SDMS DOCID# 1121039

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SEMI-ANNUAL GROUNDWATER MONITORING REPORT

May 2002 Monitoring Event

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

TRC Project No. 25-1016-01/FA06

Prepared for:

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2002 SEP 18 P 2:45

September 16, 2002

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TABLE OF CONTENTS

EXECUTIVE SUMMARY 1

1.0 INTRODUCTION 2

2.0 FIELD METHODOLOGY 3
2.1 GROUNDWATER LEVEL MEASUREMENTS 3
2.2 GROUNDWATER QUALITY MONITORING 3

3.0 MONITORING RESULTS 4
3.1 GROUNDWATER SURFACE ELEVATION 4
3.2 FREE-PHASE PETROLEUM HYDROCARBONS 5
3.3 GROUNDWATER ANALYTICAL RESULTS 5
3.3.1 Benzene 6
3.3.2 TPH-G 6
3.3.3 MTBE 7
3.3.4 HVOCs 7
3.3.5 Distribution of Constituents of Concern 7
3.4 POTENTIAL FOR INTRINSIC BIOREMEDIATION 8
3.4.1 Study Design 8
3.4.2 Results of Bioremediation Analysis 8

4.0 CONCLUSIONS 9

5.0 LIMITATIONS 10

6.0 REFERENCES 11

2002 SEP 18 P 2:44

LIST OF TABLES

Table 1	Summary of Groundwater Elevations
Table 2	Summary of Groundwater Analytical Results for TPH-G, HVOCs, and Oxygenates
Table 3	Summary of Intrinsic Bioremediation Parameter Results

LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Groundwater Elevation Contour Map - May 6, 2002
Figure 3	Dissolved-Phase Benzene and MTBE Concentration and Benzene Isoconcentration Map - May 2002
Figure 4	Dissolved-Phase TPH-G Concentration Map - May 2002
Figure 5	Dissolved-Phase HVOC Concentration Map - May 2002

LIST OF APPENDICES

Appendix A	Groundwater Monitoring Well Purge Tables and Sampling Logs
Appendix B	Summary of Historical Groundwater Elevations
Appendix C	Summary of Historical TPH, BTEX, MTBE, and HVOCs in Groundwater
Appendix D	Summary of Historical Intrinsic Bioremediation Parameter Results in Groundwater
Appendix E	Chain-of-Custody Documentation and Certified Analytical Laboratory Reports

EXECUTIVE SUMMARY

TRC has prepared this May 2002 Semi-Annual Groundwater Report on behalf of CENCO Refining Company (CENCO). This report documents the sampling of groundwater monitoring and former production 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; the Walker property, located southeast of the Site; and the Bloomfield property, located east of the Site. The activities performed as a part of this semi-annual monitoring event include a groundwater level survey and chemical analysis of 28 groundwater wells (26 monitoring wells and two former production wells). This groundwater monitoring and sampling event was conducted as stipulated by the California Regional Water Quality Board, Los Angeles Region (RWQCB) Order No. 85-17, to evaluate groundwater quality at and in the vicinity of CENCO Refining Company.

Groundwater elevations in the majority of the groundwater wells at and in the vicinity of the Site have generally decreased relative to the previous July 2001 groundwater sampling event performed by Versar, Inc. The predominant groundwater flow direction, at and in the vicinity of the site, is to the south which is consistent with previously reported flow directions. The average groundwater gradient is approximately 0.009 foot per foot (ft/ft).

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 monitoring event in July 2001. A total of 24 of the 28 wells were sampled. The remaining four groundwater wells were not sampled due to the presence of free-phase product floating on the groundwater in thicknesses ranging from 1.10 to 2.64 feet. Since the previous monitoring event, benzene concentrations have increased in five wells, decreased in 14 wells, and remained the same (not detected) in five wells.

Results of analyses performed for nitrate, sulfate, ferrous iron, methane, alkalinity, oxidation-reduction potential (REDOX), and dissolved-oxygen (DO) indicate that intrinsic bioremediation is occurring within the groundwater plume. Total petroleum hydrocarbons as gasoline (TPH-G) 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 maintains a petroleum refinery located at 12345 Lakeland Road in Santa Fe Springs, California (Figure 1). Until 1995, the refinery processed crude oil to make several grades of petroleum fuels. CENCO is not currently refining crude oil. Groundwater monitoring has been performed at the Site since June 1988 by various environmental consultants. The previous groundwater monitoring event was conducted in July 2001 by Versar, Inc. (Versar, 2001b).

This report documents the results of the May 2002 groundwater monitoring event at the CENCO refinery, the former Lakeland Property, the Metropolitan State Hospital property, and the Walker property (Figure 1). Included in this report are:

- results of water level measurements conducted at the Site and adjacent properties,
- the field parameters collected during well sampling,
- the results of the groundwater laboratory analyses, and
- an assessment of the potential for intrinsic bioremediation of petroleum hydrocarbons in groundwater beneath the Site.

The groundwater monitoring well network consists of 26 monitoring wells, which include 22 wells located within or downgradient of the CENCO refinery and four wells located on the nearby Walker property (Figure 2). Depth to water readings were collected and groundwater samples were analyzed for two additional wells: former production Wells W-7 and W-8. The former production wells are not included in the groundwater elevation survey because they are not screened within the same aquifer as the monitoring wells. The tasks included as part of this monitoring event were:

- A groundwater elevation survey of 26 Site wells.
- Analyses of groundwater samples collected from 22 Site wells and two former production wells.
- Analyses of additional groundwater samples from five selected wells for indicators of intrinsic bioremediation.

Samples were not collected from Wells EW-1, MW-504, MW-600A, and W-3A because free-phase product was measured 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 SW-846 modified Method 8015; benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl-tertiary butyl ether (MTBE) and other oxygenates, and halogenated volatile organic compounds (HVOCs) by SW-846 Method 8260B. Additionally, groundwater samples were collected from five selected monitoring wells and analyzed for nitrate, sulfate, alkalinity, ferrous iron, and methane to evaluate the potential for intrinsic bioremediation of impacted groundwater.

Well field parameters were measured during purging and sampling. These parameters and the instrumentation used to measure the parameters include:

• pH	Hydac
• temperature	Hydac
• electric conductivity	Hydac
• turbidity	Lamotte 2020
• DO	YSI 95
• REDOX (only used for select wells)	Oakton ORP Checker WD 35650-02

The measurements listed above in addition to the analytical results for nitrate, sulfate, alkalinity, methane, and ferrous iron, and historical analytical results for heterotrophic bacteria and *Psuedomonas* bacteria (Versar, 2001b), 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, 2001a). The wells were purged directly into a compliant vessel using dedicated purge piping (stingers). Purge water was then transported and discharged directly to the CENCO wastewater treatment system.

Following purging, and after the groundwater elevations had returned to a minimum of 80 percent of initial groundwater level, groundwater samples were collected using a discrete, single use disposable bailer for each well. Additionally, field parameters were measured periodically during well purging by collecting grab samples from the purging system.

2.1 GROUNDWATER LEVEL MEASUREMENTS

On May 6, 2002, water level measurements were collected from Site wells. Prior to the 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. Total monitoring well depths were also measured and recorded for use in purge volume calculations.

2.2 GROUNDWATER QUALITY MONITORING

Prior to groundwater sample collection, the initial depth-to-water was recorded for each well on a field data sheet and used to calculate the volume of groundwater within the well casing. Each well was then purged using the dedicated stingers. 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 activities, temperature, electrical conductivity, pH, turbidity, and DO were measured periodically in representative grab samples. Additionally, REDOX measurements were collected from selected wells. One set of field measurements were collected for approximately each well casing volume of groundwater removed. The groundwater well purge tables and sampling logs are provided in Appendix A. 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 five percent of the previous reading. Once the well purging was completed, groundwater samples were collected using a disposable bailer.

Samples were labeled by well identification number, recorded on a chain-of-custody form, and stored on ice in a thermally insulated container. The samples were submitted to Calscience Environmental Laboratories, Inc. for chemical analyses.

Groundwater samples were analyzed from 22 monitoring wells and two former production wells. Samples were not collected from Wells EW-1, MW-504, MW-600A, and W-3A due to the presence of free-phase product.

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

- Ferrous iron (FE^{2+}) by SM3500-FeD
- Nitrate (as NO_3) by EPA Method 300.0
- Sulfate (as SO_4) by EPA Method 300.0
- Total Alkalinity (as $CaCO_3$) by SM 2320B
- Methane by RSK-175M

3.0 MONITORING RESULTS

The results of the semi-annual monitoring activities are reported in the following sections 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 bioremedion 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 depth to water level reading from the previously surveyed top of (wellhead) casing (TOC) elevation. Table 1 presents May 2002 depth to groundwater and groundwater elevations for each well. Appendix B presents historical depth to groundwater and

groundwater elevations for each well for previously conducted groundwater monitoring events.

Groundwater was encountered beneath the Site at depths ranging between 80.21 to 100.39 feet bgs. Groundwater elevations have decreased on average approximately 1.5 feet across the site since the July 2001 sampling event. As shown in Figure 2, the average groundwater flow direction in the vicinity of the Site varies from a south-southwesterly direction in the northeastern portion of the Site to a south-southeasterly direction in the Metropolitan State Hospital property area. The average groundwater flow direction is generally consistent with those previously reported. The average groundwater gradient across the Site was estimated at 0.009 ft/ft.

It is important to note that previous investigations at the Walker property indicated that groundwater flow at the 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 average flow direction presented in this report does 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 product, or free-phase petroleum hydrocarbons (light non-aqueous phase liquids [LNAPLs]), were detected in four monitoring wells at thicknesses of 1.10 feet (MW-504), 1.11 feet (W-3A), 1.56 feet (EW-1), and 2.64 feet (MW-600A). During previous monitoring events, Wells EW-1, MW-504, and MW-600A have contained measurable free-phase product, however, Well W-3A has contained measurable free-phase product only once before at a thickness of 0.04 feet in July 2000.

Exact measurements of free-phase product are important for evaluation of the areal extent of the free-phase product plume and groundwater elevations in monitoring wells with significant free-phase product thickness (API, 1989). Groundwater elevations in wells containing free-phase product were adjusted to compensate for this effect.

3.3 GROUNDWATER ANALYTICAL RESULTS

On May 7, 8, and 9, 2002, groundwater samples were collected from 22 Site wells and two former production wells. The groundwater samples were analyzed for TPH-G by SW-846 modified Method 8015; BTEX, MTBE and other oxygenates, and HVOCs by SW-846 Method 8260B. Additionally, samples from five wells (MW-104A, MW-205, MW-502, MW-605 and MW-606) were analyzed for methane, alkalinity, sulfate, nitrate and ferrous iron to evaluate the potential for intrinsic bioremediation of impacted

groundwater. Table 2 and Attachment C presents a summary of TPH-G, BTEX, MTBE, TBA, and other HVOC and oxygenate results in groundwater. Table 3 and Attachment D summarizes the results of sampling performed to evaluate the potential for intrinsic bioremediation of petroleum hydrocarbons in groundwater beneath the Site. The results of the intrinsic bioremediation-monitoring program are briefly evaluated in section 3.4. The certified analytical laboratory reports are provided in Appendix E. It is important to note that the results reported in this section and the activities conducted during this monitoring event do not distinguish between facility and non-facility related compounds in groundwater.

3.3.1 Benzene

During this monitoring event, benzene was detected in 18 of the 24 wells sampled at concentrations ranging from 0.51 to 12,000 micrograms per liter (ug/l). Seventeen of the 18 detected concentrations exceed the California Maximum Contaminant Level (MCL) for drinking water of 1.0 ug/l (the Federal MCL for benzene is 5.0 ug/l.). Since the previous monitoring event in July 2001, benzene concentrations have decreased in the following 14 wells: MW-101, MW-103, MW-106, MW-201, MW-203, MW-205, MW-502, MW-503B, MW-604, MW-607, MW-601A, W-1, W-4, and W-8. Benzene concentrations have increased in the following five wells: MW-105, MW-107, MW-202, MW-204, and MW-501A. Benzene was not detected at or above its respective laboratory reporting limits in the following five wells: MW-104A, MW-603, MW-605, MW-606, and W-7.

Figure 3 presents the current distribution of benzene and MTBE concentrations in groundwater in the Site wells. Data from Wells W-7 and W-8 are not included on the figure since groundwater from these wells is not from the same aquifer as the rest of the Site wells.

3.3.2 TPH-G

During this monitoring event, TPH-G was detected in 21 of the 24 wells sampled at concentrations ranging from 100 to 28,000 ug/l. Since the previous monitoring event in July 2001, TPH-G concentrations have decreased in the following 11 wells: MW-101, MW-103, MW-106, MW-201, MW-203, MW-205, MW-503B, MW-601A, MW-607, W-1, and W-4. TPH-G concentrations have increased in the following eight wells: MW-104A, MW-105, MW-107, MW-202, MW-204, MW-501A, MW-502, and MW-603. TPH-G concentrations were the same as the previous sampling event in Wells MW-604 and W-8. TPH-G was not detected at or above its laboratory reporting limit (same as last monitoring event) in the following 3 wells: W-7, MW-605 and MW-606.

Figure 4 presents the current distribution of TPH-G concentrations in groundwater in the Site wells. Data from Wells W-7 and W-8 are not included on the figure since groundwater from these wells is not from the same aquifer as the rest of the Site wells.

3.3.3 MTBE

During this monitoring event, MTBE was detected in 7 of the 24 wells sampled at concentrations ranging from 5.1 to 14,000 ug/l. Since the previous monitoring event in July 2001, MTBE concentrations have decreased in the following four wells: MW-103, MW-502, MW-503B, and W-1. MTBE concentrations have increased in the following four wells: MW-201, MW-202, MW-501A, and MW-604. Additionally, Well MW-601A shows MTBE concentrations have decreased, however, a duplicate sample collected from Well MW-601A shows MTBE concentrations have increased.

3.3.4 HVOCs

HVOCs were detected in groundwater at the Site. There are no known or suspected sources for these compounds 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 (Versar, 2000a).

Figure 5 presents the current distribution of HVOCs concentrations in groundwater in the Site wells. Data from Wells W-7 and W-8 are not included on the figure since groundwater from these wells is not from the same aquifer as the rest of the Site wells.

3.3.5 Distribution of Constituents of Concern

The interpretation of the distribution of TPH-G, benzene, and HVOCs in groundwater presented in this report indicates the presence of both onsite and offsite 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 Well MW-105, located at the northwest corner of the facility, contained TPH-G at a concentration of 530 ug/l; as well as several HVOCs, including trichloroethene (TCE) at a concentration of 38 ug/l, 1,1-Dichloroethane (1,1-DCA) at a concentration of 4.4 ug/l, 1,1-Dichloroethene (1,1-DCE) at a concentration of 10 ug/l, and cis-and trans-1,2-DCE at concentrations of 14 and 6.8 ug/l, respectively. Similarly, groundwater samples collected from Well MW-106, located at the northeastern property boundary, contained TPH-G at a concentration of 430 ug/L and benzene at a concentration of 2.4 ug/L as well as several HVOCs. Chemicals detected in upgradient monitoring wells MW-104A and MW-107, in addition to the wells discussed above, suggests that it is unlikely that groundwater in these wells have been impacted by Site-related sources or activities by their location.

During this monitoring event, groundwater samples were collected from former production Wells W-7 and W-8, which have not been used since 1987. Table 2 presents the results of the TPH-G, HVOCs, and oxygenates analyses. There were no detectable

concentrations of TPH-G, HVOCs, or oxygenates in Well W-7 and W-8, with the exception of TPH-G at 180 ug/l and benzene at 0.51 ug/l in Well W-8.

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 (such as nitrate, sulfate, ferrous iron, methane, alkalinity, DO, and REDOX).

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 analyses 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, one upgradient well (MW-104A), two downgradient wells (MW-65 and MW-606), originally one crossgradient well (EW-1, which now has free-phase product), and two wells within the benzene plume (MW-205 and MW-502) were selected for intrinsic bioremediation monitoring. Several strains of bacteria are capable of utilizing hydrocarbons as an energy source. It has been historically determined that heterotrophic bacteria and *Psuedomonas* bacteria are present in groundwater beneath the Site.

3.4.2 Results of Bioremediation Analysis

Intrinsic bioremediation of petroleum hydrocarbons was evidenced this monitoring event by the presence of methane, and reduced iron, in groundwater wells containing hydrocarbons. Concentrations of nitrate and sulfate across the plume area were also indicative of bioactivity within the hydrocarbon plume.

A variation in DO concentrations of greater than 2 milligrams per liter (mg/l) across TPH-G and benzene plumes is suggestive of aerobic biodegradation activity (CTRC, 1995). The lower DO concentrations in Wells MW-205 and MW-502, which are within the impacted area, may be indicative of oxygen utilization by bioremediation activity within the area of impacted groundwater.

The observed REDOX at the Site indicates reducing conditions within the plume and oxidizing conditions outside of the plume. This is suggestive of biological activity within the plume.

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 (CTRC, 1995). At the Site, alkalinity was observed to be highest in monitoring wells MW-104A, MW-205, and MW-502. With the exception of Well MW-104A, these wells contained significant levels of petroleum hydrocarbons, suggesting bioremediation activity.

4.0 CONCLUSIONS

The purpose of this monitoring event was to monitor the groundwater quality at and in the vicinity of the CENCO refinery located in Santa Fe Springs, California. The activities performed as part of this monitoring event included a comprehensive groundwater level survey and analyses of groundwater samples from 22 Site wells and two former production wells (W-7 and W-8). Additional groundwater 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 on average approximately 1.5 feet since the previous monitoring event in July 2001.

Analytical results from this monitoring event indicate that current groundwater conditions at the Site are not substantially different from the conditions observed during the previous monitoring event. During this recent monitoring event, 24 wells total were sampled and an additional four wells were not sampled due to the presence of free-phase product. Out of the 24 wells sampled, benzene concentrations were detected in 18 wells, TPH-G concentrations were detected in 21 wells, and MTBE concentrations were detected in 7 wells.

The results of the investigation confirm the potential for intrinsic bioremediation in groundwater beneath the Site. Specifically, the results of analyses performed for nitrate, sulfate, ferrous iron, methane, alkalinity, DO, and REDOX 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.

Two former groundwater production wells, W-7 and W-8, were sampled. There were no detectable concentrations of TPH-G, HVOCs, or oxygenates in Well W-7 and W-8, with the exception of TPH-G at 180 ug/l and benzene at 0.51 ug/l in Well W-8.

5.0 LIMITATIONS

The groundwater monitoring and sampling activities summarized in this report have been conducted in accordance with current practice and the standard of care exercised by geologists and engineers performing similar tasks in this area. The work associated with the project was performed under the direct supervision of a registered geologist. No warranty, express or implied, is made regarding the conclusions and professional opinions presented in this report. The findings and conclusions are based solely upon an analysis of the observed conditions. If actual conditions differ from those described in this report, our office should be notified.

6.0 REFERENCES

API, 1989, American Petroleum Institute, *A Guide to the Assessment and Remediation of Underground Petroleum Releases,* API Publication 1628, Second edition.

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TABLES

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

WELL ID	DATE	TOC ELEVATION (FT-MSL)	DEPTH TO GROUNDWATER (FEET)	DEPTH TO FREE PRODUCT (FEET)	GROUNDWATER ELEVATION (1) (FT-MSL)	FREE PRODUCT THICKNESS (FEET)
MW-101	MAY-02	135.23	83.10	--	52.13	--
MW-103	MAY-02	136.95	87.88	--	49.07	--
MW-104A	MAY-02	141.16	83.64	--	57.52	--
MW-105	MAY-02	138.63	82.59	--	56.04	--
MW-106	MAY-02	148.41	88.19	--	60.22	--
MW-107	MAY-02	148.93	95.20	--	53.73	--
MW-201	MAY-02	132.91	84.45	--	48.46	--
MW-202	MAY-02	137.89	88.88	--	49.01	--
MW-203	MAY-02	143.89	92.96	--	50.93	--
MW-204	MAY-02	140.14	89.28	--	50.86	--
MW-205	MAY-02	138.04	83.52	--	54.52	--
MW-501A	MAY-02	NS	85.76	--	NA	--
MW-502	MAY-02	128.30	85.70	--	42.60	--
MW-503B	MAY-02	129.96	86.32	--	40.64	--
MW-504	MAY-02	134.51	87.20	86.10	47.31	1.10
MW-600A	MAY-02	120.34	83.20	80.56	37.14	2.64
MW-601A	MAY-02	126.53	85.42	--	41.11	--
MW-603	MAY-02	118.54	80.21	--	38.33	--
MW-604	MAY-02	138.16	96.79	--	41.37	--
MW-605	MAY-02	114.54	81.84	--	32.70	--
MW-606	MAY-02	113.89	84.69	--	29.20	--
MW-607	MAY-02	126.03	95.30	--	24.73	--
W-1	MAY-02	142.89	96.70	--	46.19	--
W-4	MAY-02	142.38	99.43	--	42.95	--
W-3A	MAY-02	124.00	100.39	99.28	23.61	1.11
EW-1	MAY-02	112.40	94.39	92.78	18.01	1.61

NOTES:

Measurements prior to May 2002 were conducted by consultants other than TRC.
The following wells were abandoned prior to the July 1999 sampling event: MW-104, MW-206, MW-501, MW-503, MW-600, W-2, and W-3.

(1) Groundwater elevations for wells containing hydrocarbon free product were adjusted for thickness using methods described in the American Petroleum Institute's 1989 publication titled, "A Guide to the Assessment and Remediation of Underground Petroleum Releases, Second Edition". A specific gravity 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.

TOC = Top of Well Casing Elevation
FT-MSL = Feet Above Mean Sea Level
NS = Not Surveyed
NA = Data Not Available
-- = No Measurable Free Product

TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS FOR TPH-G, HVOC's, AND OXYGENATES
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

Monitoring Well ID	Date	1 TPH-g	2 B	3 T	4 E	5 X	6 MTBE	7 TBA	8 BDCM	9 BCM	10 Chloroform	11 Chloroethane	12 c-1,2-DCE	13 1,2-DCB	14 Dichloro-difluoro methane	15 1,1-DCA	16 1,2-DCA	17 1,1-DCE	18 1,2-DCP	19 iso-PB	20 MC	21 n-BB	22 t-BB	23 n-PB	24 Naphthalene	25 p-iso-PT	26 sec-BB	27 PCE	28 t-1,2-DCE	29 TCE	30 1,2,4-TMB	31 1,3,5-TMB	32 VC	33 CB
OPERATION AREA 1: Bloomfield Property																																		
MW-106	05/07/02	430	2.4	<1.0	<1.0	<1.0	<1.0	38	<1.0	<1.0	<1.0	<1.0	22	<1.0	<1.0	1.6	< 0.5	<1.0	<1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 10	<1.0	< 1.0	< 1.0	17	1.9	< 1.0	< 1.0	15	< 1.0
MW-107	05/09/02	2100	310	<2.0	3.0	<2.0	<2.0	26	<2.0	<2.0	<2.0	<2.0	8.8	<2.0	<2.0	21	< 1.0	<2.0	<2.0	45	< 20	< 2.0	< 2.0	48	< 20	< 2.0	8.4	< 2.0	5.7	< 2.0	< 2.0	< 2.0	30	< 2.0
MW-203	05/08/02	150	8.7	<1.0	<1.0	<1.0	< 1.0	30	<1.0	<1.0	<1.0	<1.0	21	<1.0	<1.0	<1.0	< 0.5	<1.0	<1.0	<1.0	< 10	< 1.0	< 1.0	< 1.0	< 10	<1.0	<1.0	< 1.0	1.7	< 1.0	< 1.0	< 1.0	0.53	< 1.0
MW-103	05/08/02	200	< 0.5	<1.0	<1.0	<1.0	<1.0	53	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	< 0.5	<1.0	<1.0	<1.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0
MW-202	05/08/02	1400	330	2.9	2.1	3.8	16	66	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	< 0.5	<1.0	<1.0	12	< 10	3.1	1.4	32	< 10	< 1.0	3.6	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0
MW-204	05/09/02	1400	250	37	120	289	< 2.0	170	<2.0	<2.0	<2.0	<2.0	2.7	<2.0	<2.0	3.5	< 1.0	<2.0	<2.0	5.7	< 20	< 2.0	< 2.0	13	< 20	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	26	8.9	3.5	< 2.0
W-7	05/07/02	< 100	< 0.5	< 1.0	< 1.0	< 1.0	<1.0	< 10	< 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	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0
OPERATION AREA 3: Processing Area																																		
MW-104A	05/07/02	100	< 0.5	< 1.0	< 1.0	< 1.0	< 1.0	31	< 1.0	< 1.0	< 1.0	< 1.0	4.3	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	1.4	< 1.0	< 1.0	< 0.5	< 1.0
MW-504		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	05/08/02	580	17	< 1.0	1.3	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	16	< 1.0	< 1.0	2.9	< 0.5	16	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	6.2	5.6	78	< 1.0	< 1.0	1.9	< 1.0
MW-105	05/07/02	530	1.1	< 1.0	< 1.0	< 1.0	< 1.0	27	< 1.0	< 1.0	< 1.0	< 1.0	14	< 1.0	< 1.0	4.4	< 0.5	10	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	6.8	38	< 1.0	< 1.0	3.9	< 1.0
MW-201	05/09/02	1800	120	6.6	45	20	5.1	< 20	< 2.0	< 2.0	< 2.0	< 2.0	33	< 2.0	< 2.0	< 2.0	< 1.0	6.4	< 2.0	8.8	< 20	< 2.0	< 2.0	8.6	< 20	2.4	2.1	< 2.0	4.2	14	5.6	3.8	1.1	< 2.0
MW-205	05/08/02	260	9.7	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	22	< 1.0	< 1.0	< 1.0	< 0.5	1.1	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	17	< 1.0	< 1.0	0.65	< 1.0
W-8	05/07/02	180	0.51	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 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	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0
OPERATION AREA 5: Lakeland Property																																		
MW-501A	05/08/02	7000	690	4.3	6.8	5.9	130	< 20	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	4.2	< 1.0	< 2.0	7.0	100	< 20	11	< 2.0	190	< 20	< 2.0	9.3	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	2.4	< 2.0
MW-502	05/09/02	25000	4300	<200	390	230	14000	< 2000	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 100	< 200	< 200	< 200	<2000	< 200	< 200	< 200	< 2000	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 100	< 200
MW-503B	05/09/02	4500	81	3.5	77	34.5	< 2.0	< 20	< 2.0	< 2.0	2.7	< 2.0	23	< 2.0	< 2.0	< 2.0	< 1.0	5.0	< 2.0	86	< 20	7.1	< 2.0	120	26	2.8	18	< 2.0	23	< 2.0	2.5	2.2	7.7	< 2.0
OPERATION AREA 6: Former AST Area at Walker Property																																		
W-3A		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: Walker Property																																		
W-1	05/08/02	280	7.7	< 1.0	< 1.0	< 1.0	5.9	44	< 1.0	< 1.0	< 1.0	< 1.0	3.1	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0	< 1.0	3.3	< 10	< 1.0	< 1.0	2.4	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	6.4	< 1.0
W-4	05/08/02	250	33	< 1.0	< 1.0	< 1.0	< 1.0	60	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.3	< 0.5	< 1.0	< 1.0	4.5	< 10	< 1.0	< 1.0	2.3	< 10	< 1.0	1.4	< 1.0	2.0	< 1.0	< 1.0	< 1.0	5.2	< 1.0
EW-1		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 Property																																		
MW-600A		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	05/09/02	24000	11000	<100	< 100	< 100	2500	<1000	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 50	< 100	< 100	< 100	< 1000	< 100	< 100	150	< 1000	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 50	< 100
TRC ALTON #3 (DUP MW-601A)	05/09/02	28000	12000	< 100	< 100	< 100	3500	NA	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 50	< 100	< 100	< 100	< 1000	< 100	< 100	170	< 1000	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 50	< 100
MW-603	05/07/02	210	< 1.0	< 2.0	< 2.0	< 2.0	< 2.0	< 20	< 2.0	< 2.0	< 2.0	< 2.0	9.6	< 2.0	< 2.0	7.0	< 1.0	120	< 2.0	< 2.0	< 20	< 2.0	< 2.0	< 2.0	< 20	< 2.0	< 2.0	170	3.4	160	< 2.0	< 2.0	< 1.0	< 2.0
MW-604	05/08/02	1100	57	< 1.0	< 1.0	3.3	46	51	< 1.0	< 1.0	< 1.0	1.6	< 1.0	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0	< 1.0	47	< 10	2.2	< 1.0	34	< 10	< 1.0	5.2	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	5.3	< 1.0
TRC ALTON #2 (DUP MW-604)	05/08/02	1400	55	< 1.0	< 1.0	3.2	46	NA	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0	< 1.0	45	< 10	2.2	< 1.0	32	< 10	< 1.0	5.2	< 10	< 1.0	< 1.0	< 1.0	< 1.0	5.3	< 1.0
MW-605	05/07/02	< 100	< 0.5	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.5	1.8	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	19	< 1.0	22	< 1.0	< 1.0	< 0.5	< 1.0
MW-606	05/07/02	< 100	< 0.5	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	1.3	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0
MW-607	05/07/02	490	4.0	< 1.0	< 1.0	< 1.0	< 1.0	91	< 1.0	< 1.0	< 1.0	< 1.0	1.5	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0	< 1.0	3.6	< 10	< 1.0	< 1.0	< 1.0	< 10	< 1.0	3.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0
TRC ALTON #1 (DUP MW-607)	05/07/02	440	5.4	< 1.0	< 1.0	< 1.0	< 1.0	NA	< 1.0	< 1.0	< 1.0	< 1.0	1.7	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0	< 1.0	3.6	< 10	< 1.0	< 1.0	< 1.0	< 10	< 1.0	3.7	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.5	< 1.0

NOTES:

All concentrations are reported in micrograms per liter (ug/L).
Concentrations reported as "<" are not detected (ND) at or above the stated laboratory reporting limit.

TPH-g = Total Petroleum Hydrocarbons as gasoline (EPA Method 8015 Modified)
HVOC's = Halogenated Volatile Organic Compounds (by EPA Method 8260B)
EPA = Environmental Protection Agency
NS = Not Sampled due to free product in well (see Table 1)
NA = Not Analyzed

Oxygenates analyzed were MTBE, TBA, DIPE, ETBE, TAME, and Ethanol (by EPA Method 8260B).
DIPE, ETBE, TAME, and Ethanol results were ND (to their respective reporting limits) for all samples.
Duplicate samples were not analyzed for oxygenates, with the exception of MTBE.

ABBREVIATIONS:

B	=	Benzene	n-BB	=	n-Butylbenzene
T	=	Toluene	t-BB	=	tert-Butylbenzene
E	=	Ethylbenzene	n-PB	=	n-Propylbenzene
X	=	m, p & o-(total) Xylenes	p-iso-PT	=	p-iso-propyltoluene
MTBE	=	Methyl Tertiary Butyl Ether	sec-BB	=	sec-Butylbenzene
TBA	=	Tertiary Butyl Alcohol	PCE	=	Tetrachloroethene
BDCM	=	Bromodichloromethane	t-1,2-DCE	=	trans-1,2-dichloroethene
BCM	=	Bromochloromethane	TCE	=	Trichloroethene
c-1,2-DCE	=	cis-1,2-dichloroethane	1,2,4-TMB	=	1,2,4-trimethylbenzene
1,2-DCB	=	1,2-dichlorobenzene	1,3,5-TMB	=	1,3,5-trimethylbenzene
1,1-DCA	=	1,1-dichloroethane	VC	=	Vinyl Chloride
1,2-DCA	=	1,2-dichloroethane	CB	=	Chlorobenzene
1,1-DCE	=	1,1-dichloroethene	DIPE	=	Diisopropyl Ether
1,2-DCP	=	1,2-dichloropropane	ETBE	=	Ethyl Tertiary Butyl Ether
iso-PB	=	iso-propylbenzene	TAME	=	Tertiary Amyl Methyl Ether
MC	=	Methylene Chloride			

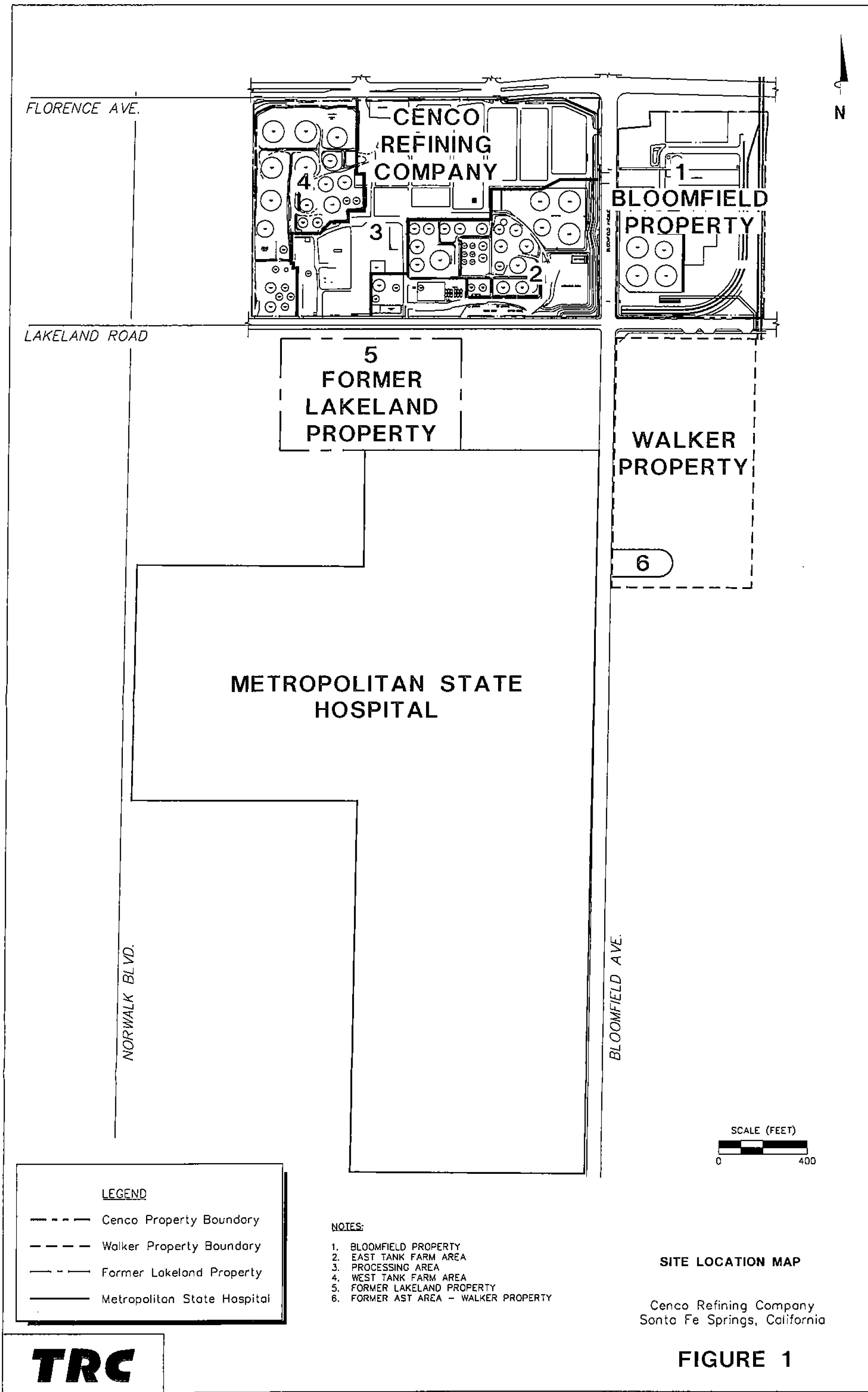
TABLE 3
SUMMARY OF INTRINSIC BIOREMEDIATION PARAMETER RESULTS
CENCO REFINING COMPANY
SANTA FE SPRINGS, CALIFORNIA

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-N (mg/L)	Sulfate (mg/L)
MW-104A	05/07/2002	NS	NS	1.72	83.7	0.257	3.0	720	< 0.10	150
MW-205	05/08/2002	NS	NS	1.22	91	0.228	< 0.10	610	< 0.10	360
MW-502	05/09/2002	NS	NS	1.14	61	7.050	0.75	830	< 0.10	<1.0
MW-605	05/07/2002	NS	NS	4.40	145	<0.0010	< 0.10	480	8.4	220
MW-606	05/07/2002	NS	NS	6.25	85.05	<0.0010	< 0.10	400	8.4	250

NOTES:

Concentrations reported as "<" are not detected (ND) at or above the stated laboratory reporting limit
cfu/ml = Colony Forming Units Per Milliliter
MPN/100 = Most Probable Number of Bacteria Per 100 Milliliters of Sample
mg/L = Milligrams Per Liter
ug/L = Micrograms Per Liter
mV = millivolts
NS = Not Sampled Due to Well Damage, Free Product in Well, or Not Scheduled for Sampling

FIGURES

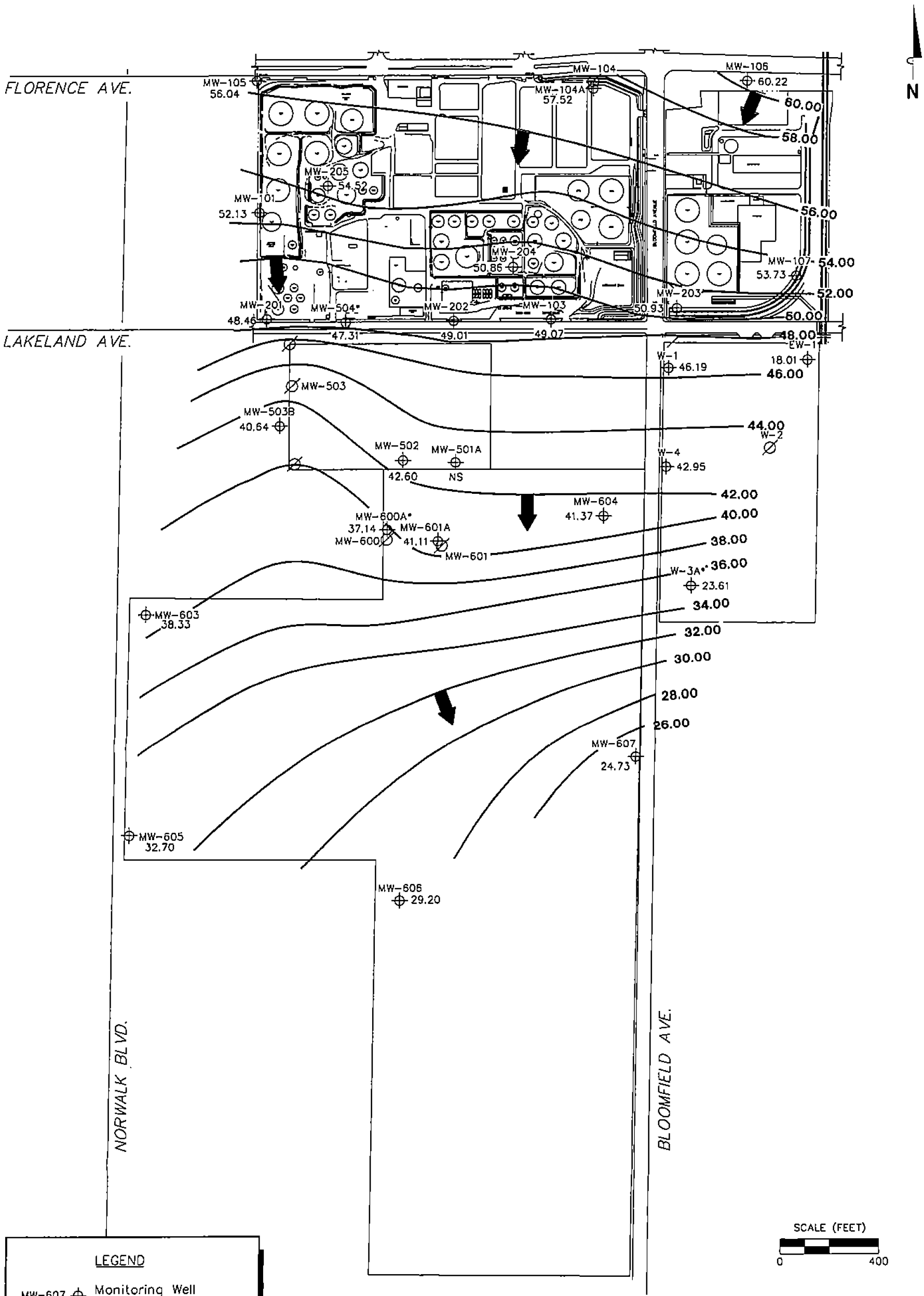


SITE LOCATION MAP

Cenco Refining Company
Santa Fe Springs, California

FIGURE 1

IR1: \Graphics\Projects\25-XXX\25-0901\25-1016\GWECN-SITELOC.dwg 6/10/02 CME



LEGEND

MW-607 ⊕	Monitoring Well
W-2 ∅	Abandoned Well
60.00 ——	Groundwater Elevation Contour (feet)
➡	General Direction of Groundwater Flow

NOTES:

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. * = not inlcuded in groundwater contour interpretotion due to free-phase product in well. NS = not surveyed, not included in groundwater contour interpretotion.

GROUNDWATER ELEVATION CONTOUR MAP
May 6, 2002

Cenco Refining Company
Santa Fe Springs, California

FIGURE 2

TRC

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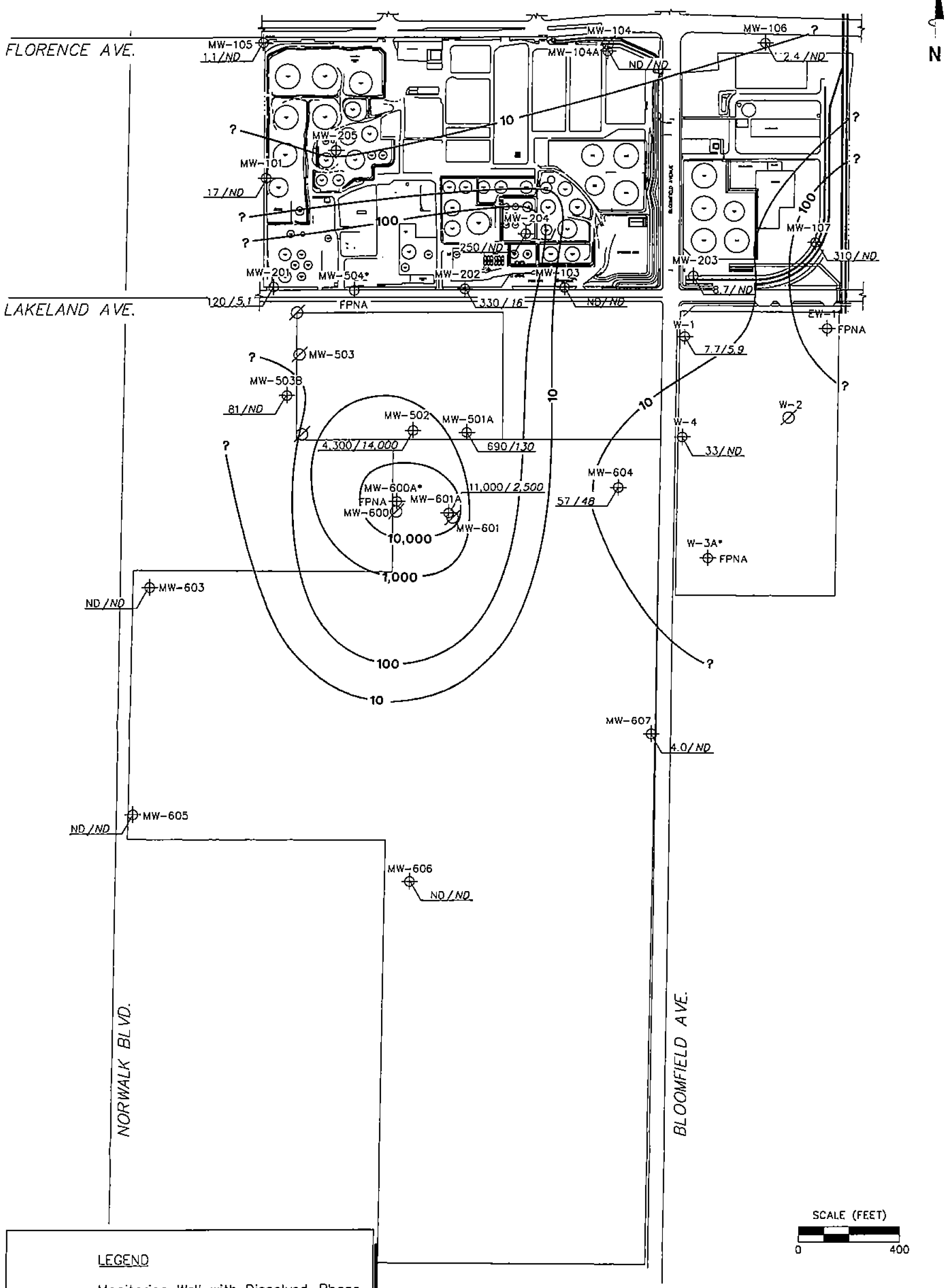


LEGEND

MW-607 ⊕ Monitoring Well with Dissolved-Phase Benzene and *MTBE* Concentrations (μg/l)

W-2 ∅ Abandoned Well

–10,000– Dissolved-Phase Benzene Contour (μg/l)

NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. MTBE = methyl tertiary butyl ether. μg/l = micrograms per liter. FPNA = Free Product, not analyzed. ND = not detected at or above reporting limit indicated on official laboratory report. * = not included in contour interpretation.

DISSOLVED-PHASE BENZENE AND MTBE CONCENTRATION AND BENZENE ISOCONCENTRATION MAP
May 2002

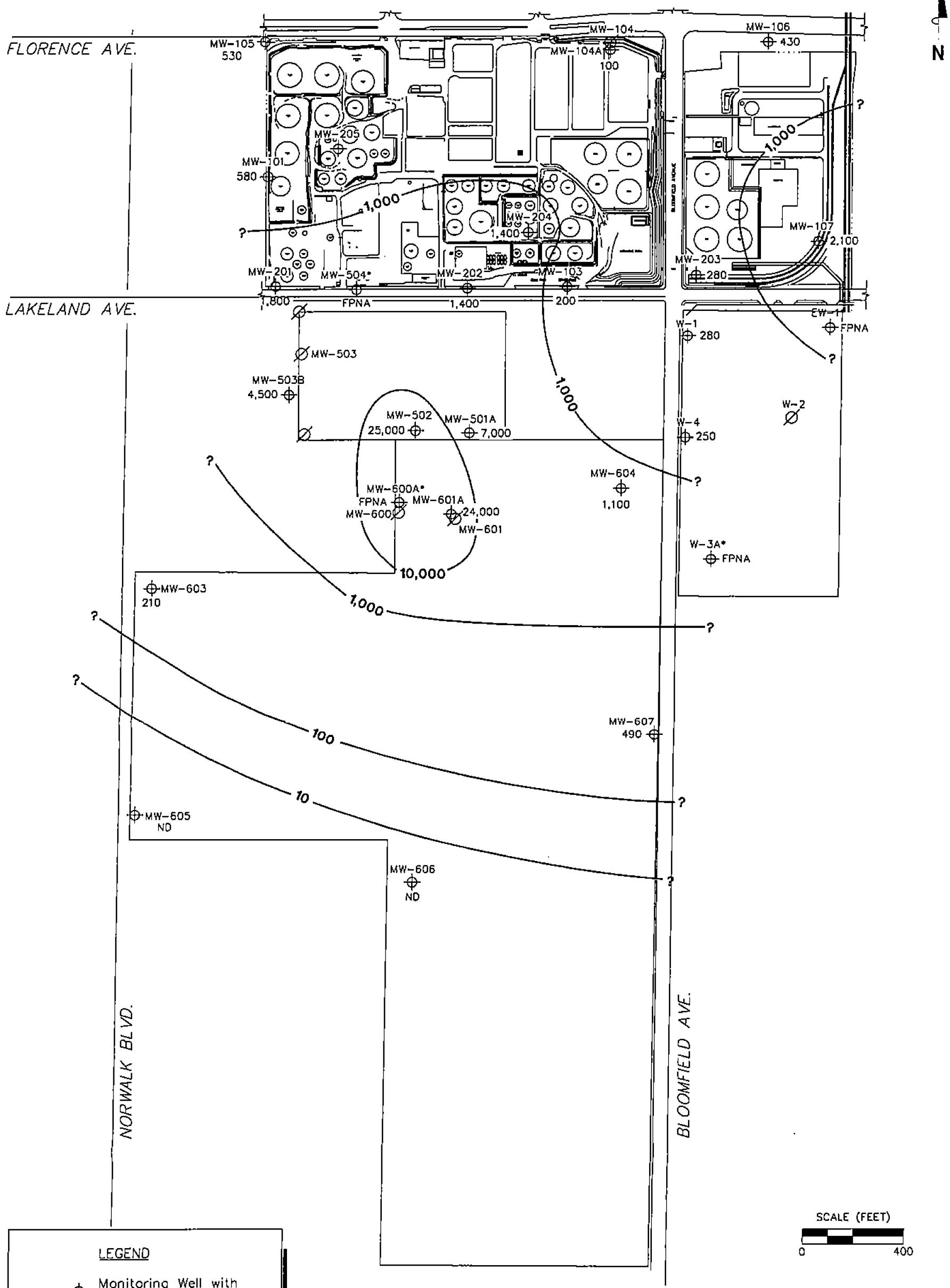
Cenco Refining Company
Santa Fe Springs, California

TRC

FIGURE 3

PS=1:1

IR1: \Graphics\Projects\25-XXX\25-0901\25-1016\GWECN-1016.dwg 6/10/02 blw



LEGEND

MW-607 ⊕	Monitoring Well with Dissolved-Phase TPH-G Concentration (µg/l)
W-2 ∅	Abandoned Well
—1,000—	Dissolved-Phase TPH-G Contour (µg/l)

NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. µg/l = micrograms per liter. TPH-G = total petroleum hydrocarbons as gasoline. FPNA = Free Product, not analyzed. ND = not detected at or above reporting limit indicated on official laboratory report. * = not included in contour interpretation due to free-phase product in well.

DISSOLVED-PHASE TPH-G CONCENTRATION MAP
May 2002

Cenco Refining Company
Santa Fe Springs, California

TRC

FIGURE 4

PS=1:1

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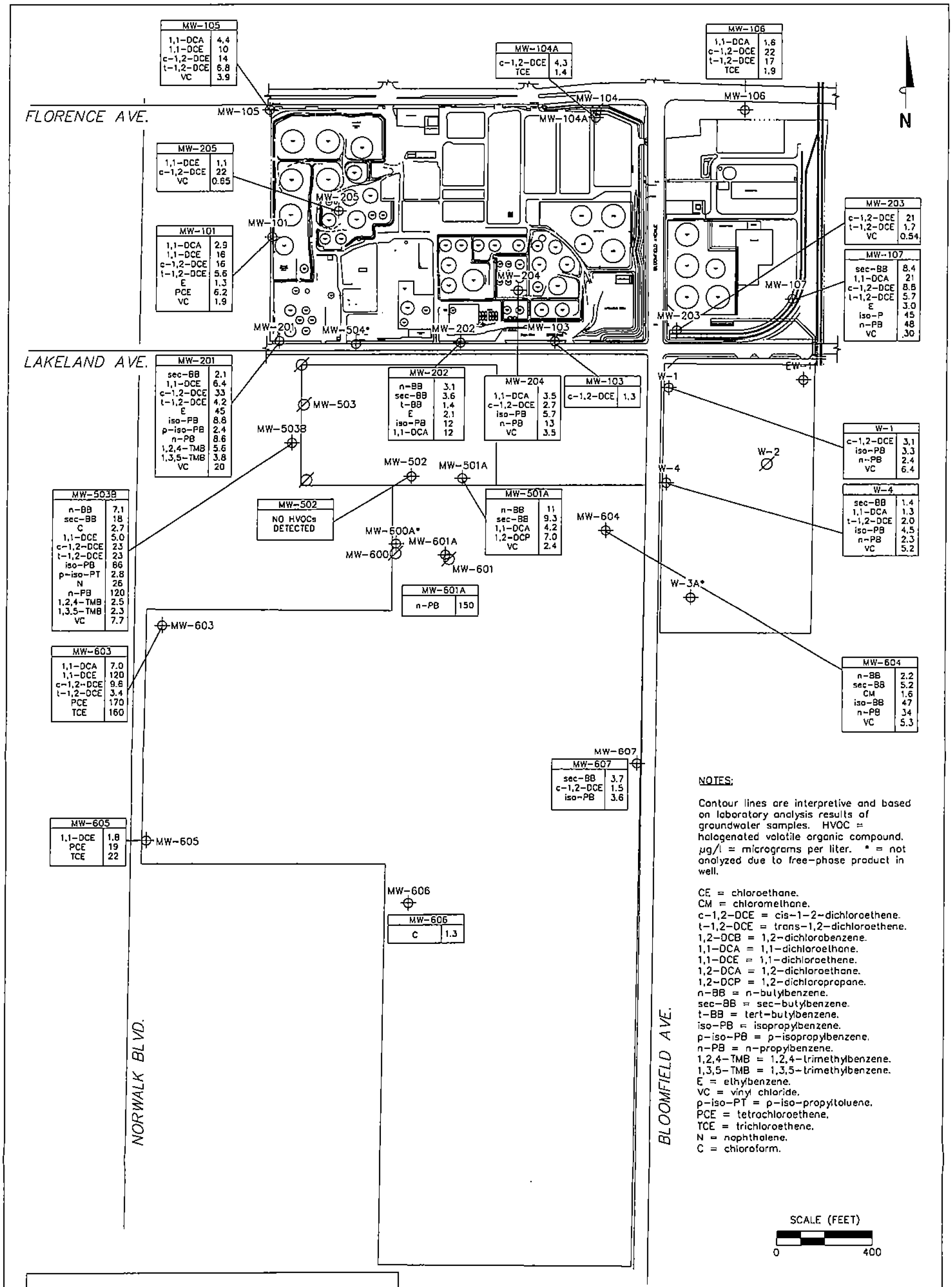

NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. HVOC = halogenated volatile organic compound. µg/l = micrograms per liter. * = not analyzed due to free-phase product in well.

CE = chloroethane.
CM = chloromethane.
c-1,2-DCE = cis-1-2-dichloroethene.
t-1,2-DCE = trans-1,2-dichloroethene.
1,2-DCB = 1,2-dichlorobenzene.
1,1-DCA = 1,1-dichloroethane.
1,1-DCE = 1,1-dichloroethene.
1,2-DCA = 1,2-dichloroethane.
1,2-DCP = 1,2-dichloropropane.
n-BB = n-butylbenzene.
sec-BB = sec-butylbenzene.
t-BB = tert-butylbenzene.
iso-PB = isopropylbenzene.
p-iso-PB = p-isopropylbenzene.
n-PB = n-propylbenzene.
1,2,4-TMB = 1,2,4-trimethylbenzene.
1,3,5-TMB = 1,3,5-trimethylbenzene.
E = ethylbenzene.
VC = vinyl chloride.
p-iso-PT = p-iso-propyltoluene.
PCE = tetrachloroethene.
TCE = trichloroethene.
N = naphthalene.
C = chloroform.

SCALE (FEET)
0 400

LEGEND

Monitoring Well with Detected Dissolved-Phase Halogenated Volatile Organic Compound Concentration (µg/l)

Well No.	
ANALYTE	µg/l

W-2 Abandoned Well

DISSOLVED-PHASE HVOC CONCENTRATION MAP
May 2002

Cenco Refining Company
Santa Fe Springs, California

TRC

FIGURE 5

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APPENDIX A

Groundwater Monitoring Well Purge Tables and Sampling Logs

Well Monitoring Worksheet
CENCO, SFS Plant
Spring 2002

	Well Number	Gauging Date/ Time	Total Depth (feet)	Depth to Water (feet bgs)	Depth to LNAPL (feet bgs)	LNAPL Thickness (feet)	Methane Reading (ppm) "FID"	Well Locations	Comments
D	W-7	5-7-02 ~~NA~~	—	92.25	—	—		Area 2	SUPPLY WELL - SAMPLE ONLY
D	MW-104A	5-6-02/0910	97.60	83.64	—	—	0	Area 3	DO 1.22
D	MW-605	5-7-02/0620	93.94	~~91.99~~ 81.84	—	—	0	Offsite	DO 4.40
D	MW-606	5-6-02/0955	99.20	84.69	—	—	0	Offsite	DO 6.25
D	MW-603	5-6-02/1028	97.45	80.21			0	Offsite	DO 1.40
D	W-8	~~NA~~ 5-6-02 1165	—	71.27	—	—	0	Area 4	SUPPLY WELL - SAMPLE ONLY out of service
D	MW-105	5-6-02/1141	100.30	82.59	—	—	0	Area 4	DO 2.64
D	MW-106	5-6-02/1204	106.75	88.19	—	—	3.0	Area 1	DO 2.27
D	MW-607	5-6-02/1018	106.72	95.30	—	—	0	Offsite	DO 2.03
	MW-203	5-6-02/1220	106.87	92.96	—	—	off scale	Area 1	DO 1.05 odor
	W-1	5-6-02/1049	118.70	96.70	96.70	—	100	Offsite	DO 1.71
	MW-205	5-6-02/1235	98.25	83.52	—	—	250	Area 4	DO 1.22
	MW-101	5-6-02/1247	90.35	83.10	—	—	off scale	Area 4	DO 1.07 odor
	MW-202	5-6-02/1258	92.15	88.88	—	—	off scale	Area 2	DO 3.68 odor
	MW-103	5-6-02/1310	94.35	87.88	—	—	off scale (FO)	Area 2	DO 1.46 odor
	W-4	5/6/02/ 1105	131.80	99.43	—	—	No Well Seal 0	Offsite	DO 5.93
LPH	W-3A	5-6-02/1120	NM	100.39	99.28	1.11	Off scale	Area 6	LPH Thickness in July 2001 was 0.00 (None) NM
	MW-604	5-6-02/1325	103.10	96.79	—	—	off scale	Offsite	DO 1.041 odor
	MW-501A	5-6-02/1455	92.05	85.76	—	—	off scale	Area 5	DO 1.03 odor
	MW-201	5-6-02/1355	101.25	84.45	—	—	off scale	Area 4	DO 1.41 odor
	MW-204	5-6-02/1420	99.85	89.28	—	—	off scale	Area 2	DO 1.06 odor
	MW-107	5-6-02/1430	107.50	95.20	—	—	off scale	Area 1	DO 4.01 odor
	MW-503B	5-6-02/1520	108.65	96.32	—	—	off scale	Area 5	DO 0.89 odor
	MW-502	5-6-02/1510	100.55	85.70	—	—	off scale	Area 5	DO 1.14 odor
	MW-601A	5-6-02/1535	89.55	85.42	—	—	off scale	Offsite	DO 0.87 odor

Well Monitoring Worksheet
CENCO, SFS Plant
Spring 2002

Well Number	Gauging Date/ Time	Total Depth (feet)	Depth to Water (feet bgs)	Depth to LNAPL (feet bgs)	LNAPL Thickness (feet)	Methane Reading	Well Locations	Comments
MW-600A	5-6-02/1540	NM	83.20	80.56	2.64	off scale	Offsite	LPH=0.56 (7/01)
MW-504	5-6-02/1600	NM	87.20	86.10	1.10	—	Area 3	LPH=1.00 (7/01)
EW-1	5-6-02/	NM	94.34	92.78	1.56	0	Offsite	LPH=2.81 (7/01)

Notes:

Do not record total depth for wells with LPH.
Use separate interface probe for wells with product and complete gauging tool sync.

SAMPLING WORKSHEET
Second Quarter 2002
CENCO Refining Company Santa Fe Springs Refinery
Santa Fe Springs, California

	Well Number	Required Analysis: VOCs w/Oxys (EPA 8260B)	TPH-G (EPA 8015M)	Methane (RSK-175M)	Iron + 2- Ferrous Iron (SM3500-Fe D)	Alkalinity (SM 2320B) and Anions (Nitrate and Sulfate) (EPA 300.0)	ORP	Field Parameters (pH, E.C., temp., D.O., turbidity)	LPH Thickness July 2001	Comments
		Three 40 ml VOAs (Preserved HCL)	Three 40 ml VOAs (Preserved HCL)	One 125 ml Amber (unpreserved)	One 250 ml HDPE (Preserved HNO_3)	One 500 ml HDPE (unpreserved)	Field Measurement	Field Measurement		Well Locations
1	W-7	■	■					■		Area 2
2	MW-104A	■	■	■	■	■	■	■		Area 3
3	MW-605	■	■	■	■	■	■	■		Offsite
4	MW-606	■	■	■	■	■	■	■		Offsite
5	MW-603	■	■					■		Offsite
6	W-8	■	■					■		Area 4
7	MW-105	■	■					■		Area 4
8	MW-106	■	■					■		Area 1
9	MW-607	■	■					■		Offsite
10	MW-203	■	■					■		Area 1
11	W-1	■	■					■		Offsite
12	MW-205	■	■	■	■	■	■	■		Area 4
13	MW-101	■	■					■		Area 4
14	MW-202	■	■					■		Area 2
15	MW-103	■	■					■		Area 2
16	W-4	■	■					■		Offsite
17	W-3A	■	■					■		Area 6
18	MW-604	■	■					■		Offsite
19	MW-501A	■	■					■		Area 5
20	MW-201	■	■					■		Area 4
21	MW-204	■	■					■		Area 2
22	MW-107	■	■					■		Area 1
23	MW-503B	■	■					■		Area 5
24	MW-502	■	■	■	■	■	■	■		Area 5
25	MW-601A	■	■					■		Offsite
26	MW-600A	■	■					■	0.56	Offsite
27	MW-504	■	■					■	1.00	Area 3
28	EW-1	■	■					■	2.61	Offsite

NOTES: DO NOT SAMPLE WELLS WITH MEASURABLE LPH

QA/QC SAMPLES

Duplicate

- One duplicate sample (Alton #-) taken at minimum frequency of 10% (one sample for every 10 samples or portion of ten samples).
  Only collect duplicate samples for VOCs and TPH-G.

Trip Blanks

- One trip blank per cooler analyzed for VOCs (8260 w/MTBE).

Equipment Blanks:

- One equipment blank at the beginning analyzed by EPA Method 8260B for VOCs and Oxys and EPA Method 8015M for TPH-G.

GROUNDWATER SAMPLING FIELD NOTES

Site: CENCO Project No.: 251016-01 Sampled By: ES Date: 5-09-02

Well No. MW-201 Purge Method: VAC
Depth to Water (feet): 84.45 Depth to Product (feet): Ø
Total Depth (feet): 101.25 LPH & Water Recovered (gallons): Ø
Water Column (feet): 16.80 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 87.81 1 Well Volume (gallons): 11

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
6:14			11	1.96	59.9	7.90
			22	2.05	61.3	7.96
	6:37		33	2.07	62.1	7.95

Static at Time Sampled	Total Purged	Time Sampled
84.47	33	6:42

Comments: TURB. 90

Well No. MW-204 Purge Method: VAC
Depth to Water (feet): 89.28 Depth to Product (feet): Ø
Total Depth (feet): 99.85 LPH & Water Recovered (gallons): Ø
Water Column (feet): 10.57 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 91.39 1 Well Volume (gallons): 7

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
7:00			7	2.05	59.7	8.31
			14	2.11	61.4	8.30
	7:35		21	2.16	62.2	8.24

Static at Time Sampled	Total Purged	Time Sampled
89.29	21	7:46

Comments: TURB. 18

Well No. MW-107 Purge Method: VAC
Depth to Water (feet): 95.20 Depth to Product (feet): Ø
Total Depth (feet): 107.50 LPH & Water Recovered (gallons): Ø
Water Column (feet): 12.30 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 97.66 1 Well Volume (gallons): 8

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
8:07			8	3.44	63.7	8.15
			16	3.63	65.6	8.17
	8:28		24	3.66	65.9	8.15

Static at Time Sampled	Total Purged	Time Sampled
95.25	24	8:36

Comments: TURB. 50

Well No. MW-503B Purge Method: VAC
Depth to Water (feet): 86.32 Depth to Product (feet): Ø
Total Depth (feet): 108.65 LPH & Water Recovered (gallons): Ø
Water Column (feet): 22.33 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 90.78 1 Well Volume (gallons): 15

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
8:45			15	2.10	65.5	8.09
			30	1.87	65.8	8.06
	9:22		45	1.89	67.5	8.04

Static at Time Sampled	Total Purged	Time Sampled
86.41	45	9:31

Comments: TURB. 40

Well No. MW-502 Purge Method: VAC
Depth to Water (feet): 85.70 Depth to Product (feet): Ø
Total Depth (feet): 100.55 LPH & Water Recovered (gallons): Ø
Water Column (feet): 14.85 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 88.67 1 Well Volume (gallons): 10

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
9:45			10	2.66	69.3	7.73
			20	2.63	72.1	7.71
	10:04		30	2.59	73.6	7.73

Static at Time Sampled	Total Purged	Time Sampled
85.79	30	10:17

Comments: ORP. 61 TURB. 27

Well No. MW-601A Purge Method: VAC
Depth to Water (feet): 85.42 Depth to Product (feet): Ø
Total Depth (feet): 89.55 LPH & Water Recovered (gallons): Ø
Water Column (feet): 4.13 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 86.24 1 Well Volume (gallons): 3

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
10:32			3	2.62	74.8	7.74
			6	2.58	74.6	7.70
	10:45		9	2.56	74.0	7.67

Static at Time Sampled	Total Purged	Time Sampled
85.50	9	10:58

Comments: TRC - Alton #3 TAKEN
TURB. 130

GROUNDWATER SAMPLING FIELD NOTES

Site: CENCO Project No.: 251016-01 Sampled By: ES Date: 5-08-02

No. MW-203 Purge Method: VAC
Depth to Water (feet): 92.96 Depth to Product (feet): Ø
Total Depth (feet) 106.87 LPH & Water Recovered (gallons): Ø
Water Column (feet): 13.91 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 95.74 Well Volume (gallons): 9

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
8:08			9	2.56	66.1	8.08
			18	2.68	66.7	8.16
	8:22		27	2.71	67.0	8.17

Static at Time Sampled	Total Purged	Time Sampled
94.01	27	8:30

Comments: TURB: 1.6

Well No. W-1 Purge Method: VAC
Depth to Water (feet): 96.70 Depth to Product (feet): Ø
Total Depth (feet) 118.70 LPH & Water Recovered (gallons): Ø
Water Column (feet): 22.60 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 101.10 Well Volume (gallons): 15

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
8:51			15	2.90	67.5	8.19
			30	2.99	69.1	8.20
	9:18		45	3.00	70.2	8.16

Static at Time Sampled	Total Purged	Time Sampled
96.77	45	9:26

Comments: TURB. 8.8

Well No. MW-205 Purge Method: VAC
Depth to Water (feet) 83.52 Depth to Product (feet): Ø
Total Depth (feet): 98.25 LPH & Water Recovered (gallons): Ø
Water Column (feet) 14.73 Casing Diameter (inches): 4"
80% Recharge Depth (feet) 86.46 Well Volume (gallons): 10

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
9:43			10	2.24	71.5	8.13
			20	2.21	71.2	8.09
	10:04		30	2.20	71.7	8.13

Static at Time Sampled	Total Purged	Time Sampled
83.58	30	10:13

Comments: ORP: 91 TURB. 3.7

Well No. MW-101 Purge Method: VAC
Depth to Water (feet) 83.10 Depth to Product (feet): Ø
Total Depth (feet): 90.35 LPH & Water Recovered (gallons): Ø
Water Column (feet) 7.25 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 84.55 Well Volume (gallons): 5

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
10:20			5	2.75	69.9	8.01
			10	2.59	69.5	8.05
	10:32		15	2.59	69.3	8.05

Static at Time Sampled	Total Purged	Time Sampled
83.35	15	10:39

Comments: TURB. 4.5

Well No. MW-202 Purge Method: VAC
Depth to Water (feet) 88.88 Depth to Product (feet): Ø
Total Depth (feet): 92.15 LPH & Water Recovered (gallons): Ø
Water Column (feet) 3.27 Casing Diameter (inches): 4"
80% Recharge Depth (feet) 89.53 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
10:50			2	2.54	72.5	7.97
			4	2.44	71.5	8.03
	11:00		6	2.40	71.1	8.07

Static at Time Sampled	Total Purged	Time Sampled
89.41	6	11:08

Comments: TURB. 9.0

Well No. MW-103 Purge Method: VAC
Depth to Water (feet) 87.88 Depth to Product (feet): Ø
Total Depth (feet): 94.35 LPH & Water Recovered (gallons): Ø
Water Column (feet) 6.47 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 89.17 Well Volume (gallons): 4

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
11:45			4	2.63	75.4	8.12
			8	2.65	76.7	8.11
	11:57		12	2.68	78.2	8.12

Static at Time Sampled	Total Purged	Time Sampled
87.92	12	12:05

Comments: TURB. 450

GROUNDWATER SAMPLING FIELD NOTES

Site: CENCO Project No.: 251016-01 Sampled By: ES Date: 5-08-02

No. W-4 Purge Method: VAC
Depth to Water (feet): 99.43 Depth to Product (feet): Ø
Total Depth (feet) 131.80 LPH & Water Recovered (gallons): Ø
Water Column (feet): 32.37 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 105.90 1 Well Volume (gallons): 2.1

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
12:15			2.1	2.98	76.5	7.99
			4.2	3.11	76.3	7.89
	12:53		6.3	3.25	78.1	7.88

Static at Time Sampled	Total Purged	Time Sampled
99.50	6.3	1:03

Comments: TURB. 85

Well No. MW-604 Purge Method: VAC
Depth to Water (feet): 96.79 Depth to Product (feet): Ø
Total Depth (feet) 103.10 LPH & Water Recovered (gallons): Ø
Water Column (feet): 6.31 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 98.05 1 Well Volume (gallons): 4

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
1:13			4	3.01	75.9	7.58
			8	2.87	71.5	7.65
	1:34		12	2.83	70.1	7.69

Static at Time Sampled	Total Purged	Time Sampled
96.80	12	1:42

Comments: TRC Alton #2 TAKEN
TURB. 30

Well No. MW-501A Purge Method: VAC
Depth to Water (feet) 85.76 Depth to Product (feet): Ø
Total Depth (feet): 92.05 LPH & Water Recovered (gallons): Ø
Water Column (feet) 6.29 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 87.01 1 Well Volume (gallons): 4

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
2:02			4	2.80	80.9	7.51
			8	2.70	79.8	7.59
	2:15		12	2.71	78.9	7.56

Static at Time Sampled	Total Purged	Time Sampled
85.84	12	2:30

Comments: TURB. 900

Well No.____ Purge Method:____
Depth to Water (feet)____ Depth to Product (feet):____
Total Depth (feet):____ LPH & Water Recovered (gallons):____
Water Column (feet)____ Casing Diameter (inches):____
80% Recharge Depth (feet):____ 1 Well Volume (gallons):____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH

Static at Time Sampled	Total Purged	Time Sampled

Comments:

Well No.____ Purge Method:____
Depth to Water (feet)____ Depth to Product (feet):____
Total Depth (feet):____ LPH & Water Recovered (gallons):____
Water Column (feet)____ Casing Diameter (inches):____
80% Recharge Depth (feet):____ 1 Well Volume (gallons):____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH

Static at Time Sampled	Total Purged	Time Sampled

Comments:

GROUNDWATER SAMPLING FIELD NOTES

Site: CENCO Project No.: 251016-01 Sampled By: E.S Date: 5-07-02

Well No. MW-605 Purge Method: SUB
Depth to Water (feet): 81.84 Depth to Product (feet): 0
Total Depth (feet) 93.96 LPH & Water Recovered (gallons): 0
Water Column (feet): 12.12 Casing Diameter (inches): 4"
80% Recharge Depth (feet) 84.26 Well Volume (gallons): 8

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
6:54			8	2.39	64.0	6.76
			16	2.51	66.6	6.75
	7:08		24	2.56	68.2	6.76

Static at Time Sampled	Total Purged	Time Sampled
81.88	24	7:30

Comments: orp. 145 TURB. 9.04

Well No. MW-104A Purge Method: SUB
Depth to Water (feet): 83.64 Depth to Product (feet): 0
Total Depth (feet) 97.60 LPH & Water Recovered (gallons): 0
Water Column (feet): 13.96 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 86.43 Well Volume (gallons): 9

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
7:57			9	2.63	64.5	6.90
			18	2.64	70.4	6.90
	8:08		27	2.73	73.5	6.91

Static at Time Sampled	Total Purged	Time Sampled
83.70	27	8:18

Comments: orp. -23 TURB. 9.3

Well No. MW-606 Purge Method: SUB
Depth to Water (feet) 84.69 Depth to Product (feet): 0
Total Depth (feet): 99.20 LPH & Water Recovered (gallons): 0
Water Column (feet) 14.51 Casing Diameter (inches): 4"
80% Recharge Depth (feet): 87.59 Well Volume (gallons): 10

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
8:56			10	2.11	65.6	6.92
			20	2.16	69.3	6.89
	9:09		30	2.18	70.3	6.88

Static at Time Sampled	Total Purged	Time Sampled
85.05	30	9:21

Comments: orp. 175 TURB. 600

Well No. MW-603 Purge Method: SUB
Depth to Water (feet) 80.21 Depth to Product (feet): 0
Total Depth (feet): 97.45 LPH & Water Recovered (gallons): 0
Water Column (feet) 17.24 Casing Diameter (inches): 4"
80% Recharge Depth (feet) 83.63 Well Volume (gallons): 11

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
9:31			11	2.11	67.1	6.67
			22	2.18	69.6	6.65
	9:45		33	2.20	70.4	6.64

Static at Time Sampled	Total Purged	Time Sampled
80.25	33	9:55

Comments: TURB. 34

Well No. MW-105 Purge Method: SUB
Depth to Water (feet) 82.59 Depth to Product (feet): 0
Total Depth (feet): 100.30 LPH & Water Recovered (gallons): 0
Water Column (feet) 17.71 Casing Diameter (inches): 4"
80% Recharge Depth (feet) 86.13 Well Volume (gallons): 12

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
10:05			12	2.38	67.5	6.75
			24	2.46	69.8	6.78
	10:20		36	2.49	70.7	6.79

Static at Time Sampled	Total Purged	Time Sampled
82.60	36	10:29

Comments: TURB. 38

Well No. MW-106 Purge Method: SUB
Depth to Water (feet) 88.19 Depth to Product (feet): 0
Total Depth (feet): 106.75 LPH & Water Recovered (gallons): 0
Water Column (feet) 18.56 Casing Diameter (inches): 4"
80% Recharge Depth (feet) 91.90 Well Volume (gallons): 12

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
11:02			12	2.40	73.1	6.88
			24	2.50	76.3	6.87
	11:18		36	2.51	77.0	6.86

Static at Time Sampled	Total Purged	Time Sampled
89.54	36	11:26

Comments: TURB. 13

GROUNDWATER SAMPLING FIELD NOTES

Site: CENCO Project No.: 25106-01 Sampled By: ES Date: 5-07-02

Well No. MW-607 Purge Method: Sub
Depth to Water (feet): 95.38 Depth to Product (feet): 0
Total Depth (feet) 106.72 LPH & Water Recovered (gallons): 0
Water Column (feet): 11.42 Casing Diameter (inches): 4"
90% Recharge Depth (feet): 97.58 Well Volume (gallons): 8

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
11:38			8	2.75	74.3	6.73
			16	2.81	75.4	6.74
	11:51		24	2.84	76.1	6.73

Static at Time Sampled	Total Purged	Time Sampled
95.40	24	12:07

Comments: Duplicate #1 taken
TURB. 3.30

Well No. W-8 Purge Method: No Purge Sample
Depth to Water (feet): 71.27 Depth to Product (feet): —
Total Depth (feet) — LPH & Water Recovered (gallons): —
Water Column (feet): — Casing Diameter (inches): 12"
80% Recharge Depth (feet): — 1 Well Volume (gallons): —

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
			—	0.99	73.8	9.92
			—			
			—			

Static at Time Sampled	Total Purged	Time Sampled
N/A		12:25

Comments:
TURB - 33.0

Well No. W-7 Purge Method: No Purge Sample
Depth to Water (feet) 92.25 Depth to Product (feet): —
Total Depth (feet): — LPH & Water Recovered (gallons): —
Water Column (feet) — Casing Diameter (inches): —
80% Recharge Depth (feet): — 1 Well Volume (gallons): —

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
			—	1.30	77.3	9.94
			—			
			—			

Static at Time Sampled	Total Purged	Time Sampled
N/A		2:36

Comments:
TURB. 4.6

Well No. _____ Purge Method: _____
Depth to Water (feet) _____ Depth to Product (feet): _____
Total Depth (feet): _____ LPH & Water Recovered (gallons): _____
Water Column (feet) _____ Casing Diameter (inches): _____
80% Recharge Depth (feet): _____ 1 Well Volume (gallons): _____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH

Static at Time Sampled	Total Purged	Time Sampled

Comments:

Well No. _____ Purge Method: _____
Depth to Water (feet) _____ Depth to Product (feet): _____
Total Depth (feet): _____ LPH & Water Recovered (gallons): _____
Water Column (feet) _____ Casing Diameter (inches): _____
80% Recharge Depth (feet): _____ 1 Well Volume (gallons): _____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH

Static at Time Sampled	Total Purged	Time Sampled

Comments:

METER CALIBRATION LOG

CLIENT NAME: Cenco

SITE #:

CALIBRATED BY: Ed Sanchez

LOCATION: Santa Fe Springs

DATE: 5-07-02

METER BRAND NAME: Hydac-H 9319

METER BRAND NAME:

METER MODEL #: –

METER MODEL #:

CALIBRATION STANDARD EXP. DATE: 7/03

CALIBRATION STANDARD EXP. DATE:

SITE INITIAL CALIBRATION			*POST-SAMPLING STANDARD MEASUREMENTS*		
	Standard	Final Calibrated Values		Standard	Measured Values
pH	4.00	4.00	pH	4.00	
pH	7.00	7.00	pH	7.00	
pH	10.00	10.00	pH	10.00	
Conductivity	1000	–	Conductivity	1000	
Conductivity	10000	10000	Conductivity	10000	
Turbidity	1.0		Turbidity	1.0	
Turbudity	10.0		Turbudity	10.0	

REMARKS:

SIGNATURE: Edward Sanchez

Page 1 of 1

METER CALIBRATION LOG

CLIENT NAME: CENCO

SITE #: CENCO

CALIBRATED BY: Ed Sanchez

LOCATION: SFS

DATE: 5-09-02

METER BRAND NAME: HYDA C

METER BRAND NAME:

METER MODEL #: 9613

METER MODEL #:

CALIBRATION STANDARD EXP. DATE: 2003

CALIBRATION STANDARD EXP. DATE:

SITE INITIAL CALIBRATION			POST SAMPLING STANDARD MEASUREMENTS		
	Standard	Final Calibrated Values		Standard	Measured Values
pH	4.00	4.00	pH	4.00	
pH	7.00	7.00	pH	7.00	
pH	10.00	10.00	pH	10.00	
Conductivity	1000		Conductivity	1000	
Conductivity	10000	10000	Conductivity	10000	
Turbidity	1.0		Turbidity	1.0	
Turbudity	10.0		Turbudity	10.0	

REMARKS:

SIGNATURE: Edward Sanchez

Page 1 of 1

APPENDIX B

Summary of Historical Groundwater Elevations

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	–
	Feb-01	135.23	82.09	ND	53.14	–
	Jul-01	135.23	81.60	ND	53.63	
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	–
	Feb-01	136.95	87.01	ND	49.94	–
	Jul-01	136.95	86.55	ND	50.40	

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	–
	Feb-01	141.16	82.89	ND	58.27	–
	Jul-01	141.16	82.38	ND	58.78	–
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	–
	Feb-01	138.63	81.68	ND	56.95	–
	Jul-01	138.63	80.95	ND	57.68	–
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	–
	Feb-01	148.41	86.68	ND	61.73	–
	Jul-01	148.41	86.89	ND	61.52	–
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	–
	Feb-01	148.93	93.51	ND	55.42	–
	Jul-01	148.93	93.92	ND	55.01	–

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-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	–
	Feb-01	132.91	83.32	ND	49.59	–
	Jul-01	132.91	83.00	ND	49.91	–
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	–
	Feb-01	137.89	87.86	ND	50.03	–
	Jul-01	137.89	87.49	ND	50.40	–
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	–
	Feb-01	143.89	91.81	ND	52.08	–
	Jul-01	143.89	91.76	ND	52.13	–
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 I
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	–
	Feb-01	140.14	88.29	ND	51.85	–
	Jul-01	140.14	87.93	ND	52.21	–
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	–
	Feb-01	138.04	82.57	ND	55.47	–
	Jul-01	138.04	82.01	ND	56.03	–

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	97.30	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
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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-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
	Feb-01	Not Surveyed	84.48	ND	NAP	NAP
	Jul-01	Not Surveyed	84.33	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	–
	Feb-01	128.30	84.42	ND	43.88	–
	Jul-01	128.30	84.32	ND	43.98	–
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
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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-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	–
	Feb-01	129.96	85.06	ND	44.90	–
	Jul-01	129.96	84.98	ND	44.98	–
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
	Jan-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	76.76	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	82.85	82.20	52.15	0.68
	Jul-00	134.51	83.96	84.90	51.26	0.94
	Feb-01	134.51	–*	86.24	–*	–*
	Jul-01	134.51	86.47	84.58		1.89
MW-400 (ABANDONED)	Sep-90	120.05	91.46	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	31.36	0.90

TABLE 1
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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
	Feb-01	120.34	79.39	79.87	41.31	0.48
	Jul-01	120.34	80.38	79.82	40.39	0.56
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
	Feb-01	126.53	83.71	83.73	42.84	0.02
	Jul-01	126.53	84.07	ND	42.46	–
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	72.71	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	–
	Feb-01	118.54	78.48	ND	40.06	–
	Jul-01	118.54	79.14	ND	39.40	–

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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-404	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	–
	Feb-01	138.16	95.65	ND	42.51	–
	Jul-01	138.16	95.42	ND	42.74	–
MW-405	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	–
	Feb-01	114.54	79.99	ND	34.55	–
	Jul-01	114.54	80.83	ND	33.71	–
MW-406	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	–
	Feb-01	113.89	82.70	ND	31.19	–
	Jul-01	113.89	83.55	ND	30.34	–
MW-407	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	–
	Feb-01	126.03	93.53	ND	32.50	–
	Jul-01	126.03	93.58	ND	32.45	–
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	–
	Feb-01	142.89	95.33	ND	47.56	–
	Jul-01	142.89	95.32	ND	47.57	–
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	–
	Feb-01	142.38	98.20	ND	44.18	–
	Jul-01	142.38	99.04	ND	43.34	–

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)
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	26.93	0.04
	Feb-01	124.00	98.26	ND	25.74	–
	Jul-01	124.00	96.20	ND	25.80	–
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	*	*	*	*
	Feb-01	112.40	*	*	*	*
	Jul-01	112.40	93.92	91.31	20.46	2.61

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.

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
* = Accurate field measurement of depth to water and thickness of free-phase product were unable to be collected
-- = Not Measured

APPENDIX C

Summary of Historical TPH, BTEX, MTBE, and HVOCs in Groundwater

Version

TABLE 2
SUMMARY OF TOTAL PETROLEUM HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) RESULTS IN GROUNDWATER (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 Chloromethane	13 c-1,2-DCE	14 1,2-DCB	15 Dichloromethane	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-cymene	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
PERATION AREA 1: BLOOMFIELD PROPERTY																																							
MW-106	12/20/95	0.79	–	<10	–	0.012	0.0035	0.01	0.01	–	–	–	–	0.033	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	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	–	–	–	–	–	–	–	–	–	–	0.015	0.0015	–	–	–	–	–
	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	–	–	–	–	–	–	<0.0003	0.017	0.0025	–	–	–	0.00098	–
	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	–	–	<0.002	<0.002	<0.002	–	<0.002	0.026	<0.002	<0.002	<0.002	–	<0.004	–
	8/20/98	1.6	–	–	<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	0.01	<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	0.0056	<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	<0.01	0.0015	–	<0.001	<0.005	<0.005	<0.005	<0.005	–	<0.01	<0.005
	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	–	–	<0.01	<0.01	<0.001	–	<0.001	0.0064	0.0026	<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	<0.01	<0.001	–	<0.001	0.0096	<0.001	<0.001	<0.001	–	<0.0005	<0.001
	2/5/01	0.53	–	–	<0.001	0.0023	<0.001	0.0013	<0.001	<0.001	<0.001	<0.001	<0.001	0.035	<0.001	<0.001	0.002	<0.0005	0.0012	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	<0.010	<0.010	<0.010	<0.01	<0.001	<0.010	<0.001	0.021	0.011	0.0021	<0.001	<0.001	–	0.025	–
	7/24/01	0.47	–	–	<0.001	0.0017	<0.001	<0.001	<0.001	0.0014	<0.001	<0.001	<0.001	0.033	<0.001	<0.001	0.0018	<0.0005	0.001	<0.001	0.0018	<0.010	<0.001	<0.001	<0.001	–	–	<0.010	<0.01	<0.001	–	<0.001	0.015	0.0018	<0.001	<0.001	–	0.015	<0.001
MW-107	12/1/95	<0.5	–	<10	–	0.016	0.00099	0.00077	0.0029	–	–	–	–	0.028	–	–	–	–	–	–	–	–	–	–	–	–	–	<0.010	<0.01	<0.001	–	<0.001	0.022	0.0021	<0.001	<0.001	–	<0.0005	<0.001
	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	–	–	–	–	–	–	–	–	–	–	–	–	0.0045	–	–	–	–	–	–
	12/17/96	0.38	–	–	<0.002	0.022	<0.001	<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	–	–	–	–	–	–	<0.0003	0.019	0.00078	–	–	–	0.0011	–
	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	–	–	<0.005	<0.005	<0.005	–	<0.005	0.033	<0.005	<0.005	<0.005	–	<0.01	–
	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	0.047	<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	0.025	<0.005	<0.005	<0.005	–	<0.01	<0.005
	7/19/99	0.52	–	–	<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	–	–	<0.010	<0.005	<0.005	–	<0.005	0.044	<0.005	<0.005	<0.005	–	<0.01	<0.005
	1/12/00	1.7	–	–	<0.001	0.057	<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	–	–	<0.05	<0.005	<0.005	–	<0.005	0.077	<0.005	<0.005	<0.005	–	<0.0025	<0.005
	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	<0.010	<0.005	0.0064	<0.001	<0.001	0.110	0.0034	<0.001	<0.001	–	<0.0005	0.0013
	2/5/01	2.1	–	–	<0.001	0.130	<0.001	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	0.045	<0.001	<0.001	0.028	<0.0005	<0.001	<0.001	0.054	<0.010	<0.001	0.001	0.057	–	–	<0.050	<0.005	0.0097	–	<0.005	0.059	<0.005	<0.005	<0.005	–	0.053	<0.005
	7/25/01	2.0	–	–	<0.001	0.250	<0.001	0.0028	<0.001	<0.001	<0.001	<0.001	<0.001	0.033	<0.001	<0.001	0.033	<0.0005	<0.001	<0.001	0.051	<0.010	<0.001	<0.001	0.053	–	–	<0.010	<0.001	0.0045	–	<0.001	0.013	<0.001	<0.001	<0.001	–	0.021	<0.001
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	–	–	–	–	0.044	<0.005	<0.005	<0.005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	8/25/93	–	–	–	–	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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	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	–	–	–	–	–	–	–	–	–	–	0.0045	–	–	–	–	0.0014	–
	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	–	–	–	–	–	–	<0.0001	0.0017	0.00034	–	–	–	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	–	–	<0.001	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.002	–
	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	0.014	<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	<0.001	<0.001	–	<0.001	–	–	<0.01	<0.005	<0.005	–	<0.005	<0.005	<0.005	<0.005	<0.005	–	<0.01	<0.005
	1/12/00	<0.50	–	–	0.001	0.0079	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.014	<0.001	<0.001	<0.001	0.00153	<0.001	<0.001	<0.001	<0.010	<0.001	–	<0.001	–	–	<0.01	<0.005	<0.001	–	<0.001	0.0019	<0.001	<0.001	<0.001	–	<0.00010	<0.001
	7/31/00	<0.50	–	–	<0.005	0.037	<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	<0.005	<0.001	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.005	<0.001
	2/5/01	<0.50	–	–	<0.001	0.013	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.015	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	–	–	<0.010	<0.005	<0.001	<0.010	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.00051	<0.001
	7/24/01	0.18	–	–	<0.001	0.014	<0.001	<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	<0.001	–	–	<0.010	<0.005	<0.001	–	<0.001	0.0016	<0.001	<0.001	<0.001	–	0.0012	<0.001
																																<0.001	0.0018	<0.001	<0.001	<0.001	–	0.00043	<0.001

SEE NOTES AND EXPLANATIONS ON PAGE 10

12/7/00

TABLE 2
SUMMARY OF TOTAL PETROLEUM HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) RESULTS IN GROUNDWATER (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	Chloroethane	c-1,2-DCE	1,2-DCB	Dichlorodifluoromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCP
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
OPERATION AREA 2: EAST TANK FARM AREA																				
MW-103	8/85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	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	–	–	–	–	0.58	<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	–	–	–	–	4.3	<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	0.021	–	–	–	–	–	–	–	–	–	–	–
	3/1/95	–	–	–	–	0.16	<0.005	<0.005	<0.015	–	–	–	–	–	–	–	–	–	–	–
	9/1/95	–	–	–	–	0.5	<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
	7/31/96	2.7	–	–	<0.010	0.34	0.005	<0.0005	0.012	<0.0003	–	<0.0003	–	0.0007	0.0012	0.011	0.017	0.0017	<0.0003	<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
	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
	8/19/98	1.8	–	–	<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
	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
	7/19/99	1.5	–	–	<0.001	0.041	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
	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
	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
	2/9/01	0.45	–	–	<0.001	0.00087	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0024	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001
	7/25/01	1.3	–	–	0.0025	0.041	<0.001	<0.001	0.0027	<0.001	<0.001	<0.001	<0.001	0.0025	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001
MW-201	8/85	–	–	–	–	–	–	–	–											–
	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	–	–	–	–	–	–	–	–	–	–	–
	3/31/96	3.2	–	–	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
	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
	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
	8/18/98	3.1	–	–	<0.005	0.24	<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
	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
	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
	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
	8/2/00	1.4	–	–	<0.001	0.043	<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
	2/7/01	1.1	–	–	<0.001	0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0023	<0.001	<0.001	0.0073	<0.0005	<0.001	<0.001
	7/24/01	1.1	–	–	<0.001	0.038	<0.001	<0.001	0.0018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0018	<0.0005	<0.001	<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	–	–	–	–	0.044	<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	–	–	–	–	–	–	–	–	–	–	–

Monitoring Well ID	Date	isoPB	MC	n-BB	t-BB	n-PB	1m naphthalene	2m naphthalene	Naphthalene	p-isoPT	sec-BB	Phenol	PCE	t-1,2-DCE	TCE	1,2,4-TMB	1,3,5-TMB	TOX	VC	CB
		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
OPERATION AREA 2: EAST TANK FARM AREA																				
MW-103	8/85	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.06	–	–
	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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/95	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/95	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/13/95	–	<0.0005	–	–	–	–	–	–	–	–	–	<0.0005	<0.0005	<0.0005	–	–	–	0.0025	–
	7/31/96	–	<0.0003	–	–	–	–	–	–	–	–	–	<0.0003	<0.0003	0.00038	–	–	–	<0.0003	–
	12/17/96	0.006	<0.005	<0.005	–	0.0084	–	–	<0.005	<0.005	<0.005	–	0.0059	<0.005	<0.005	<0.005	<0.005	–	0.054	–
	1/21/98	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	0.011	<0.005	0.0049	–	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	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	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	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	0.0035	<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	–	0.00073	<0.001
	2/9/01	0.0047	<0.010	<0.001	<0.001	<0.001	–	–	<0.010	<0.001	0.0036	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.0005	<0.001
	7/25/01	0.0041	<0.010	0.0025	<0.001	0.0055	–	–	<0.010	<0.001	0.0032	–	<0.001	<0.001	<0.001	0.0058	0.0017	–	<0.0005	<0.001
MW-201	8/85	–	–	–	–	–	–	–	–	–	–	1.9	–	–	–	–	–	–	–	–
	11/1/93	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/95	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/95	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/95	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/31/96	–	<0.0003	–	–	–	–	–	–	–	–	–	<0.0003	0.00034	0.00037	–	–	–	<0.0003	–
	12/17/96	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	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	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	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	0.062	<0.02	0.019	–	0.13	–	–	<0.02	<0.002	0.025	–	<0.002	<0.002	<0.002	<0.002	<0.002	–	<0.001	<0.002
	1/11/00	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	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
	2/7/01	0.0099	<0.010	0.0011	0.0012	0.0077	–	–	<0.010	<0.001	0.01	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.0033	<0.001
	7/24/01	0.0061	<0.010	0.0024	0.0016	0.016	–	–	<0.010	<0.001	0.004	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.0005	<0.001
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	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/91	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	6/1/91	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	9/1/91	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	12/1/91	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	3/1/92	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

SEE NOTES AND EXPLANATIONS ON PAGE 10

TABLE 2
SUMMARY OF TOTAL PETROLEUM HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) RESULTS IN GROUNDWATER (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	m-PB	MC	n-BB	t-BB	n-PB	1m naphthalene	2m naphthalene	Napthalene	p-IPT	sec-BB	Phenol	PCE	t-1,2-DCE	TCE	1,2,4-TMB	1,3,5-TMB	TOX	VC	CB
	6/1/92	-	-	-	-	0.11	0.071	<0.005	0.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/1/92	-	-	-	-	0.09	0.02	<0.005	<0.005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	-	-	-	-	5.8	0.077	0.13	0.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/1/95	-	-	-	-	6.9	4.7	0.65	3.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/13/95	12000	-	<1	-	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	0.053	<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
	3/21/98	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
	1/22/99	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	-	-	0.037	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
	2/8/01	1.2	-	-	<0.001	0.055	0.0014	<0.001	0.0015	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	0.0014	<0.010	<0.001	<0.001	0.0039	-	-	<0.010	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.0005	<0.001
	7/24/01	1.2	-	-	0.0016	0.2	<0.001	0.012	0.0048	<0.001	<0.001	<0.001	<0.001	0.0015	<0.001	<0.001	0.0047	<0.0005	<0.001	<0.001	0.0013	<0.010	<0.001	<0.001	<0.001	-	-	<0.010	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.0005	<0.001
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
	2/8/01	<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	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	-	-	<0.010	<0.001	<0.001	-	<0.001	<0.001	<0.001	<0.001	<0.001	-	<0.0005	<0.001
	7/26/01	<0.1	-	-	<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	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	-	-	<0.010	<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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/7/89	-	-	-	-	<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

SEE NOTES AND EXPLANATIONS ON PAGE 10

TABLE 2
SUMMARY OF TOTAL PETROLEUM HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) RESULTS IN GROUNDWATER (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 Chloroethane	13 c-1,2-DCE	14 1,2-DCB	15 Dichlorodifluoromethane	16 1,1-DCA	17 1,2-DCA
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
	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
	3/2/00	<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
	2/7/01	<0.5	-	-	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0042	<0.001	<0.001	<0.001	<0.0005
	7/25/01	<0.1	-	-	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0039	<0.001	<0.001	<0.001	<0.0005
MW-504	12/1/93	-	-	-	-	11.0	1.3	1.8	9.2	-	-	-	-	-	-	-	-	-
	6/1/94	-	-	-	-	4.6	2.1	<0.5	5.1	-	-	-	-	-	-	-	-	-
	12/1/94	-	-	-	-	3.3	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	-	34.9	-	2.7	0.73	0.8	2.6	-	-	-	-	0.014	-	-	0.013	-
	6/1/96	80.0	-	-	0.37	3.4	1.4	0.96	3.7	<0.001	-	<0.001	-	0.01	<0.001	<0.001	0.004	0.02
	12/18/96	33.0	-	-	<0.05	6.0	2.8	1.8	3.3	<0.25	<0.25	<0.25	-	<0.25	<0.25	<0.25	<0.25	<0.25
	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
	7/20/98				Free Product (see Table 1)					NS	NS	NS	-	NS	NS	NS	NS	NS
	1/21/99				Free Product (see Table 1)					NS	NS	NS	-	NS	NS	NS	NS	NS
	7/19/99				Free Product (see Table 1)					NS	NS	NS	-	NS	NS	NS	NS	NS
	1/10/00				Free Product (see Table 1)					NS	NS	NS	-	NS	NS	NS	NS	NS
	7/31/00				Free Product (see Table 1)					NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/8/01				Free Product (see Table 1)													
	7/24/01				Free Product (see Table 1)													
OPERATION AREA 4: WEST TANK FARM AREA																		
MW-101	8/85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/1/88	-	-	-	-	0.42	<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	-	-	-	-	0.063	<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	0.0025	-	-	-	-	0.045	-	-	0.0093	0.0018
	7/31/96	1.3	-	-	<0.01	0.13	0.014	0.13	0.014	<0.0003	-	<0.0003	-	0.35	<0.0003	<0.0003	0.0086	0.0016
	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
	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
	3/18/98	3.2	-	-	-	0.14	<0.005	0.015	0.0047	<0.005	<0.005	<0.005	-	0.052	<0.005	<0.01	<0.005	<0.005
	1/26/99	3.2	-	-	<0.005	0.0484	<0.005	0.00708	<0.005	<0.005	<0.005	<0.005	-	0.0719	<0.005	<0.01	0.0139	<0.005
	7/19/99	1.3	-	-	<0.002	0.022	<0.002	0.0014	<0.002	<0.002	<0.002	<0.002	-	0.057	<0.002	<0.002	0.018	<0.001
	1/10/00	0.49	-	-	<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
	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	0.0034
	2/9/01	0.6	-	-	<0.005	0.026	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.021	<0.005	<0.005	0.0075	<0.0025
	7/26/01	0.69	-	-	<0.001	0.025	<0.001	0.0015	<0.001	<0.001	<0.001	<0.001	<0.001	0.028	<0.001	<0.001	0.0032	<0.005
MW-105	12/21/95	<0.5	-	<10	-	0.011	0.0017	0.00081	0.0037	-	-	-	-	0.0094	-	-	0.0045	0.0033
	7/31/96	0.65	-	-	<0.01	0.091	0.0018	0.002	0.0018	<0.001	-	<0.0003	-	0.0084	<0.0003	<0.0003	0.012	0.0014
	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
	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
	3/18/98	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
	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
	7/19/99	0.61	-	-	<0.001	0.0043	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	0.029	<0.001	<0.001	0.016	0.0034
	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
	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
	2/6/01	0.61	-	-	<0.005	<0.0025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.033	<0.005	<0.005	0.013	<0.0025
	7/24/01	0.21	-	-	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.018	<0.001	<0.001	0.009	0.0015

Monitoring Well ID	Date	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-isoT	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-104A	7/19/99	<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	<0.001	<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
	3/2/00	<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
	2/7/01	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	-	-	<0.010	<0.001	<0.001	-	<0.001	<0.001	0.0014	<0.001	<0.001	-	<0.0005	<0.001
	7/25/01	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	-	-	<0.010	<0.001	<0.001	-	<0.001	<0.001	0.0014	<0.001	<0.001	-	<0.0005	<0.001
MW-504	12/1/93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/1/94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/1/94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/1/95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/1/95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/13/95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6/1/96	<0.001	<0.001	-	<0.001	-	-	-	-	-	-	-	-	-	<0.001	0.00046	0.00078	-	-	-	0.0011	-
	12/18/96	<0.25	<0.25	<0.25	<0.25	<0.25	-	0.25	-	-	2.3	0.37	<0.25	-	<0.25	<0.25	<0.25	5	2.1	-	<0.5	-
	1/21/98	<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
	7/20/98	NS	NS	NS	NS	NS	-	NS	-	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/21/99	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
	1/10/00	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
	2/8/01																					
	7/24/01																					
OPERATION AREA 4: WEST TANK FARM AREA																						
MW-101	8/85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	-	-
	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	0.067	<0.0005	-	0.0013	-	-	-	-	-	-	-	-	-	0.036	0.00097	0.1	-	-	-	<0.0005	-
	7/31/96	0.052	<0.0003	-	<0.0003	-	-	-	-	-	-	-	-	-	24	<0.0003	0.041	-	-	-	<0.0003	-
	12/17/96	0.14	<0.025	<0.025	<0.025	<0.025	-	<0.025	-	-	<0.025	<0.05	<0.025	-	0.057	<0.025	0.24	<0.025	<0.025	-	<0.05	-
	1/19/98	<50	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	-	<0.01	<0.05	<0.005	-	0.18	<0.005	0.32	<0.005	<0.005	-	<0.01	<0.005
	3/18/98	0.091	<0.005	0.0064	<0.005	<0.005	-	<0.005	-	-	<0.01	<0.05	<0.005	-	0.034	<0.005	<0.005	<0.005	<0.005	-	<0.01	<0.005
	1/26/99	0.0979	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	-	<0.01	<0.05	<0.005	-	0.0193	<0.005	0.16	<0.005	<0.005	-	<0.07	<0.005
	7/19/99	0.158	<0.002	<0.002	<0.02	<0.002	-	<0.002	-	-	<0.02	<0.02	<0.002	-	0.078	0.0045	0.27	<0.002	<0.002	-	<0.001	<0.002
	1/10/00	0.130	<0.001	<0.001	<0.010	<0.001	-	<0.001	-	-	<0.010	<0.001	<0.001	-	0.310	0.0015	0.260	<0.001	<0.001	-	<0.0005	<0.001
	8/3/00	0.092	<0.002	<0.002	<0.020	<0.002	<0.002	<0.002	<0.010	<0.010	<0.020	<0.020	<0.002	<0.010	0.037	0.019	0.270	<0.002	<0.002	-	0.005	<0.002
	2/9/01	0.032	<0.005	<0.005	<0.050	<0.005	<0.005	<0.005	-	-	<0.050	<0.005	<0.005	-	0.0099	0.011	0.100	<0.005	<0.005	-	0.0032	<0.005
	7/26/01	0.030	<0.001	0.0011	<0.010	<0.001	<0.001	<0.001	-	-	<0.010	<0.001	<0.001	-	0.0081	0.015	0.100	<0.001	<0.001	-	0.0043	<0.001
MW-105	12/21/95	0.013	-	-	-	-	-	-	-	-	-	-	-	-	0.016	-	0.046	-	-	-	-	-
	7/31/96	0.02	<0.0003	-	<0.0003	-	-	-	-	-	-	-	-	-	0.024	<0.0003	0.033	-	-	-	<0.0003	-
	12/16/96	0.05	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	-	<0.005	<0.01	<0.005	-	0.08	<0.005	0.11	<0.005	<0.005	-	<0.01	-
	1/20/98	0.14	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	-	<0.01	<0.05	<0.005	-	0.15	<0.005	0.21	<0.005	<0.005	-	<0.01	<0.005
	3/18/98	0.108	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	-	<0.01	<0.05	<0.005	-	0.0967	<0.005	0.162	<0.005	<0.005	-	<0.01	<0.005
	1/25/99	0.117	<0.005	<0.005	<0.005	<0.005	-	<0.005	-	-	<0.01	<0.05	<0.005	-	0.125	<0.005	0.187	<0.005	<0.005	-	0.00643	<0.005
	7/19/99	0.130	<0.001	<0.001	<0.01	<0.001	-	<0.001	-	-	<0.01	<0.001	<0.001	-	0.078	0.015	0.250	<0.001	<0.001	-	<0.0005	<0.001
	1/10/00	0.100	<0.005	<0.005	<0.050	<0.005	-	<0.005	-	-	<0.050	<0.005	<0.005	-	<0.005	0.041	0.130	<0.005	<0.005	-	<0.0025	<0.005
	7/31/00	0.062	<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
	2/6/01	0.032	<0.005	<0.005	<0.050	<0.005	<0.005	<0.005	-	-	<0.050	<0.001	<0.005	-	<0.005	0.021	0.047	<0.005	<0.005	-	0.0079	<0.005
	7/24/01	0.017	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	<0.010	<0.001	<0.001	-	<0.001	0.011	0.034	<0.001	<0.001	-	<0.005	<0.001

SEE NOTES AND EXPLANATIONS ON PAGE 10

TABLE 2
SUMMARY OF TOTAL PETROLEUM HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) RESULTS IN GROUNDWATER (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	DCM	Chloroform	Chloroethane	c-1,2-DCE	1,2-DCB	Dichlorodifluoromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCP	iso-PB	MC	n-BB	t-BB	n-PB	1m naphthalene	2m naphthalene	Naphthalene	p-IPT	sec-BB	Phenol	PCE	t-1,2-DCE	TCE	1,2,4-TMB	1,3,5-TMB	TDX	VC	CB
MW-201	5/85	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-	-	-
	5/1/88	-	-	-	-	1.9	0.15	<0.005	0.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/7/88	-	-	-	-	0.53	0.21	0.11	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	12/1/88	-	-	-	-	0.42	0.065	0.019	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3/1/89	-	-	-	-	0.21	0.077	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	-	-	-	-	0.83	0.049	0.064	0.083	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	9/1/90	-	-	-	-	0.34	0.015	0.01	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	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	0.046	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	0.057	0.00081	-	0.0007	-	-	-	-	-	-	-	-	-	0.058	0.0017	0.11	-	-	-	-	-
	7/31/96	<0.1	-	-	<0.01	0.43	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	-	-	-	-	-	-	-	-	-	0.12	<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	0.021	-	<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	0.3	<0.005	0.019	<0.005	<0.005	-	0.025	-	-	0.011	<0.005	<0.005	-	0.16	0.0053	0.18	0.02	0.012	-	<0.01	<0.005
	3/11/98	2.6	-	-	-	0.44	0.0066	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	2.3	-	-	<0.005	0.16	0.029	0.049	0.0544	<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	3.9	-	-	<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	0.013	<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	0.013	<0.005	-	<0.0025	<0.005
	2/9/01	3.2	-	-	<0.010	0.310	0.012	0.130	0.014	<0.010	<0.010	<0.010	<0.010	0.1	<0.010	<0.010	<0.010	<0.005	0.032	<0.010	0.026	<0.100	<0.010	<0.010	0.032	-	-	<0.100	<0.010	<0.010	-	<0.010	<0.010	0.013	0.034	<0.010	-	<0.005	<0.010
	7/26/01	3.2	-	-	<0.010	0.180	0.0096	0.056	0.0247	<0.010	<0.010	<0.010	<0.010	0.057	<0.010	<0.010	0.023	<0.005	0.013	<0.010	0.014	<0.100	0.031	<0.010	0.016	-	-	<0.100	0.0036	0.033	-	<0.010	0.0068	0.008	0.017	0.0025	-	<0.01	<0.02
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	[illegible]	-	<5	-	0.11	0.0013	0.019	0.037	-	-	-	-	0.051	-	-	0.0072	0.002	0.022	-	-	0.00058	-	-	-	-	-	-	-	-	-	[illegible]	[illegible]	[illegible]	-	-	-	-	-
	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	0.044	-	-	-	<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	-	0.017	<0.005	<0.010	<0.005	<0.005	0.0097	<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

SEE NOTES AND EXPLANATIONS ON PAGE 10

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SUMMARY OF TOTAL PETROLEUM HYDROCARBONS, BTEX, MTBE, AND VOLATILE ORGANIC COMPOUNDS (VOC) RESULTS IN GROUNDWATER (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	Chloroethane	c-1,2-DCE	1,2-DCB	Dichlorodifluoromethane	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCP	isoPB	MC	n-BB	t-BB	n-PB	1m naphthalene	2m naphthalene	Naphthalene	p-isoPT	sec-BB	Phenol	PCE	t-1,2-DCE	TCE	1,2,4-TMB	1,3,5-TMB	TOX	VC	CB
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	–	<1.0003	–	–	–	–	–	–	–	–	–	<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	–	–	0.0017	<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
	2/7/01	<0.5	–	–	<0.001	<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	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.0005	<0.005
	7/24/01	<0.1	–	–	<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	<0.0005	<0.001	<0.001	<0.001	<0.010	<0.001	<0.001	<0.001	–	–	<0.010	<0.001	<0.001	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.0005	<0.001
MW-407	12/19/95	1.2	–	31	–	0.033	0.035	0.0017	0.0094	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
	7/31/96	0.9	–	–	0.012	0.019	0.009	0.0023	0.008	<0.0003	–	<0.0003	–	<0.0003	<0.0003	<0.0003	0.00044	<0.0003	<0.0003	<0.0003	–	<0.0003	–	–	–	–	–	–	–	–	–	<0.0003	<0.0003	<0.0003	–	–	–	0.0013	–
	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	0.26	–	–	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	0.0053	–	0.07	–	–	<0.05	<0.05	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	0.0084	<0.02	<0.002	–	0.0073	–	–	<0.02	<0.02	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	<0.02	0.0041	<0.011	<0.002	<0.002	<0.002	<0.002	<0.002	–	0.0011	<0.002
	2/7/01	0.05	–	–	<0.001	0.012	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	0.0035	<0.010	<0.001	<0.001	0.0013	–	–	<0.010	<0.01	0.0025	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	0.00055	<0.001
	7/24/01	0.59	–	–	<0.001	0.012	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0014	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	0.0053	<0.010	<0.001	<0.001	0.0024	–	–	<0.010	<0.001	0.0033	–	<0.001	<0.001	<0.001	<0.001	<0.001	–	<0.0005	<0.001
MW-A (ABANDONED)	2/23/91	0.0495	–	–	–	17	14	1.5	12.5	–	–	–	–	–	<0.25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	<0.25
MW-B (ABANDONED)	2/25/91	<1	–	–	–	3.5	8.03	0.18	0.467	–	–	–	–	–	<0.0005	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	<0.0005
MW-1 (ABANDONED)	3/19/91	21	–	–	–	9.2	2.4	1.5	8.7	–	–	–	–	–	<0.05	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	<0.05
MW-C (ABANDONED)	3/31/95	0.06	–	–	–	0.0066	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	0.0064	<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:

1 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 analytes is shown

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

( ) = EPA Method 601/8010

( )( ) = EPA Method 602/8020

Abbreviations:

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

5

APPENDIX D

Summary of Historical Intrinsic Bioremediation Parameter Results in Groundwater

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	7/12/99	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
	2/7/01	4,400	<1	3.05	1,933	0.289	0.2	790	<0.10	98
	7/25/01	89	<1	1.88	51	0.23	0.19	790	<0.10	69
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
	2/7/01	5,600	<1	*	1,763	0.033	<0.10	740	<0.10	116
	7/25/01	3,000	<1	1.91	57	0.33	<0.10	680	<0.10	220
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
	2/7/01	14,000	<1	*	1,294	0.984	0.7	840	<0.10	2
	7/25/01	570,000	<1	2.73	91	4.85	0.14	880	<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
	2/7/01	1,600	<1	*	1,800	--	<0.10	510	7	164
	7/24/01	36,000	5,200	2.21	112	<0.001	<0.10	480	7.8	160
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
	2/7/01	3,300	<1	3	1,350	<0.001	<0.10	390	9	261
	7/24/01	31,000	10,000	2.27	111	<0.001	<0.1	370	8.3	210

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

* = Data not reliable due to suspected malfunction of dissolved oxygen meter

-- = Not Sampled Due to Well Damage, Free Product in Well, or Not Scheduled for Sampling

APPENDIX E

Chain-of-Custody Documentation and Certified Analytical Laboratory Reports

Calscience
Environmental
Laboratories, Inc.

May 14, 2002

Karrie Field
TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Subject: **Calscience Work Order No.: 02-05-0285**
Client Reference: Cenco / 251016-01

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 5/7/02 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Michael J. Crisostomo
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

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	N/A
Method:	RSK-175M

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-605	02-05-0285-1	Aqueous	05/07/02	N/A	05/08/02	020508

Parameter	Result	RL	DF	Qual	Units
Methane	ND	1.00	1		ug/L

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-104A	02-05-0285-2	Aqueous	05/07/02	N/A	05/08/02	020508

Parameter	Result	RL	DF	Qual	Units
Methane	257	4	4		ug/L

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-606	02-05-0285-3	Aqueous	05/07/02	N/A	05/08/02	020508

Parameter	Result	RL	DF	Qual	Units
Methane	ND	1.00	1		ug/L

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-12-010-52	Aqueous	N/A	N/A	05/08/02	020508

Parameter	Result	RL	DF	Qual	Units
Methane	ND	1.00	1		ug/L

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: N/A
Method: SM 2320B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-605	02-05-0285-1	Aqueous	05/07/02	N/A	05/08/02	0508AlkDP1

Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	480	5.0	1		mg/L

MW-104A	02-05-0285-2	Aqueous	05/07/02	N/A	05/08/02	0508AlkDP1

Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	720	5.0	1		mg/L

MW-606	02-05-0285-3	Aqueous	05/07/02	N/A	05/08/02	0508AlkDP1

Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	400	5.0	1		mg/L

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	N/A
Method:	EPA 300.0

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-605	02-05-0285-1	05/07/02	Aqueous	N/A	05/07/02	020507

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Nitrate-N	8.4	1.0	10	D	mg/L	Sulfate	220	100	100	D	mg/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-104A	02-05-0285-2	05/07/02	Aqueous	N/A	05/08/02	020507

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Nitrate-N	ND	0.10	1		mg/L	Sulfate	150	100	100	D	mg/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-606	02-05-0285-3	05/07/02	Aqueous	N/A	05/08/02	020507

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Nitrate-N	8.4	1.0	10	D	mg/L	Sulfate	250	100	100	D	mg/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-05-118-1,316	N/A	Aqueous	N/A	05/07/02	020507

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Nitrate-N	ND	0.10	1		mg/L	Sulfate	ND	1.0	1		mg/L

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: N/A
Method: SM3500-FeD

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-605	02-05-0285-1	Aqueous	05/07/02	N/A	05/07/02	0507FeMB1

Parameter	Result	RL	DF	Qual	Units
Iron (II)	ND	0.10	1		mg/L

MW-104A	02-05-0285-2	Aqueous	05/07/02	N/A	05/07/02	0507FeMB1

Parameter	Result	RL	DF	Qual	Units
Iron (II)	3.0	0.1	1		mg/L

MW-606	02-05-0285-3	Aqueous	05/07/02	N/A	05/07/02	0507FeMB1

Parameter	Result	RL	DF	Qual	Units
Iron (II)	ND	0.10	1		mg/L

Method Blank	099-05-111-1,156	Aqueous	N/A	N/A	05/07/02	0507FeMB1

Parameter	Result	RL	DF	Qual	Units
Iron (II)	ND	0.10	1		mg/L

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: EPA 5030B
Method: EPA 8015M

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-605	02-05-0285-1	Aqueous	05/07/02	N/A	05/09/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	84	49-157	

MW-104A	02-05-0285-2	Aqueous	05/07/02	N/A	05/09/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	100	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	87	49-157	

MW-606	02-05-0285-3	Aqueous	05/07/02	N/A	05/08/02	02050801sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	66	49-157	

MW-603	02-05-0285-4	Aqueous	05/07/02	N/A	05/08/02	02050801sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	210	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	75	49-157	

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: EPA 5030B
Method: EPA 8015M

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-105	02-05-0285-5	Aqueous	05/07/02	N/A	05/08/02	02050801sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	530	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	78	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-106	02-05-0285-6	Aqueous	05/07/02	N/A	05/08/02	02050801sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	430	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-607	02-05-0285-7	Aqueous	05/07/02	N/A	05/08/02	02050801sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	490	200	2		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	69	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
W-8	02-05-0285-8	Aqueous	05/07/02	N/A	05/09/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	180	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	83	49-157	

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: EPA 5030B
Method: EPA 8015M

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
W-7	02-05-0285-9	Aqueous	05/07/02	N/A	05/09/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
Equip. Blank	02-05-0285-10	Aqueous	05/07/02	N/A	05/08/02	02050801sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	66	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
TRC ALTON #1	02-05-0285-11	Aqueous	05/07/02	N/A	05/08/02	02050801sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	440	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	74	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	098-03-006-2,625	Aqueous	N/A	N/A	05/08/02	02050801sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	73	49-157	

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: EPA 5030B
Method: EPA 8015M

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	098-03-006-2,627	Aqueous	N/A	N/A	05/09/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	84	49-157	

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-605	02-05-0285-1	05/07/02	Aqueous	N/A	05/08/02	050802AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	19	1	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	22	1	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	1.8	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	ND	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	98	86-118		Toluene-d8	102	88-110	
1,4-Bromofluorobenzene	96	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-104A	02-05-0285-2	05/07/02	Aqueous	N/A	05/08/02	050802AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	1.4	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	4.3	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	31	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	96	86-118		Toluene-d8	103	88-110	
1,4-Bromofluorobenzene	97	85-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.		Date Received:	05/07/02
21A Technology Drive		Work Order No:	02-05-0285
Irvine, CA 92718-2366		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-606	02-05-0285-3	05/07/02	Aqueous	N/A	05/08/02	050802AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	1.3	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	ND	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	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	97	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-603	02-05-0285-4	05/07/02	Aqueous	N/A	05/08/02	050802AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	20	2		ug/L	1,1-Dichloropropene	ND	2.0	2		ug/L
Benzene	ND	1.0	2		ug/L	c-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromobenzene	ND	2.0	2		ug/L	t-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromochloromethane	ND	2.0	2		ug/L	Ethylbenzene	ND	2.0	2		ug/L
Bromodichloromethane	ND	2.0	2		ug/L	2-Hexanone	ND	20	2		ug/L
Bromoform	ND	2.0	2		ug/L	Isopropylbenzene	ND	2.0	2		ug/L
Bromomethane	ND	2.0	2		ug/L	p-Isopropyltoluene	ND	2.0	2		ug/L
2-Butanone	ND	20	2		ug/L	Methylene Chloride	ND	20	2		ug/L
n-Butylbenzene	ND	2.0	2		ug/L	4-Methyl-2-Pentanone	ND	20	2		ug/L
sec-Butylbenzene	ND	2.0	2		ug/L	Naphthalene	ND	20	2		ug/L
tert-Butylbenzene	ND	2.0	2		ug/L	n-Propylbenzene	ND	2.0	2		ug/L
Carbon Disulfide	ND	20	2		ug/L	Styrene	ND	2.0	2		ug/L
Carbon Tetrachloride	ND	1.0	2		ug/L	1,1,1,2-Tetrachloroethane	ND	2.0	2		ug/L
Chlorobenzene	ND	2.0	2		ug/L	1,1,2,2-Tetrachloroethane	ND	2.0	2		ug/L
Chloroethane	ND	2.0	2		ug/L	Tetrachloroethene	170	2	2		ug/L
Chloroform	ND	2.0	2		ug/L	Toluene	ND	2.0	2		ug/L
Chloromethane	ND	2.0	2		ug/L	1,2,3-Trichlorobenzene	ND	2.0	2		ug/L
2-Chlorotoluene	ND	2.0	2		ug/L	1,2,4-Trichlorobenzene	ND	2.0	2		ug/L
4-Chlorotoluene	ND	2.0	2		ug/L	1,1,1-Trichloroethane	ND	2.0	2		ug/L
Dibromochloromethane	ND	2.0	2		ug/L	1,1,2-Trichloroethane	ND	2.0	2		ug/L
1,2-Dibromo-3-Chloropropane	ND	10	2		ug/L	Trichloroethene	160	2	2		ug/L
1,2-Dibromoethane	ND	2.0	2		ug/L	Trichlorofluoromethane	ND	20	2		ug/L
Dibromomethane	ND	2.0	2		ug/L	1,2,3-Trichloropropane	ND	10	2		ug/L
1,2-Dichlorobenzene	ND	2.0	2		ug/L	1,2,4-Trimethylbenzene	ND	2.0	2		ug/L
1,3-Dichlorobenzene	ND	2.0	2		ug/L	1,3,5-Trimethylbenzene	ND	2.0	2		ug/L
1,4-Dichlorobenzene	ND	2.0	2		ug/L	Vinyl Acetate	ND	20	2		ug/L
Dichlorodifluoromethane	ND	2.0	2		ug/L	Vinyl Chloride	ND	1.0	2		ug/L
1,1-Dichloroethane	7.0	2.0	2		ug/L	p/m-Xylene	ND	2.0	2		ug/L
1,2-Dichloroethane	ND	1.0	2		ug/L	o-Xylene	ND	2.0	2		ug/L
1,1-Dichloroethene	120	2	2		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	2.0	2		ug/L
c-1,2-Dichloroethene	9.6	2.0	2		ug/L	Tert-Butyl Alcohol (TBA)	ND	20	2		ug/L
t-1,2-Dichloroethene	3.4	2.0	2		ug/L	Diisopropyl Ether (DIPE)	ND	4.0	2		ug/L
1,2-Dichloropropane	ND	2.0	2		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	4.0	2		ug/L
1,3-Dichloropropane	ND	2.0	2		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	4.0	2		ug/L
2,2-Dichloropropane	ND	2.0	2		ug/L	Ethanol	ND	200	2		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	96	86-118		Toluene-d8	103	88-110	
1,4-Bromofluorobenzene	97	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-105	02-05-0285-5	05/07/02	Aqueous	N/A	05/08/02	050802AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	1.1	0.5	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	38	1	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	3.9	0.5	1		ug/L
1,1-Dichloroethane	4.4	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	10	1	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	14	1	1		ug/L	Tert-Butyl Alcohol (TBA)	27	10	1		ug/L
t-1,2-Dichloroethene	6.8	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	96	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

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-106	02-05-0285-6	05/07/02	Aqueous	N/A	05/08/02	050802AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	2.4	0.5	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	1.9	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	15	0.50	1		ug/L
1,1-Dichloroethane	1.6	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	22	1	1		ug/L	Tert-Butyl Alcohol (TBA)	38	10	1		ug/L
t-1,2-Dichloroethene	17	1	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	94	86-118		Toluene-d8	103	88-110	
1,4-Bromofluorobenzene	96	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.		Date Received:	05/07/02
21A Technology Drive		Work Order No:	02-05-0285
Irvine, CA 92718-2366		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-607	02-05-0285-7	05/07/02	Aqueous	N/A	05/08/02	050802AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	4.0	0.5	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	3.6	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	3.7	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	1.5	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	91	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	96	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

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
W-8	02-05-0285-8	05/07/02	Aqueous	N/A	05/08/02	050802AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	0.51	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	ND	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	97	86-118		Toluene-d8	102	88-110	
1,4-Bromofluorobenzene	97	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
W-7	02-05-0285-9	05/07/02	Aqueous	N/A	05/09/02	050802BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	ND	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	109	86-118		Toluene-d8	103	88-110	
1,4-Bromofluorobenzene	95	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.		Date Received:	05/07/02
21A Technology Drive		Work Order No:	02-05-0285
Irvine, CA 92718-2366		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Equip. Blank	02-05-0285-10	05/07/02	Aqueous	N/A	05/08/02	050802AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	ND	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	86-118		Toluene-d8	104	88-110	
1,4-Bromofluorobenzene	96	86-115					

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: EPA 5030B
Method: EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-05-0316-1	Aqueous	GC/MS T	N/A	05/08/02	02050316-1

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	91	94	72-127	3	0-25	
Carbon Tetrachloride	86	88	70-130	2	0-25	
Chlorobenzene	100	103	72-131	3	0-25	
1,2-Dichlorobenzene	101	103	70-130	2	0-25	
1,1-Dichloroethene	85	90	69-127	6	0-25	
Toluene	94	95	75-124	2	0-25	
Trichloroethene	94	96	60-137	2	0-25	
Vinyl Chloride	93	94	70-130	1	0-25	
Methyl-t-Butyl Ether (MTBE)	79	82	80-120	4	0-25	3
Tert-Butyl Alcohol (TBA)	72	75	60-140	3	0-25	
Diisopropyl Ether (DIPE)	92	94	60-140	2	0-25	
Ethyl-t-Butyl Ether (ETBE)	86	89	60-140	3	0-25	
Tert-Amyl-Methyl Ether (TAME)	82	85	60-140	4	0-25	
Ethanol	75	73	60-140	3	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-05-0317-9	Aqueous	GC/MS T	N/A	05/09/02	02050317-9

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	94	95	72-127	2	0-25	
Carbon Tetrachloride	90	92	70-130	3	0-25	
Chlorobenzene	100	102	72-131	2	0-25	
1,2-Dichlorobenzene	102	105	70-130	3	0-25	
1,1-Dichloroethene	95	91	69-127	4	0-25	
Toluene	94	94	75-124	1	0-25	
Trichloroethene	96	96	60-137	0	0-25	
Vinyl Chloride	98	97	70-130	1	0-25	
Methyl-t-Butyl Ether (MTBE)	87	88	80-120	1	0-25	
Tert-Butyl Alcohol (TBA)	89	87	60-140	2	0-25	
Diisopropyl Ether (DIPE)	93	95	60-140	2	0-25	
Ethyl-t-Butyl Ether (ETBE)	88	91	60-140	3	0-25	
Tert-Amyl-Methyl Ether (TAME)	84	87	60-140	3	0-25	
Ethanol	86	84	60-140	1	0-25	

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-006-5,127	N/A	Aqueous	N/A	05/08/02	050802AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	ND	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	86-118		Toluene-d8	103	88-110	
1,4-Bromofluorobenzene	96	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-006-5,130	N/A	Aqueous	N/A	05/09/02	050802BW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	ND	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	115	86-118		Toluene-d8	104	88-110	
1,4-Bromofluorobenzene	94	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
TRC ALTON #1	02-05-0285-11	05/07/02	Aqueous	N/A	05/08/02	050802AW

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	5.4	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	3.6	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	3.7	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	5.0	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	1.7	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	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	103	88-110	
1,4-Bromofluorobenzene	99	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Trip Blank	02-05-0285-12	05/07/02	Aqueous	N/A	05/08/02	050802AW

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	5.0	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-t-Butyl Ether (MTBE)	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	103	88-110	
1,4-Bromofluorobenzene	95	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-006-5,127	N/A	Aqueous	N/A	05/08/02	050802AW

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	5.0	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-t-Butyl Ether (MTBE)	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	103	88-110	
1,4-Bromofluorobenzene	96	86-115					

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

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	5/7/02
Work Order No:	02-05-0285
Preparation:	N/A
Method:	SM 2320B

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
MW-605	Aqueous	PH 1	N/A	05/08/02	0508AlkDP1

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	480	480	0	0-25	

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

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.		Date Received:	05/07/02
21A Technology Drive		Work Order No:	02-05-0285
Irvine, CA 92718-2366		Preparation:	N/A
		Method:	EPA 300.0

Project: Cenco / 251016-01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-05-0078-25	Aqueous	IC 2	N/A	05/07/02	020507

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate-N	89	89	50-150	1	0-25	
Sulfate	101	101	50-150	1	0-25	

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	N/A
Method:	EPA 300.0

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-118-1,316	Aqueous	IC 2	N/A	05/07/02	020507

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate-N	93	92	80-120	1	0-25	
Sulfate	97	98	80-120	1	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	N/A
Method:	SM3500-FeD

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-605	Aqueous	UV 2	N/A	05/07/02	0507FeMS1

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Iron (II)	95	95	70-130	0	0-25	

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Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: N/A
Method: SM3500-FeD

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-05-111-1,156	Aqueous	UV 2	05/07/02	NONE	0507FeMB1

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Iron (II)	1.0	1.0	102	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	N/A
Method:	RSK-175M

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-010-52	Aqueous	GC 33	N/A	05/08/02	020508

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	94	94	80-120	0	0-20	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.		Date Received:	05/07/02
21A Technology Drive		Work Order No:	02-05-0285
Irvine, CA 92718-2366		Preparation:	EPA 5030B
		Method:	EPA 8015M

Project: Cenco / 251016-01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-606	Aqueous	GC-1	N/A	05/08/02	02050801ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	98	97	72-120	0	0-21	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	EPA 5030B
Method:	EPA 8015M

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-2,625	Aqueous	GC 1	N/A	05/08/02	020508015a

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	92	88	81-123	5	0-17	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: EPA 5030B
Method: EPA 8015M

Project: Cenco / 251016-01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-05-0377-2	Aqueous	GC 29	N/A	05/09/02	02050901ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	86	85	72-120	1	0-21	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	EPA 5030B
Method:	EPA 8015M

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-2,627	Aqueous	GC 29	N/A	05/09/02	02050901sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	90	93	81-123	4	0-17	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/07/02
Work Order No:	02-05-0285
Preparation:	EPA 5030B
Method:	EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-5,127	Aqueous	GC/MS T	N/A	05/08/02	050802AW

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	93	93	72-127	0	0-25	
Carbon Tetrachloride	85	87	70-130	2	0-25	
Chlorobenzene	103	104	72-131	0	0-25	
1,2-Dichlorobenzene	103	103	70-130	0	0-25	
1,1-Dichloroethene	86	88	69-127	2	0-25	
Toluene	96	96	75-124	0	0-25	
Trichloroethene	95	95	60-137	0	0-25	
Vinyl Chloride	92	93	79-118	0	0-25	
Methyl-t-Butyl Ether (MTBE)	84	84	80-120	0	0-25	
Tert-Butyl Alcohol (TBA)	87	87	60-140	0	0-25	
Diisopropyl Ether (DIPE)	93	93	60-140	0	0-25	
Ethyl-t-Butyl Ether (ETBE)	89	89	60-140	0	0-25	
Tert-Amyl-Methyl Ether (TAME)	87	87	60-140	0	0-25	
Ethanol	90	86	60-140	4	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received: 05/07/02
Work Order No: 02-05-0285
Preparation: EPA 5030B
Method: EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-5,130	Aqueous	GC/MS T	N/A	05/08/02	050802BW

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	93	94	72-127	1	0-25	
Carbon Tetrachloride	89	87	70-130	3	0-25	
Chlorobenzene	101	102	72-131	1	0-25	
1,2-Dichlorobenzene	103	103	70-130	0	0-25	
1,1-Dichloroethene	94	90	69-127	4	0-25	
Toluene	95	96	75-124	1	0-25	
Trichloroethene	95	95	60-137	0	0-25	
Vinyl Chloride	96	92	79-118	4	0-25	
Methyl-t-Butyl Ether (MTBE)	85	83	80-120	2	0-25	
Tert-Butyl Alcohol (TBA)	78	74	60-140	5	0-25	
Diisopropyl Ether (DIPE)	93	92	60-140	1	0-25	
Ethyl-t-Butyl Ether (ETBE)	88	87	60-140	2	0-25	
Tert-Amyl-Methyl Ether (TAME)	85	85	60-140	0	0-25	
Ethanol	83	73	60-140	13	0-25	

Calscience Environmental Laboratories, Inc.

GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 02-05-0285

Qualifier	Definition
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.

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 02-05-0285

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: TRC

DATE: 5/7/02

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- ____ Chilled, cooler with temperature blank provided.
- ✓ Chilled, cooler without temperature blank.
- ____ Chilled and placed in cooler with wet ice.
- ____ Ambient and placed in cooler with wet ice.
- ____ Ambient temperature.
- 4 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

- ____ °C Temperature blank.
- ____ °C IR thermometer.
- ____ Ambient temperature.

Initial: M

CUSTODY SEAL INTACT:

Sample(s): ____ Cooler: ____ No (Not Intact) : ____ Not Applicable (N/A): ✓

Initial: M

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.			✓
Tedlar bag(s) free of condensation			

Initial: M

COMMENTS:

CAL ENVIRONMENTAL
LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 5-07-02

Page 1 of 2

LABORATORY CLIENT: TRC

ADDRESS: 21 Technology Dr

CITY: Irvine STATE: Ca ZIP: 92618

TEL: 9497530101 FAX: 949753 0111 E-MAIL:

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ COELT REPORTING

SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NUMBER: 251016-01 CENCO

PROJECT CONTACT: Kallie Field

SAMPLER(S): (SIGNATURE) Edwin Sanchez

COELT LOG CODE ☐☐☐☐

P.O. NO.:

LAB USE ONLY: 0 5 0 2 8 5

COOLER RECEIPT TEMP = ____ °C

REQUESTED ANALYSES

LAB USE ONLY	GEIMS ID	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G) EPA 8015M	TPH (D) or ____	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B) EPA w/oxys	VOCs (5035 / 8260B) EnCore	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	Methane	Iron + 2 - Ferrous Iron	Alkalinity (SM 2320B) Anions Cl, Nitrate, K	Sulfate (EPA 300.0)
1	MW-605		5-07-02	7:30	G.W.	6 VOAs 4 poly bottles	X				X									X	X	X	X
2	MW-104 A			8:18		6														X	X	X	X
3	MW-604			9:21																X	X	X	X
4	MW-603			9:55		6																	
5	MW-105			10:29																			
6	MW-106			11:26																			
7	MW-607			12:07																			
8	W-8			12:25																			
9	W-7			2:36																			

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Edwin Sanchez	[signature]	5/7/02	1637
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature) [signature]	Received for Laboratory by: (Signature) [signature]	Date: 5/7/02	Time: 1710

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09/10/01 Revision

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7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 5-07-02

Page 2 of 2

LABORATORY CLIENT: TRC

ADDRESS: 21 Technology Dr.

CITY: Irvine CA STATE: 92618 ZIP:

TEL: 9497530101 FAX: 9497530111 E-MAIL:

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ COELT REPORTING

SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NUMBER: 251016-01 CENCO

P.O. NO.:

PROJECT CONTACT: Karrie Field

LAB USE ONLY: 05-0215

SAMPLER(S): (SIGNATURE) Edwin Sanchez

COELT LOG CODE ☐☐☐☐

COOLER RECEIPT TEMP = ____ °C

REQUESTED ANALYSES

LAB USE ONLY	GEIMS ID	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) or ____	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B)	VOCs (5035 / 8260B) EnCore	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EOB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	VOCs & TPH-G	VOCs (8260 w/MTBE)	EPA method 8260B for VOCs and oxys	and EPA method 8015M for TPH-G
10		Equip Blank	5-07-02			6																X	X
11		TRC Alton #1	↓			6														X			
12		Trip Blank	↓			2															X		

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Edwin Sanchez	Albert Rodriguez	5/7/02	1637
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Albert Rodriguez	Received for Laboratory by: (Signature)	Date: 5/7/02	Time: ~~05~~ 1710

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Yellow and Pink copies respectively.

09/10/01 Revision

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Calscience
Environmental
Laboratories, Inc.

May 14, 2002

Karrie Field
TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Subject: **Calscience Work Order No.: 02-05-0358**
Client Reference: Cenco / 251016-01

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 5/8/02 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Michael J. Crisostomo
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

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/08/02
Work Order No: 02-05-0358
Preparation: N/A
Method: RSK-175M

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-205	02-05-0358-3	Aqueous	05/08/02	N/A	05/09/02	020509

Parameter	Result	RL	DF	Qual	Units
Methane	228	4	4		ug/L

Method Blank	099-12-010-53	Aqueous	N/A	N/A	05/09/02	020509

Parameter	Result	RL	DF	Qual	Units
Methane	ND	1.00	1		ug/L

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	N/A
Method:	SM 2320B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-205	02-05-0358-3	Aqueous	05/08/02	N/A	05/09/02	0509AlkDP1

Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	610	5.0	1		mg/L

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

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Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	N/A
Method:	EPA 300.0

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-205	02-05-0358-3	05/08/02	Aqueous	N/A	05/08/02	020508

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Nitrate-N	ND	0.10	1		mg/L	Sulfate	360	100	100	D	mg/L

Method Blank	099-05-118-1,318	N/A	Aqueous	N/A	05/08/02	020508

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Nitrate-N	ND	0.10	1		mg/L	Sulfate	ND	1.0	1		mg/L

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

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Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/08/02
Work Order No: 02-05-0358
Preparation: N/A
Method: SM3500-FeD

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-205	02-05-0358-3	Aqueous	05/08/02	N/A	05/08/02	0508FeMB1

Parameter	Result	RL	DF	Qual	Units
Iron (II)	ND	0.10	1		mg/L

Method Blank	099-05-111-1,157	Aqueous	N/A	N/A	05/08/02	0508FeMB1

Parameter	Result	RL	DF	Qual	Units
Iron (II)	ND	0.10	1		mg/L

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/08/02
Work Order No: 02-05-0358
Preparation: EPA 5030B
Method: EPA 8015M

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-203	02-05-0358-1	Aqueous	05/08/02	N/A	05/09/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	150	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	81	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
W-1	02-05-0358-2	Aqueous	05/08/02	N/A	05/09/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	280	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	91	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-205	02-05-0358-3	Aqueous	05/08/02	N/A	05/09/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	260	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-101	02-05-0358-4	Aqueous	05/08/02	N/A	05/09/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	580	500	5		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	81	49-157	

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	EPA 5030B
Method:	EPA 8015M

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-202	02-05-0358-5	Aqueous	05/08/02	N/A	05/10/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	1400	200	2		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	97	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-103	02-05-0358-6	Aqueous	05/08/02	N/A	05/10/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	200	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
W-4	02-05-0358-7	Aqueous	05/08/02	N/A	05/10/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	250	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-604	02-05-0358-8	Aqueous	05/08/02	N/A	05/10/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	1100	1000	10		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	84	49-157	

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/08/02
Work Order No: 02-05-0358
Preparation: EPA 5030B
Method: EPA 8015M

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-501A	02-05-0358-9	Aqueous	05/08/02	N/A	05/10/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	7000	200	2		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	196	49-157	2

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
TRC-ALTON #2	02-05-0358-10	Aqueous	05/08/02	N/A	05/10/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	1400	1000	10		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	92	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	098-03-006-2,627	Aqueous	N/A	N/A	05/09/02	02050901sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	84	49-157	

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-203	02-05-0358-1	05/08/02	Aqueous	N/A	05/09/02	050902AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	8.7	0.5	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	0.53	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	21	1	1		ug/L	Tert-Butyl Alcohol (TBA)	30	10	1		ug/L
t-1,2-Dichloroethene	1.7	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	99	86-118		Toluene-d8	103	88-110	
1,4-Bromofluorobenzene	96	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
W-1	02-05-0358-2	05/08/02	Aqueous	N/A	05/09/02	050902AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	7.7	0.5	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	3.3	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	2.4	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	6.4	0.5	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	5.9	1.0	1		ug/L
c-1,2-Dichloroethene	3.1	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	44	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	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	97	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/08/02
Work Order No: 02-05-0358
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-205	02-05-0358-3	05/08/02	Aqueous	N/A	05/09/02	050902AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	9.7	0.5	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	11	1	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	0.65	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	1.1	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	22	1	1		ug/L	Tert-Butyl Alcohol (TBA)	ND	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	86-118		Toluene-d8	103	88-110	
1,4-Bromofluorobenzene	94	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-101	02-05-0358-4	05/08/02	Aqueous	N/A	05/09/02	050902AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	17	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	1.3	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	6.2	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	78	1	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	1.9	0.5	1		ug/L
1,1-Dichloroethane	2.9	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	16	1	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	16	1	1		ug/L	Tert-Butyl Alcohol (TBA)	ND	10	1		ug/L
t-1,2-Dichloroethene	5.6	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	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	96	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-202	02-05-0358-5	05/08/02	Aqueous	N/A	05/09/02	050902AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	330	2	5	D	ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	2.1	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	12	1	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	3.1	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	3.6	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	1.4	1.0	1		ug/L	n-Propylbenzene	32	1	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	2.9	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	1.2	1.0	1		ug/L	p/m-Xylene	3.8	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	16	1	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	66	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	107	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

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-103	02-05-0358-6	05/08/02	Aqueous	N/A	05/09/02	050902AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	11	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	1.3	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	53	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	86-118		Toluene-d8	103	88-110	
1,4-Bromofluorobenzene	96	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/08/02
Work Order No: 02-05-0358
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
W-4	02-05-0358-7	05/08/02	Aqueous	N/A	05/09/02	050902AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	33	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	4.5	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	1.4	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	2.3	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	5.2	0.5	1		ug/L
1,1-Dichloroethane	1.3	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	60	10	1		ug/L
t-1,2-Dichloroethene	2.0	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	86-118		Toluene-d8	102	88-110	
1,4-Bromofluorobenzene	95	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/08/02
Work Order No: 02-05-0358
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-604	02-05-0358-8	05/08/02	Aqueous	N/A	05/09/02	050902AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	19	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	57	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	47	1	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	2.2	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	5.2	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	34	1	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	1.6	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	5.3	0.5	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	3.3	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	48	1	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	51	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	94	86-118		Toluene-d8	104	88-110	
1,4-Bromofluorobenzene	99	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-501A	02-05-0358-9	05/08/02	Aqueous	N/A	05/09/02	050902AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	20	2		ug/L	1,1-Dichloropropene	ND	2.0	2		ug/L
Benzene	690	5	10	O	ug/L	c-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromobenzene	ND	2.0	2		ug/L	t-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromochloromethane	ND	2.0	2		ug/L	Ethylbenzene	6.8	2.0	2		ug/L
Bromodichloromethane	ND	2.0	2		ug/L	2-Hexanone	ND	20	2		ug/L
Bromoform	ND	2.0	2		ug/L	Isopropylbenzene	100	2	2		ug/L
Bromomethane	ND	2.0	2		ug/L	p-Isopropyltoluene	ND	2.0	2		ug/L
2-Butanone	ND	20	2		ug/L	Methylene Chloride	ND	20	2		ug/L
n-Butylbenzene	11	2	2		ug/L	4-Methyl-2-Pentanone	ND	20	2		ug/L
sec-Butylbenzene	9.3	2.0	2		ug/L	Naphthalene	ND	20	2		ug/L
tert-Butylbenzene	ND	2.0	2		ug/L	n-Propylbenzene	190	2	2		ug/L
Carbon Disulfide	ND	20	2		ug/L	Styrene	ND	2.0	2		ug/L
Carbon Tetrachloride	ND	1.0	2		ug/L	1,1,1,2-Tetrachloroethane	ND	2.0	2		ug/L
Chlorobenzene	ND	2.0	2		ug/L	1,1,2,2-Tetrachloroethane	ND	2.0	2		ug/L
Chloroethane	ND	2.0	2		ug/L	Tetrachloroethene	ND	2.0	2		ug/L
Chloroform	ND	2.0	2		ug/L	Toluene	4.3	2.0	2		ug/L
Chloromethane	ND	2.0	2		ug/L	1,2,3-Trichlorobenzene	ND	2.0	2		ug/L
2-Chlorotoluene	ND	2.0	2		ug/L	1,2,4-Trichlorobenzene	ND	2.0	2		ug/L
4-Chlorotoluene	ND	2.0	2		ug/L	1,1,1-Trichloroethane	ND	2.0	2		ug/L
Dibromochloromethane	ND	2.0	2		ug/L	1,1,2-Trichloroethane	ND	2.0	2		ug/L
1,2-Dibromo-3-Chloropropane	ND	10	2		ug/L	Trichloroethene	ND	2.0	2		ug/L
1,2-Dibromoethane	ND	2.0	2		ug/L	Trichlorofluoromethane	ND	20	2		ug/L
Dibromomethane	ND	2.0	2		ug/L	1,2,3-Trichloropropane	ND	10	2		ug/L
1,2-Dichlorobenzene	ND	2.0	2		ug/L	1,2,4-Trimethylbenzene	ND	2.0	2		ug/L
1,3-Dichlorobenzene	ND	2.0	2		ug/L	1,3,5-Trimethylbenzene	ND	2.0	2		ug/L
1,4-Dichlorobenzene	ND	2.0	2		ug/L	Vinyl Acetate	ND	20	2		ug/L
Dichlorodifluoromethane	ND	2.0	2		ug/L	Vinyl Chloride	2.4	1.0	2		ug/L
1,1-Dichloroethane	4.2	2.0	2		ug/L	p/m-Xylene	5.9	2.0	2		ug/L
1,2-Dichloroethane	ND	1.0	2		ug/L	o-Xylene	ND	2.0	2		ug/L
1,1-Dichloroethene	ND	2.0	2		ug/L	Methyl-t-Butyl Ether (MTBE)	130	2	2		ug/L
c-1,2-Dichloroethene	ND	2.0	2		ug/L	Tert-Butyl Alcohol (TBA)	ND	20	2		ug/L
t-1,2-Dichloroethene	ND	2.0	2		ug/L	Diisopropyl Ether (DIPE)	ND	4.0	2		ug/L
1,2-Dichloropropane	7.0	2.0	2		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	4.0	2		ug/L
1,3-Dichloropropane	ND	2.0	2		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	4.0	2		ug/L
2,2-Dichloropropane	ND	2.0	2		ug/L	Ethanol	ND	200	2		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	94	86-118		Toluene-d8	110	88-110	
1,4-Bromofluorobenzene	99	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/08/02
Work Order No: 02-05-0358
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-006-5,141	N/A	Aqueous	N/A	05/09/02	050902AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	ND	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	86-118		Toluene-d8	104	88-110	
1,4-Bromofluorobenzene	97	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/08/02
Work Order No: 02-05-0358
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
TRC-ALTON #2	02-05-0358-10	05/08/02	Aqueous	N/A	05/09/02	050902AW

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	55	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	45	1	1		ug/L
n-Butylbenzene	2.2	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	5.2	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	32	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	5.0	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	5.3	0.5	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	3.2	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-t-Butyl Ether (MTBE)	46	1	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	104	88-110	
1,4-Bromofluorobenzene	99	86-115					

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Trip Blank	02-05-0358-11	05/08/02	Aqueous	N/A	05/09/02	050902AW

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	5.0	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-t-Butyl Ether (MTBE)	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	103	88-110	
1,4-Bromofluorobenzene	95	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/08/02
Work Order No: 02-05-0358
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-006-5,141	N/A	Aqueous	N/A	05/09/02	050902AW

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	5.0	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-t-Butyl Ether (MTBE)	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	104	88-110	
1,4-Bromofluorobenzene	97	86-115					

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	5/8/02
Work Order No:	02-05-0358
Preparation:	N/A
Method:	SM 2320B

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
MW-205	Aqueous	PH-1	N/A	05/09/02	0509AlkDP1

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	610	610	0	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	N/A
Method:	RSK-175M

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-010-53	Aqueous	GC 33	N/A	05/09/02	020509

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	91	93	80-120	2	0-20	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	N/A
Method:	SM3500-FeD

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-205	Aqueous	UV 2	N/A	05/08/02	0508FeMS1

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Iron (II)	104	104	70-130	0	0-25	

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Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	N/A
Method:	SM3500-FeD

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-05-111-1,157	Aqueous	UV 2	05/08/02	NONE	0508FeMB1

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Iron (II)	1.0	1.0	101	80-120	

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/08/02
Work Order No: 02-05-0358
Preparation: N/A
Method: EPA 300.0

Project: Cenco / 251016-01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-05-0300-1	Aqueous	IC 4	N/A	05/08/02	020508

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate-N	102	102	50-150	0	0-25	
Sulfate	104	104	50-150	0	0-25	

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Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	N/A
Method:	EPA 300.0

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-118-1,318	Aqueous	IC 4	N/A	05/08/02	020508

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate-N	103	103	80-120	0	0-25	
Sulfate	104	104	80-120	0	0-25	

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	EPA 5030B
Method:	EPA 8015M

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-05-0377-2	Aqueous	GC 29	N/A	05/09/02	02050901ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	86	85	72-120	1	0-21	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	EPA 5030B
Method:	EPA 8015M

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-2,627	Aqueous	GC 29	N/A	05/09/02	02050901sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	90	93	81-123	4	0-17	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	EPA 5030B
Method:	EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-203	Aqueous	GC/MS T	N/A	05/09/02	02050358-1

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	88	97	72-127	9	0-25	
Carbon Tetrachloride	83	91	70-130	9	0-25	
Chlorobenzene	95	105	72-131	10	0-25	
1,2-Dichlorobenzene	94	107	70-130	13	0-25	
1,1-Dichloroethene	86	89	69-127	3	0-25	
Toluene	88	98	75-124	12	0-25	
Trichloroethene	89	98	60-137	10	0-25	
Vinyl Chloride	93	98	70-130	5	0-25	
Methyl-t-Butyl Ether (MTBE)	80	86	80-120	7	0-25	
Tert-Butyl Alcohol (TBA)	70	83	60-140	14	0-25	
Diisopropyl Ether (DIPE)	86	94	60-140	9	0-25	
Ethyl-t-Butyl Ether (ETBE)	81	90	60-140	10	0-25	
Tert-Amyl-Methyl Ether (TAME)	78	86	60-140	10	0-25	
Ethanol	72	87	60-140	19	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/08/02
Work Order No:	02-05-0358
Preparation:	EPA 5030B
Method:	EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-5,141	Aqueous	GC/MS T	N/A	05/09/02	050902AW

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	93	96	72-127	3	0-25	
Carbon Tetrachloride	86	90	70-130	4	0-25	
Chlorobenzene	102	106	72-131	4	0-25	
1,2-Dichlorobenzene	103	106	70-130	3	0-25	
1,1-Dichloroethene	85	93	69-127	8	0-25	
Toluene	95	97	75-124	2	0-25	
Trichloroethene	94	98	60-137	4	0-25	
Vinyl Chloride	90	94	79-118	4	0-25	
Methyl-t-Butyl Ether (MTBE)	82	83	80-120	2	0-25	
Tert-Butyl Alcohol (TBA)	82	75	60-140	9	0-25	
Diisopropyl Ether (DIPE)	91	95	60-140	3	0-25	
Ethyl-t-Butyl Ether (ETBE)	87	89	60-140	2	0-25	
Tert-Amyl-Methyl Ether (TAME)	85	86	60-140	1	0-25	
Ethanol	82	71	60-140	14	0-25	

Calscience Environmental Laboratories, Inc.

GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 02-05-0358

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.

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7440 LINCOLN WAY
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CHAIN OF CUSTODY RECORD

Date 5-08-02

Page 1 of 2

LABORATORY CLIENT: TRC

ADDRESS: 21 Technology Dr.

CITY: Irvine STATE: Ca. ZIP: 92618

TEL: 9497530101 FAX: 9497530111 E-MAIL:

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ COELT REPORTING

SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NUMBER: 251016-01 CENCO

P.O. NO.:

PROJECT CONTACT: Karrie Field

LAB USE ONLY: 05-0358

SAMPLER(S): (SIGNATURE) Edmund Sanchez

COELT LOG CODE ☐☐☐☐

COOLER RECEIPT TEMP = ____ °C

REQUESTED ANALYSES

LAB USE ONLY	GEIMS ID	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G) EPA 8015 M	TPH (D) or ___	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B) EPA w/oxys	VOCs (5035 / 8260B) EnCore	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	Methane (RSK-175M)	Iron + 2-Ferrous Iron SM3500-Fe D	Alkalinity CSM 2320B Anions (Nitrate α)	Sulfate (EPA 300.0)
1		MW-203	5-08-02	8:30	G.W.	6	X				X												
2		W-1		9:26		6																	
3		MW-205		10:13		6 [illegible]														X	X	X	X
4		MW-101		10:39		6																	
5		MW-202		11:08																			
6		MW-103		12:05																			
7		W-4		1:03																			
8		MW-604		1:42																			
9		MW-501A		2:30																			

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Edmund Sanchez	Albert Rodriguez	5/8/02	1603
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature) Albert Rodriguez	Received for Laboratory by: (Signature)	5/8/02	1710

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Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Yellow and Pink copies respectively.

09/10/01 Revision

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7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
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CHAIN OF CUSTODY RECORD

Date 5-08-02

Page 2 of 2

LABORATORY CLIENT: TRC

ADDRESS: 21 Technology Dr.

CITY: Irvine STATE: CA ZIP: 92618

TEL: 9497530101 FAX: 9497530111 E-MAIL:

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ COELT REPORTING

SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NUMBER: 251016-01 CENCO

PROJECT CONTACT: Kallie Field

SAMPLER(S): (SIGNATURE) Earl Sandy

COELT LOG CODE ☐☐☐☐

P.O. NO.:

LAB USE ONLY: 05-0355

COOLER RECEIPT TEMP = ____ °C

REQUESTED ANALYSES

LAB USE ONLY	GEIMS ID	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) or ____	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B)	VOCs (5035 / 8260B) EnCore	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	VOCs & TPH-G	VOCs (8260 w/MTBE)			
10		TRC-Alton #2	5-08-02			6														X				
11		Trip Blank	"			2															X			

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Earl Sandy	Allen Rodney	5/8/02	1603
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature) Allen Rodney	Received for Laboratory by: (Signature)	Date: 5/8/02	Time: 1710

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Yellow and Pink copies respectively.

09/10/01 Revision

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Calscience Environmental Laboratories, Inc.

WORK ORDER #: 02-05-0358

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: TRC

DATE: 5/8/02

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- ____ Chilled, cooler with temperature blank provided.
- ____ Chilled, cooler without temperature blank.
- ✓ Chilled and placed in cooler with wet ice.
- ____ Ambient and placed in cooler with wet ice.
- ____ Ambient temperature.
- 4 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

- ____ °C Temperature blank.
- ____ °C IR thermometer.
- ____ Ambient temperature.

Initial: RL

CUSTODY SEAL INTACT:

Sample(s): ____ Cooler: ____ No (Not Intact) : ____ Not Applicable (N/A): ✓

Initial: RL

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: RL

COMMENTS:

Calscience
Environmental
Laboratories, Inc.

May 15, 2002

Karrie Field
TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Subject: **Calscience Work Order No.: 02-05-0416**
Client Reference: Cenco / 251016-01

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 5/9/02 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Michael J. Crisostomo
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

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	N/A
Method:	RSK-175M

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-502	02-05-0416-5	Aqueous	05/09/02	N/A	05/09/02	020509

Parameter	Result	RL	DF	Qual	Units
Methane	7050	80	80		ug/L

Method Blank	099-12-010-53	Aqueous	N/A	N/A	05/09/02	020509

Parameter	Result	RL	DF	Qual	Units
Methane	ND	1.00	1		ug/L

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	N/A
Method:	SM 2320B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-502	02-05-0416-5	Aqueous	05/09/02	N/A	05/10/02	0510AlkDP2

Parameter	Result	RL	DF	Qual	Units
Alkalinity, Total (as CaCO3)	830	5.0	1		mg/L

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

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Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	N/A
Method:	EPA 300.0

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-502	02-05-0416-5	05/09/02	Aqueous	N/A	05/10/02	020509

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Nitrate-N	ND	0.10	1		mg/L	Sulfate	ND	1.0	1		mg/L

Method Blank	099-05-118-1,319	N/A	Aqueous	N/A	05/09/02	020509

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Nitrate-N	ND	0.10	1		mg/L	Sulfate	ND	1.0	1		mg/L

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/09/02
Work Order No: 02-05-0416
Preparation: N/A
Method: SM3500-FeD

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-502	02-05-0416-5	Aqueous	05/09/02	N/A	05/09/02	0509FeMB1

Parameter	Result	RL	DF	Qual	Units
Iron (II)	0.75	0.10	1		mg/L

Method Blank	099-05-111-1,158	Aqueous	N/A	N/A	05/09/02	0509FeMB1

Parameter	Result	RL	DF	Qual	Units
Iron (II)	ND	0.10	1		mg/L

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/09/02
Work Order No: 02-05-0416
Preparation: EPA 5030B
Method: EPA 8015M

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-201	02-05-0416-1	Aqueous	05/09/02	N/A	05/11/02	02051002sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	1800	500	5		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	88	49-157	

MW-204	02-05-0416-2	Aqueous	05/09/02	N/A	05/11/02	02051002sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	1400	500	5		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	83	49-157	

MW-107	02-05-0416-3	Aqueous	05/09/02	N/A	05/11/02	02051002sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	2100	1000	10		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	92	49-157	

MW-503B	02-05-0416-4	Aqueous	05/09/02	N/A	05/11/02	02051002sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	4500	200	2		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	185	49-157	2

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/09/02
Work Order No: 02-05-0416
Preparation: EPA 5030B
Method: EPA 8015M

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-502	02-05-0416-5	Aqueous	05/09/02	N/A	05/11/02	02051002sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	25000	1000	10		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	96	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
MW-601A	02-05-0416-6	Aqueous	05/09/02	N/A	05/11/02	02051002sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	24000	2000	20		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	82	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
TRC-ALTON #3	02-05-0416-7	Aqueous	05/09/02	N/A	05/11/02	02051002sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	28000	1000	10		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	109	49-157	

Client Sample Number	Lab Sample Number	Matrix	Date Collected	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	098-03-006-2,630	Aqueous	N/A	N/A	05/10/02	02051002sa

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	49-157	

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-201	02-05-0416-1	05/09/02	Aqueous	N/A	05/10/02	051002AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	20	2		ug/L	1,1-Dichloropropene	ND	2.0	2		ug/L
Benzene	120	1	2		ug/L	c-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromobenzene	ND	2.0	2		ug/L	t-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromochloromethane	ND	2.0	2		ug/L	Ethylbenzene	45	2	2		ug/L
Bromodichloromethane	ND	2.0	2		ug/L	2-Hexanone	ND	20	2		ug/L
Bromoform	ND	2.0	2		ug/L	Isopropylbenzene	8.8	2.0	2		ug/L
Bromomethane	ND	2.0	2		ug/L	p-Isopropyltoluene	2.4	2.0	2		ug/L
2-Butanone	ND	20	2		ug/L	Methylene Chloride	ND	20	2		ug/L
n-Butylbenzene	ND	2.0	2		ug/L	4-Methyl-2-Pentanone	ND	20	2		ug/L
sec-Butylbenzene	2.1	2.0	2		ug/L	Naphthalene	ND	20	2		ug/L
tert-Butylbenzene	ND	2.0	2		ug/L	n-Propylbenzene	8.6	2.0	2		ug/L
Carbon Disulfide	ND	20	2		ug/L	Styrene	ND	2.0	2		ug/L
Carbon Tetrachloride	ND	1.0	2		ug/L	1,1,1,2-Tetrachloroethane	ND	2.0	2		ug/L
Chlorobenzene	ND	2.0	2		ug/L	1,1,2,2-Tetrachloroethane	ND	2.0	2		ug/L
Chloroethane	ND	2.0	2		ug/L	Tetrachloroethene	ND	2.0	2		ug/L
Chloroform	ND	2.0	2		ug/L	Toluene	6.6	2.0	2		ug/L
Chloromethane	ND	2.0	2		ug/L	1,2,3-Trichlorobenzene	ND	2.0	2		ug/L
2-Chlorotoluene	ND	2.0	2		ug/L	1,2,4-Trichlorobenzene	ND	2.0	2		ug/L
4-Chlorotoluene	ND	2.0	2		ug/L	1,1,1-Trichloroethane	ND	2.0	2		ug/L
Dibromochloromethane	ND	2.0	2		ug/L	1,1,2-Trichloroethane	ND	2.0	2		ug/L
1,2-Dibromo-3-Chloropropane	ND	10	2		ug/L	Trichloroethene	14	2	2		ug/L
1,2-Dibromoethane	ND	2.0	2		ug/L	Trichlorofluoromethane	ND	20	2		ug/L
Dibromomethane	ND	2.0	2		ug/L	1,2,3-Trichloropropane	ND	10	2		ug/L
1,2-Dichlorobenzene	ND	2.0	2		ug/L	1,2,4-Trimethylbenzene	5.6	2.0	2		ug/L
1,3-Dichlorobenzene	ND	2.0	2		ug/L	1,3,5-Trimethylbenzene	3.8	2.0	2		ug/L
1,4-Dichlorobenzene	ND	2.0	2		ug/L	Vinyl Acetate	ND	20	2		ug/L
Dichlorodifluoromethane	ND	2.0	2		ug/L	Vinyl Chloride	1.1	1.0	2		ug/L
1,1-Dichloroethane	ND	2.0	2		ug/L	p/m-Xylene	20	2	2		ug/L
1,2-Dichloroethane	ND	1.0	2		ug/L	o-Xylene	ND	2.0	2		ug/L
1,1-Dichloroethene	6.4	2.0	2		ug/L	Methyl-t-Butyl Ether (MTBE)	5.1	2.0	2		ug/L
c-1,2-Dichloroethene	33	2	2		ug/L	Tert-Butyl Alcohol (TBA)	ND	20	2		ug/L
t-1,2-Dichloroethene	4.2	2.0	2		ug/L	Diisopropyl Ether (DIPE)	ND	4.0	2		ug/L
1,2-Dichloropropane	ND	2.0	2		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	4.0	2		ug/L
1,3-Dichloropropane	ND	2.0	2		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	4.0	2		ug/L
2,2-Dichloropropane	ND	2.0	2		ug/L	Ethanol	ND	200	2		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	98	86-118		Toluene-d8	102	88-110	
1,4-Bromofluorobenzene	95	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-204	02-05-0416-2	05/09/02	Aqueous	N/A	05/10/02	051002AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	20	2		ug/L	1,1-Dichloropropene	ND	2.0	2		ug/L
Benzene	250	1	2		ug/L	c-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromobenzene	ND	2.0	2		ug/L	t-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromochloromethane	ND	2.0	2		ug/L	Ethylbenzene	120	2	2		ug/L
Bromodichloromethane	ND	2.0	2		ug/L	2-Hexanone	ND	20	2		ug/L
Bromoform	ND	2.0	2		ug/L	Isopropylbenzene	5.7	2.0	2		ug/L
Bromomethane	ND	2.0	2		ug/L	p-Isopropyltoluene	ND	2.0	2		ug/L
2-Butanone	ND	20	2		ug/L	Methylene Chloride	ND	20	2		ug/L
n-Butylbenzene	ND	2.0	2		ug/L	4-Methyl-2-Pentanone	ND	20	2		ug/L
sec-Butylbenzene	ND	2.0	2		ug/L	Naphthalene	ND	20	2		ug/L
tert-Butylbenzene	ND	2.0	2		ug/L	n-Propylbenzene	13	2	2		ug/L
Carbon Disulfide	ND	20	2		ug/L	Styrene	ND	2.0	2		ug/L
Carbon Tetrachloride	ND	1.0	2		ug/L	1,1,1,2-Tetrachloroethane	ND	2.0	2		ug/L
Chlorobenzene	ND	2.0	2		ug/L	1,1,2,2-Tetrachloroethane	ND	2.0	2		ug/L
Chloroethane	ND	2.0	2		ug/L	Tetrachloroethene	ND	2.0	2		ug/L
Chloroform	ND	2.0	2		ug/L	Toluene	37	2	2		ug/L
Chloromethane	ND	2.0	2		ug/L	1,2,3-Trichlorobenzene	ND	2.0	2		ug/L
2-Chlorotoluene	ND	2.0	2		ug/L	1,2,4-Trichlorobenzene	ND	2.0	2		ug/L
4-Chlorotoluene	ND	2.0	2		ug/L	1,1,1-Trichloroethane	ND	2.0	2		ug/L
Dibromochloromethane	ND	2.0	2		ug/L	1,1,2-Trichloroethane	ND	2.0	2		ug/L
1,2-Dibromo-3-Chloropropane	ND	10	2		ug/L	Trichloroethene	ND	2.0	2		ug/L
1,2-Dibromoethane	ND	2.0	2		ug/L	Trichlorofluoromethane	ND	20	2		ug/L
Dibromomethane	ND	2.0	2		ug/L	1,2,3-Trichloropropane	ND	10	2		ug/L
1,2-Dichlorobenzene	ND	2.0	2		ug/L	1,2,4-Trimethylbenzene	26	2	2		ug/L
1,3-Dichlorobenzene	ND	2.0	2		ug/L	1,3,5-Trimethylbenzene	8.9	2.0	2		ug/L
1,4-Dichlorobenzene	ND	2.0	2		ug/L	Vinyl Acetate	ND	20	2		ug/L
Dichlorodifluoromethane	ND	2.0	2		ug/L	Vinyl Chloride	3.5	1.0	2		ug/L
1,1-Dichloroethane	3.5	2.0	2		ug/L	p/m-Xylene	270	2	2		ug/L
1,2-Dichloroethane	ND	1.0	2		ug/L	o-Xylene	19	2	2		ug/L
1,1-Dichloroethene	ND	2.0	2		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	2.0	2		ug/L
c-1,2-Dichloroethene	2.7	2.0	2		ug/L	Tert-Butyl Alcohol (TBA)	170	20	2		ug/L
t-1,2-Dichloroethene	ND	2.0	2		ug/L	Diisopropyl Ether (DIPE)	ND	4.0	2		ug/L
1,2-Dichloropropane	ND	2.0	2		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	4.0	2		ug/L
1,3-Dichloropropane	ND	2.0	2		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	4.0	2		ug/L
2,2-Dichloropropane	ND	2.0	2		ug/L	Ethanol	ND	200	2		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	98	86-118		Toluene-d8	98	88-110	
1,4-Bromofluorobenzene	94	86-115					

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/09/02
Work Order No: 02-05-0416
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-107	02-05-0416-3	05/09/02	Aqueous	N/A	05/10/02	051002AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	20	2		ug/L	1,1-Dichloropropene	ND	2.0	2		ug/L
Benzene	310	1	2		ug/L	c-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromobenzene	ND	2.0	2		ug/L	t-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromochloromethane	ND	2.0	2		ug/L	Ethylbenzene	3.0	2.0	2		ug/L
Bromodichloromethane	ND	2.0	2		ug/L	2-Hexanone	ND	20	2		ug/L
Bromoform	ND	2.0	2		ug/L	Isopropylbenzene	45	2	2		ug/L
Bromomethane	ND	2.0	2		ug/L	p-Isopropyltoluene	ND	2.0	2		ug/L
2-Butanone	ND	20	2		ug/L	Methylene Chloride	ND	20	2		ug/L
n-Butylbenzene	ND	2.0	2		ug/L	4-Methyl-2-Pentanone	ND	20	2		ug/L
sec-Butylbenzene	8.4	2.0	2		ug/L	Naphthalene	ND	20	2		ug/L
tert-Butylbenzene	ND	2.0	2		ug/L	n-Propylbenzene	48	2	2		ug/L
Carbon Disulfide	ND	20	2		ug/L	Styrene	ND	2.0	2		ug/L
Carbon Tetrachloride	ND	1.0	2		ug/L	1,1,1,2-Tetrachloroethane	ND	2.0	2		ug/L
Chlorobenzene	ND	2.0	2		ug/L	1,1,2,2-Tetrachloroethane	ND	2.0	2		ug/L
Chloroethane	ND	2.0	2		ug/L	Tetrachloroethene	ND	2.0	2		ug/L
Chloroform	ND	2.0	2		ug/L	Toluene	ND	2.0	2		ug/L
Chloromethane	ND	2.0	2		ug/L	1,2,3-Trichlorobenzene	ND	2.0	2		ug/L
2-Chlorotoluene	ND	2.0	2		ug/L	1,2,4-Trichlorobenzene	ND	2.0	2		ug/L
4-Chlorotoluene	ND	2.0	2		ug/L	1,1,1-Trichloroethane	ND	2.0	2		ug/L
Dibromochloromethane	ND	2.0	2		ug/L	1,1,2-Trichloroethane	ND	2.0	2		ug/L
1,2-Dibromo-3-Chloropropane	ND	10	2		ug/L	Trichloroethene	ND	2.0	2		ug/L
1,2-Dibromoethane	ND	2.0	2		ug/L	Trichlorofluoromethane	ND	20	2		ug/L
Dibromomethane	ND	2.0	2		ug/L	1,2,3-Trichloropropane	ND	10	2		ug/L
1,2-Dichlorobenzene	ND	2.0	2		ug/L	1,2,4-Trimethylbenzene	ND	2.0	2		ug/L
1,3-Dichlorobenzene	ND	2.0	2		ug/L	1,3,5-Trimethylbenzene	ND	2.0	2		ug/L
1,4-Dichlorobenzene	ND	2.0	2		ug/L	Vinyl Acetate	ND	20	2		ug/L
Dichlorodifluoromethane	ND	2.0	2		ug/L	Vinyl Chloride	30	1	2		ug/L
1,1-Dichloroethane	21	2	2		ug/L	p/m-Xylene	ND	2.0	2		ug/L
1,2-Dichloroethane	ND	1.0	2		ug/L	o-Xylene	ND	2.0	2		ug/L
1,1-Dichloroethene	ND	2.0	2		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	2.0	2		ug/L
c-1,2-Dichloroethene	8.8	2.0	2		ug/L	Tert-Butyl Alcohol (TBA)	26	20	2		ug/L
t-1,2-Dichloroethene	5.7	2.0	2		ug/L	Diisopropyl Ether (DIPE)	ND	4.0	2		ug/L
1,2-Dichloropropane	ND	2.0	2		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	4.0	2		ug/L
1,3-Dichloropropane	ND	2.0	2		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	4.0	2		ug/L
2,2-Dichloropropane	ND	2.0	2		ug/L	Ethanol	ND	200	2		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	91	86-118		Toluene-d8	100	88-110	
1,4-Bromofluorobenzene	95	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/09/02
Work Order No: 02-05-0416
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-503B	02-05-0416-4	05/09/02	Aqueous	N/A	05/10/02	051002AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	20	2		ug/L	1,1-Dichloropropene	ND	2.0	2		ug/L
Benzene	81	1	2		ug/L	c-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromobenzene	ND	2.0	2		ug/L	t-1,3-Dichloropropene	ND	1.0	2		ug/L
Bromochloromethane	ND	2.0	2		ug/L	Ethylbenzene	77	2	2		ug/L
Bromodichloromethane	ND	2.0	2		ug/L	2-Hexanone	ND	20	2		ug/L
Bromoform	ND	2.0	2		ug/L	Isopropylbenzene	86	2	2		ug/L
Bromomethane	ND	2.0	2		ug/L	p-Isopropyltoluene	2.8	2.0	2		ug/L
2-Butanone	ND	20	2		ug/L	Methylene Chloride	ND	20	2		ug/L
n-Butylbenzene	7.1	2.0	2		ug/L	4-Methyl-2-Pentanone	ND	20	2		ug/L
sec-Butylbenzene	18	2	2		ug/L	Naphthalene	26	20	2		ug/L
tert-Butylbenzene	ND	2.0	2		ug/L	n-Propylbenzene	120	2	2		ug/L
Carbon Disulfide	ND	20	2		ug/L	Styrene	ND	2.0	2		ug/L
Carbon Tetrachloride	ND	1.0	2		ug/L	1,1,1,2-Tetrachloroethane	ND	2.0	2		ug/L
Chlorobenzene	ND	2.0	2		ug/L	1,1,2,2-Tetrachloroethane	ND	2.0	2		ug/L
Chloroethane	ND	2.0	2		ug/L	Tetrachloroethene	ND	2.0	2		ug/L
Chloroform	2.7	2.0	2		ug/L	Toluene	3.5	2.0	2		ug/L
Chloromethane	ND	2.0	2		ug/L	1,2,3-Trichlorobenzene	ND	2.0	2		ug/L
2-Chlorotoluene	ND	2.0	2		ug/L	1,2,4-Trichlorobenzene	ND	2.0	2		ug/L
4-Chlorotoluene	ND	2.0	2		ug/L	1,1,1-Trichloroethane	ND	2.0	2		ug/L
Dibromochloromethane	ND	2.0	2		ug/L	1,1,2-Trichloroethane	ND	2.0	2		ug/L
1,2-Dibromo-3-Chloropropane	ND	10	2		ug/L	Trichloroethene	ND	2.0	2		ug/L
1,2-Dibromoethane	ND	2.0	2		ug/L	Trichlorofluoromethane	ND	20	2		ug/L
Dibromomethane	ND	2.0	2		ug/L	1,2,3-Trichloropropane	ND	10	2		ug/L
1,2-Dichlorobenzene	ND	2.0	2		ug/L	1,2,4-Trimethylbenzene	2.5	2.0	2		ug/L
1,3-Dichlorobenzene	ND	2.0	2		ug/L	1,3,5-Trimethylbenzene	2.2	2.0	2		ug/L
1,4-Dichlorobenzene	ND	2.0	2		ug/L	Vinyl Acetate	ND	20	2		ug/L
Dichlorodifluoromethane	ND	2.0	2		ug/L	Vinyl Chloride	7.7	1.0	2		ug/L
1,1-Dichloroethane	ND	2.0	2		ug/L	p/m-Xylene	26	2	2		ug/L
1,2-Dichloroethane	ND	1.0	2		ug/L	o-Xylene	8.5	2.0	2		ug/L
1,1-Dichloroethene	5.0	2.0	2		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	2.0	2		ug/L
c-1,2-Dichloroethene	23	2	2		ug/L	Tert-Butyl Alcohol (TBA)	ND	20	2		ug/L
t-1,2-Dichloroethene	23	2	2		ug/L	Diisopropyl Ether (DIPE)	ND	4.0	2		ug/L
1,2-Dichloropropane	ND	2.0	2		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	4.0	2		ug/L
1,3-Dichloropropane	ND	2.0	2		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	4.0	2		ug/L
2,2-Dichloropropane	ND	2.0	2		ug/L	Ethanol	ND	200	2		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	99	86-118		Toluene-d8	107	88-110	
1,4-Bromofluorobenzene	96	86-115					

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-502	02-05-0416-5	05/09/02	Aqueous	N/A	05/10/02	051002AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	2000	200		ug/L	1,1-Dichloropropene	ND	200	200		ug/L
Benzene	4300	100	200		ug/L	c-1,3-Dichloropropene	ND	100	200		ug/L
Bromobenzene	ND	200	200		ug/L	t-1,3-Dichloropropene	ND	100	200		ug/L
Bromochloromethane	ND	200	200		ug/L	Ethylbenzene	390	200	200		ug/L
Bromodichloromethane	ND	200	200		ug/L	2-Hexanone	ND	2000	200		ug/L
Bromoform	ND	200	200		ug/L	Isopropylbenzene	ND	200	200		ug/L
Bromomethane	ND	200	200		ug/L	p-Isopropyltoluene	ND	200	200		ug/L
2-Butanone	ND	2000	200		ug/L	Methylene Chloride	ND	2000	200		ug/L
n-Butylbenzene	ND	200	200		ug/L	4-Methyl-2-Pentanone	ND	2000	200		ug/L
sec-Butylbenzene	ND	200	200		ug/L	Naphthalene	ND	2000	200		ug/L
tert-Butylbenzene	ND	200	200		ug/L	n-Propylbenzene	ND	200	200		ug/L
Carbon Disulfide	ND	2000	200		ug/L	Styrene	ND	200	200		ug/L
Carbon Tetrachloride	ND	100	200		ug/L	1,1,1,2-Tetrachloroethane	ND	200	200		ug/L
Chlorobenzene	ND	200	200		ug/L	1,1,2,2-Tetrachloroethane	ND	200	200		ug/L
Chloroethane	ND	200	200		ug/L	Tetrachloroethene	ND	200	200		ug/L
Chloroform	ND	200	200		ug/L	Toluene	ND	200	200		ug/L
Chloromethane	ND	200	200		ug/L	1,2,3-Trichlorobenzene	ND	200	200		ug/L
2-Chlorotoluene	ND	200	200		ug/L	1,2,4-Trichlorobenzene	ND	200	200		ug/L
4-Chlorotoluene	ND	200	200		ug/L	1,1,1-Trichloroethane	ND	200	200		ug/L
Dibromochloromethane	ND	200	200		ug/L	1,1,2-Trichloroethane	ND	200	200		ug/L
1,2-Dibromo-3-Chloropropane	ND	1000	200		ug/L	Trichloroethene	ND	200	200		ug/L
1,2-Dibromoethane	ND	200	200		ug/L	Trichlorofluoromethane	ND	2000	200		ug/L
Dibromomethane	ND	200	200		ug/L	1,2,3-Trichloropropane	ND	1000	200		ug/L
1,2-Dichlorobenzene	ND	200	200		ug/L	1,2,4-Trimethylbenzene	ND	200	200		ug/L
1,3-Dichlorobenzene	ND	200	200		ug/L	1,3,5-Trimethylbenzene	ND	200	200		ug/L
1,4-Dichlorobenzene	ND	200	200		ug/L	Vinyl Acetate	ND	2000	200		ug/L
Dichlorodifluoromethane	ND	200	200		ug/L	Vinyl Chloride	ND	100	200		ug/L
1,1-Dichloroethane	ND	200	200		ug/L	p/m-Xylene	230	200	200		ug/L
1,2-Dichloroethane	ND	100	200		ug/L	o-Xylene	ND	200	200		ug/L
1,1-Dichloroethene	ND	200	200		ug/L	Methyl-t-Butyl Ether (MTBE)	14000	200	200		ug/L
c-1,2-Dichloroethene	ND	200	200		ug/L	Tert-Butyl Alcohol (TBA)	ND	2000	200		ug/L
t-1,2-Dichloroethene	ND	200	200		ug/L	Diisopropyl Ether (DIPE)	ND	400	200		ug/L
1,2-Dichloropropane	ND	200	200		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	400	200		ug/L
1,3-Dichloropropane	ND	200	200		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	400	200		ug/L
2,2-Dichloropropane	ND	200	200		ug/L	Ethanol	ND	20000	200		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	95	86-118		Toluene-d8	98	88-110	
1,4-Bromofluorobenzene	93	86-115					

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
MW-601A	02-05-0416-6	05/09/02	Aqueous	N/A	05/10/02	051002AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	1000	100		ug/L	1,1-Dichloropropene	ND	100	100		ug/L
Benzene	11000	50	100		ug/L	c-1,3-Dichloropropene	ND	50	100		ug/L
Bromobenzene	ND	100	100		ug/L	t-1,3-Dichloropropene	ND	50	100		ug/L
Bromochloromethane	ND	100	100		ug/L	Ethylbenzene	ND	100	100		ug/L
Bromodichloromethane	ND	100	100		ug/L	2-Hexanone	ND	1000	100		ug/L
Bromoform	ND	100	100		ug/L	Isopropylbenzene	ND	100	100		ug/L
Bromomethane	ND	100	100		ug/L	p-Isopropyltoluene	ND	100	100		ug/L
2-Butanone	ND	1000	100		ug/L	Methylene Chloride	ND	1000	100		ug/L
n-Butylbenzene	ND	100	100		ug/L	4-Methyl-2-Pentanone	ND	1000	100		ug/L
sec-Butylbenzene	ND	100	100		ug/L	Naphthalene	ND	1000	100		ug/L
tert-Butylbenzene	ND	100	100		ug/L	n-Propylbenzene	150	100	100		ug/L
Carbon Disulfide	ND	1000	100		ug/L	Styrene	ND	100	100		ug/L
Carbon Tetrachloride	ND	50	100		ug/L	1,1,1,2-Tetrachloroethane	ND	100	100		ug/L
Chlorobenzene	ND	100	100		ug/L	1,1,2,2-Tetrachloroethane	ND	100	100		ug/L
Chloroethane	ND	100	100		ug/L	Tetrachloroethene	ND	100	100		ug/L
Chloroform	ND	100	100		ug/L	Toluene	ND	100	100		ug/L
Chloromethane	ND	100	100		ug/L	1,2,3-Trichlorobenzene	ND	100	100		ug/L
2-Chlorotoluene	ND	100	100		ug/L	1,2,4-Trichlorobenzene	ND	100	100		ug/L
4-Chlorotoluene	ND	100	100		ug/L	1,1,1-Trichloroethane	ND	100	100		ug/L
Dibromochloromethane	ND	100	100		ug/L	1,1,2-Trichloroethane	ND	100	100		ug/L
1,2-Dibromo-3-Chloropropane	ND	500	100		ug/L	Trichloroethene	ND	100	100		ug/L
1,2-Dibromoethane	ND	100	100		ug/L	Trichlorofluoromethane	ND	1000	100		ug/L
Dibromomethane	ND	100	100		ug/L	1,2,3-Trichloropropane	ND	500	100		ug/L
1,2-Dichlorobenzene	ND	100	100		ug/L	1,2,4-Trimethylbenzene	ND	100	100		ug/L
1,3-Dichlorobenzene	ND	100	100		ug/L	1,3,5-Trimethylbenzene	ND	100	100		ug/L
1,4-Dichlorobenzene	ND	100	100		ug/L	Vinyl Acetate	ND	1000	100		ug/L
Dichlorodifluoromethane	ND	100	100		ug/L	Vinyl Chloride	ND	50	100		ug/L
1,1-Dichloroethane	ND	100	100		ug/L	p/m-Xylene	ND	100	100		ug/L
1,2-Dichloroethane	ND	50	100		ug/L	o-Xylene	ND	100	100		ug/L
1,1-Dichloroethene	ND	100	100		ug/L	Methyl-t-Butyl Ether (MTBE)	2500	100	100		ug/L
c-1,2-Dichloroethene	ND	100	100		ug/L	Tert-Butyl Alcohol (TBA)	ND	1000	100		ug/L
t-1,2-Dichloroethene	ND	100	100		ug/L	Diisopropyl Ether (DIPE)	ND	200	100		ug/L
1,2-Dichloropropane	ND	100	100		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	200	100		ug/L
1,3-Dichloropropane	ND	100	100		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	200	100		ug/L
2,2-Dichloropropane	ND	100	100		ug/L	Ethanol	ND	10000	100		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	96	86-118		Toluene-d8	99	88-110	
1,4-Bromofluorobenzene	92	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-006-5,153	N/A	Aqueous	N/A	05/10/02	051002AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl Alcohol (TBA)	ND	10	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl Ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L	Ethanol	ND	100	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	110	86-118		Toluene-d8	102	88-110	
1,4-Bromofluorobenzene	96	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
TRC-ALTON #3	02-05-0416-7	05/09/02	Aqueous	N/A	05/14/02	051302BW

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	12000	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	ND	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	170	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	ND	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	500	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	ND	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-t-Butyl Ether (MTBE)	3500	100	100		ug/L
1,2-Dichloropropane	ND	100	100		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	86-118		Toluene-d8	96	88-110	
1,4-Bromofluorobenzene	95	86-115					

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received: 05/09/02
Work Order No: 02-05-0416
Preparation: EPA 5030B
Method: EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Trip Blank	02-05-0416-8	05/09/02	Aqueous	N/A	05/10/02	051002AW

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	5.0	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-t-Butyl Ether (MTBE)	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	99	88-110	
1,4-Bromofluorobenzene	92	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-006-5,153	N/A	Aqueous	N/A	05/10/02	051002AW

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	5.0	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-t-Butyl Ether (MTBE)	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	102	88-110	
1,4-Bromofluorobenzene	96	86-115					

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

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	EPA 5030B
Method:	EPA 8260B

Project: Cenco / 251016-01

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-10-006-5,160	N/A	Aqueous	N/A	05/14/02	051302BW

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	5.0	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-t-Butyl Ether (MTBE)	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	94	88-110	
1,4-Bromofluorobenzene	91	86-115					

RL - Reporting Limit DF - Dilution Factor Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received: 5/9/02
Work Order No: 02-05-0416
Preparation: N/A
Method: SM 2320B

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
02-05-0434-2	Aqueous	PH 1	N/A	05/10/02	0510AlkDP2

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
Alkalinity, Total (as CaCO3)	1000	990	1	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	N/A
Method:	RSK-175M

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-010-53	Aqueous	GC 33	N/A	05/09/02	020509

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Methane	91	93	80-120	2	0-20	

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Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	N/A
Method:	SM3500-FeD

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW-502	Aqueous	UV 2	N/A	05/09/02	0509FeMS1

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Iron (II)	97	98	70-130	1	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	N/A
Method:	SM3500-FeD

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-05-111-1,158	Aqueous	UV 2	05/09/02	NONE	L0509FeMB1

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Iron (II)	1.0	0.96	96	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	N/A
Method:	EPA 300.0

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-05-0375-4	Aqueous	IC 4	N/A	05/09/02	020509

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate-N	101	101	50-150	0	0-25	
Sulfate	103	102	50-150	0	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	N/A
Method:	EPA 300.0

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-118-1,319	Aqueous	IC 4	N/A	05/09/02	020509

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Nitrate-N	100	100	80-120	0	0-25	
Sulfate	102	100	80-120	2	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.		Date Received:	05/09/02
21A Technology Drive		Work Order No:	02-05-0416
Irvine, CA 92718-2366		Preparation:	EPA 5030B
		Method:	EPA 8015M

Project: Cenco / 251016-01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-05-0239-2	Aqueous	GC 29	N/A	05/10/02	02051002ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	84	87	72-120	3	0-21	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	EPA 5030B
Method:	EPA 8015M

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-2,630	Aqueous	GC 29	N/A	05/10/02	02051002sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	92	95	81-123	3	0-17	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	EPA 5030B
Method:	EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-05-0421-2	Aqueous	GC/MS T	N/A	05/10/02	02050421-2

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	83	93	72-127	12	0-25	
Carbon Tetrachloride	77	88	70-130	13	0-25	
Chlorobenzene	90	102	72-131	13	0-25	
1,2-Dichlorobenzene	90	101	70-130	12	0-25	
1,1-Dichloroethene	78	87	69-127	10	0-25	
Toluene	84	94	75-124	12	0-25	
Trichloroethene	80	91	60-137	13	0-25	
Vinyl Chloride	88	100	70-130	13	0-25	
Methyl-t-Butyl Ether (MTBE)	72	81	60-120	12	0-25	3
Tert-Butyl Alcohol (TBA)	69	73	60-140	6	0-25	
Diisopropyl Ether (DIPE)	80	90	60-140	12	0-25	
Ethyl-t-Butyl Ether (ETBE)	76	86	60-140	13	0-25	
Tert-Amyl-Methyl Ether (TAME)	73	82	60-140	12	0-25	
Ethanol	64	70	60-140	9	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received:	05/09/02
Work Order No:	02-05-0416
Preparation:	EPA 5030B
Method:	EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-5,153	Aqueous	GC/MS T	N/A	05/10/02	051002AW

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	92	95	72-127	3	0-25	
Carbon Tetrachloride	88	89	70-130	1	0-25	
Chlorobenzene	100	103	72-131	3	0-25	
1,2-Dichlorobenzene	100	102	70-130	2	0-25	
1,1-Dichloroethene	96	92	69-127	4	0-25	
Toluene	93	97	75-124	5	0-25	
Trichloroethene	90	92	60-137	3	0-25	
Vinyl Chloride	104	103	79-118	1	0-25	
Methyl-t-Butyl Ether (MTBE)	86	83	80-120	3	0-25	
Tert-Butyl Alcohol (TBA)	81	74	60-140	9	0-25	
Diisopropyl Ether (DIPE)	89	90	60-140	2	0-25	
Ethyl-t-Butyl Ether (ETBE)	87	88	60-140	2	0-25	
Tert-Amyl-Methyl Ether (TAME)	85	85	60-140	1	0-25	
Ethanol	75	75	60-140	0	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

TRC-Alton Geoscience, Inc.		Date Received:	05/09/02
21A Technology Drive		Work Order No:	02-05-0416
Irvine, CA 92718-2366		Preparation:	EPA 5030B
		Method:	EPA 8260B

Project: Cenco / 251016-01

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
02-05-0434-1	Aqueous	GC/MS-T	N/A	05/14/02	02050434-1

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	101	99	72-127	2	0-25	
Carbon Tetrachloride	105	99	70-130	6	0-25	
Chlorobenzene	97	98	72-131	1	0-25	
1,2-Dichlorobenzene	99	100	70-130	1	0-25	
1,1-Dichloroethene	117	102	69-127	13	0-25	
Toluene	98	100	75-124	2	0-25	
Trichloroethene	101	98	60-137	3	0-25	
Vinyl Chloride	107	99	70-130	8	0-25	
Methyl-t-Butyl Ether (MTBE)	113	105	80-120	8	0-25	
Ethanol	116	116	60-140	0	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

TRC-Alton Geoscience, Inc.
21A Technology Drive
Irvine, CA 92718-2366

Project: Cenco / 251016-01

Date Received: 05/09/02
Work Order No: 02-05-0416
Preparation: EPA 5030B
Method: EPA 8260B

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-5,160	Aqueous	GC/MS T	N/A	05/13/02	051302BW

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	100	100	72-127	0	0-25	
Carbon Tetrachloride	104	99	70-130	5	0-25	
Chlorobenzene	98	99	72-131	1	0-25	
1,2-Dichlorobenzene	99	100	70-130	1	0-25	
1,1-Dichloroethene	115	103	69-127	10	0-25	
Toluene	98	101	75-124	3	0-25	
Trichloroethene	100	98	60-137	2	0-25	
Vinyl Chloride	104	99	79-118	4	0-25	
Methyl-t-Butyl Ether (MTBE)	109	103	60-120	6	0-25	
Tert-Butyl Alcohol (TBA)	108	101	60-140	7	0-25	
Diisopropyl Ether (DIPE)	104	104	60-140	0	0-25	
Ethyl-t-Butyl Ether (ETBE)	102	101	60-140	1	0-25	
Tert-Amyl-Methyl Ether (TAME)	99	99	60-140	0	0-25	
Ethanol	101	102	60-140	1	0-25	

Calscience Environmental Laboratories, Inc.

GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 02-05-0416

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.

[illegible]AL[illegible]ENC[illegible] ENV[illegible]NM[illegible]AL
LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 • FAX: (714) 894-7501

Date 5-09-02

Page 1 of 1

LABORATORY CLIENT: TRC

ADDRESS: 21 Technology Dr.

CITY: Irvine STATE: Ca. ZIP: 92618

TEL: 9497530101 FAX: 9497530111 E-MAIL:

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☐ 5 DAYS ☒ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ COELT REPORTING

SPECIAL INSTRUCTIONS:

CLIENT PROJECT NAME / NUMBER: 251016-01 CENCO

PROJECT CONTACT: Kallie Field

SAMPLER(S): (SIGNATURE) Edmund Smith

COELT LOG CODE ☐☐☐☐

P.O. NO.:

LAB USE ONLY: 05-0416

COOLER RECEIPT TEMP = 0 °C

REQUESTED ANALYSES

LAB USE ONLY	GEIMS ID	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G) EPA 8015M	TPH (D) or	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B) EPA w/OXYS	VOCs (5035 / 8260B) EnCore	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EOB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	Methane (RSK-175M)	Iron+2-Ferrous Iron (SM 3500-Fe D)	Alkalinity (SM 2320 B) Anions (Nitrate & sulfate) (EPA 300.0)	VOCs & TPH-G	VOCs (8260 W/MTBE)
1		MW-201	5-09-02	6:42	G.W.	6					X													
2		MW-204		7:46		6																		
3		MW-107		8:36		6																		
4		MW-503B		9:31		6														X	X	X		
5		MW-502		10:17		6 VOAs 2 plastic cooler																		
6		MW-601A		10:58		6																	X	
7		TRC-Alton #3				6																		X
8		Trip Blank				2																		

Relinquished by: (Signature) Edmund Smith

Received by: (Signature) [signature] Date: 5/9/02 Time: 1346

Relinquished by: (Signature)

Received by: (Signature) Date: Time:

Relinquished by: (Signature) [signature]

Received for Laboratory by: (Signature) [signature] Date: 5/9/02 Time: 1440

09/10/01 Revision

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.
[illegible] of 3 of our T/Cs are printed on the reverse side of the Yellow and Pink copies respectively.

Q&Q Graphic (714) 898-9702

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 02-0 5 - 0 9 1 6

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: TRC

DATE: 5/9/02

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

- ____ Chilled, cooler with temperature blank provided.
- ✓ Chilled, cooler without temperature blank.
- ____ Chilled and placed in cooler with wet ice.
- ____ Ambient and placed in cooler with wet ice.
- ____ Ambient temperature.

4 °C Temperature blank.

LABORATORY (Other than Calscience Courier):

- ____ °C Temperature blank.
- ____ °C IR thermometer.
- ____ Ambient temperature.

Initial: MC

CUSTODY SEAL INTACT:

Sample(s): ____ Cooler: ____ No (Not Intact) : ____ Not Applicable (N/A): ✓

Initial: MC

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	—		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers for analyses requested	✓		
Proper preservation noted on sample label(s)	✓		
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: MC

COMMENTS: