	--
	Sep-91	136.95	95.92	ND	41.03	--
	Dec-91	136.95	95.91	ND	41.04	--
	Mar-92	136.95	95.06	ND	41.89	--
	Jun-92	136.95	93.90	ND	43.05	--
	Sep-92	136.95	93.73	ND	43.22	--
	Dec-92	136.95	93.99	ND	42.96	--
	Mar-93	136.95	93.15	ND	43.80	--
	May-93	136.95	90.90	ND	46.05	--
	Sep-93	136.95	88.67	ND	48.28	--
	Nov-93	136.95	87.24	ND	49.71	--
	Mar-94	136.95	84.86	84.85	52.10	0.01
	Jun-94	136.95	83.15	83.14	53.81	0.01
	Sep-94	136.95	82.70	82.69	54.26	0.01
	Dec-94	136.95	83.17	ND	53.78	--
	Mar-95	136.95	82.65	ND	54.30	--
	Sep-95	136.95	81.03	ND	55.92	--
	Dec-95	136.95	81.21	ND	55.74	--
	Jul-96	136.95	80.41	ND	56.54	--
	Dec-96	136.95	81.24	ND	55.71	--
	Jan-98	136.95	80.55	ND	56.40	--
	Aug-98	136.95	79.51	ND	57.44	--
	Jan-99	136.95	79.88	ND	57.07	--
	Jul-99	136.95	80.74	ND	56.21	--
	Jan-00	136.95	83.70	ND	53.25	--
	Jul-00	136.95	85.80	ND	51.15	--

For Notes and explanations see page 11

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-104 (ABANDONED)	Jun-88	141.60	87.95	ND	53.65	--
	Sep-88	141.60	88.25	ND	53.35	--
	Dec-88	141.60	88.67	ND	52.93	--
	Mar-89	141.60	89.15	ND	52.45	--
	Jun-89	141.60	89.57	ND	52.03	--
	Sep-89	141.60	89.90	ND	51.70	--
	Dec-89	141.60	90.17	ND	51.43	--
	Mar-90	141.60	90.62	ND	50.98	--
	Jun-90	141.60	90.82	ND	50.78	--
	Sep-90	141.60	90.96	ND	50.64	--
	Dec-90	141.60	91.13	ND	50.47	--
	Mar-91	141.60	91.12	ND	50.48	--
	Jun-91	141.60	91.02	ND	50.58	--
	Sep-91	141.60	90.76	ND	50.84	--
	Dec-91	141.60	90.63	ND	50.97	--
	Mar-92	141.60	90.45	ND	51.15	--
	Jun-92	141.60	89.90	ND	51.70	--
	Sep-92	141.60	89.33	ND	52.27	--
	Dec-92	141.60	89.10	ND	52.50	--
	Mar-93	141.60	88.71	ND	52.89	--
	May-93	141.60	87.55	ND	54.05	--
	Sep-93	141.60	86.15	ND	55.45	--
	Nov-93	141.60	84.05	ND	57.55	--
	Mar-94	141.60	82.33	ND	59.27	--
	Jun-94	141.60	80.55	ND	61.05	--
	Sep-94	141.60	79.37	79.36	62.24	0.01
	Dec-94	141.60	79.50	ND	62.10	--
	Mar-95	141.60	79.32	ND	62.28	--
	Sep-95	141.60	77.26	ND	64.34	--
	Dec-95	141.60	77.21	ND	64.39	--
	Jul-96	141.60	76.75	ND	64.85	--
	Dec-96	141.60	77.38	ND	64.22	--
	Jan-98	141.60	75.58	ND	66.02	--
	Aug-98	141.60	75.58	ND	66.02	--
	Jan-99	141.60	75.91	ND	65.69	--
MW-104A	Jul-99	141.16	76.32	ND	64.84	--
	Jan-00	141.16	78.86	ND	62.30	--
	Jul-00	141.16	81.50	ND	59.66	--
MW-105	Jul-96	138.63	73.85	ND	64.78	--
	Dec-96	138.63	75.12	ND	63.51	--
	Jan-98	138.63	74.13	ND	64.50	--
	Aug-98	138.63	72.66	ND	65.97	--
	Jan-99	138.63	73.15	ND	65.48	--
	Jul-99	138.63	74.95	ND	63.68	--
	Jan-00	138.63	78.91	ND	59.72	--
	Jul-00	138.63	80.72	ND	57.91	--
MW-106	Jul-96	148.41	81.86	ND	66.55	--
	Dec-96	148.41	82.05	ND	66.36	--
	Jan-98	148.41	81.29	ND	67.12	--
	Aug-98	148.41	80.47	ND	67.94	--
	Jan-99	148.41	80.48	ND	67.93	--
	Jul-99	148.41	80.92	ND	67.49	--
	Jan-00	148.41	82.65	ND	65.76	--
	Jul-00	148.41	85.18	ND	63.23	--
MW-107	Jul-96	148.93	89.92	ND	59.01	--
	Dec-96	148.93	89.85	ND	59.08	--
	Jan-98	148.93	88.99	ND	59.94	--
	Aug-98	148.93	88.05	ND	60.88	--
	Jan-99	148.93	88.14	ND	60.79	--
	Jul-99	148.93	88.45	ND	60.48	--
	Jan-00	148.93	90.00	ND	58.93	--
	Jul-00	148.93	91.90	ND	57.03	--

For Notes and explanations see page 11

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-201	Jun-88	132.91	90.05	ND	42.86	--
	Sep-88	132.91	90.77	ND	42.14	--
	Dec-88	132.91	92.24	ND	40.67	--
	Mar-89	132.91	92.84	ND	40.07	--
	Jun-89	132.91	93.00	ND	39.91	--
	Sep-89	132.91	93.60	ND	39.31	--
	Dec-89	132.91	94.51	ND	38.40	--
	Mar-90	132.91	94.91	ND	38.00	--
	Jun-90	132.91	94.48	ND	38.43	--
	Sep-90	132.91	94.85	ND	38.06	--
	Dec-90	132.91	95.43	ND	37.48	--
	Mar-91	132.91	93.88	ND	39.03	--
	Jun-91	132.91	93.05	ND	39.86	--
	Sep-91	132.91	93.57	ND	39.34	--
	Dec-91	132.91	92.90	ND	40.01	--
	Mar-92	132.91	91.30	ND	41.61	--
	Jun-92	132.91	90.10	ND	42.81	--
	Sep-92	132.91	90.40	ND	42.51	--
	Dec-92	132.91	90.29	ND	42.62	--
	Mar-93	132.91	88.84	ND	44.07	--
	May-93	132.91	86.33	ND	46.58	--
	Sep-93	132.91	84.47	84.45	48.46	0.02
	Dec-93	132.91	82.75	82.74	50.17	0.01
	Mar-94	132.91	79.76	79.75	53.16	0.01
	Jun-94	132.91	78.06	78.05	54.86	0.01
	Sep-94	132.91	78.46	78.45	54.46	0.01
	Dec-94	132.91	79.10	ND	53.81	--
	Mar-95	132.91	77.87	ND	55.04	--
	Sep-95	132.91	76.53	ND	56.38	--
	Dec-95	132.91	76.79	ND	56.12	--
	Jul-96	132.91	76.00	ND	56.91	--
	Dec-96	132.91	76.93	ND	55.98	--
	Jan-98	132.91	76.02	ND	56.89	--
	Aug-98	132.91	75.01	ND	57.90	--
	Jan-99	132.91	75.36	ND	57.55	--
	Jul-99	132.91	76.88	ND	56.03	--
	Jan-00	132.91	79.50	ND	53.41	--
	Jul-00	132.91	82.44	ND	50.47	--
MW-202	Jun-88	137.89	DRY	ND	ND	--
	Sep-88	137.89	DRY	ND	ND	--
	Dec-88	137.89	DRY	ND	ND	--
	Mar-89	137.89	DRY	ND	ND	--
	Jun-89	137.89	DRY	ND	ND	--
	Sep-89	137.89	DRY	ND	ND	--
	Dec-89	137.89	DRY	ND	ND	--
	Mar-90	137.89	DRY	ND	ND	--
	Sep-90	137.89	DRY	ND	ND	--
	Dec-90	137.89	DRY	ND	ND	--
	Mar-91	137.89	DRY	ND	ND	--
	Jun-91	137.89	DRY	ND	ND	--
	Sep-91	137.89	DRY	ND	ND	--
	Dec-91	137.89	DRY	ND	ND	--
	Mar-92	137.89	DRY	ND	ND	--
	Jun-92	137.89	DRY	ND	ND	--
	Sep-92	137.89	DRY	ND	ND	--
	Dec-92	137.89	DRY	ND	ND	--
	Mar-93	137.89	DRY	ND	ND	--
	May-93	137.89	DRY	ND	ND	--
	Sep-93	137.89	89.36	89.35	48.54	0.01
	Nov-93	137.89	87.85	ND	50.04	--
	Mar-94	137.89	85.36	85.35	52.54	0.01
	Jun-94	137.89	83.53	83.52	54.37	0.01
	Sep-94	137.89	83.32	83.31	54.58	0.01
	Dec-94	137.89	83.88	83.87	54.02	0.01

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-202 (cont.)	Mar-95	137.89	83.10	ND	54.79	--
	Sep-95	137.89	81.44	ND	56.45	--
	Dec-95	137.89	81.71	ND	56.18	--
	Jul-96	137.89	80.90	ND	56.99	--
	Dec-96	137.89	81.78	ND	56.11	--
	Jan-98	137.89	81.00	ND	56.89	--
	Aug-98	137.89	79.93	ND	57.96	--
	Jan-99	137.89	83.35	ND	54.54	--
	Jul-99	137.89	81.37	ND	56.52	--
	Jan-00	137.89	84.70	ND	53.19	--
	Jul-00	137.89	86.78	ND	51.11	--
MW-203	Jun-88	143.89	95.98	ND	47.91	--
	Sep-88	143.89	96.30	ND	47.59	--
	Dec-88	143.89	96.76	ND	47.13	--
	Mar-89	143.89	97.15	ND	46.74	--
	Jun-89	143.89	97.50	ND	46.39	--
	Sep-89	143.89	97.85	ND	46.04	--
	Dec-89	143.89	98.19	ND	45.70	--
	Mar-90	143.89	98.72	ND	45.17	--
	Sep-90	143.89	99.09	ND	44.80	--
	Dec-90	143.89	99.55	ND	44.34	--
	Mar-91	143.89	99.23	ND	44.66	--
	Jun-91	143.89	99.19	ND	44.70	--
	Sep-91	143.89	98.93	ND	44.96	--
	Dec-91	143.89	98.84	ND	45.05	--
	Mar-92	143.89	98.39	ND	45.50	--
	Jun-92	143.89	97.76	ND	46.13	--
	Sep-92	143.89	97.47	ND	46.42	--
	Dec-92	143.89	97.50	ND	46.39	--
	Mar-93	143.89	97.13	ND	46.76	--
	May-93	143.89	96.14	ND	47.75	--
	Sep-93	143.89	95.81	ND	48.08	--
	Nov-93	143.89	93.84	93.83	50.06	0.01
	Mar-94	143.89	92.27	92.25	51.64	0.02
	Jun-94	143.89	90.68	90.67	53.22	0.01
	Sep-94	143.89	89.61	89.60	54.29	0.01
	Dec-94	143.89	89.41	ND	54.48	--
	Mar-95	143.89	89.03	ND	54.86	--
	Sep-95	143.89	87.47	ND	56.42	--
	Dec-95	143.89	87.38	ND	56.51	--
	Jul-96	143.89	86.53	ND	57.36	--
	Dec-96	143.89	87.03	ND	56.86	--
	Jan-98	143.89	86.39	ND	57.50	--
	Aug-98	143.89	85.38	ND	58.51	--
	Jan-99	143.89	85.72	ND	58.17	--
	Jul-99	143.89	86.30	ND	57.59	--
	Jan-00	143.89	88.54	ND	55.35	--
	Jul-00	143.89	90.60	ND	53.29	--
MW-204	Jun-88	140.14	94.95	ND	45.19	--
	Sep-88	140.14	95.43	ND	44.71	--
	Dec-88	140.14	96.57	ND	43.57	--
	Mar-89	140.14	97.53	ND	42.61	--
	Jun-89	140.14	97.68	ND	42.46	--
	Sep-89	140.14	98.00	ND	42.14	--
	Dec-89	140.14	98.70	ND	41.44	--
	Mar-90	140.14	99.19	ND	40.95	--
	Jun-90	140.14	98.95	ND	41.19	--
	Sep-90	140.14	99.08	ND	41.06	--
	Dec-90	140.14	99.50	ND	40.64	--
	Mar-91	140.14	98.61	ND	41.53	--
	Jun-91	140.14	97.85	ND	42.29	--
	Sep-91	140.14	97.59	ND	42.55	--
	Dec-91	140.14	97.50	ND	42.64	--
	Mar-92	140.14	96.45	ND	43.69	--

For Notes and explanations see page 11

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-204 (cont.)	Jun-92	140.14	95.07	ND	45.07	--
	Sep-92	140.14	94.91	ND	45.23	--
	Dec-92	140.14	95.08	ND	45.06	--
	Mar-93	140.14	94.03	ND	46.11	--
	May-93	140.14	91.83	ND	48.31	--
	Sep-93	140.14	89.56	89.55	50.59	0.01
	Nov-93	140.14	88.10	88.09	52.05	0.01
	Mar-94	140.14	85.90	85.89	54.25	0.01
	Jun-94	140.14	84.09	ND	56.05	--
	Sep-94	140.14	83.71	83.70	56.44	0.01
	Dec-94	140.14	84.31	ND	55.83	--
	Mar-95	140.14	83.76	ND	56.38	--
	Sep-95	140.14	81.98	ND	58.16	--
	Dec-95	140.14	82.23	ND	57.91	--
	Jul-96	140.14	81.50	ND	58.64	--
	Dec-96	140.14	82.42	ND	57.72	--
	Jan-98	140.14	81.69	ND	58.45	--
	Aug-98	140.14	80.57	ND	59.57	--
	Jan-99	140.14	80.95	ND	59.19	--
	Jul-99	140.14	81.93	ND	58.21	--
	Jan-00	140.14	84.80	ND	55.34	--
	Jul-00	140.14	87.17	ND	52.97	--
MW-205	Jun-88	138.17	90.15	ND	48.02	--
	Sep-88	138.17	90.67	ND	47.50	--
	Dec-88	138.17	91.92	ND	46.25	--
	Mar-89	138.17	92.88	ND	45.29	--
	Jun-89	138.17	92.80	ND	45.37	--
	Sep-89	138.17	93.20	ND	44.97	--
	Dec-89	138.17	94.05	ND	44.12	--
	Mar-90	138.17	94.20	ND	43.97	--
	Jun-90	138.17	94.12	ND	44.05	--
	Sep-90	138.17	93.85	ND	44.32	--
	Dec-90	138.17	94.80	ND	43.37	--
	Mar-91	138.17	93.49	ND	44.68	--
	Jun-91	138.17	92.64	ND	45.53	--
	Sep-91	138.17	92.45	ND	45.72	--
	Dec-91	138.04	92.65	ND	45.39	--
	Mar-92	138.04	90.92	ND	47.12	--
	Jun-92	138.04	89.59	ND	48.45	--
	Sep-92	138.04	89.61	ND	48.43	--
	Dec-92	138.04	89.65	ND	48.39	--
	Mar-93	138.04	88.60	ND	49.44	--
	May-93	138.04	85.92	ND	52.12	--
	Sep-93	138.04	83.56	83.55	54.49	0.01
	Nov-93	138.04	82.00	ND	56.04	--
	Mar-94	138.04	79.55	79.54	58.50	0.01
	Jun-94	138.04	77.75	77.74	60.30	0.01
	Sep-94	138.04	77.80	77.79	60.25	0.01
	Dec-94	138.04	78.76	ND	59.28	--
	Mar-95	138.04	77.80	ND	60.24	--
	Sep-95	138.04	75.91	ND	62.13	--
	Dec-95	138.04	76.28	ND	61.76	--
	Jul-96	138.04	75.74	ND	62.30	--
	Dec-96	138.04	76.09	ND	61.95	--
	Jan-98	138.04	75.26	ND	62.78	--
	Aug-98	138.04	73.96	ND	64.08	--
	Jan-99	138.04	74.59	ND	63.45	--
	Jul-99	138.04	75.95	ND	62.09	--
	Jan-00	138.04	79.45	ND	58.59	--
	Jul-00	138.04	81.60	ND	56.44	--

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-206 (ABANDONED)	Jun-88	129.93	92.37	ND	37.56	--
	Sep-88	129.93	93.37	ND	36.56	--
	Dec-88	129.93	94.93	ND	35.00	--
	Mar-89	129.93	95.20	ND	34.73	--
	Jun-89	129.93	95.55	ND	34.38	--
	Sep-89	129.93	96.88	ND	33.05	--
	Dec-89	129.93	94.75	ND	35.18	--
	Mar-90	129.93	97.75	ND	32.18	--
	Jun-90	129.93	97.48	ND	32.45	--
	Sep-90	129.93	98.02	ND	31.91	--
	Dec-90	129.93	98.64	ND	31.29	--
	Mar-91	129.93	96.92	ND	33.01	--
	Jun-91	129.93	96.11	ND	33.82	--
	Sep-91	129.93	96.41	ND	33.52	--
	Dec-91	129.93	96.12	ND	33.81	--
	Mar-92	129.93	94.32	ND	35.61	--
	Jun-92	129.93	93.45	ND	36.48	--
	Sep-92	129.93	93.97	ND	35.96	--
	Dec-92	129.93	93.50	ND	36.43	--
	Mar-93	129.93	91.91	ND	38.02	--
	May-93	129.93	89.60	ND	40.33	--
	Sep-93	129.93	87.91	87.90	42.03	0.01
	Dec-93	129.93	86.43	86.41	43.52	0.02
	Mar-94	129.93	82.89	82.88	47.05	0.01
	Jun-94	129.93	81.30	81.29	48.64	0.01
	Sep-94	129.93	81.81	81.80	48.13	0.01
	Dec-94	129.93	82.00	ND	47.93	--
	Mar-95	129.93	80.33	ND	49.60	--
	Sep-95	129.93	79.68	ND	50.25	--
	Dec-95	129.93	79.65	ND	50.28	--
	Jul-96	129.93	78.57	ND	51.36	--
	Dec-96	129.93	79.40	ND	50.53	--
	Jan-98	129.93	78.40	ND	51.53	--
	Aug-98	Well Damaged	NR	NR	NAP	NAP
	Jan-99	Well Destroyed	NAP	NAP	NAP	NAP
MW-501 (ABANDONED)	Jun-88	128.70	92.46	91.16	37.23	1.30
	Sep-88	128.70	94.39	93.03	35.34	1.36
	Dec-88	128.70	94.41	93.71	34.82	0.70
	Mar-89	128.70	94.81	94.06	34.46	0.75
	Jun-89	128.70	94.62	93.81	34.70	0.81
	Sep-89	128.70	96.17	95.21	33.26	0.96
	Dec-89	128.70	97.15	96.32	32.18	0.83
	Mar-90	128.70	97.62	96.80	31.70	0.82
	Jun-90	128.70	96.02	95.27	33.25	0.75
	Sep-90	128.70	97.80	96.85	31.62	0.95
	Dec-90	128.70	98.82	97.64	30.78	1.18
	Mar-91	128.70	96.83	96.25	32.31	0.58
	Jun-91	128.70	95.94	95.44	33.14	0.50
	Sep-91	128.70	96.12	95.62	32.96	0.50
	Dec-91	128.70	95.91	95.44	33.15	0.47
	Mar-92	128.70	94.14	93.93	34.72	0.21
	Jun-92	128.70	92.98	92.97	35.73	0.01
	Sep-92	128.70	93.42	93.25	35.41	0.17
	Dec-92	128.70	92.99	92.85	35.82	0.14
	Mar-93	128.70	91.60	ND	37.10	--
	May-93	128.70	89.45	ND	39.25	--
	Sep-93	128.70	87.77	87.76	40.94	0.01
	Dec-93	128.70	86.25	86.24	42.46	0.01
	Mar-94	128.70	83.19	83.18	45.52	0.01
	Jun-94	128.70	81.35	81.34	47.36	0.01
	Sep-94	128.70	81.27	81.26	47.44	0.01
	Dec-94	128.70	81.50	81.49	47.21	0.01

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TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-501 (cont.) (ABANDONED)	Mar-95	128.70	80.23	ND	48.47	--
	Sep-95	128.70	76.04	ND	52.66	--
	Dec-95	128.70	79.09	ND	49.61	--
	Jul-96	128.70	77.84	ND	50.86	--
	Dec-96	128.70	78.67	ND	50.03	--
	Jan-98	128.70	NR	NR	NAP	NAP
	Aug-98	Well Damaged	NR	NR	NAP	NAP
	Jan-99	Well Damaged	NR	NR	NAP	NAP
MW-501A	Jul-99	Not Surveyed	77.70	ND	NAP	NAP
	Jan-00	Not Surveyed	81.30	ND	NAP	NAP
	Jul-00	Not Surveyed	83.24	ND	NAP	NAP
MW-502	Jun-88	131.19	94.00	ND	37.19	--
	Sep-88	131.19	94.95	ND	36.24	--
	Dec-88	131.19	96.35	ND	34.84	--
	Mar-89	131.19	96.75	ND	34.44	--
	Jun-89	131.19	97.27	94.14	36.30	3.13
	Sep-89	131.19	99.08	96.25	34.26	2.83
	Dec-89	131.19	100.40	98.65	32.12	1.75
	Mar-90	131.19	100.96	99.23	31.54	1.73
	Jun-90	131.19	99.16	97.77	33.09	1.39
	Jun-91	130.82	97.95	97.21	33.43	0.74
	Sep-91	130.82	98.20	97.46	33.18	0.74
	Dec-91	130.82	97.97	97.19	33.44	0.78
	Mar-92	130.82	96.00	95.57	35.15	0.43
	Jun-92	130.82	94.95	94.65	36.10	0.30
	Sep-92	130.82	95.51	95.11	35.61	0.40
	Dec-92	130.82	95.14	94.87	35.89	0.27
	Mar-93	130.82	93.30	ND	37.52	--
	May-93	130.82	91.13	ND	39.69	--
	Sep-93	130.82	89.45	89.44	41.38	0.01
	Dec-93	130.82	87.94	87.93	42.89	0.01
	Mar-94	130.82	84.70	84.69	46.13	0.01
	Jun-94	130.82	82.99	82.98	47.84	0.01
	Sep-94	130.82	83.03	ND	47.79	--
	Dec-94	130.82	83.40	ND	47.42	--
	Mar-95	130.82	81.96	ND	48.86	--
	Sep-95	130.82	81.05	ND	49.77	--
	Dec-95	130.82	81.02	ND	49.80	--
	Jul-96	130.82	79.83	ND	50.99	--
	Dec-96	130.82	80.68	ND	50.14	--
	Jan-98	130.82	79.78	ND	51.04	--
	Aug-98	130.82	78.98	ND	51.84	--
	Jan-99	128.30	76.73	ND	51.57	--
	Jul-99	128.30	76.90	ND	51.40	--
	Jan-00	128.30	81.56	ND	46.74	--
	Jul-00	128.30	83.48	ND	44.82	--
MW-503 (ABANDONED)	Jun-88	131.43	92.55	ND	38.88	--
	Sep-88	131.43	93.26	ND	38.17	--
	Dec-88	131.43	94.74	ND	36.69	--
	Mar-89	131.43	95.18	ND	36.25	--
	Jun-89	131.43	95.50	ND	35.93	--
	Sep-89	131.43	96.30	ND	35.13	--
	Dec-89	131.43	97.16	ND	34.27	--
	Mar-90	131.43	97.54	ND	33.89	--
	Jun-90	131.43	97.30	ND	34.13	--
	Sep-90	131.43	97.70	ND	33.73	--
	Dec-90	131.43	98.27	ND	33.16	--
	Mar-91	131.43	96.64	ND	34.79	--
	Jun-91	131.43	95.79	ND	35.64	--
	Sep-91	131.43	96.05	ND	35.38	--
	Dec-91	131.43	95.80	ND	35.63	--
	Mar-92	131.43	93.98	ND	37.45	--

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TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-503 (cont.) (ABANDONED)	Jun-92	131.43	93.01	ND	38.42	--
	Sep-92	131.43	93.52	ND	37.91	--
	Dec-92	131.43	93.11	ND	38.32	--
	Mar-93	131.43	91.67	ND	39.76	--
	May-93	134.43	88.78	ND	45.65	--
	Sep-93	134.43	87.47	87.45	46.98	0.02
	Dec-93	134.43	86.02	86.00	48.43	0.02
	Mar-94	134.43	82.54	82.53	51.90	0.01
	Jun-94	134.43	80.95	80.94	53.49	0.01
	Sep-94	134.43	81.41	81.40	53.03	0.01
	Dec-94	134.43	81.75	ND	52.68	--
	Mar-95	134.43	80.10	ND	54.33	--
	Sep-95	134.43	79.34	ND	55.09	--
	Dec-95	134.43	79.37	ND	55.06	--
	Jul-96	134.43	78.35	ND	56.08	--
	Dec-96	134.43	79.31	ND	55.12	--
	Jan-98	134.43	78.24	ND	56.19	--
	Aug-98	134.43	77.45	ND	56.98	--
	Jan-99	Well Destroyed	NAP	NAP	NAP	NAP
MW-503B	Feb-99	129.96	77.05	ND	52.91	--
	Jul-99	129.96	78.64	ND	51.32	--
	Jan-00	129.96	82.58	ND	47.38	--
	Jul-00	129.96	84.17	ND	45.79	--
MW-504	Jun-88	133.83	92.56	90.73	42.66	1.83
	Sep-88	133.83	93.98	92.41	41.04	1.57
	Dec-88	133.83	94.70	92.83	40.55	1.87
	Mar-89	133.83	96.25	93.50	39.67	2.75
	Jun-89	133.83	94.36	92.16	41.14	2.20
	Sep-89	133.83	99.21	97.15	36.19	2.06
	Dec-89	133.83	96.80	95.45	38.06	1.35
	Mar-90	133.83	97.10	95.72	37.78	1.38
	Jun-90	133.83	95.75	95.13	38.55	0.62
	Dec-90	133.83	97.47	96.31	37.24	1.16
	Jun-91	134.51	95.20	ND	39.31	--
	Sep-91	134.51	95.19	ND	39.32	--
	Dec-91	134.51	95.08	ND	39.43	--
	Mar-92	134.51	95.55	ND	38.96	--
	Jun-92	134.51	92.28	ND	42.23	--
	Sep-92	134.51	92.47	ND	42.04	--
	Dec-92	134.51	92.32	ND	42.19	--
	Mar-93	134.51	91.09	ND	43.42	--
	May-93	134.51	88.78	ND	45.73	--
	Sep-93	134.51	86.64	86.63	47.88	0.01
	Nov-93	134.51	85.10	ND	49.41	--
	Mar-94	134.51	82.26	82.25	52.26	0.01
	Jun-94	134.51	80.43	ND	54.08	--
	Sep-94	134.51	80.59	80.58	53.93	0.01
	Dec-94	134.51	81.14	ND	53.37	--
	Mar-95	134.51	80.06	ND	54.45	--
	Sep-95	134.51	78.55	ND	55.96	--
	Dec-95	134.51	78.76	ND	55.75	--
	Jul-96	134.51	77.92	ND	56.59	--
	Dec-96	134.51	79.15	78.85	55.59	0.30
	Jan-98	134.51	78.00	77.98	56.53	0.02
	Aug-98	134.51	77.00	76.98	57.53	0.02
	Jan-99	134.51	77.56	77.46	57.03	0.10
	Jul-99	134.51	79.12	78.63	55.76	0.49
	Jan-00	134.51	82.88	82.20	52.15	0.68
	Jul-00	134.51	83.96	84.90	51.26	0.94
MW-600 (ABANDONED)	Sep-90	120.05	91.48	90.31	29.46	1.17
	Dec-90	120.05	92.43	90.79	28.87	1.64
	Mar-91	120.05	89.88	89.00	30.84	0.88
	Jun-91	120.05	89.35	88.45	31.38	0.90

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CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-600 (cont.) (ABANDONED)	Sep-91	120.05	89.64	88.76	31.08	0.88
	Dec-91	120.05	88.91	88.58	31.39	0.33
	Mar-92	120.05	87.09	86.89	33.11	0.20
	Jun-92	120.05	86.26	86.12	33.90	0.14
	Sep-92	120.05	86.90	86.69	33.31	0.21
	Dec-92	120.05	86.02	86.00	34.05	0.02
	Mar-93	120.05	84.63	ND	35.42	--
	May-93	120.05	82.52	ND	37.53	--
	Sep-93	120.05	80.99	80.98	39.07	0.01
	Dec-93	120.05	79.49	79.48	40.57	0.01
	Mar-94	120.05	76.01	76.00	44.05	0.01
	Jun-94	120.05	74.40	74.39	45.66	0.01
	Sep-94	120.05	74.73	74.72	45.33	0.01
	Dec-94	120.05	74.90	74.84	45.20	0.06
	Mar-95	120.05	73.65	73.03	46.87	0.62
	Sep-95	120.05	73.69	73.30	46.66	0.39
	Dec-95	120.05	72.02	ND	48.03	--
	Jul-96	120.05	73.55	70.59	48.75	2.96
	Dec-96	120.05	73.90	71.35	48.09	2.55
	Jan-98	120.05	75.05	69.67	49.09	5.38
	Aug-98	120.05	74.50	72.70	49.09	1.8 [2]
	Jan-99	120.05	73.72	69.60	49.46	4.12
MW-600A	Jul-99	120.34	77.55	77.32	42.96	0.23
	Jan-00	120.34	77.80	76.77	43.32	1.03
	Jul-00	120.34	78.59	78.99	42.05	0.40
MW-601 (ABANDONED)	Sep-90	125.03	96.64	95.89	28.96	0.75
	Dec-90	125.03	97.01	96.52	28.39	0.49
	Mar-91	125.03	94.84	ND	30.19	--
	Jun-91	125.03	94.27	ND	30.76	--
	Sep-91	125.03	94.54	ND	30.49	--
	Dec-91	125.03	94.30	ND	30.73	--
	Mar-92	125.03	92.66	ND	32.37	--
	Jun-92	125.03	91.81	ND	33.22	--
	Sep-92	125.03	92.80	92.28	32.63	0.52
	Dec-92	125.03	91.78	ND	33.25	--
	Mar-93	125.03	90.38	ND	34.65	--
	May-93	125.03	88.35	ND	36.68	--
	Sep-93	125.03	86.76	86.75	38.28	0.01
	Dec-93	125.03	85.36	85.35	39.68	0.01
	Mar-94	125.03	82.01	82.00	43.03	0.01
	Jun-94	125.03	80.30	80.25	44.77	0.05
	Sep-94	125.03	80.50	80.40	44.61	0.10
	Dec-94	125.03	80.65	80.52	44.48	0.13
	Mar-95	125.03	79.08	78.98	46.03	0.10
	Sep-95	125.03	78.36	78.11	46.86	0.25
	Dec-95	125.03	78.07	ND	46.96	--
	Jul-96	125.03	77.03	76.75	48.21	0.28
	Dec-96	125.03	77.57	ND	47.46	--
	Jan-98	125.03	76.79	76.40	48.54	0.39
	Aug-98	125.03	76.29	76.05	48.92	0.24 [2]
	Jan-99	125.03	76.62	75.95	48.92	0.67
MW-601A	Jul-99	126.53	77.39	77.36	49.12	-0.03
	Jan-00	126.53	81.03	ND	45.50	--
	Jul-00	126.53	82.70	82.72	43.85	0.02
MW-603	Jul-96	118.54	72.01	ND	46.53	--
	Dec-96	118.54	72.39	ND	46.15	--
	Jan-98	118.54	71.33	ND	47.21	--
	Aug-98	118.54	71.12	ND	47.42	--
	Jan-99	118.54	77.71	ND	46.83	--
	Jul-99	118.54	72.97	ND	45.57	--
	Jan-00	118.54	76.87	ND	41.67	--
	Jul-00	118.54	78.00	ND	40.54	--

For Notes and explanations see page 11

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
MW-604	Jul-96	138.16	88.79	ND	49.37	–
	Dec-96	138.16	89.57	ND	48.59	–
	Jan-98	138.16	88.61	ND	49.55	–
	Aug-98	138.16	87.55	ND	50.61	–
	Jan-99	138.16	87.88	ND	50.28	–
	Jul-99	138.16	88.53	ND	49.63	–
	Jan-00	138.16	92.10	ND	46.06	–
	Jul-00	138.16	94.21	ND	43.95	–
MW-605	Jul-96	114.54	74.03	ND	40.51	–
	Dec-96	114.54	74.06	ND	40.48	–
	Jan-98	114.54	73.19	ND	41.35	–
	Aug-98	114.54	73.18	ND	41.36	–
	Jan-99	114.54	72.52	ND	42.02	–
	Jul-99	114.54	74.62	ND	39.92	–
	Jan-00	114.54	78.58	ND	35.96	–
	Jul-00	114.54	79.54	ND	35.00	–
MW-606	Jul-96	113.89	77.19	ND	36.70	–
	Dec-96	113.89	77.50	ND	36.39	–
	Jan-98	113.89	75.92	ND	37.97	–
	Aug-98	113.89	75.93	ND	37.96	–
	Jan-99	113.89	75.26	ND	38.63	–
	Jul-99	113.89	77.19	ND	36.70	–
	Jan-00	113.89	80.87	ND	33.02	–
	Jul-00	113.89	82.12	ND	31.77	–
MW-607	Jul-96	126.03	86.88	ND	39.15	–
	Dec-96	126.03	87.56	ND	38.47	–
	Jan-98	126.03	86.50	ND	39.53	–
	Aug-98	126.03	85.64	ND	40.39	–
	Jan-99	126.03	85.88	ND	40.15	–
	Jul-99	126.03	86.52	ND	39.51	–
	Jan-00	126.03	90.40	ND	35.63	–
	Jul-00	126.03	92.02	ND	34.01	–
W-1	Dec-96	142.89	90.10	ND	52.79	–
	Jan-98	142.89	89.28	ND	53.61	–
	Aug-98	142.89	88.19	ND	54.70	–
	Jan-99	142.89	88.62	ND	54.27	–
	Jul-99	142.89	89.25	ND	53.64	–
	Jan-00	142.89	91.80	ND	51.09	–
	Jul-00	142.89	94.00	ND	48.89	–
W-2 (ABANDONED)	Dec-96	139.31	88.72	ND	50.59	–
	Jan-98	139.31	87.95	ND	51.36	–
	Aug-98	139.31	86.95	ND	52.36	–
	Jan-99	NS	NS	NAP	NAP	NAP
W-3 (ABANDONED)	Dec-96	136.11	90.98	ND	45.13	–
	Jan-98	136.11	89.95	ND	46.16	–
	Aug-98	NS	NS	NAP	NAP	NAP
	Jan-99	NS	NS	NAP	NAP	NAP
W-4	Dec-96	142.38	92.88	ND	49.50	–
	Jan-98	142.38	92.01	ND	50.37	–
	Aug-98	142.38	90.90	ND	51.48	–
	Jan-99	142.38	91.31	ND	51.07	–
	Jul-99	142.38	91.90	ND	50.48	–
	Jan-00	142.38	94.66	ND	47.72	–
	Jul-00	142.38	96.88	ND	45.50	–
W-3A	Aug-98	124.00	91.14	ND	32.86	–
	Jan-99	124.00	91.55	ND	32.45	–
	Jul-99	124.00	92.21	ND	31.79	–
	Jan-00	124.00	95.65	ND	28.35	–
	Jul-00	124.00	97.10	97.14	48.92	0.04

For Notes and explanations see page 11

TABLE 1
SUMMARY OF HISTORICAL GROUNDWATER ELEVATIONS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO HYDROCARBONS (FEET)	GROUNDWATER ELEVATION [1] (FT-MSL)	HYDROCARBON THICKNESS (FEET)
EW-1	Aug-98	112.40	85.99	ND	26.41	--
	Jan-99	112.40	86.22	ND	26.18	--
	Jul-99	112.40	86.51	ND	25.89	--
	Jan-00	112.40	88.29	88.21	24.17	0.08
	Jul-00	112.40	89.14	91.72	25.22	2.58

NOTES:

Measurements prior to January, 1998, were conducted by consultants other than Versar, Inc.

[1] Groundwater elevations for wells containing free product were adjusted for hydrocarbon thickness using methods described in API, 1989. A specific gravity value of 0.76 was used for free product. Previously reported groundwater elevations did not take into account the effect of the specific gravity of free product on groundwater elevation and therefore may differ from groundwater elevations reported herein.

[2] Product thickness was estimated due to malfunction of oil-water interface probe.
TOC = Top of Well Casing Elevation
FT-MSL = Feet Above Mean Sea Level
Well Damaged = Well damaged due to construction activities.
NR = Not recorded due to well damage, or improper equipment reading.
NAP = Not Applicable
ND = None Detected
NA = Data Not Available
NS = Not Scheduled for Measurement