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REPORT ON THE SPECIAL SAMPLING ACTIVITIES AT THE LAND TREATMENT UNIT

GIANT REFINING COMPANY

CINIZA REFINERY

PREPARED BY:

LYNN SHELTON
SENIOR ENVIRONMENTAL COORDINATOR

NOVEMBER 10, 1993

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HAZARDOUS WASTE
PROGRAM

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TABLE 1: Observed Organic Constituents

1.0 INTRODUCTION

Additional sampling activities were performed at the Land Treatment Area (LTA) during the period of September 1, 1993 to September 10, 1993 to further characterize the possible migration of hazardous constituents into the area beneath the treatment zone (BTZ) as suggested in the August 18, 1993 letter from the New Mexico Environmental Department Hazardous and Radioactive Materials Bureau.

Twelve additional borings were drilled and sampled within the LTA and two additional background borings were completed. Those boring sites were selected because it was felt they had the greatest possibility of migration due to past management practices.

The results of the sampling event were used to develop permit modifications.

2.0 SITE SURVEY

Due to the fact that the site was satisfactorily characterized by a survey, using the engineering firm of Sterling and Mataya, Inc., prior to the 1992 LTA sampling event, no further site surveys were performed.

3.0 SAMPLING ACTIVITIES

The firm of Scott, Allard, and Bohannon, Inc. (3001 West Indian School Road, Suite 312, Phoenix, Arizona 85017) was chosen to provide oversight of the sampling activities. Mr. Larry Dony represented Scott, Allard, and Bohannon as the field representative/technician. His report of the site, layout, drilling and sampling activities is included as Appendix A.

The firm of Precision Engineering, Inc. (2001 Copper Avenue, Suite 1, Las Cruces, New Mexico 88004) performed the drilling operations, coring, and equipment decontamination. Mr. William Kingsley, P.E., supervised all operations by this firm.

Coordination of the sampling event was by Lynn Shelton, CET, of Giant Refining Company. No unusual problems were encountered during sampling, drilling, or decontamination.

3.1 SOIL SAMPLES

During the drilling of sample bores, a hollow stem auger with a two and one-half inch CME tube was used to drill and advance the sample tube. The carbon steel CME tube was set up to advance six inches ahead of the augers to prevent contamination during the removal and addition of auger flights. Continuous coring was achieved in this manner. A carbon steel CME tube was used to preclude any bias of chrome content that has been found to occur with stainless steel CME tubes. Two equipment rinsate samples were taken to verify decontamination.

To be absolutely certain that no cross-contamination would occur, the first auger flight was advanced from the surface through the zone of incorporation (ZOI) into the native soil within the BTZ. Each auger flight and each CME tube was decontaminated after each advance by washing with Liquinox soap and by high pressure steam cleaning. Samples were collected at each specified interval with decontaminated metal spatulas and placed on clean plastic before filling the sample bottles.

Measurement to each sampling interval was achieved using an engineer's tape from the original, native soil surface and are accurate to within one inch.

The samples were essentially red to reddish brown clay with some interbedded sands and silt (see boring logs, Appendix B). There was no indication of hydrocarbon staining or odor on any of the soil samples.

3.2 SAMPLE IDENTIFICATION

The identification system used in this sampling event, to identify sample location and depth, is a continuation of the identification system used in the July, 1992 sampling event. The various components of the system are explained below:

```
(1)      (2)  (3)(4)
BTZ - C - 9 - 5.0 D
```

(1)	BTZ-C	=	Below Treatment Zone Characterization
(2)	9	=	Sample and Site Number
(3)	5.0	=	Depth
(4)	D	=	Duplicate (for QA/QC)
	E	=	Equipment Rinsate
	A	=	Archive

3.3 SAMPLE ARCHIVES

The decision to archive samples below fifteen feet, until it was determined if analysis was necessary, was made to help control cost. In that the statistical calculations showed no evidence of significant increase in constituent levels below ten feet, the samples held in archive were not analyzed.

4.0 LABORATORY ANALYSIS

All samples were shipped via Federal Express to Core Laboratories (10703 East Bethany Drive, Aurora, Colorado 80014) where they were analyzed for chromium and lead. Additionally, the samples from the seven and one-half foot depth were analyzed for the Appendix IX Volatiles and Semi-Volatiles (40 CFR 264). The following methods were used in analyzing the soil and water samples.

SW-842 Method 8240, Volatile Organics
SW-842 Method 8270, Semi-Volatile Organics
SW-842 Method 6010, Total Metals by ICP

Original analytical data is included in Appendix A.

4.1 PROJECT QUALITY ASSURANCE

A "Laboratory Quality Assurance Plan" from Core Laboratories is available on site and outlines the quality assurance and quality control procedures to be followed by the laboratory in analyzing the soil and water samples.

5.0 STATISTICS

Selection of statistical tests to evaluate the analytical data is critical to the determination of statistical increase (or lack of increase) of specific samples.

The correct statistical test is one that can supply the information needed to make a valid statistical comparison at a reasonable confidence level. Factors in selecting a statistical test include the number of samples, number of units in the background population, and parametric/non-parametric factors.

The Coefficient of Variation (CV) test was used to determine normality/non-normality of the data (Figures 1 and 2). This test helps establish which statistical tests are valid for a given population of data. The CV in this case identified those constituents (Appendix IX, Constituents) whose data was not normally distributed and, in the absence of background data which precludes normal statistical comparison, was the only statistical test available. The CV of chromium and lead indicated that all data, at all depths, is normally distributed.

A Cochran's Approximation of the Behrens-Fisher Students T test would have been an appropriate test for five foot depth intervals, and is included for comparison (Figures 3 and 4), but the small background population significantly reduced the confidence level when trying to test the seven and one-half, ten, and fifteen foot depth intervals.

A tolerance interval test was selected for statistically comparing chromium and lead in individual samples to the levels in the background samples.

A variation of the tolerance interval test was introduced to compensate for the small background population at the seven and one-half, ten, and fifteen foot depth intervals. In that there is no number in a one sided tolerance table for two samples, the one sided normal tolerance factor for three samples was used. Although normal regression was used to establish a tolerance limit for two samples, the number, at 11.5320, was considered to give too high a tolerance limit and was rejected. Using a tolerance factor for three samples has the effect of creating a smaller tolerance limit, but is considered to give more accurate numbers.

A tolerance interval is constructed from the data on uncontaminated background samples. The concentrations from samples of concern are then compared with the tolerance interval. If concentrations do not fall in the tolerance interval (below the upper tolerance limit), significant statistical increases can be reasonably assumed to have taken place.

Tolerance intervals are most appropriate for use at facilities that do not exhibit high degrees of spatial variation between background samples and samples of concern. Facilities that overlie extensive, homogenous geologic deposits (such as thick, homogenous lacustrine clays) that do not naturally display hydrogeochemical variations are suitable for this statistical method of analysis.

All available background data was used to construct the tolerance interval/upper tolerance limit. After constructing the tolerance level, the individual samples of concern were plotted using a graph (Figures 5 to 12).

As can be seen by the graphs, indications of chromium contamination

FIGURE 1

COEFFICIENT OF VARIATION

Many statistical procedures assume that the data are normally distributed. The concentration of a hazardous constituent is inherently non–negative, while the normal distribution allows for negative values. However, if the mean of the normal distribution is sufficiently above zero, the distribution places very little probability on negative observations and is still a valid approximation. One simple check that can rule out use of the normal distribution is to calculate the coefficient of variation of the data.

To compute the coefficient of variation:

$$CV = S/X$$

CV = COEFFICIENT OF VARIATION
S = STANDARD DEVIATION
X = SAMPLE MEAN

If the result of the above equation is greater than one, then it is evidence that normal distribution does not fit the data adequately.

FIGURE 2

COEFFICIENT of VARIATION

CHROMIUM

Depth	X	S	CV
5'	14	6.807	0.486
7.5	12.077	6.304	0.522
10'	11.769	7.683	0.653
15'	8.583	5.178	0.603

LEAD

Depth	X	S	CV
5'	11.154	3.848	.345
7.5	11.500	4.301	.374
10'	11.231	3.586	.319
15'	9.42	3.651	.388

APPENDIX IX

Parameter	X	S	CV
Acetone	683.333	1476.226	2.16
Benzene	2.667	1.135	.426
2–Butanone	81.667	85.369	1.045
1,1,2,2,–tetrachloroethane	4.000	5.918	1.479
Tetrachloroethene	9.583	12.754	1.331
Dichloromethane	8.000	6.328	.790
bis(2–Ethylhexyl)phthalate	219.583	189.082	.861

SPECIAL SAMPLE EVENT

Facility Name: GIANT CINIZA EPA ID #: NMD000333211-2

Date: OCT 93 Parameter: Chrome

Sample # 5.0' Prepared by: Lynn Shelton

Please list the values calculated for the background parameters on the Background Indicator Parameter Calculation Sheet:

X(b)=	4.929	S(b)2=	1.859	t(b)=	1.771
V(b)=	0.13278571	n(b)=	14		

Please list the current values for this monitoring well.

	Value	(Value – X(m))2
1	9	25
2	5	81
3	7	49
4	5	81
5	6	64
6	23	81
7	17	9
8	20	36
9	22	64
10	20	36
11	16	4
12	13	1
13	19	25

Total 1	182	Total 2	556

Mean value X(m)	14
Variance S(m)2	46.3333333

t(m)=	1.782
V(m)=	11.5833333

t(*)=	2.65010620
t(c)=	1.78187533

If t(*) abeolute is less than t(c) there has not been an increase in the value

FIGURE 3

SPECIAL SAMPLE EVENT

Facility Name: GIANT CINIZA **EPA ID #:** NMD000333211-2

Date: OCT 93 **Parameter:** Lead

Sample # 5.0' **Prepared by:** Lynn Shelton

Please list the values calculated for the background parameters on the Background Indicator Parameter Calculation Sheet:

X(b)=	10.5	S(b)2=	1.9	t(b)=	1.771
W(b)=	0.13571428	n(b)=	14		

Please list the current values for this monitoring well.

	Value	(Value – X(m))2
1	10	16
2	7	49
3	10	16
4	10	16
5	7	49
6	19	25
7	12	4
8	10	16
9	16	4
10	16	4
11	12	4
12	6	64
13	10	16
Total 1	145	Total 2 283

Mean value X(m)	11.1538461
Variance S(m)2	23.5833333

t(m)=	1.782
W(m)=	5.89583333

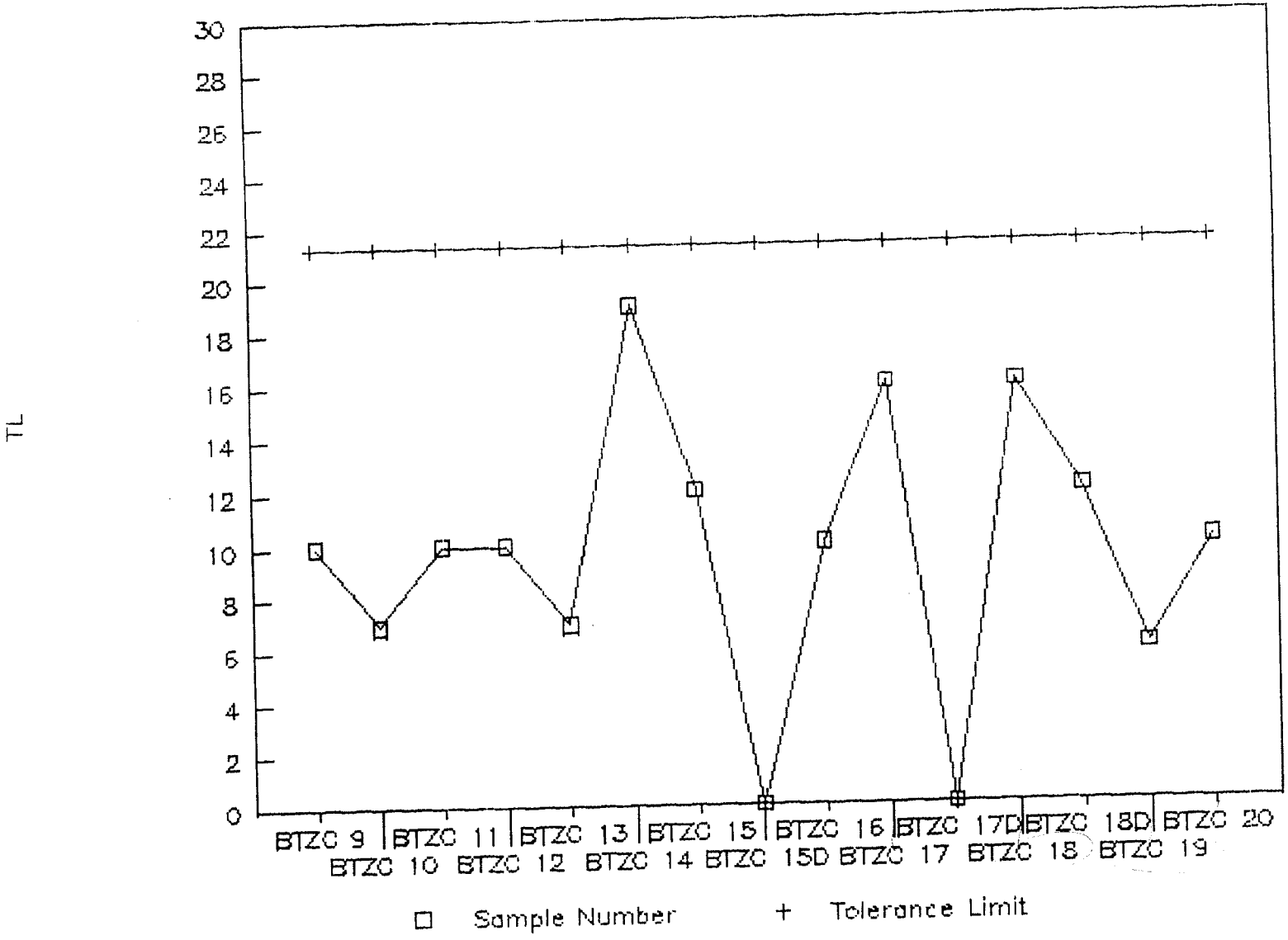
t(*)=	0.26623257
t(c)=	1.78175249

If t(*) absolute is less than t(c) there has not been an increase in the value

FIGURE 4

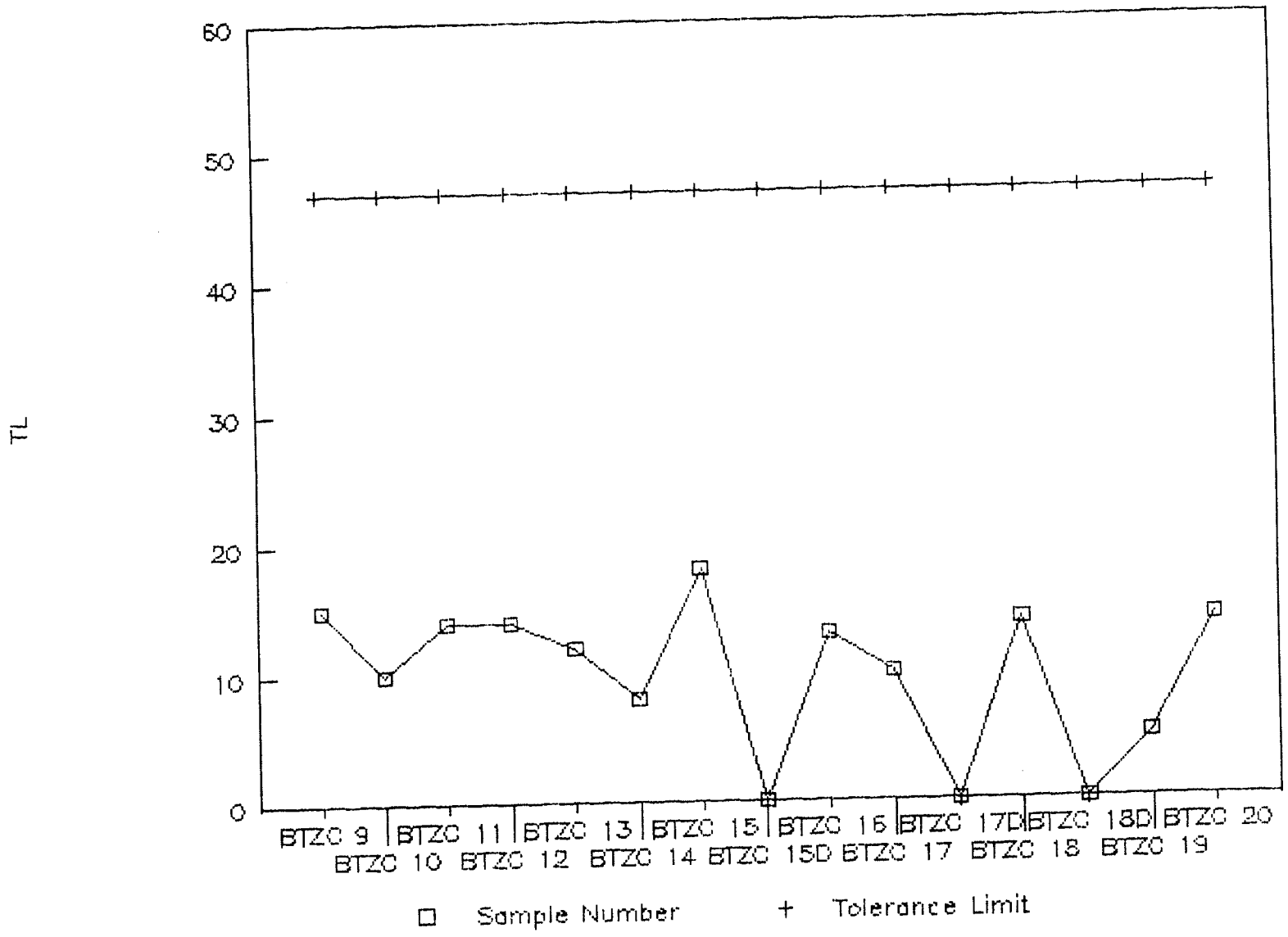
TOLERANCE INTERVAL

LEAD 5'



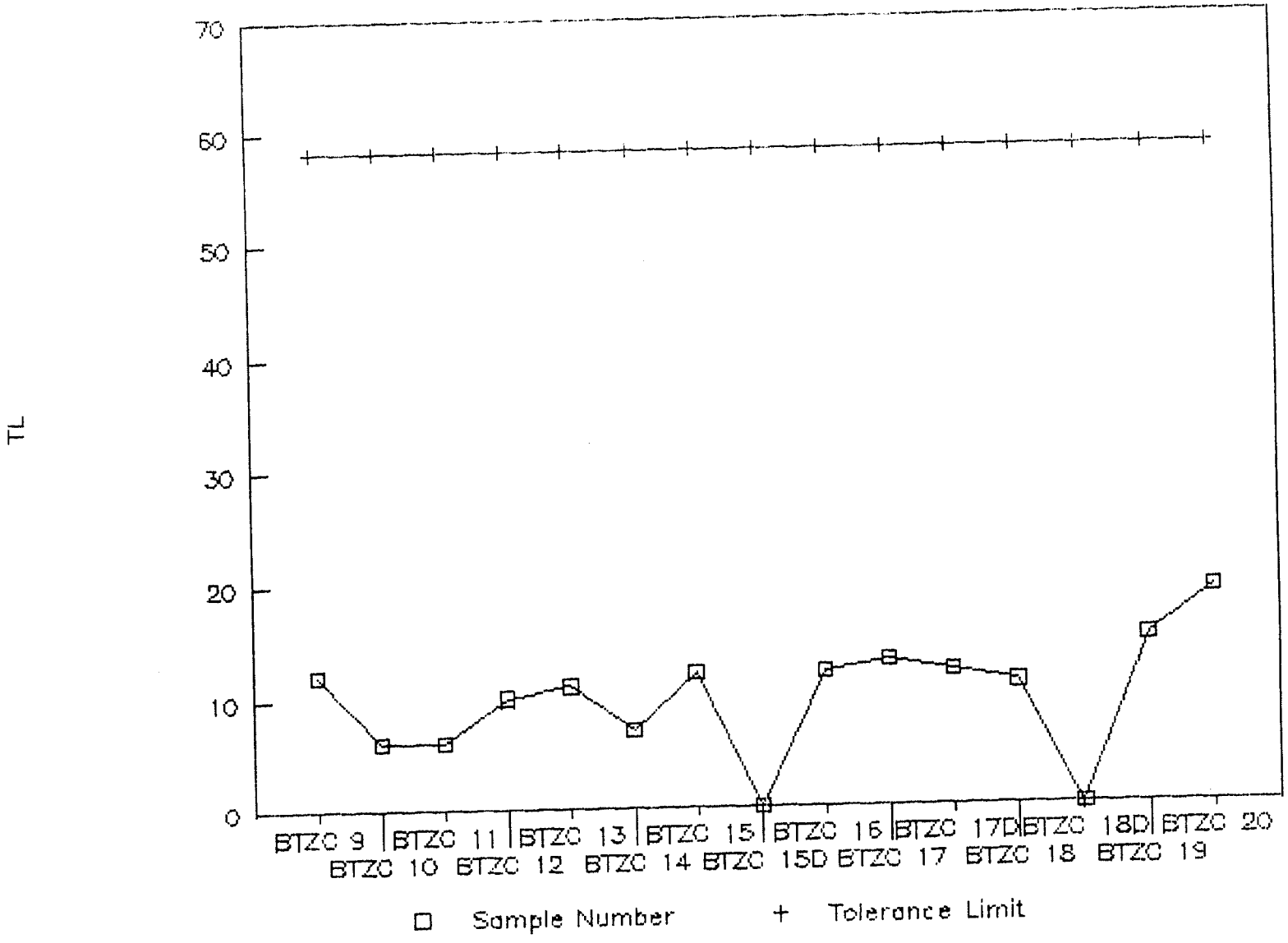
TOLERANCE INTERVAL

LEAD 7.5'



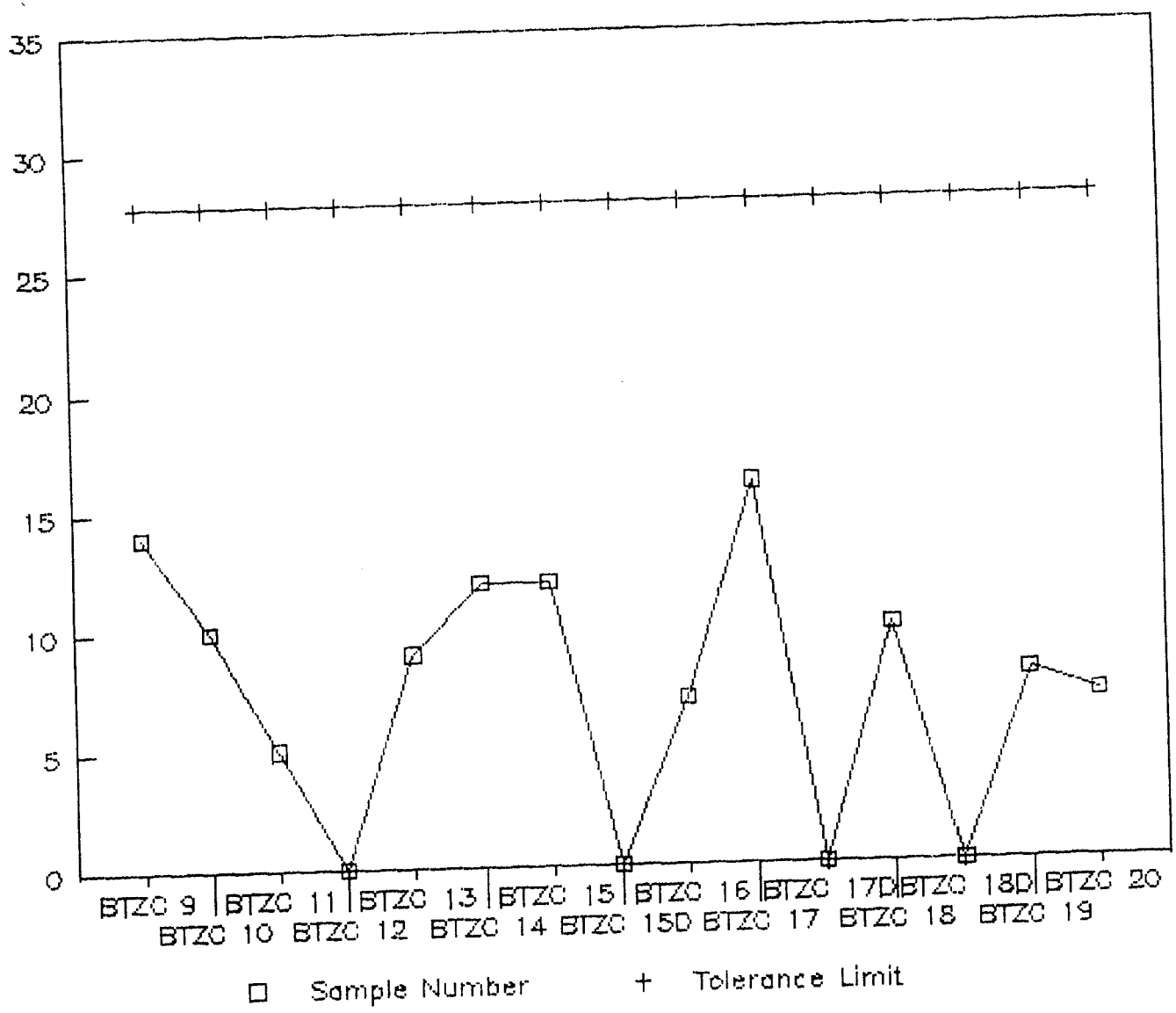
TOLERANCE INTERVAL

LEAD 10'



TOLERANCE INTERVAL

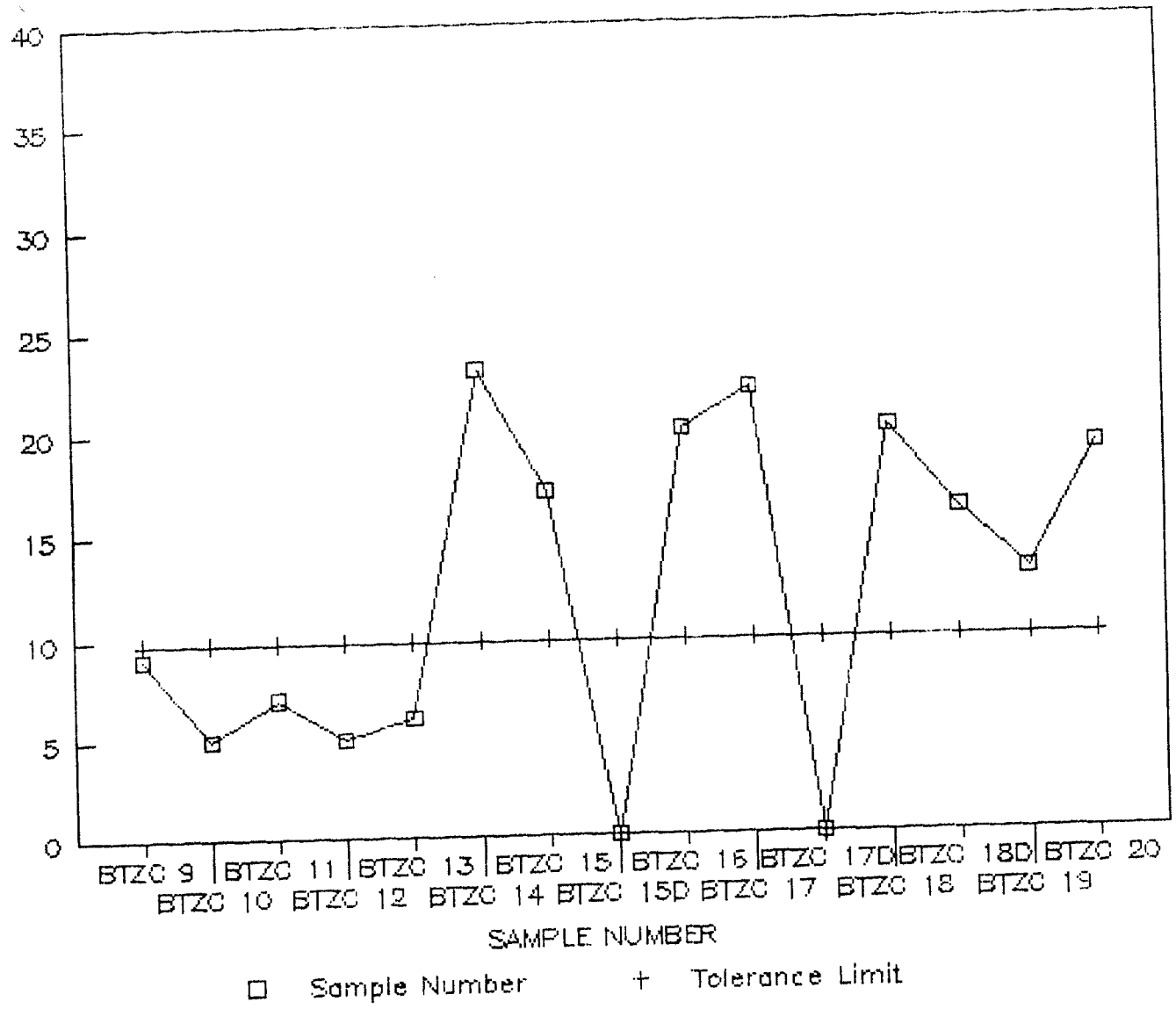
LEAD 15'



TL

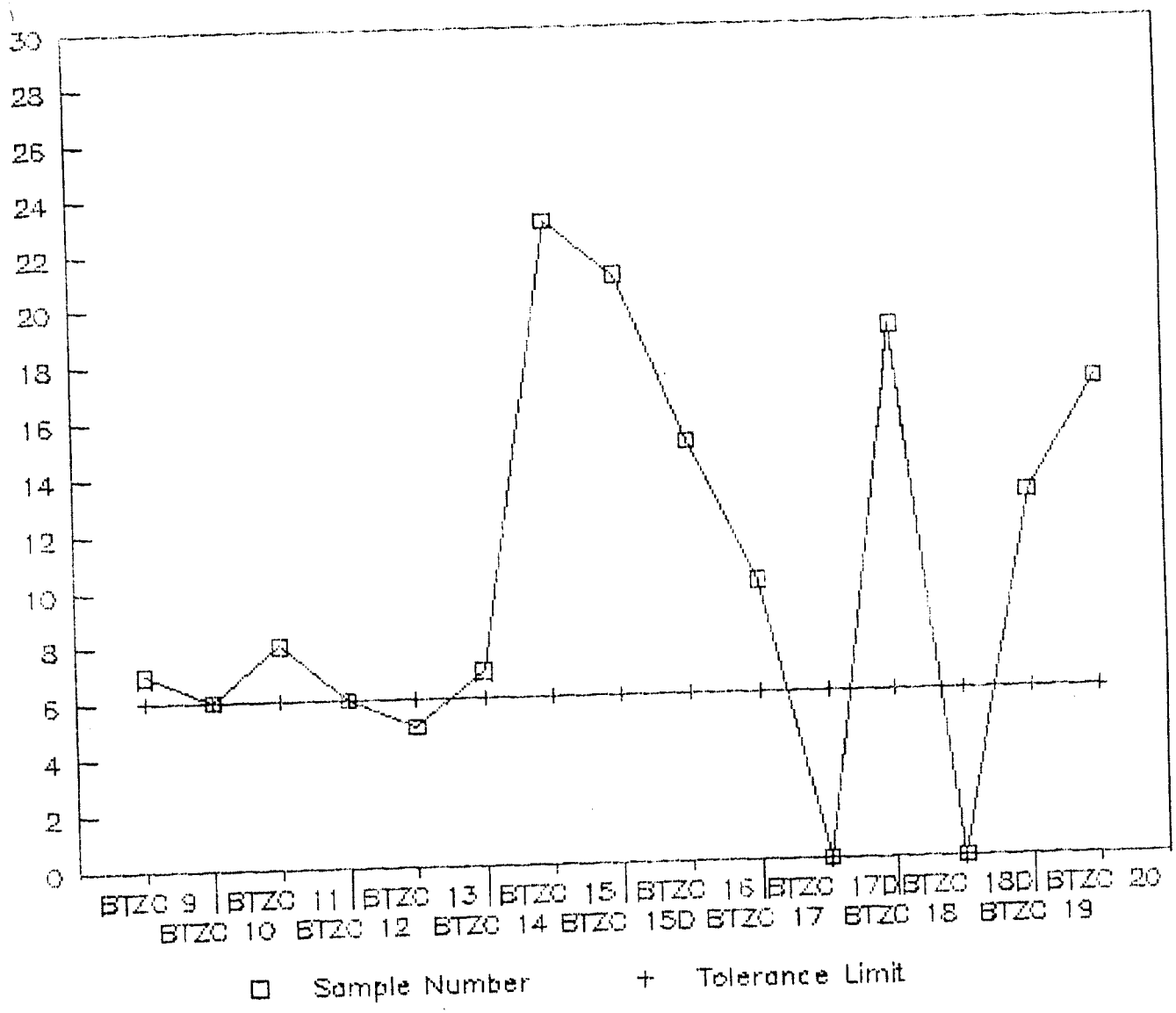
TOLERANCE INTERVAL

CHROMIUM 5'



TOLERANCE INTERVAL

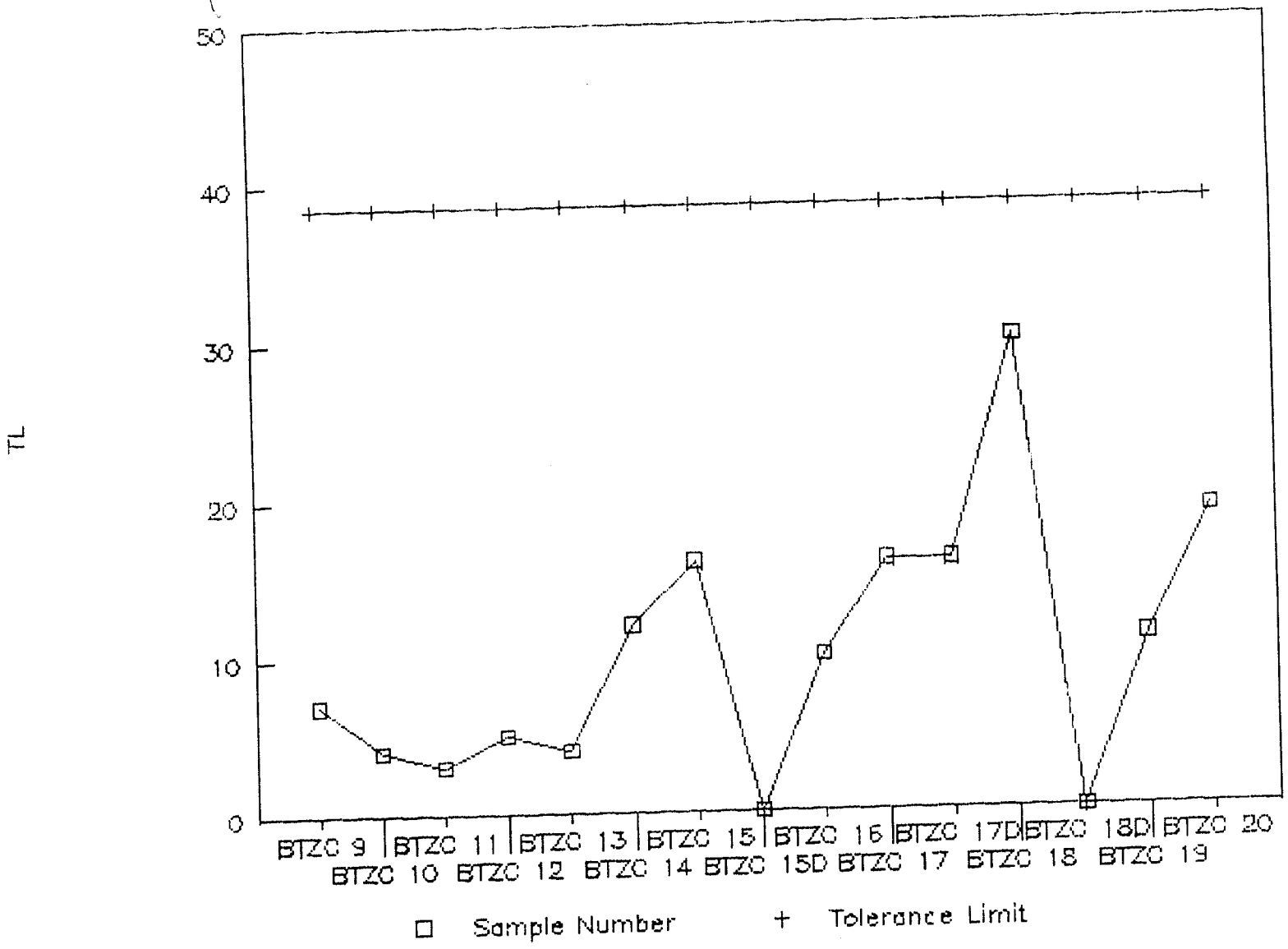
CHROMIUM 7.5'



TL

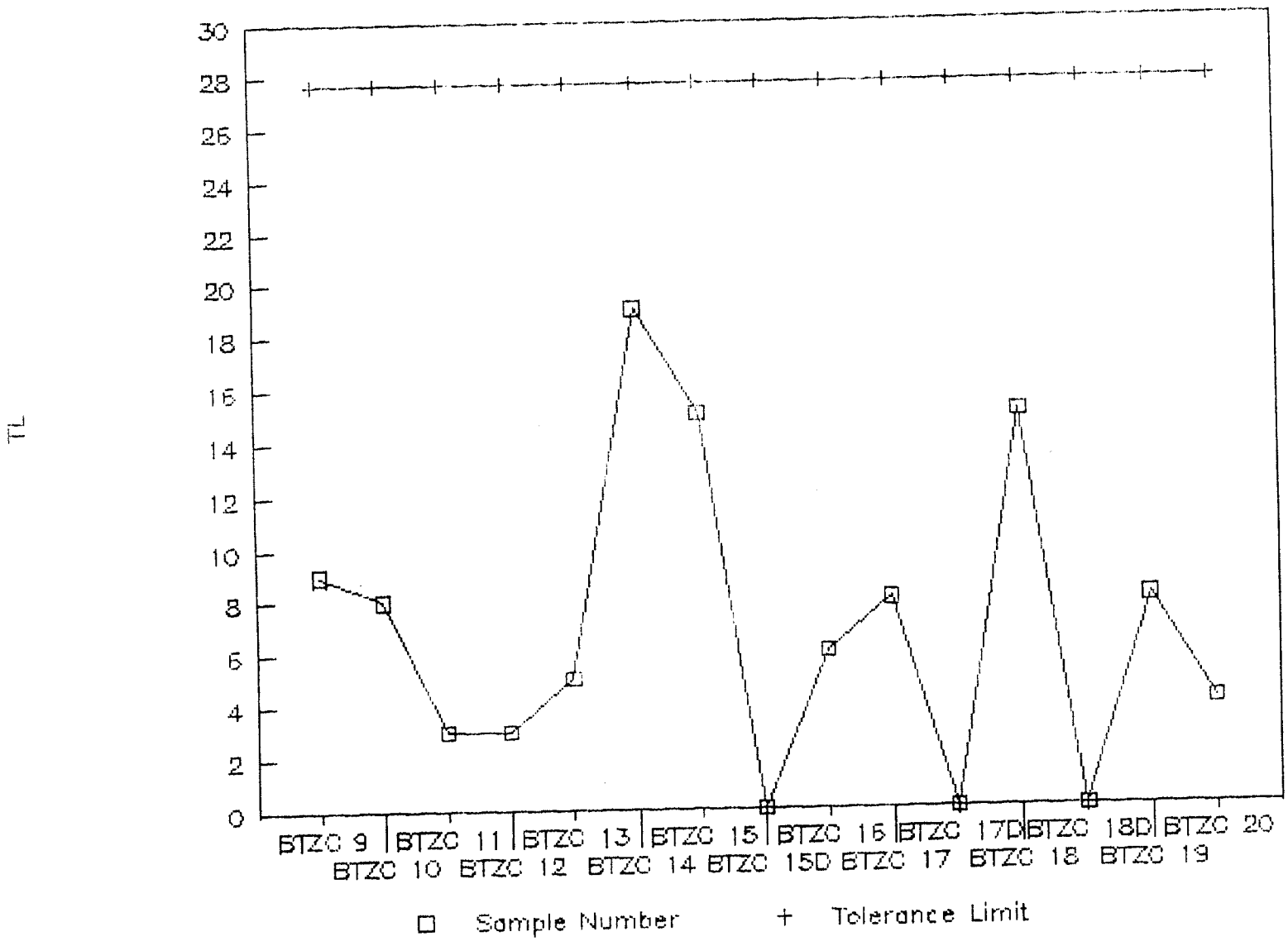
TOLERANCE INTERVAL

CHROMIUM 10'



TOLERANCE INTERVAL

CHROMIUM 15'



Scott, Allard, & B

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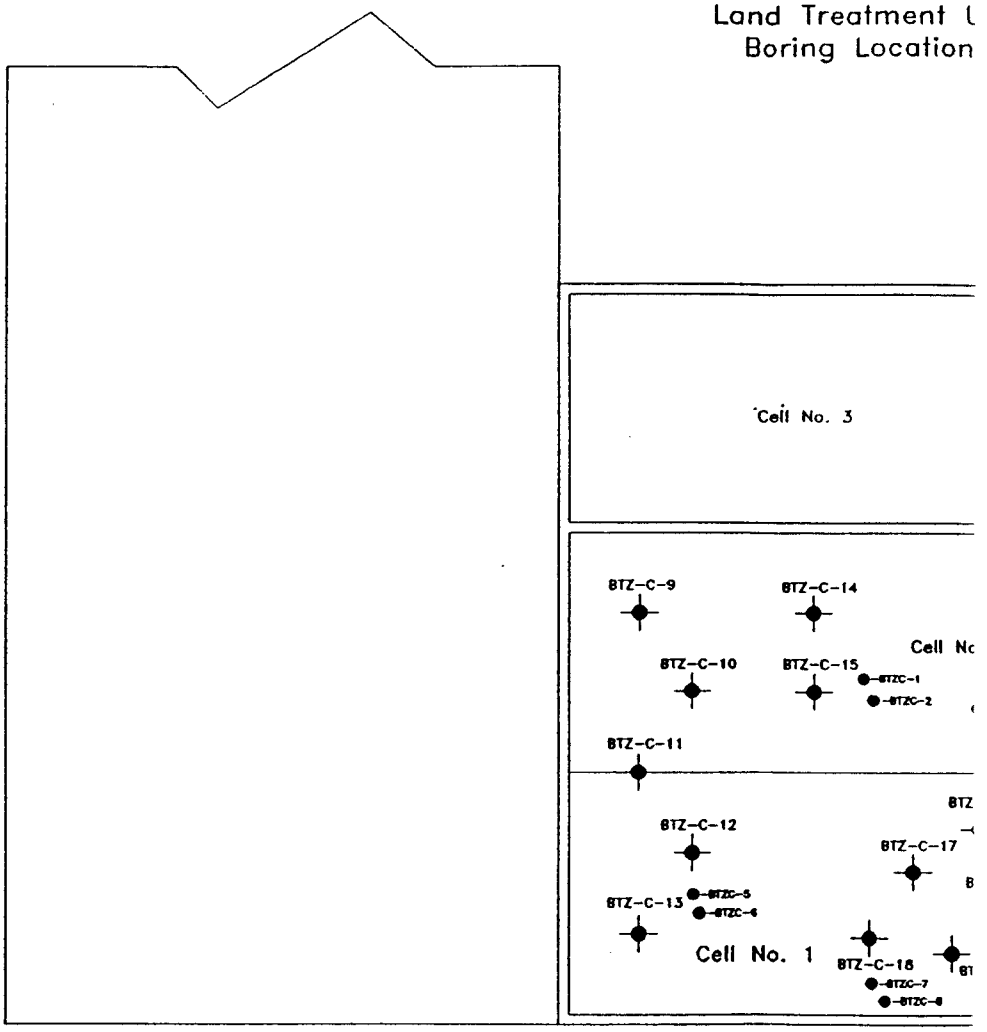
Figure 1
Giant Refining Com
Land Treatment U
Boring Location



Air Strip

September, 1993 Soil Sampling

July, 1992 Soil sampling

& Bohannan, Inc.

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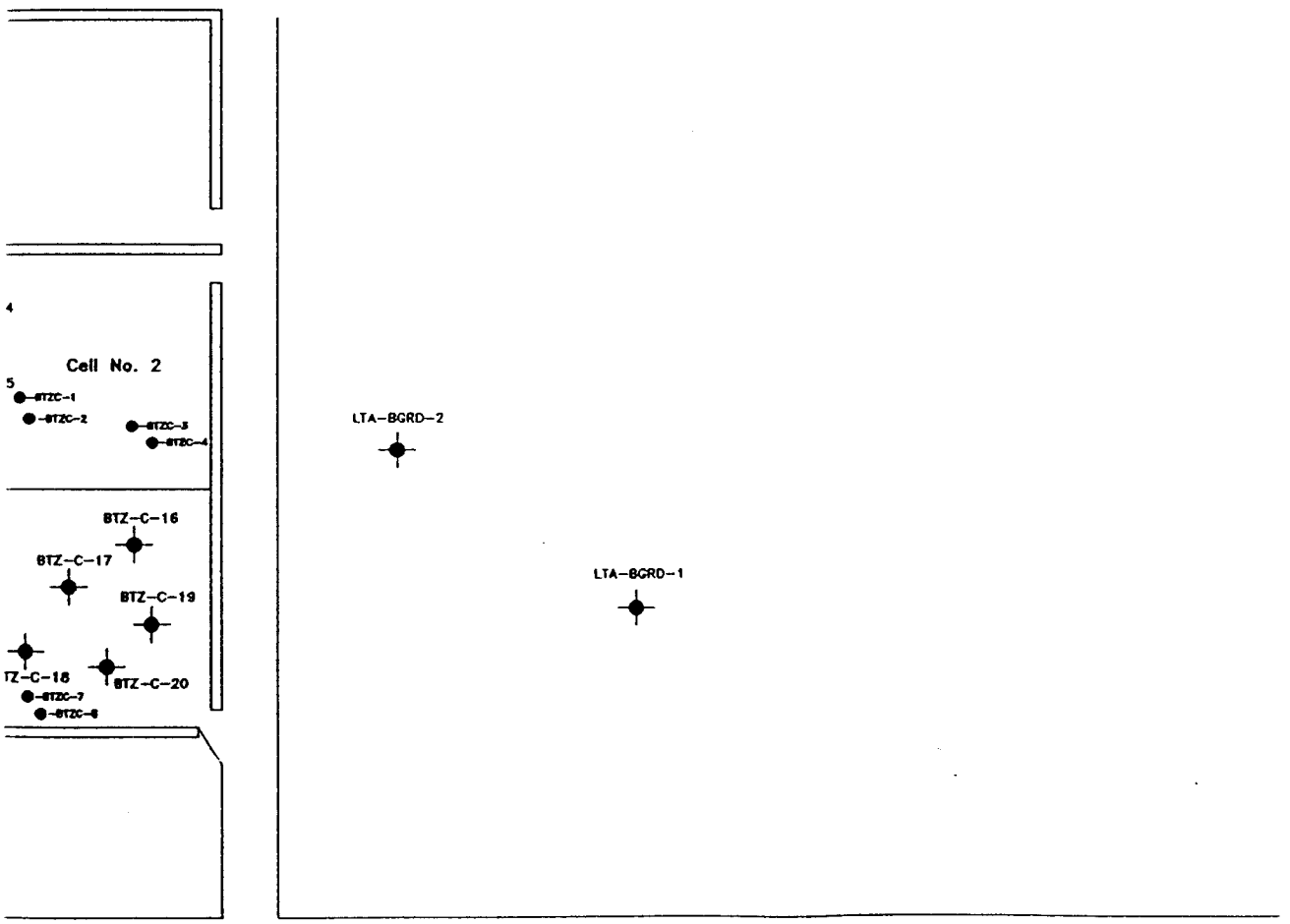
ıtment Unit
Locations



Strip

N

NOT TO SCALE

at the five and seven and one-half foot depth intervals are observed in 62% of the samples at the five foot interval and 77% of the samples at the seven and one-half foot interval, but remain below the upper tolerance limit at the ten and fifteen foot intervals. There are no indications of lead contamination at any depth interval.

6.0 DATA SUMMARY

Results of the organic analysis of samples at the seven and one-half foot interval are shown in Table 1. It can be seen that there appears to be contamination from several volatiles at this interval. There are several explanations for this, including, obviously, that volatile fractions have migrated downward with non-volatile fractions and water. The constituent Dichloromethane (more commonly known as Methylene Chloride) is a common lab contaminant that has appeared uniformly throughout the two sampling events. Although Dichloromethane did not appear in the Method Blank, conversations with the laboratory indicate that the preponderance of data is likely laboratory contamination, as that constituent is used in the extraction process and is not a hydrocarbon fraction seen as a result of our refining process. The constituent 2-Butanone (commonly known as Methyl Ethyl Ketone [MEK]) is a plastic cleaner and solvent and has been observed in the LTA and the LTA background plot at the five foot depth interval before (1988 Report). Like Dichloromethane and the other volatiles seen in this event, 2-Butanone typically is a solvent and is not a hydrocarbon fraction seen as a by-product of our refining process. Acetone, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, and Benzene (as a fraction of the other constituents) are other solvent-type hydrocarbon fractions.

While some of the volatile constituents can be attributed to lab contamination, others are more likely the result of random application of cleaning solvents. Most interesting is the fact that, other than one observation of bis(2-ethyl-hexyl)phthalate, a plasticizer, no other semi-volatiles from the Appendix IX list were observed. This is the inverse of what could normally and reasonably be seen to occur with hydrocarbon migration. It should also be noted that only two of the volatiles, benzene and 1,1,2,2-Tetrachloroethane, are on the WQCC water standards list (WQCC 82-1, Amendment No. 4) and only one, 1,1,2,2-Tetrachloroethane exceeds the action level.

The metal constituents observed were derived from applications of refinery sludges, most notably from the cooling tower, API Separator, tank bottoms and bundle cleaning operation. As of

TABLE 1

LAND TREATMENT CHARACTERIZATION

SEPTEMBER, 1993

APPENDIX IX – VOLATILE & SEMI-VOLATILE

PARAMETER	UNITS	SAMPLE NUMBER BTZC 9	BTZC 10	BTZC 11	BTZC 12	BTZC 13	BTZC 14
ACETONE	ug/kg	900	1800	ND	ND	ND	ND
BENZENE	ug/kg	1	6	ND	ND	ND	ND
2-BUTANONE	ug/kg	140	340	ND	ND	ND	ND
1,1,2,2,TETRACHLORETHANE	ug/kg	ND	23	ND	ND	ND	ND
TETRACHLORETHENE	ug/kg	ND	ND	41	31	ND	ND
DICHLOROMETHANE	ug/kg	ND	ND	ND	ND	6	14
BIS(2-ETHYLHEXYL)PHTHALATE	ug/kg	ND	ND	ND	ND	ND	ND

	UNITS	BTZC 15	BTZC 16	BTZC 17	BTZC 18	BTZC 19	BTZC 20
ACETONE	ug/kg	ND	ND	ND	ND	ND	ND
BENZENE	ug/kg	ND	ND	ND	ND	ND	ND
2-BUTANONE	ug/kg	ND	ND	ND	ND	ND	ND
1,1,2,2,TETRACHLORETHANE	ug/kg	ND	ND	ND	ND	ND	ND
TETRACHLORETHENE	ug/kg	ND	5	ND	5	9	9
DICHLOROMETHANE	ug/kg	17	13	16	15	ND	ND
BIS(2-ETHYLHEXYL)PHTHALATE	ug/kg	ND	820	ND	ND	ND	ND

November, 1990, all sludges listed above were land-banned and have not been applied since. Cooling tower chemicals that previously were of a Chromium base are now Zinc based. Additions of materials containing Chromium or Lead will not be made to the LTA.

7.0 CONCLUSIONS

In reviewing the data, it is clear that some contamination has migrated below the treatment zone.

The metals constituents show a downward trend to the seven and one-half foot depth interval, after which the levels do not show evidence of significant contamination. Although individual results show an occasional high number for chromium, significant statistical increases are absent. As a result, the archived samples to thirty feet have not been analyzed. Using the data acquired in the last two special sampling events (1992 and 1993) and the data from the 1993 annual groundwater sampling event for the early detection wells (Part B, Attachment G,2,A,ii), for which chromium results are (in mg/l):

SMW-3	SMW-4	SMW-5	SMW-6	SMW-4D
.012	.014	.020	.012	.011

(WQCC Action Level = .05 mg/l)

then, Giant concludes that no potential to cause harm to human health or the environment due to metals migration from the LTA exists.

The volatile constituents also show evidence of contamination below the treatment zone at the seven and one-half foot depth interval. There is no clear relationship between the various constituents at the five and the seven and one-half foot depth intervals. This tends to indicate the potential of random application of solvents. The absence of semi-volatile constituents with the volatile constituents further complicates the assessment. Normal hydrogeology indicates that the concentration of volatiles will decrease with depth and the concentration of semi-volatiles will increase with depth assuming constant migration. Based on the data from the special sampling events and the data from the 1993 annual groundwater sampling event for the early detection wells, which showed no volatile or semi-volatile constituents, Giant concludes that no potential to cause harm to human health or the environment due to hydrocarbon migration from the LTA exists.

These conclusions are based also on the fact that listed refinery sludges are materials that are hazardous by characteristic (TCLP, corrosive, et al.) are specifically land banned and, therefore,

additions of materials that could contribute to further migration will not be applied. Metals in the native clay soils underlying the LTA are tightly bound (and thus immobilized) and the volatile constituents will biologically degrade over time. These assumptions are based on the recommended changes in the management practices of the LTA discussed in the following section.

Based on these conclusions, Giant proposes to continue operation of the LTA, using modified management practices, and to modify the operating permit as necessary.

8.0 RECOMMENDATIONS

Giant recommends the following changes to current management practices of the LTA to enhance microbial action and to minimize the potential of migration of hazardous constituents:

I. Level Land Treatment Area - Because there is ≈2.9' of elevation change in the LTA from east to west and that simply moving ≈1.5' of soil from the east side to the west side would inhibit microbial action, the LTA will be divided into two level tiers with an 8-10" berm between the level sections. This will prevent ponding on the west side of the LTA and will enhance the irrigation of the LTA during the period of degradation.

II. Oil and grease will not exceed 10% by weight in the zone of incorporation.

III. The LTA will be tilled twice after each application of waste and at least monthly during the period of degradation (April 1 through October 31).

IV. Soil ph will be checked bi-weekly during the degradation season and maintained between 6.0 and 9.0 units to promote microbial action and to prevent further migration of immobilized metals.

V. Water will be added during the degradation season to insure microbial action.

VI. The carbon: nitrogen: phosphorous ratio will be monitored to insure optimum microbial action.

VII. Microbial action will be monitored, in the ZOI, on a monthly basis during the degradation season.

VIII. Additional soil samples will be collected to further assess possible migration of organic constituents using the following schedule:

<u>1993</u>

10.0' depth interval - 4 random samples

1994

15.0' - 20' - 4 random samples each
(if data at shallower depths
indicates possible migration)

1995

25.0' - 30.0' - 4 random samples each
(if data at shallower depths
indicates possible migration)

All samples will be analyzed for Appendix IX constituents.

IX. Samples collected from SMW-3, SMW-4, SMW-5 and SMW-6 during the annual groundwater sampling event will be analyzed for the Appendix IX constituents.

APPENDIX A

CONSULTANT'S REPORT

SCOTT, ALLARD & BOHANNAN, INC.
ENVIRONMENTAL & CHEMICAL CONSULTANTS

SUBSURFACE SOIL SAMPLING
LAND TREATMENT UNIT
CINIZA REFINERY
GIANT REFINING COMPANY
GALLUP, NEW MEXICO

Job No. 93299BJ

NOVEMBER 8,1993

3001 W. Indian School Rd., Suite 312 • Phoenix, Arizona 85017 • (602) 263-0045 • FAX: (602) 263-0749

SCOTT, ALLARD & BOHANNAN, INC.
ENVIRONMENTAL & CHEMICAL CONSULTANTS

November 8, 1993

Giant Refining Company
Ciniza Refinery
Route 3, Box 7
Gallup, New Mexico 87301

Attn: Mr. Lynn Shelton
Environmental Assistant

Re: Subsurface Soil Sampling Report
Land Treatment Unit
Ciniza Refinery
Gallup, New Mexico

Job No. 93299BJ

Dear Mr. Shelton:

Attached is Scott, Allard & Bohannan's report titled "Subsurface Soil Sampling; Land Treatment Unit, Ciniza Refinery, Giant Refining Company, Gallup, New Mexico". The report includes details of field sampling and drilling conditions, and a tabulation and discussion of analytical results. If you have any questions or comments, please do not hesitate to call me at (602) 263-0045.

Sincerely,
Scott, Allard & Bohannan, Inc.

Marilyn G. Hershberger, GIT
Project Manager

Larry R. Donny
Environmental Specialist

Reviewed by: Robert R. Bohannan
Vice President

Copies to: Addressee (3)

F440

3001 W. Indian School Rd., Suite 312 • Phoenix, Arizona 85017 • (602) 263-0045 • FAX: (602) 263-0749

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SUBSURFACE SOIL SAMPLING
LAND TREATMENT UNIT
CINIZA REFINERY
GIANT REFINING COMPANY
GALLUP, NEW MEXICO

Job No. 93299BJ

1. INTRODUCTION

From September 1, 1993 through September 9, 1993, subsurface soil sampling of the Land Treatment Unit (LTU) was conducted at the Ciniza Refinery, Giant Refining Company (Giant) located at Exit 39 of Interstate 40, east of Gallup, New Mexico (Attachment A, Photo No. 1). The soil boring and soil sampling were conducted in accordance with the plan prepared by Lynn Shelton of Giant Refining Co., titled "Sampling Plan; Land Treatment Unit; Giant Refining Company; Ciniza", dated May 19, 1993. This report summarizes the events of this soil sampling.

2. SOIL BORING

Precision Engineering Inc. of Las Cruces, New Mexico, subcontractor to Giant, conducted drilling and soil logging of the LTU. Utilizing a CME drill rig equipped with hollow-stem augers, a total of 14 boreholes were drilled. Twelve of the borings were drilled in cells 1 and 2 of the LTU and two borings were drilled as background borings east of the LTU (Figure 1). Numbering of the borings corresponded to the sample identification numbering system (SINS) used in the initial characterization program of July, 1992. An example of a sample identification number is:

BTZ-C -	11	5.0	D
(1)	(2)	(3)	(4)

(1) Below Treatment Zone Characterization

(2) Sample Number

(3) Depth in Feet

(4) D - Duplicate

E - Equipment Wash

If no letter appears here, it is the original sample.

A 5 foot CME split core barrel, 2.5 inches in diameter (Photo No. 2), was placed in an advance position of the lead auger. The sample tube was pushed into the soil at the same rate as the auger. At each 5 foot interval, the sampling tube was pulled from the soil and disconnected from the drill rod. The core barrel was then opened to access the soil core (Photo No. 3).

Detailed boring log information, was recorded by William H. Kingsley, P.E. of Precision Engineering, Inc. and included lithologic classification, color, grain size, moisture, odor (if applicable) and other descriptive terms. Soil samples were collected (see Section 3) and the CME sampler was decontaminated with a high pressure, high temperature cleaner containing a solution of Liqui-nox and water (see Photo No. 4). After a borehole was completed, the auger stems were decontaminated in the same manner as the CME sampler. All of the soil borings were grouted with a cement slurry to the original surface of the LTU. All drill cuttings were spread within the LTU. A copy of the boring logs is included in Attachment B.

3. SOIL SAMPLING

The LTU consists of three vertical zones: (1) treatment zone which extends to the average depth of approximately 1.3 feet below ground surface (bgs); (2) transition zone, directly below the treatment zone with a average thickness of approximately 0.4 feet; and, (3) the native soil (original LTU soil surface), which starts at a average depth of approximately 1.7 feet bgs. Soil samples were collected at the 5, 7.5, 10, 15, 20, 25, and 30 foot levels from the native soil surface of the LTU. Reference Table I for specific measured depths of the three zones pertaining to each boring.

The samples were obtained utilizing aluminum sample scoops. The sample scoops were decontaminated after each sampling event with a solution of water and Alconox, followed with a deionized water rinse and then a propanol rinse. The sample scoops were then air dried and placed in a zip-lock bag until the next sampling event.

To measure the precision of sampling activities, a total of 5 duplicate samples (5% of the samples) were randomly chosen during the sampling activities. Results of analyzed duplicates are given in Table II. In addition, an equipment blank sample was obtained to determine if the equipment had been sufficiently decontaminated. The equipment blank was obtained by pouring deionized water over and through the sampling equipment, caught in a decontaminated plastic container, and poured into sample bottles.

The soil samples were placed in 4-ounce glass sample containers with screw lids and labeled in accordance with the sampling plan. Head space in the sample jars and handling and exposure of the samples were minimized as much as possible in order to prevent volatilization of any volatile constituents. All sample containers were placed immediately in a chilled cooler prior to their preparation for shipping to Western Atlas International Core Laboratories, Aurora, Colorado. Copies of the Chain-of-Custody Records which were maintained throughout the sampling and analysis procedures, are included in Attachment C.

Soil samples were submitted to Western Atlas International Core Laboratories and analyzed for Environmental Protection Agency (EPA)-approved test methods listed in Giant's Part B Permit. Chemical analyses included:

- Total chromium and lead by EPA Test Method 6010
- Volatile Organics by EPA Test Method 8240
- Semi-volatile Organics by EPA Test Method 8270

Samples from the 5, 7.5, 10 and 15 feet depth intervals (below the top of the native soil surface) were analyzed for total chromium and total lead. Samples from the 7.5 feet depth interval were also analyzed for volatile organics and semi-volatile organics. Samples from the 20, 25, and 30 feet depth intervals were archived by the laboratory at the request of Giant.

4. Discussion of Results

A. Subsurface Soil Lithologies

Soil borings penetrated hard, red to brown clay units interbedded with thinner units of dense, silty sands. In most of the soil borings, clay was the only lithology type encountered from the surface to 15-20 feet below the native soil surface and sands were generally more common at deeper intervals. Groundwater was encountered in several of the borings at 28.5 - 30 feet below the native soil surface.

B. Analytical Results

Analytical results of the soil samples are listed in Table II. Laboratory reports are presented in Attachment D. Results are discussed below:

Total chromium and lead: Total chromium and total lead were detected in most of the samples. Results of background samples analyzed indicated that lead and chromium concentrations in background soil (not related to the LTU operations) ranged from 4 to 9 parts per million (ppm) for chromium and not detected to 14 ppm for lead. Chromium and lead analytical results for soils from borings BTZ-C-9 through BTZ-C-13 were comparable to the background sample results. These borings were located on the west ends of cells 1 and 2 of the LTU.

In general, chromium and lead analytical results for soils from borings BTZ-C-14 through BTZ-C-20 (located in the center and east sides of cells 1 and 2) were slightly greater than background concentrations. The highest concentrations of chromium and lead in these borings were 30 ppm chromium in the 10 foot sample from BTZ-C-18 and 19 ppm lead in the 5 foot sample from BTZ-C-14 and the 10 foot sample from BTZ-C-20. Chromium concentrations in most of the borings decreased with depth. Lead concentrations did not noticeably vary with depth.

Volatile organic compounds: Volatile organic compounds including acetone, 2-butanone (methyl ethyl ketone), benzene, tetrachloroethene (PCE) and dichloromethane were detected in some of the samples. Acetone, 2-butanone, and benzene were only detected in 7.5 foot samples from BTZ-C-9 and BTZ-C-10. Concentrations were 900 ppb acetone, 140 ppb 2-butanone and 1 ppb benzene in the BTZ-C-9 sample and 1,800 ppb acetone, 340 ppb 2-butanone and 6 ppb benezene in Sample BTZ-C-10.

PCE ranging from 5 to 41 ppb was detected in the 7.5 foot samples obtained from borings drilled on the west side of cells 1 and 2 and the southeast corner to cell 1. The specific borings in which PCE was detected were BTZ-C-10, BTZ-C-11, BTZ-C-12, BTZ-C-15 (duplicate only), BTZ-C-16 and BTZ-C-18.

Dichloromethane was detected in the 7.5 foot samples from several of the borings and ranged in concentration from 6 to 17 ppb. The borings in which dichloromethane was not detected were drilled in the west sides of cells 2 and 3 (BTZ-C-9, BTZ-C-10, BTZ-C-11 and BTZ-C-12) and outside of the LTU (LTA-BGRD-1 and LTA-BGRD-2).

Semi-volatile compounds: Bis (2-ethylhexyl) phthalate was the only semi-volatile compound detected from the EPA 8270 list of parameters. It was present in the 7.5 foot sample from boring BTZ-C-16 at a concentration of 820 ppb.

TABLE I

TREATMENT/TRANSITION ZONE THICKNESS

Boring No.	Treatment Zone (feet below ground surface)	Transition Zone (feet below ground surface)	Top of Native Soil (feet below ground surface)
BTZ-C-9	Surface to 1.75	1.75 to 2.5	2.5
BTZ-C-10	Surface to 1.3	1.3 to 1.7	1.7
BTZ-C-11	Surface to 1.1	1.1 to 1.3	1.3
BTZ-C-12	Surface to 0.7	0.7 to 1.0	1.0
BTZ-C-13	Surface to 1.7	none	1.7
BTZ-C-14	Surface to 0.7	0.7 to 1.0	1.0
BTZ-C-15	Surface to 1.3	1.3 to 1.7	1.7
BTZ-C-16	Surface to 1.7	1.7 to 2.3	2.3
BTZ-C-17	Surface to 1.7	none	1.7
BTZ-C-18	Surface to 1.4	1.4 to 1.7	1.7
BTZ-C-19	Surface to 1.4	1.4 to 1.7	1.7
BTZ-C-20	Surface to 1.3	1.3 to 1.7	1.7

Note: Soil samples obtained at depths measured from the top of the native soil surface. Boring Logs (Attachment B) measured from top of Treatment Zone.

TABLE II

ANALYTICAL RESULTS OF SOIL SAMPLES FROM SOIL BORINGS

Sample No.	Sample Depth (feet below native soil surface)	Cr (1) (ppm)	Pb(2) (ppm)	Acetone (ppb)	2-Butanone (ppb)	Benzene (ppb)	Tetrachloro-ethene (PCE) (ppb)	Dichloro-methane (ppb)	BIS (2-Ethylhexyl) Phthalate (ppb)
BTZ-C-9 - 5.0	5.0	9	10	(4) NA	NA	NA	NA	NA	NA
BTZ-C-9 - 7.5	7.5	7	15	900	140	1	ND	ND	ND
BTZ-C-9 - 10.0	10.0	7	12	NA	NA	NA	NA	NA	NA
BTZ-C-9 - 15.0	15.0	9	14	NA	NA	NA	NA	NA	NA
BTZ-C-10 - 5.0	5.0	5	7	(3) NA	NA	NA	NA	NA	NA
BTZ-C-10 - 7.5	7.5	6	10	1800	340	6	23	ND	ND
BTZ-C-10 - 10.0	10.0	4	6	NA	NA	NA	NA	NA	NA
BTZ-C-10 - 15.0	15.0	8	10	NA	NA	NA	NA	NA	NA
BTZ-C-11 - 5.0	5.0	7	10	NA	NA	NA	NA	NA	NA
BTZ-C-11 - 7.5	7.5	8	14	(5) ND	ND	ND	41	ND	ND
BTZ-C-11 - 10.0	10.0	3	6	NA	NA	NA	NA	NA	NA
BTZ-C-11 - 15.0	15.0	3	5	NA	NA	NA	NA	NA	NA
BTZ-C-11 - (7)30E	30.0	ND	0.10	ND	ND	ND	ND	ND	ND
BTZ-C-12 - 5.0	5.0	5	10	NA	NA	NA	NA	NA	NA
BTZ-C-12 - 7.5	7.5	6	14	ND	ND	ND	31	ND	ND
BTZ-C-12 - 10.0	10.0	5	10	NA	NA	NA	NA	NA	NA
BTZ-C-12 - 15.0	15.0	3	ND	NA	NA	NA	NA	NA	NA
BTZ-C-13 - 5.0	5.0	6	7	NA	NA	NA	NA	NA	NA
BTZ-C-13 - 7.5	7.5	5	12	ND	ND	ND	ND	6	ND
BTZ-C-13 - 10.0	10.0	4	11	NA	NA	NA	NA	NA	NA
BTZ-C-13 - 15.0	15.0	5	9	NA	NA	NA	NA	NA	NA
BTZ-C-14 - 5.0	5.0	23	19	NA	NA	NA	NA	NA	NA
BTZ-C-14 - 7.5	7.5	7	8	ND	ND	ND	ND	14	ND
BTZ-C-14 - 10.0	10.0	12	7	NA	NA	NA	NA	NA	NA
BTZ-C-14 - 15.0	15.0	19	12	NA	NA	NA	NA	NA	NA

(1) Cr = Total Chromium
(2) Pb = Total Lead
(3) Sample result, an estimate because concentration exceeded calibration range of the instrument.
(4) NA = Not Analyzed
(5) ND = Not Detected
(6) Result in brackets denotes duplicate
(7) Equipment Blank

TABLE II CONT'D.

ANALYTICAL RESULTS OF SOIL SAMPLES FROM SOIL BORINGS

Sample No.	Sample Depth (feet below native soil surface)	Cr (1) (ppm)	Pb(2) (ppm)	Acetone (ppb)	2-Butanone (ppb)	Benzene (ppb)	Tetrachloro-ethene (PCE) (ppb)	Dichloro-methane (ppb)	BIS (2-Ethylhexyl) Phthalate (ppb)
BTZ-C-15 - 5.0	5.0	17	12	NA	NA	NA	NA	NA	NA
BTZ-C-15 - 7.5	7.5	23	18	ND	ND	ND	ND [5]	17 [13](6)	ND
BTZ-C-15 - 10.0	10.0	16	12	NA	NA	NA	NA	NA	NA
BTZ-C-15 - 15.0	15.0	15	12	NA	NA	NA	NA	NA	NA
BTZ-C-16 - 5.0	5.0	20	10	NA	NA	NA	NA	NA	NA
BTZ-C-16 - 7.5	7.5	15	3	ND	ND	ND	5	13	820
BTZ-C-16 - 10.0	10.0	10	12	NA	NA	NA	NA	NA	NA
BTZ-C-16 - 15.0	15.0	6	7	NA	NA	NA	NA	NA	NA
BTZ-C-17 - 5.0	5.0	22	16	NA	NA	NA	NA	NA	NA
BTZ-C-17 - 7.5	7.5	10	10	ND	ND	ND	ND	16	ND
BTZ-C-17 - 10.0	10.0	16	13	NA	NA	NA	NA	NA	NA
BTZ-C-17 - 15.0	15.0	16 [8]	16 [12]	NA	NA	NA	NA	NA	NA
BTZ-C-18 - 5.0	5.0	20 [16]	16 [12]	NA	NA	NA	NA	NA	NA
BTZ-C-18 - 7.5	7.5	19	14	ND	ND	ND	5	15	ND
BTZ-C-18 - 10.0	10.0	30	11	NA	NA	NA	NA	NA	NA
BTZ-C-18 - 15.0	15.0	15	10	NA	NA	NA	NA	NA	NA
BTZ-C-19 - 5.0	5.0	13	6	NA	NA	NA	NA	NA	NA
BTZ-C-19 - 7.5	7.5	13	5	ND	ND	ND	ND	9	ND
BTZ-C-19 - 10.0	10.0	11	15	NA	NA	NA	NA	NA	NA
BTZ-C-19 - 15.0	15.0	8	8	NA	NA	NA	NA	NA	NA
BTZ-C-20 - 5.0	5.0	19	10	NA	NA	NA	NA	NA	NA
BTZ-C-20 - 7.5	7.5	17	14	ND	ND	ND	ND	9	ND
BTZ-C-20 - 10.0	10.0	19	19	NA	NA	NA	NA	NA	NA
BTZ-C-20 - 15.0	15.0	4	7	NA	NA	NA	NA	NA	NA

(1) Cr = Total Chromium
(2) Pb = Total Lead
(3) Sample result, an estimate because concentration exceeded calibration range of the instrument.
(4) NA = Not Analyzed
(5) ND = Not Detected
(6) Result in brackets denotes duplicate
(7) Equipment Blank

TABLE II CONT'D.

ANALYTICAL RESULTS OF SOIL SAMPLES FROM SOIL BORINGS

Sample No.	Sample Depth (feet below native soil surface)	Cr (1) (ppm)	Pb(2) (ppm)	Acetone (ppb)	2-Butanone (ppb)	Benzene (ppb)	Tetrachloro-ethene (PCE) (ppb)	Dichloro-methane (ppb)	BIS (2-Ethylhexyl) Phthalate (ppb)
LTA-BGRD-1 - 5.0	5.0	9	12	NA	NA	NA	NA	NA	NA
LTA-BGRD-1 - 7.5	7.5	6	ND	ND	ND	ND	ND	ND	ND
LTA-BGRD-1 - 10.0	10.0	3	5	NA	NA	NA	NA	NA	NA
LTA-BGRD-1 - 15.0	15.0	4	10	NA	NA	NA	NA	NA	NA
LTA-BGRD-2 - 5.0	5.0	7	13	NA	NA	NA	NA	NA	NA
LTA-BGRD-2 - 7.5	7.5	6	10	ND	ND	ND	ND	ND	ND
LTA-BGRD-2 - 10.0	10.0	9	14	NA	NA	NA	NA	NA	NA
LTA-BGRD-2 - 15.0	15.0	8	13	NA	NA	NA	NA	NA	NA

(1) Cr = Total Chromium
(2) Pb = Total Lead
(3) Sample result, an estimate because concentration exceeded calibration range of the instrument.
(4) NA = Not Analyzed
(5) ND = Not Detected
(6) Result in brackets denotes duplicate
(7) Equipment Blank

September, 1993 Soil Sampling

July, 1992 Soil sampling

N

OT TO SCALE

PHOTO LOG

PROJECT NAME: Giant Refining Subsurface Soil Sampling

PROJECT NO.: 93299BJ

PHOTOGRAPHER: Larry Donny

DATE: SEPTEMBER 2, 1993

PHOTO NO. 1
LAND TREATMENT UNIT, CELLS 1 & 2

PHOTO NO. 2
HOLLOW-STEM AUGER AND CME CORE BARREL

PHOTO NO. 3
CME CORE BARREL WITH SOIL CORE

PHOTO NO. 4
DECONTAMINATION OF SAMPLING EQUIPMENT

APPENDIX B

BORING LOGS

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

File No. 93-124
Project: Giant Refining
Location Ciniza Refinery
Land Treatment Unit

Boring Location See Boring Plan

LOG OF TEST BORINGS

Elevation Measured from
Existing Ground

Boring Number: #1 BACKGROUND

Water Level NOT ENCOUNT. Date: 09/09/93

LAB #	DEPTH	BLOWS/N	PLOT	SCALE	SAMPLE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR, GRAINSIZE, ETC.)	%M	LL	PI	CLASS.
	0.0		//-///		/ \	CLAY, SLIGHTLY SILTY, RED BROWN TO BROWN,				
			//-///			STIFF TO HARD, MOIST				
			//-///							
			//-///							
			//-///							
			//-///	5						
			//-///		C					
			//-///		O					
	8.0		//-///		N					
	9.0		//-//-		T	CLAY, SILTY, LIGHT BROWN TO BROWN, HARD, MOIST				
			::-::-	10	I	SAND, FINE, SILTY, RED BROWN, DENSE, MOIST TO				
	11.1		::-::-		N	DAMP				
			//-///		U	CLAY, SILTY, LIGHT BROWN TO BROWN, HARD, MOIST				
			//-///		O					
			//-///		U					
			//-///	15	S					
			//-///							
			//-///		S					
	18.3		//-///		A					
			::::::		M	SAND, FINE, LIGHT BROWN TO WHITE, DENSE, MOIST				
			::::::	20	P	TO DRY				
			::::::		L					
			::::::		I					
			::::::		N					
			::::::		G					
	24.6		::::::	25						
			//-//-			CLAY, SILTY, RED BROWN TO BROWN, HARD, MOIST				
	27.4		//-//-							
			::-::-			SAND, FINE, SILTY, LIGHT BROWN, DENSE, DAMP,				
			::-::-			3" CLAY LENSE @ 30'				
	30.3		::/::/	30	\ /					
	TD									
				35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WHK

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

File No. 93-124
Project: Giant Refining
Location Ciniza Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring Location See Boring Plan

LOG OF TEST BORINGS

Boring Number: #2 BACKGROUND

Water Level NOT ENCOUNT. Date: 09/09/93

LAB #	DEPTH	BLOWS/N	PLOT	SCALE	SAMPLE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR, GRAINSIZE, ETC.)	WM	LL	PI	CLASS.
	0.0					CLAY, SLIGHTLY SILTY OR SANDY IN THIN ISOLATED ZONES, RED BROWN, SOFT TO HARD, MOIST TO DAMP				
				5						
				10						
	13.5									
				15		CLAY, DARK BROWN, HARD, DAMP				
	17.0									
	18.2					CLAY AND SAND, SILTY, RED BROWN TO BROWN, HARD AND DENSE, DAMP TO MOIST				
				20		CLAY, SANDY, SILTY, BROWN PURPLE TO LIGHT BROWN, HARD, MOIST TO DAMP				
	21.8									
	24.0					SAND, FINE TO MEDIUM, SILTY, LIGHT BROWN, DENSE, DAMP TO MOIST				
				25		CLAY, SOME CARBONATE CRYSTALS, BROWN, HARD, MOIST TO WET				
	26.0									
						SAND, FINE, WITH 8" CLAY LENSE @ 28.5', ORANGE BROWN, DENSE, DAMP				
	30.1			30						
	TD									
				35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WBR

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

File No. 93-124
Project: Giant Refining
Location Cinisa Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring location See Boring Plan

LOG OF TEST BORINGS

Boring Number: BTZC 9

Water Level Not Found Date: 09/09/93

LAB #	DEPTH	BLOWS/N	PLOT	SCALE	SAMPLE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR, GRAINSIZE, ETC.)	%M	LL	PI	CLASS.
	0-1.75		//////		/ \	CLAY, BLACK TO DARK GREY, SOFT, WET (FILL)				
			//////			TRANSITION ZONE, SHOWS EVIDENCE OF LEACHING				
	2.5		//////			FROM ABOVE				
			//////			CLAY, RED, HARD TO STIFF, WET TO MOIST, DRYER				
			//////			WITH DEPTH.				
			//////	5						
			//////		C					
			//////		O					
			//////		N					
	9.3		//////		T					
			//-//-	10	I	CLAY, SILTY, RED, HARD MOIST, INTERBEDDED FINE				
			//://:		N	SAND, SILT, AND SANDY CLAYS. INTERBEDDING				
			://:///		U	IS ON THE ORDER OF THREE INCHES. THE ZONE IS				
			//-//-		O	PRIMARILY CLAY WITH ON THE ORDER OF 70% OF ANY				
			//://:		U	SAMPLING RUN HAVING A CLAY A THE PRIMARY				
			://:///	15	S	FRACTION. ALL CONTACTS ARE GRADATIONAL.				
			//-//-			NORMAL PATTERN OF INTERBEDDING IS SAND-SILT-				
			//://:		S	CLAY DOWNWARD. SANDS AND SILTS ARE DRIER THAN				
			://:///		A	CLAYS, NORMALLY DAMP. SOME CARBONATE				
			//-//-		M	DEVELOPMENT AT THE BOTTOM OF THE ZONE AS WEAK				
			//://:	20	P	NODULES, CCI = 1, 24-25'.				
			://:///		L					
			//-//-		I					
			//://:		N					
			://:///		G					
	25.0		//-//-	25						
			-://-:/			SAND, FINE, SILTY, ORANGE-BROWN, DENSE, MOIST				
			-://-:/			SILT AT 25.5-27.5, GRADES BACK TO SAND.				
			-://-:/							
	28.4		-://-:/							
			//://:	30	\ /	CLAY, SANDY, GRADES TO SILT, SANDY AT 32.1,				
			//://:			THEN SAND, FINE, SILTY AT 33'ORANGE-BROWN,				
			//://:			DENSE, MOIST TO DAMP IN THE SAND, GRADATIONAL				
	33.0		//://:			TO SAND DOWNWARD. WATER NOT ENCOUNTERED.				
	TD									
				35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WHK

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

LOG OF TEST BORINGS

File No. 93-124
Project: Giant Refining
Location Ciniza Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring Location See Boring Plan

Boring Number: BTEC 10

Water Level Not Found Date: 09/09/93

LAB #	DEPTH	BLOWS/N	PLOT	SCALE	SAMPLE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR, GRAINSIZE, ETC.)	%M	LL	PI	CLASS.
	0-1.4		//////		/ \	CLAY, BLACK TO DARK GREY, SOFT, WET (FILL)				
			//////			TRANSITION ZONE, SHOWS EVIDENCE OF LEACHING				
	1.7		//////			FROM ABOVE				
			//////			CLAY, RED, HARD, MOIST TO WET. DRIER WITH				
			//////			DEPTH.				
			//////	5						
	6.5		//////		C					
			//-//-		O	CLAY, SILTY, RED, HARD, MOIST TO WET. INTER				
			//://:		N	BEDDED FINE SAND ON THE ORDER OF 3-10'.				
			::/::/		T	PRIMARILY CLAY IN ANY SAMPLING RUN (~80%).				
			//-//-	10	I	SOME CARBONATE ACCUMULATION AS WEAK NODULES				
			//://:		N	FROM 24 - 24.8, (CCI = 0 - 1) . SANDS DAMP				
			::/::/		U	TO MOIST. SILTS MOIST, CLAY MOIST TO WET,				
			//-//-		O	BUT, GENERALLY DRIER WITH DEPTH.				
			//://:		U					
			::/::/	15	S					
			//-//-							
			//://:		S					
			::/::/		A					
			//-//-		M					
			//://:	20	P					
			::/::/		L					
			//-//-		I					
			//://:		N					
			::/::/		G					
			//-//-	25						
			//://:							
			::/::/							
	27.5		//-//-							
			::/::/			SAND, FINE, SILTY, CLAY OR SILT PARTINGS TO				
			::/::/	30	\ /	3", DENSE, DAMP TO MOIST. ~70% SAND IN RUN.				
			::/::/			ORANGE TO ORANGE BROWN. ALL CONTENTS				
			::/::/			GRADATIONAL.				
	33.0		::/::/							
	TD									
				35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WEK

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

LOG OF TEST BORINGS

File No. 93-124
Project: Giant Refining
Location Ciniza Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring Location See Boring Plan

Boring Number: BTEC 11

Water Level Not Found Date: 09/08/93

LAB #	DEPTH	BLOWS/N	PLOT	SCALE	SAMPLE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR, GRAINSIZE, ETC.)	%M	LL	PI	CLASS.
	0-1.3		//////			CLAY, BLACK TO DARK GREY, SOFT, WET (FILL)				
	1.7					TRANSITION ZONE, SHOWS EVIDENCE OF LEACHING FROM ABOVE				
				5		CLAY, RED, HARD, WET TO MOIST				
	9.2				CONT					
	11.2			10	INUOUS	SILT, CLAYEY, DARK RED BROWN, DAMP TO MOIST, HARD				
	17.5			15	SAMPLING	SAND, FINE, SILTY, DARK RED BROWN, DENSE, DAMP SANDY CLAY FROM 14.2 - 15.2'				
	24.4			20		CLAY, SILTY OR SANDY, DARK RED BROWN, MOIST TO DAMP. THIN SAND INTERBEDS(TO 3"). 90% OF SAMPLE RUN IS THE CLAY FRACTION. ALL CONTACTS ARE GRADATIONAL				
	26.2			25		SILT, SANDY, CLAYEY, DARK RED BROWN, HARD, DAMP TO MOIST				
	30.5			30		SAND, FINE, SILTY, SOME THIN CLAY INTERBEDS TO 3", RED BROWN, DENSE, MOIST, CONTACTS GRADATIONAL				
	33.0					SILT, SANDY, SLIGHTLY CLAYEY, ORANGE BROWN,				
	TD			35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WHK

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

LOG OF TEST BORINGS

File No. 93-124
Project: Giant Refining
Location Cinisa Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring Location See Boring Plan

Boring Number: BT2C 12

Water Level 32.0' Date: 09/08/93

LAB #	DEPTH	BLOWS/N	PLOT	SCALE	SAMPLE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR, GRAINSIZE, ETC.)	%M	LL	PI	CLASS.
	0-0.67		//////		/ \	CLAY, BLACK TO DARK GREY, SOFT, WET (FILL)				
	1.0		//////			TRANSITION ZONE, EVIDENCE OF LEACHING FROM ABOVE				
			//////			CLAY, RED, STIFF TO HARD, MOIST TO WET, DRIER				
			//////			WITH DEPTH				
			//////							
			//////	5						
			//////		C					
			//////		O					
			//////		N					
	9.4		//////		T					
			------	10	I	SILT, SAND, CLAY, INTERBEDDED, RED BROWN,				
			::::::		N	DENSE, HARD, MOIST, GRADATIONAL CONTACTS WITH				
	11.9		//////		U	APPROXIMATELY 4" BEDDING				
			//://		O	CLAY, SANDY, SILTY, RED BROWN, HARD, MOIST				
			//://		U					
	15.1		//://	15	S					
			::::::			SAND, FINE, LIGHT BROWN, DENSE, DAMP TO DRY				
			::::::		S					
	18.0		::::::		A					
			//://		M	CLAY, SANDY, RED BROWN, HARD, DAMP				
			//://	20	P					
			//://		L					
	22.0		//://		I					
			//://		N	CLAY, SILTY, SANDY, RED BROWN, HARD, MOIST,				
			//-//-		G	THIN FINE SAND INTERBEDS AT APPROXIMATELY				
			//://	25		3"-4" SPACING				
			//-//-							
	27.1		//://							
			::::::			SAND, FINE, SLIGHTLY CLAYEY BELOW 28.4', LIGHT				
	28.8		::::::			BROWN TO ORANGE BROWN, DENSE, DRY TO MOIST				
			::::::	30		SAND, AND CLAY, APROXIMATELY 6" INTERBEDS, RED				
			//////			BROWN, MODERATELY DENSE, MOIST ABOVE 31.5',				
			::::::			WATER BEARING @ 32.0', 6" CLAY CONFINES				
	33.5		//////		\ /	LAMINAR BEDDED SAND THAT PRODUCES WATER				
	TD									
				35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WHK

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

LOG OF TEST BORINGS

File No. 93-124
Project: Giant Refining
Location Ciniza Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring Location See Boring Plan

Boring Number: BTIC 13

Water Level 28.5' Date: 09/08/93

LAB #	DEPTH	BLOWS/N	PLOT	SCALE	SAMPLES	MATERIAL CHARACTERISTICS (MOISTURE,CONDITION,COLOR,GRAINSIZE,ETC.)	%M	LL	PI	CLASS.
	0.0		//////		/ \	CLAY, BLACK TO DARK GREY, SOFT, WET (FILL)				
	1.7		//////							
			//-//-			CLAY, SILTY, WITH SOME SAND SEAMS, RED BROWN,				
			//-//-			STIFF TO HARD, MOIST TO WET				
			//-//-							
			//-//-	5						
			//://:		C					
			//-//-		O					
			//-//-		N					
			//-//-		T					
			//-//-	10	I					
			//://:		N					
			//-//-		U					
			//-//-		O					
			//-//-		U					
			//-//-	15	S					
			//://:							
			//-//-		S					
			//-//-		A					
			//-//-		M					
			//-//-	20	P					
	20.5		//://:		L					
			//://:		I	CLAY, VERY SANDY, SOME FINE SAND LENSES, RED				
			//://:		N	BROWN, HARD, MOIST TO WET				
	24.0		//://:		G					
			//://:	25		CLAY, SILTY, SANDY, GRADATIONAL CHANGES IN				
			//-//-			SAND AND SILT CONTENT, RED BROWN, HARD, MOIST				
			//://:			TO WET				
	28.0		//-//-							
			//-//-			SAND, AND CLAY, SILTY, INTERBEDDED, LAMINAR				
	30.1		::-::-	30		BEDDED WATER BEARING SAND @ 28.5', RED BRONW				
	30.4		//////		\ /	CLAY, RED BROWN, STIFF TO HARD, WET				
				35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WHK

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

File No. 93-124
Project: Giant Refining
Location Cinisa Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring Location See Boring Plan

LOG OF TEST BORINGS

Boring Number: BTEC 14

Water Level 30.5' Date: 09/02/93

LAB #	DEPTH	BLOWS/N	PLOT	SCALE	SAMPLE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR, GRAINSIZE, ETC.)	%M	LL	PI	CLASS.
	0-0.6		//////		/ \	CLAY, BLACK TO DARK GREY, SOFT, WET (FILL)				
	1.0		//////			TRANSITION ZONE, EVIDENCE OF LEACHING FROM ABOVE				
			//////			CLAY, RED, HARD, WET TO MOIST				
			//////							
			//////							
			//////	5						
			//////		C					
			//////		O					
	8.5		//////		T					
			::::::		T	SAND AND CLAY, SILTY, RED BROWN, DENSE AND				
	9.8		//////	10	I	HARD, DAMP TO MOIST				
			::::::		N	SAND, FINE, BROWN, DENSE, DAMP				
					U					
			::::::		O					
	13.75		::::::		U					
			//-//-	15	S	CLAY, SILTY, WITH 12" SAND LENSES, RED BROWN				
			//-//-			TO PURPLE BROWN, HARD, MOIST				
			//-//-		S					
			::::::		A					
			//-//-		M					
			//-//-	20	P					
			//-//-		L					
			::::::		I					
			//-//-		N					
			//-//-		G					
			//-//-	25						
			::::::							
	27.0		//-//-							
			::::::			SAND AND CLAY, ORANGE BROWN TO BROWN, DENSE				
	29.0		//////			AND HARD, MOIST				
			::::::	30		SAND, LAMINAR BEDDED, WITH THIN CLAY PARTINGS,				
	30.6		::::::		\ /	ORANGE BROWN, DENSE, WET, WATER BEARING @30.5'				
	TD									
				35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WHR

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

File No. 93-124
Project: Giant Refining
Location Cinisa Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring Location See Boring Plan

LOG OF TEST BORINGS

Boring Number: BTZC 15

Water Level 32.9' Date: 09/02/93

LAB #	DEPTH	BLOWS/N	PLOT	SCALE	SAMPLE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR, GRAINSIZE, ETC.)	%M	LL	PI	CLASS.
	0-1.3		//////			CLAY, BLACK TO DARK GREY, SOFT, WET (FILL)				
	1.7		//////			TRANSITION ZONE, EVIDENCE OF LEACHING FROM ABOVE				
			//://:			CLAY, WITH SCATTERED THIN SAND PARTINGS, RED,				
			//////			STIFF TO HARD, WET DRYING TO MOIST WITH DEPTH				
			//://:							
			//////	5						
			//://:		C					
			//////		O					
			//://:		N					
			//////		T					
	9.8		//://:	10	I					
			//://:		N	CLAY, SILTY, SANDY, WITH 6" TO 12" SAND LENSES				
			//-//-		U	PURPLE BROWN, HARD, DAMP TO MOIST				
			//://:		O					
			//-//-		U					
			//://:	15	S					
			//-//-							
			//://:		S					
			//-//-		A					
			//://:		M					
			//-//-	20	P					
			//://:		L					
			//-//-		I					
			//://:		N					
			//-//-		G					
			//://:	25						
			//-//-							
			//://:							
	28.0		//-//-							
			//////			SAND AND CLAY, ORANGE BROWN TO BROWN, LOOSE TO				
			::::::	30		DENSE AND HARD, DAMP TO MOIST				
			//////							
	31.9		::::::							
			::::::			SAND, FINE, WITH CLAY LENSES, LAMINAR BEDDED,				
	33.2		::/::/			ORANGE BROWN, WATER BEARING @ 32.9'				
	TD			35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WHK

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

File No. 93-124
Project: Giant Refining
Location Cinize Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring Location See Boring Plan

LOG OF TEST BORINGS

Boring Number: BTZC 16

Water Level 28.8' Date: 09/02/93

LAB #	DEPTH	BLOWS/M	PLOT	SCALE	SAMPLE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR, GRAINSIZE, ETC.)	%M	LL	PI	CLASS.
	0-1.7		//////		/\	CLAY, BLACK TO DARK GREY, SOFT, WET (FILL)				
			//////			TRANSITION ZONE, SHOWS EVIDENCE OF LEACHING				
	2.3		//////			FROM ABOVE				
			//////			CLAY, RED, STIFF, WET TO MOIST				
			//////							
			//////	5						
	6.5		//////		C					
			//://:		O	CLAY, SANDY, SILTY, WITH 6" TO 18" SAND LENSES				
			//-//-		N	RED BROWN TO PURPLE BROWN, HARD, MOIST TO DAMP				
			//://:		T					
			//-//-	10	I					
			//://:		N					
			//-//-		U					
			//://:		O					
			//-//-		U					
			//://:	15	S					
			//-//-							
			//://:		S					
			//-//-		A					
			//://:		N					
			//-//-	20	P					
			//://:		L					
			//-//-		I					
			//://:		N					
	24.0		//-//-		G					
			//////	25		CLAY, BROWN, HARD, WET				
			//////							
	27.0		//////							
			::::::			SAND, FINE, LAMINAR BEDDED, WITH THIN CLAY				
			://:///			STREAKS AND SEAMS, YELLOW BROWN, LOOSE TO				
	30.0		::::::	30	\/	DENSE, WATER BEARING @ 28.8'				
	TD									
				35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WHK

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

LOG OF TEST BORINGS

File No. 93-124
Project: Giant Refining
Location Ciniza Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring Location See Boring Plan

Boring Number: BTZC 17

Water Level 28.8' Date: 09/02/93

LAB #	DEPTH	BLOWS/N	FLOW TEST	BOX CALE	SAMPLE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR, GRAINSIZE, ETC.)	WM	LL	PI	CLASS.
	0-1.7		//////		/ \	CLAY, BLACK TO DARK GREY, SOFT, WET (FILL)				
			//////			CLAY, RED, HARD, WET				
			//////							
			//////							
			//////							
			//////	5						
			//////		C					
			//////		O					
			//////		N					
	9.0		//////		T					
			//:///:	10	I	CLAY, SANDY, SILTY, PURPLE BROWN, HARD, DAMP				
			//////		N	TO MOIST				
			//:///:		U					
			//////		O					
			//:///:		U					
	15.2		//////	15	S					
			::-::-			SAND, FINE, SILTY, PURPLE BROWN, DENSE, DAMP				
			::-::-		S					
	18.5		::-::-		A					
			//////		M	CLAY, SAND, SILT, 12" TO 36" SEQUENCES, PURPLE				
			::::::	20	P	BROWN, HARD TO DENSE, DAMP TO MOIST				
			------		L					
			//////		I					
			::::::		N					
			------		G					
			//////	25						
	26.5		::::::							
			::::::			SAND, LAMINAR BEDDED, BROWN, LOOSE, WATER				
			::::::			BEARING @ 28.8'				
	29.5		::::::							
	30.2		//////	30	\ /	CLAY, RED, FIRM, WET (NOT WATER BEARING)				
	TD									
				35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WBR

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

LOG OF TEST BORINGS

File No. 93-124
Project: Giant Refining
Location Ciniza Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring Location See Boring Plan

Boring Number: BT2C 18

Water Level 30.0' Date: 09/02/93

LAB #	DEPTH	BLOWS/N	PLOT	SCALE	SAMPLE	MATERIAL CHARACTERISTICS (MOISTURE,CONDITION,COLOR,GRAINSIZE,ETC.)	WC	LL	PI	CLASS.
	0-1.7		//////		/ \	CLAY, BLACK TO DARK GREY, SOFT, WET (FILL)				
			//////			CLAY, RED, HARD, WET				
			//////							
			//////							
			//////							
			//////	5						
			//////		C					
			//////		O					
			//////		N					
	9.0		//////		T					
			//-//-	10	I	CLAY, SILTY, SOME THIN SAND LENSES/PARTINGS,				
			//-//-		N	RED BROWN, HARD, MOIST				
			//-//-		U					
			//://:		O					
			//-//-		U					
			//-//-	15	S					
	16.2		//-//-							
			::-::-		S	SAND, FINE, SILTY, SOME CLAY LENSES, PURPLE				
			::-::-		A	BROWN, DENSE, DAMP TO MOIST				
			::-::-		M					
			::/::/	20	P					
			::-::-		L					
			::-::-		I					
			::/::/		N					
	24.0		::-::-		G					
			//////	25		CLAY, WITH SOME SAND LENSES, RED BROWN, HARD,				
			//////			MOIST TO WET				
			//://:							
	28.0		//////							
			::::::			SAND, LAMINAR BEDDED, LIGHT BROWN, DENSE,				
	30.4		::::::	30	\ /	WATER BEARING @ 30.0'				
	TD									
				35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WBK

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

LOG OF TEST BORINGS

File No. 93-124
Project: Giant Refining
Location Ciniza Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring Location See Boring Plan

Boring Number: BTZC 19

Water Level 29.4' Date: 09/01/93

LAB #	DEPTH	BLOWS/N	FLOW TEST	SCALE	SAMPLES	MATERIAL CHARACTERISTICS (MOISTURE,CONDITION,COLOR,GRAINSIZE,ETC.)	SM	LL	PI	CLASS.
	0-1.5		//////		/ \	CLAY, BLACK TO DARK GREY, SOFT, WET (FILL)				
			//////			CLAY, RED, HARD, WET TO MOIST				
			//////							
			//////							
			//////							
			//////	5						
			//////		C					
			//////		O					
	8.0		//////		N					
			//://:		T	CLAY, SANDY, SILTY, DARK RED TO RED/PURPLE,				
			//-//-	10	I	HARD, MOIST TO WET				
			//://:		N					
			//-//-		U					
			//://:		O					
			//-//-		U					
			//://:	15	S					
			//-//-							
			//://:		S					
	18.0		//-//-		A					
			::/::/		M	SAND, CLAYEY, SILTY, RED/PURPLE, DENSE, DAMP				
			::/::/	20	P					
			::/::/		L					
			::/::/		I					
			::/::/		N					
			::/::/		G					
	24.5		::/::/	25						
			//////			CLAY, RED/PURPLE, HARD, MOIST				
			//////							
	28.0		//////							
			::::::			SAND, LAMINAR BEDDED, ORANGE/PINK/PURPLE,LOOSE				
	30.0		::::::	30	\ /	WET, CAPILARITY TO 27', WATER BEARING @ 29.4'				
	TD									
				35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WHK

SHEET 1 OF 1

PRECISION ENGINEERING, INC.

LOG OF TEST BORINGS

File No. 93-124
Project: Giant Refining
Location Ciniza Refinery
Land Treatment Unit
Elevation Measured from
Existing Ground

Boring Location See Boring Plan

Boring Number: ETZC 20

Water Level 29.0' Date: 09/01/93

LAB #	DEPTH	BLOWS/N	PLOT	SCALE	SAMPLE	MATERIAL CHARACTERISTICS (MOISTURE, CONDITION, COLOR, GRAINSIZE, ETC.)	%M	LL	P*	CLASS.
	0-1.4		//////		/ \	CLAY, BLACK TO DARK GREY, SOFT, WET (FILL)				
			//////			CLAY, RED, HARD, WET TO MOIST				
			//////							
			//////							
			//////							
	4.5		//////	5						
			//////		C	CLAY, WITH OCCASIONAL SANDY & SILTY PARTINGS				
			//:///:		O	RED BROWN, HARD, MOIST				
			//////		N					
			//-//-		T					
			//////	10	I					
			//:///:		N					
			//////		U					
			//-//-		O					
			//////		U					
			//:///:	15	S					
			//////							
			//-//-		S					
			//////		A					
	18.0		//:///:		M					
			::-::-	20	P	SAND, FINE, SILTY, RED/PURPLE, DENSE, MOIST				
			::-::-		L					
			::-::-		I					
			::-::-		N					
			::-::-		G					
	24.7		::-::-	25						
			//////			CLAY, RED/PURPLE, HARD, WET TO MOIST				
			//////							
	28.0		//////							
			::::::			SAND, FINE, LAMINAR BEDDED, MULTI-COLORED,				
	30.0		::::::	30	\ /	DENSE, WET, WATER BEARING @ 29.0'				
	TD									
				35						
				40						

Size & Type of Boring: 7-5/8" OD Hollow Stemmed Auger

Logged By: WHK

APPENDIX C

ORIGINAL ANALYTICAL DATA

Western Atlas International

CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
TE SAMPLED.....: 09/09/93
ME SAMPLED.....: 08:47
ORK DESCRIPTION...: BTZ-C-9-5.0

LABORATORY I.D...: 931773-0032
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
romium, Total (Cr)	9	1	mg/Kg	6010 (2)	09/24/93	WGL
ad, Total (Pb)	10	5	mg/Kg	6010 (2)	09/24/93	WGL

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

The analyses, opinions or interpretations contained in this report are based upon observations and material supplied by the client for whose exclusive and confidential use this report has been made. The interpretations or opinions expressed repre-
... as to the productivity, proper operations, or profitableness of any oil, gas, coal or

Western Atlas International

CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/09/93
ME SAMPLED.....: 08:51
ORK DESCRIPTION...: BTZ-C-9-7.5

LABORATORY I.D...: 931773-0033
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	7	1	mg/Kg	6010 (2)	09/24/93	WGL
ead, Total (Pb)	15	5	mg/Kg	6010 (2)	09/24/93	WGL
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/18/93	MRC
Acetone	900	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	1	1	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	ND	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	140	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

JOB NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/09/93
TIME SAMPLED.....: 08:51
WORK DESCRIPTION...: BTZ-C-9-7.5

LABORATORY I.D...: 931773-0033
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	ND	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	50	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
APPENDIX IX BNA ORGANICS		*1		8270 (2)	09/27/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/09/93
ME SAMPLED.....: 08:51
ORK DESCRIPTION...: BTZ-C-9-7.5

LABORATORY I.D...: 931773-0033
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

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DATE SAMPLED.....: 09/09/93
TIME SAMPLED.....: 08:51
WORK DESCRIPTION...: BTZ-C-9-7.5

LABORATORY I.D...: 931773-0033
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	660	ug/Kg			
4-Chloro-3-methylphenol	ND	330	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	1650	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	330	ug/Kg			
Ethyl methanesulfonate	ND	6600	ug/Kg			
Hexachlorophene	ND	330	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	1650	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	330	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol		*1		8270 (2)	09/30/93	JMC
APPENDIX IX ORGANOPHOSPHOROUS PEST						
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/09/93
ME SAMPLED.....: 08:51
RK DESCRIPTION...: BTZ-C-9-7.5

LABORATORY I.D...: 931773-0033
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 932998J
TE SAMPLED.....: 09/09/93
ME SAMPLED.....: 08:54
ORK DESCRIPTION...: BTZ-C-9-10.0

LABORATORY I.D...: 931773-0034
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
chromium, Total (Cr)	7	1	mg/Kg	6010 (2)	09/24/93	WGL
ead, Total (Pb)	12	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/09/93
ME SAMPLED.....: 09:02
WORK DESCRIPTION...: BTZ-C-9-15.0

LABORATORY I.D...: 931773-0035
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	9	1	mg/Kg	6010 (2)	09/24/93	WGL
ead, Total (Pb)	14	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 932998J
TE SAMPLED.....: 09/08/93
ME SAMPLED.....: 15:20
RK DESCRIPTION...: BTZ-C-10-5.0

LABORATORY I.D...: 931773-0024
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	5	1	mg/Kg	6010 (2)	09/24/93	WGL
ead, Total (Pb)	7	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

:LIENT I.D.....: 93299BJ
) E SAMPLED.....: 09/08/93
:E SAMPLED.....: 15:26
..K DESCRIPTION...: BTZ-C-10-7.5

LABORATORY I.D...: 931773-0025
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

:T DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	6	1	mg/Kg	6010 (2)	09/24/93	WGL
ıd, Total (Pb)	10	5	mg/Kg	6010 (2)	09/24/93	WGL
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/18/93	MRC
Acetone	1800 E	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	6	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	ND	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	340	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
ATE SAMPLED.....: 09/08/93
ME SAMPLED.....: 15:26
ORK DESCRIPTION...: BTZ-C-10-7.5

LABORATORY I.D...: 931773-0025
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	23	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
APPENDIX IX BNA ORGANICS		*1		8270 (2)	09/27/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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CLIENT I.D.....: 93299BJ
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WORK DESCRIPTION...: BTZ-C-10-7.5

LABORATORY I.D...: 931773-0025
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 932998J
TE SAMPLED.....: 09/08/93
ME SAMPLED.....: 15:26
WORK DESCRIPTION...: BTZ-C-10-7.5

LABORATORY I.D...: 931773-0025
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

..ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	660	ug/Kg			
4-Chloro-3-methylphenol	ND	330	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	1650	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	330	ug/Kg			
Ethyl methanesulfonate	ND	6600	ug/Kg			
Hexachlorophene	ND	330	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	1650	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	330	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol		*1		8270 (2)	09/30/93	JMC
APPENDIX IX ORGANOPHOSPHOROUS PEST						
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

JOB NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/08/93
TIME SAMPLED.....: 15:26
WORK DESCRIPTION...: BTZ-C-10-7.5

LABORATORY I.D...: 931773-0025
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

JOB NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/08/93
TIME SAMPLED.....: 15:28
WORK DESCRIPTION...: BTZ-C-10-10.0

LABORATORY I.D...: 931773-0026
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	4	1	mg/Kg	6010 (2)	09/24/93	WGL
Lead, Total (Pb)	6	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

JB NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/08/93
TIME SAMPLED.....: 15:36
WORK DESCRIPTION...: BTZ-C-10-15.0

LABORATORY I.D...: 931773-0027
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	8	1	mg/Kg	6010 (2)	09/24/93	WGL
Lead, Total (Pb)	10	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
TE SAMPLED.....: 09/08/93
ME SAMPLED.....: 13:42
ORK DESCRIPTION...: BTZ-C-11-5.0

LABORATORY I.D...: 931773-0015
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
hromium, Total (Cr)	7	1	mg/Kg	6010 (2)	09/24/93	WGL
ead, Total (Pb)	10	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
E SAMPLED.....: 09/08/93
E SAMPLED.....: 13:49
RK DESCRIPTION...: BTZ-C-11-7.5

LABORATORY I.D...: 931773-0016
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

T DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	8	1	mg/Kg	6010 (2)	09/24/93	WGL
ad, Total (Pb)	14	5	mg/Kg	6010 (2)	09/24/93	WGL
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/18/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	ND	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/08/93
ME SAMPLED.....: 13:49
ORK DESCRIPTION...: BTZ-C-11-7.5

LABORATORY I.D...: 931773-0016
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	41	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
APPENDIX IX BNA ORGANICS		*1		8270 (2)	09/27/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 932998J
^^TE SAMPLED.....: 09/08/93
ME SAMPLED.....: 13:49
RK DESCRIPTION...: BTZ-C-11-7.5

LABORATORY I.D...: 931773-0016
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/05/93

JOB NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/08/93
TIME SAMPLED.....: 13:49
WORK DESCRIPTION...: BTZ-C-11-7.5

LABORATORY I.D...: 931773-0016
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

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WORK DESCRIPTION...: BTZ-C-11-7.5

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DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	660	ug/Kg			
4-Chloro-3-methylphenol	ND	330	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	1650	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	330	ug/Kg			
Ethyl methanesulfonate	ND	6600	ug/Kg			
Hexachlorophene	ND	330	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	1650	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	330	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol		*1		8270 (2)	09/30/93	JMC
APPENDIX IX ORGANOPHOSPHOROUS PEST						
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 932998J
TE SAMPLED.....: 09/08/93
ME SAMPLED.....: 13:49
ORK DESCRIPTION...: BTZ-C-11-7.5

LABORATORY I.D...: 931773-0016
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

JOB NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 932998J
DATE SAMPLED.....: 09/08/93
TIME SAMPLED.....: 13:53
WORK DESCRIPTION...: BTZ-C-11-10.0

LABORATORY I.D...: 931773-0017
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	3	1	mg/Kg	6010 (2)	09/24/93	WGL
Lead, Total (Pb)	6	5	mg/Kg	6010 (2)	09/24/93	WGL

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/08/93
TIME SAMPLED.....: 14:00
WORK DESCRIPTION...: BTZ-C-11-15.0

LABORATORY I.D...: 931773-0018
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	3	1	mg/Kg	6010 (2)	09/24/93	WGL
Lead, Total (Pb)	5	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

ENT I.D.....: 93299BJ
E SAMPLED.....: 09/08/93
IE SAMPLED.....: 10:47
ORK DESCRIPTION...: BTZ-C-12-5.0

LABORATORY I.D...: 931773-0007
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
romium, Total (Cr)	5	1	mg/Kg	6010 (2)	09/24/93	WGL
..ad, Total (Pb)	10	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
TE SAMPLED.....: 09/08/93
ME SAMPLED.....: 10:52
ORK DESCRIPTION...: BTZ-C-12-7.5

LABORATORY I.D...: 931773-0008
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
hromium, Total (Cr)	6	1	mg/Kg	6010 (2)	09/24/93	WGL
ead, Total (Pb)	14	5	mg/Kg	6010 (2)	09/24/93	WGL
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/18/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	ND	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

C ENT I.D.....: 93299BJ
E SAMPLED.....: 09/08/93
IE SAMPLED.....: 10:52
ORK DESCRIPTION...: BTZ-C-12-7.5

LABORATORY I.D...: 931773-0008
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	31	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	10	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	5	ug/Kg			
Xylenes-total		*1		8270 (2)	09/27/93	JMC
APPENDIX IX BNA ORGANICS						
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	660	ug/Kg			
Benzyl Alcohol	ND	330	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	660	ug/Kg			
4-Chloroaniline	ND	330	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 932998J
TE SAMPLED.....: 09/08/93
.ME SAMPLED.....: 10:52
WORK DESCRIPTION...: BTZ-C-12-7.5

LABORATORY I.D...: 931773-0008
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LABORATORY I.D...: 931773-0008
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/08/93
TIME SAMPLED.....: 10:52
WORK DESCRIPTION...: BTZ-C-12-7.5

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	660	ug/Kg			
4-Chloro-3-methylphenol	ND	330	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	1650	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	330	ug/Kg			
Ethyl methanesulfonate	ND	6600	ug/Kg			
Hexachlorophene	ND	330	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	1650	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	330	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol		*1		8270 (2)	09/30/93	JMC
APPENDIX IX ORGANOPHOSPHOROUS PEST						
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 932998J
TE SAMPLED.....: 09/08/93
.ME SAMPLED.....: 10:52
WORK DESCRIPTION...: BTZ-C-12-7.5

LABORATORY I.D...: 931773-0008
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/08/93
TIME SAMPLED.....: 10:56
WORK DESCRIPTION...: BTZ-C-12-10.0

LABORATORY I.D...: 931773-0009
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	5	1	mg/Kg	6010 (2)	09/24/93	WGL
Lead, Total (Pb)	10	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
TE SAMPLED.....: 09/08/93
..ME SAMPLED.....: 11:03
WORK DESCRIPTION...: BTZ-C-12-15.0

LABORATORY I.D...: 931773-0010
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
ıromium, Total (Cr)	3	1	mg/Kg	6010 (2)	09/24/93	WGL
.ead, Total (Pb)	<5	5	mg/Kg	6010 (2)	09/24/93	WGL

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
TE SAMPLED.....: 09/08/93
.ME SAMPLED.....: 09:32
WORK DESCRIPTION...: BTZ-C-13-5.0

LABORATORY I.D...: 931773-0001
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
ıromium, Total (Cr)	6	1	mg/Kg	6010 (2)	09/24/93	WGL
Lead, Total (Pb)	7	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

C ENT I.D.....: 93299BJ
E SAMPLED.....: 09/08/93
HE SAMPLED.....: 09:37
ORK DESCRIPTION...: BTZ-C-13-7.5

LABORATORY I.D...: 931773-0002
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
romium, Total (Cr)	5	1	mg/Kg	6010 (2)	09/24/93	WGL
Lead, Total (Pb)	12	5	mg/Kg	6010 (2)	09/24/93	WGL
PPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/17/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	6	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
.TE SAMPLED.....: 09/08/93
.IME SAMPLED.....: 09:37
WORK DESCRIPTION...: BTZ-C-13-7.5

LABORATORY I.D...: 931773-0002
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	ND	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	10	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	5	ug/Kg			
Xylenes-total		*1		8270 (2)	09/27/93	JMC
APPENDIX IX BNA ORGANICS						
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	660	ug/Kg			
Benzyl Alcohol	ND	330	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	660	ug/Kg			
4-Chloroaniline	ND	330	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
TE SAMPLED.....: 09/08/93
ME SAMPLED.....: 09:37
ORK DESCRIPTION...: BTZ-C-13-7.5

LABORATORY I.D...: 931773-0002
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

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CLIENT I.D.....: 93299BJ
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ORK DESCRIPTION...: BTZ-C-13-7.5

LABORATORY I.D...: 931773-0002
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	660	ug/Kg			
4-Chloro-3-methylphenol	ND	330	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	1650	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	330	ug/Kg			
Ethyl methanesulfonate	ND	6600	ug/Kg			
Hexachlorophene	ND	330	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	1650	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	330	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol		*1		8270 (2)	09/30/93	JMC
APPENDIX IX ORGANOPHOSPHOROUS PEST						
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

I NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
TE SAMPLED.....: 09/08/93
ME SAMPLED.....: 09:37
ORK DESCRIPTION...: BTZ-C-13-7.5

LABORATORY I.D...: 931773-0002
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

JB NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LIENT I.D.....: 93299BJ
ATE SAMPLED.....: 09/08/93
IME SAMPLED.....: 09:42
WORK DESCRIPTION...: BTZ-C-13-10.0

LABORATORY I.D...: 931773-0003
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	4	1	mg/Kg	6010 (2)	09/24/93	WGL
Lead, Total (Pb)	11	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
TE SAMPLED.....: 09/08/93
.ME SAMPLED.....: 09:50
ORK DESCRIPTION...: BTZ-C-13-15.0

LABORATORY I.D...: 931773-0004
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
ıromium, Total (Cr)	5	1	mg/Kg	6010 (2)	09/24/93	WGL
ɹead, Total (Pb)	9	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/06/93

JB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
IME SAMPLED.....: 16:24
ORK DESCRIPTION...: BTZ-C-14-5.0

LABORATORY I.D...: 931725-0046
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	23	1	mg/Kg	6010 (2)	09/17/93	WGL
ead, Total (Pb)	19	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS

10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 16:30
RK DESCRIPTION...: BTZ-C-14-7.5

LABORATORY I.D...: 931725-0047
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
hromium, Total (Cr)	7	1	mg/Kg	6010 (2)	09/17/93	WGL
ad, Total (Pb)	8	5	mg/Kg	6010 (2)	09/17/93	WGL
PENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/17/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	14	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 16:30
WORK DESCRIPTION...: BTZ-C-14-7.5

LABORATORY I.D...: 931725-0047
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	ND	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
APPENDIX IX BNA ORGANICS		*1		8270 (2)	09/22/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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CLIENT I.D.....: 93299BJ
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LABORATORY I.D...: 931725-0047
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

'^B NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 16:30
RK DESCRIPTION...: BTZ-C-14-7.5

LABORATORY I.D...: 931725-0047
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	330	ug/Kg			
4-Chloro-3-methylphenol	ND	660	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	330	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	1650	ug/Kg			
Ethyl methanesulfonate	ND	330	ug/Kg			
Hexachlorophene	ND	6600	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	330	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	1650	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol	ND	330	ug/Kg			
PPENDIX IX ORGANOPHOSPHOROUS PEST		*1		8270 (2)	10/01/93	JMC
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 16:30
RK DESCRIPTION...: BTZ-C-14-7.5

LABORATORY I.D...: 931725-0047
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

'^B NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 16:35
RK DESCRIPTION...: BTZ-C-14-10.0

LABORATORY I.D...: 931725-0048
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	12	1	mg/Kg	6010 (2)	09/17/93	WGL
:ad, Total (Pb)	7	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 16:43
MARK DESCRIPTION...: BTZ-C-14-15.0

LABORATORY I.D...: 931725-0049
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	19	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	12	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 14:50
WORK DESCRIPTION...: BTZ-C-15-5.0

LABORATORY I.D...: 931725-0038
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	17	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	12	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 15:00
MARK DESCRIPTION...: BTZ-C-15-7.5

LABORATORY I.D...: 931725-0039
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	23	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	18	5	mg/Kg	6010 (2)	09/17/93	WGL
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/17/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	17	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 15:00
WORK DESCRIPTION...: BTZ-C-15-7.5

LABORATORY I.D...: 931725-0039
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	ND	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
APPENDIX IX BNA ORGANICS		*1		8270 (2)	09/22/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 15:00
MARK DESCRIPTION...: BTZ-C-15-7.5

LABORATORY I.D...: 931725-0039
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

B NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/02/93
ME SAMPLED.....: 15:00
RK DESCRIPTION...: BTZ-C-15-7.5

LABORATORY I.D...: 931725-0039
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	330	ug/Kg			
4-Chloro-3-methylphenol	ND	660	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	330	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	1650	ug/Kg			
Ethyl methanesulfonate	ND	330	ug/Kg			
Hexachlorophene	ND	6600	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	330	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	1650	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol	ND	330	ug/Kg			
APPENDIX IX ORGANOPHOSPHOROUS PEST		*1		8270 (2)	10/01/93	JMC
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/06/93

B NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/02/93
ME SAMPLED.....: 15:00
RK DESCRIPTION...: BTZ-C-15-7.5

LABORATORY I.D...: 931725-0039
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 15:00
WORK DESCRIPTION...: BTZ-C-15-7.5-D

LABORATORY I.D...: 931725-0040
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	21	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	<5	5	mg/Kg	6010 (2)	09/17/93	WGL
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/17/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	13	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS
10/06/93

3 NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/02/93
ME SAMPLED.....: 15:00
RK DESCRIPTION...: BTZ-C-15-7.5-D

LABORATORY I.D...: 931725-0040
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	5	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
APPENDIX IX BNA ORGANICS		*1		8270 (2)	09/22/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

B NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/02/93
ME SAMPLED.....: 15:00
ORK DESCRIPTION...: BTZ-C-15-7.5-D

LABORATORY I.D...: 931725-0040
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

3 NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/02/93
ME SAMPLED.....: 15:00
RK DESCRIPTION...: BTZ-C-15-7.5-D

LABORATORY I.D...: 931725-0040
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	330	ug/Kg			
4-Chloro-3-methylphenol	ND	660	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	330	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	1650	ug/Kg			
Ethyl methanesulfonate	ND	330	ug/Kg			
Hexachlorophene	ND	6600	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	330	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	1650	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol	ND	330	ug/Kg			
APPENDIX IX ORGANOPHOSPHOROUS PEST		*1		8270 (2)	10/01/93	JMC
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

JB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 15:00
ORK DESCRIPTION...: BTZ-C-15-7.5-D

LABORATORY I.D...: 931725-0040
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

JB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 15:05
ORK DESCRIPTION...: BTZ-C-15-10.0

LABORATORY I.D...: 931725-0041
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	16	1	mg/Kg	6010 (2)	09/17/93	WGL
ead, Total (Pb)	12	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS

10/06/93

JB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 932998J
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 15:13
WORK DESCRIPTION...: BTZ-C-15-15.0

LABORATORY I.D...: 931725-0042
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	15	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	12	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 13:28
MARK DESCRIPTION...: BTZ-C-16-5.0

LABORATORY I.D...: 931725-0031
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	20	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	10	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 13:31
WORK DESCRIPTION...: BTZ-C-16-7.5

LABORATORY I.D...: 931725-0032
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	15	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	13	5	mg/Kg	6010 (2)	09/17/93	WGL
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/16/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	13	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

OB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LIENT I.D.....: 93299BJ
ATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 13:31
RK DESCRIPTION...: BTZ-C-16-7.5

LABORATORY I.D...: 931725-0032
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	5	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
PENDIX IX BNA ORGANICS		*1		8270 (2)	09/21/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	820	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 13:31
WORK DESCRIPTION...: BTZ-C-16-7.5

LABORATORY I.D...: 931725-0032
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 13:31
WORK DESCRIPTION...: BTZ-C-16-7.5

LABORATORY I.D...: 931725-0032
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	330	ug/Kg			
4-Chloro-3-methylphenol	ND	660	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	330	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	1650	ug/Kg			
Ethyl methanesulfonate	ND	330	ug/Kg			
Hexachlorophene	ND	6600	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	330	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	1650	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol	ND	330	ug/Kg			
APPENDIX IX ORGANOPHOSPHOROUS PEST		*1		8270 (2)	10/01/93	JMC
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

'B NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LIENT I.D.....: 93299BJ
ATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 13:31
RK DESCRIPTION...: BTZ-C-16-7.5

LABORATORY I.D...: 931725-0032
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

OB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 13:45
RK DESCRIPTION...: BTZ-C-16-10.0

LABORATORY I.D...: 931725-0033
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	10	1	mg/Kg	6010 (2)	09/17/93	WGL
·ad, Total (Pb)	12	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

B NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LIENT I.D.....: 93299BJ
ATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 13:50
RK DESCRIPTION...: BTZ-C-16-15.0

LABORATORY I.D...: 931725-0034
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
hromium, Total (Cr)	6	1	mg/Kg	6010 (2)	09/17/93	WGL
ad, Total (Pb)	7	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS

10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 10:33
WORK DESCRIPTION...: BTZ-C-17-5.0

LABORATORY I.D...: 931725-0023
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	22	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	16	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 10:37
MARK DESCRIPTION...: BTZ-C-17-7.5

LABORATORY I.D...: 931725-0024
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	10	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	10	5	mg/Kg	6010 (2)	09/17/93	WGL
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/16/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	16	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 932998J
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 10:37
WORK DESCRIPTION...: BTZ-C-17-7.5

LABORATORY I.D...: 931725-0024
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	ND	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
APPENDIX IX BNA ORGANICS		*1		8270 (2)	09/21/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 10:37
WORK DESCRIPTION...: BTZ-C-17-7.5

LABORATORY I.D...: 931725-0024
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 10:37
WORK DESCRIPTION...: BTZ-C-17-7.5

LABORATORY I.D...: 931725-0024
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	330	ug/Kg			
4-Chloro-3-methylphenol	ND	660	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	330	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	1650	ug/Kg			
Ethyl methanesulfonate	ND	330	ug/Kg			
Hexachlorophene	ND	6600	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	330	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	1650	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol	ND	330	ug/Kg			
APPENDIX IX ORGANOPHOSPHOROUS PEST		*1		8270 (2)	10/01/93	JMC
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 10:37
MARK DESCRIPTION...: BTZ-C-17-7.5

LABORATORY I.D...: 931725-0024
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

OB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LIENT I.D.....: 93299BJ
ATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 10:42
RK DESCRIPTION...: BTZ-C-17-10.0

LABORATORY I.D...: 931725-0025
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
hromium, Total (Cr)	16	1	mg/Kg	6010 (2)	09/17/93	WGL
ad, Total (Pb)	13	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 10:48
WORK DESCRIPTION...: BTZ-C-17-15.0

LABORATORY I.D...: 931725-0026
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	16	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	16	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 10:48
WORK DESCRIPTION...: BTZ-C-17-15.0-D

LABORATORY I.D...: 931725-0027
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	8	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	12	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
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JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 09:12
WORK DESCRIPTION...: BTZ-C-18-5.0

LABORATORY I.D...: 931725-0015
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	20	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	16	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 09:12
WORK DESCRIPTION...: BTZ-C-18-5.0-D

LABORATORY I.D...: 931725-0016
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	16	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	12	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 09:15
WORK DESCRIPTION...: BTZ-C-18-7.5

LABORATORY I.D...: 931725-0017
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	19	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	14	5	mg/Kg	6010 (2)	09/17/93	WGL
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/16/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	15	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 09:15
MARK DESCRIPTION...: BTZ-C-18-7.5

LABORATORY I.D...: 931725-0017
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	5	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
PENDIX IX BNA ORGANICS		*1		8270 (2)	09/21/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

B NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 09:15
RK DESCRIPTION...: BTZ-C-18-7.5

LABORATORY I.D...: 931725-0017
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

3 NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 09:15
RK DESCRIPTION...: BTZ-C-18-7.5

LABORATORY I.D...: 931725-0017
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	330	ug/Kg			
4-Chloro-3-methylphenol	ND	660	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	330	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	1650	ug/Kg			
Ethyl methanesulfonate	ND	330	ug/Kg			
Hexachlorophene	ND	6600	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	330	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	1650	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol	ND	330	ug/Kg			
PPENDIX IX ORGANOPHOSPHOROUS PEST		*1		8270 (2)	10/01/93	JMC
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS

10/06/93

'3 NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
ME SAMPLED.....: 09:15
RK DESCRIPTION...: BTZ-C-18-7.5

LABORATORY I.D...: 931725-0017
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 09:22
MARK DESCRIPTION...: BTZ-C-18-10.0

LABORATORY I.D...: 931725-0018
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	30	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	11	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/02/93
TIME SAMPLED.....: 09:27
WORK DESCRIPTION...: BTZ-C-18-15.0

LABORATORY I.D...: 931725-0019
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	15	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	10	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS

10/06/93

IB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/01/93
ME SAMPLED.....: 11:52
ORK DESCRIPTION...: BTZ-C-19-5.0

LABORATORY I.D...: 931725-0001
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	13	1	mg/Kg	6010 (2)	09/17/93	WGL
ead, Total (Pb)	6	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

B NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/01/93
ME SAMPLED.....: 14:05
ORK DESCRIPTION...: BTZ-C-19-7.5

LABORATORY I.D...: 931725-0002
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	13	1	mg/Kg	6010 (2)	09/17/93	WGL
ead, Total (Pb)	5	5	mg/Kg	6010 (2)	09/17/93	WGL
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/15/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	ND	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

3 NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/01/93
ME SAMPLED.....: 14:05
URK DESCRIPTION...: BTZ-C-19-7.5

LABORATORY I.D...: 931725-0002
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	9	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
APPENDIX IX BNA ORGANICS		*1		8270 (2)	09/21/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

B NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/01/93
ME SAMPLED.....: 14:05
RK DESCRIPTION...: BTZ-C-19-7.5

LABORATORY I.D...: 931725-0002
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
ATE SAMPLED.....: 09/01/93
IME SAMPLED.....: 14:05
ORK DESCRIPTION...: BTZ-C-19-7.5

LABORATORY I.D...: 931725-0002
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	330	ug/Kg			
4-Chloro-3-methylphenol	ND	660	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	330	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	1650	ug/Kg			
Ethyl methanesulfonate	ND	330	ug/Kg			
Hexachlorophene	ND	6600	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	330	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	1650	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol	ND	330	ug/Kg			
APPENDIX IX ORGANOPHOSPHOROUS PEST		*1		8270 (2)	09/30/93	JMC
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

JB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
TE SAMPLED.....: 09/01/93
ME SAMPLED.....: 14:05
ORK DESCRIPTION...: BTZ-C-19-7.5

LABORATORY I.D...: 931725-0002
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

B NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/01/93
ME SAMPLED.....: 14:18
RK DESCRIPTION...: BTZ-C-19-10.0

LABORATORY I.D...: 931725-0003
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	11	1	mg/Kg	6010 (2)	09/17/93	WGL
·ad, Total (Pb)	15	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS

10/06/93

IB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/01/93
ME SAMPLED.....: 14:23
RK DESCRIPTION...: BTZ-C-19-15.0

LABORATORY I.D...: 931725-0004
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	8	1	mg/Kg	6010 (2)	09/17/93	WGL
ead, Total (Pb)	8	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS

10/06/93

3 NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/01/93
ME SAMPLED.....: 15:35
RK DESCRIPTION...: BTZ-C-20-5.0

LABORATORY I.D...: 931725-0008
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
hromium, Total (Cr)	19	1	mg/Kg	6010 (2)	09/17/93	WGL
ad, Total (Pb)	10	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/01/93
TIME SAMPLED.....: 15:48
WORK DESCRIPTION...: BTZ-C-20-7.5

LABORATORY I.D...: 931725-0009
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	17	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	14	5	mg/Kg	6010 (2)	09/17/93	WGL
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/15/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	ND	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/01/93
TIME SAMPLED.....: 15:48
SAMPLE DESCRIPTION...: BTZ-C-20-7.5

LABORATORY I.D...: 931725-0009
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	9	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
PPENDIX IX BNA ORGANICS		*1		8270 (2)	09/21/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			

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10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/01/93
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WORK DESCRIPTION...: BTZ-C-20-7.5

LABORATORY I.D...: 931725-0009
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			

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10/06/93

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TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	330	ug/Kg			
4-Chloro-3-methylphenol	ND	660	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	330	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	1650	ug/Kg			
Ethyl methanesulfonate	ND	330	ug/Kg			
Hexachlorophene	ND	6600	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	330	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	1650	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol	ND	330	ug/Kg			
APPENDIX IX ORGANOPHOSPHOROUS PEST		*1		8270 (2)	10/01/93	JMC
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			

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10/06/93

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CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/01/93
TIME SAMPLED.....: 15:48
WORK DESCRIPTION...: BTZ-C-20-7.5

LABORATORY I.D...: 931725-0009
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/01/93
TIME SAMPLED.....: 15:55
MARK DESCRIPTION...: BTZ-C-20-10.0

LABORATORY I.D...: 931725-0010
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	19	1	mg/Kg	6010 (2)	09/17/93	WGL
ad, Total (Pb)	19	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/01/93
TIME SAMPLED.....: 16:08
WORK DESCRIPTION...: BTZ-C-20-15.0

LABORATORY I.D...: 931725-0011
DATE RECEIVED....: 09/04/93
TIME RECEIVED....: 10:02
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	4	1	mg/Kg	6010 (2)	09/17/93	WGL
Lead, Total (Pb)	7	5	mg/Kg	6010 (2)	09/17/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

C'ENT I.D.....: 932998J
E SAMPLED.....: 09/09/93
JE SAMPLED.....: 11:10
ORK DESCRIPTION...: LTA-BGRD-1-5.0

LABORATORY I.D...: 931773-0046
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
romium, Total (Cr)	9	1	mg/Kg	6010 (2)	09/24/93	WGL
ad, Total (Pb)	12	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

JOB NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/09/93
TIME SAMPLED.....: 11:15
WORK DESCRIPTION...: LTA-BGRD-1-7.5

LABORATORY I.D...: 931773-0047
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	6	1	mg/Kg	6010 (2)	09/24/93	WGL
Lead, Total (Pb)	<5	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/09/93
ME SAMPLED.....: 11:19
ORK DESCRIPTION...: LTA-BGRD-1-10.0

LABORATORY I.D...: 931773-0048
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
hromium, Total (Cr)	3	1	mg/Kg	6010 (2)	09/24/93	WGL
ead, Total (Pb)	5	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

JOB NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/09/93
TIME SAMPLED.....: 11:23
WORK DESCRIPTION...: LTA-BGRD-1-15.0

LABORATORY I.D...: 931773-0049
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	4	1	mg/Kg	6010 (2)	09/24/93	WGL
Lead, Total (Pb)	10	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
TE SAMPLED.....: 09/09/93
ME SAMPLED.....: 10:10
RK DESCRIPTION...: LTA-BGRD-2-5.0

LABORATORY I.D...: 931773-0039
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	7	1	mg/Kg	6010 (2)	09/24/93	WGL
ad, Total (Pb)	13	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

; NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CIIENT I.D.....: 93299BJ
[TE SAMPLED.....: 09/09/93
4E SAMPLED.....: 10:16
JORK DESCRIPTION...: LTA-BGRD-2-7.5

LABORATORY I.D...: 931773-0040
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

..ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
chromium, Total (Cr)	6	1	mg/Kg	6010 (2)	09/24/93	WGL
ad, Total (Pb)	10	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
TE SAMPLED.....: 09/09/93
IE SAMPLED.....: 10:19
RK DESCRIPTION...: LTA-BGRD-2-10.0

LABORATORY I.D...: 931773-0041
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
hromium, Total (Cr)	9	1	mg/Kg	6010 (2)	09/24/93	WGL
ad, Total (Pb)	14	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

JB NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 932998J
DATE SAMPLED.....: 09/09/93
TIME SAMPLED.....: 10:23
WORK DESCRIPTION...: LTA-BGRD-2-15.0

LABORATORY I.D...: 931773-0042
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	8	1	mg/Kg	6010 (2)	09/24/93	WGL
Lead, Total (Pb)	13	5	mg/Kg	6010 (2)	09/24/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
TE SAMPLED.....: 09/08/93
ME SAMPLED.....: 14:42
ORK DESCRIPTION...: BTZ-C-11-30.0-E

LABORATORY I.D...: 931773-0023
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Chromium, Total (Cr)	<0.01	0.01	mg/L	6010 (2)	09/20/93	WGL
Lead, Total (Pb)	0.10	0.05	mg/L	6010 (2)	09/20/93	WGL

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LABORATORY TESTS RESULTS

10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

IENT I.D.....: 93299BJ
TE SAMPLED.....: 09/08/93
ME SAMPLED.....: 14:37
WORK DESCRIPTION...: BTZ-C-11-30.0-E

LABORATORY I.D...: 931773-0022
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
PENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/17/93	MRC
Acetone	ND	100	ug/L			
Acetonitrile	ND	100	ug/L			
Acrolein	ND	50	ug/L			
Acrylonitrile	ND	20	ug/L			
Allyl chloride	ND	20	ug/L			
Benzene	ND	1	ug/L			
Bromodichloromethane	ND	5	ug/L			
Bromoform	ND	5	ug/L			
Bromomethane	ND	10	ug/L			
Carbon Disulfide	ND	5	ug/L			
Carbon tetrachloride	ND	5	ug/L			
Chlorobenzene	ND	5	ug/L			
Chloroethane	ND	10	ug/L			
Chloroform	ND	5	ug/L			
Chloromethane	ND	5	ug/L			
Dibromochloromethane	ND	5	ug/L			
1,2 Dibromo-3-Chloropropane	ND	20	ug/L			
1,2 Dibromoethane	ND	20	ug/L			
Dibromomethane	ND	5	ug/L			
trans-1,4-Dichloro-2-butene	ND	50	ug/L			
Dichlorodifluoromethane	ND	10	ug/L			
1,1-Dichloroethane	ND	5	ug/L			
1,2-Dichloroethane	ND	5	ug/L			
1,1-Dichloroethene	ND	5	ug/L			
1,2-Dichloroethene (total)	ND	5	ug/L			
Dichloromethane	ND	5	ug/L			
1,2-Dichloropropane	ND	5	ug/L			
cis-1,3-Dichloropropene	ND	5	ug/L			
trans-1,3-Dichloropropene	ND	5	ug/L			
Ethyl Benzene	ND	5	ug/L			
Ethyl methacrylate	ND	5	ug/L			
2-Hexanone	ND	50	ug/L			
Iodomethane	ND	5	ug/L			
Methylacrylonitrile	ND	50	ug/L			
2-Butanone	ND	100	ug/L			
4-Methyl-2-pentanone	ND	50	ug/L			
Methyl methacrylate	ND	5	ug/L			
Propionitrile	ND	100	ug/L			
Styrene	ND	5	ug/L			
1,1,1,2-Tetrachlorethane	ND	5	ug/L			
1,1,2,2-Tetrachloroethane	ND	5	ug/L			
Tetrachloroethene	ND	5	ug/L			
Toluene	ND	5	ug/L			

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LABORATORY TESTS RESULTS

10/05/93

NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....: 93299BJ
DATE SAMPLED.....: 09/08/93
TIME SAMPLED.....: 14:37
WORK DESCRIPTION...: BTZ-C-11-30.0-E

LABORATORY I.D...: 931773-0022
DATE RECEIVED....: 09/11/93
TIME RECEIVED....: 10:00
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1-Trichloroethane	ND	5	ug/L			
1,1,2-Trichloroethane	ND	5	ug/L			
Trichloroethene	ND	5	ug/L			
Trichlorofluoromethane	ND	5	ug/L			
1,2,3-Trichloropropane	ND	5	ug/L			
Vinyl Acetate	ND	50	ug/L			
Vinyl chloride	ND	10	ug/L			
Xylenes-total	ND	5	ug/L			

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

Job Number: 931773
Prepared For:

GIANT REFINING
LYNN SHELTON
RT 3, BOX 7
GALLUP, NM 87301

Date: 10/05/93

Signature

10·13·93
Date:

Name: Ron Fuller

Core Laboratories
10703 East Bethany Drive
Aurora, CO 80014

Title: LABORATORY MANAGER

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Sample Delivery Group Narrative

October 13,1993

Customer: Giant Refining
Project: 93299BJ
Core Laboratories Project Number: 931773

The organic analysis of the samples submitted for this project did not include the quantitative analysis for following compounds: chloroprene, isobutanol, and 2-sec-butyl-4,6-dinitrophenol. The sample spectrum were reviewed and these compounds were manually searched for. The manual qualitative search of the samples did not detect the presence of these analytes, but no quantitative data was reported. The analysis of Core Laboratories sample 931773-25 (BTZ-C-13-7.5) by method 8240 for volatile organic compounds has an E-flagged result reported for acetone. The reported concentration is above the calibrated range for acetone, but is within the linear range for this compound based on historical data.

Linda L. Benkers
QA/QC Coordinator

James M. Childs
Laboratory Supervisor

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EXPLANATION OF DATA FLAGS

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

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

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

* - Used to indicate matrix interference.

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

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LABORATORY TESTS RESULTS

10/05/93

NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LABORATORY I.D...: 931773-0053
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

CLIENT I.D.....:
E SAMPLED.....: / /
E SAMPLED.....: :
K DESCRIPTION...: METHOD BLANK

T DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/17/93	MRC
Acetone	ND	100	ug/L			
Acetonitrile	ND	100	ug/L			
Acrolein	ND	50	ug/L			
Acrylonitrile	ND	20	ug/L			
Allyl chloride	ND	20	ug/L			
Benzene	ND	1	ug/L			
Bromodichloromethane	ND	5	ug/L			
Bromoform	ND	5	ug/L			
Bromomethane	ND	10	ug/L			
Carbon Disulfide	ND	5	ug/L			
Carbon tetrachloride	ND	5	ug/L			
Chlorobenzene	ND	5	ug/L			
Chloroethane	ND	10	ug/L			
Chloroform	ND	5	ug/L			
Chloromethane	ND	5	ug/L			
Chloroprene	ND	5	ug/L			
Dibromochloromethane	ND	5	ug/L			
1,2 Dibromo-3-Chloropropane	ND	20	ug/L			
1,2 Dibromoethane	ND	20	ug/L			
Dibromomethane	ND	5	ug/L			
trans-1,4-Dichloro-2-butene	ND	50	ug/L			
Dichlorodifluoromethane	ND	10	ug/L			
1,1-Dichloroethane	ND	5	ug/L			
1,2-Dichloroethane	ND	5	ug/L			
1,1-Dichloroethene	ND	5	ug/L			
1,2-Dichloroethene (total)	ND	5	ug/L			
Dichloromethane	ND	5	ug/L			
1,2-Dichloropropane	ND	5	ug/L			
cis-1,3-Dichloropropene	ND	5	ug/L			
trans-1,3-Dichloropropene	ND	5	ug/L			
Ethyl Benzene	ND	5	ug/L			
Ethyl methacrylate	ND	5	ug/L			
2-Hexanone	ND	50	ug/L			
Iodomethane	ND	5	ug/L			
Isobutyl alcohol	ND	50	ug/L			
Methylacrylonitrile	ND	50	ug/L			
2-Butanone	ND	100	ug/L			
Methyl isobutyl ketone	ND	50	ug/L			
4-Methyl-2-pentanone	ND	50	ug/L			
Methyl methacrylate	ND	5	ug/L			
Propionitrile	ND	100	ug/L			
Styrene	ND	5	ug/L			
1,1,1,2-Tetrachlorethane	ND	5	ug/L			

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LABORATORY TESTS RESULTS

10/05/93

JB NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....:
ATE SAMPLED.....: / /
ME SAMPLED.....: :
ORK DESCRIPTION...: METHOD BLANK

LABORATORY I.D...: 931773-0053
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,2,2-Tetrachloroethane	ND	5	ug/L			
Tetrachloroethene	ND	5	ug/L			
Toluene	ND	5	ug/L			
1,1,1-Trichloroethane	ND	5	ug/L			
1,1,2-Trichloroethane	ND	5	ug/L			
Trichloroethene	ND	5	ug/L			
Trichlorofluoromethane	ND	5	ug/L			
1,2,3-Trichloropropane	ND	5	ug/L			
Vinyl Acetate	ND	50	ug/L			
Vinyl chloride	ND	10	ug/L			
Xylenes-total	ND	5	ug/L			
		*1		8270 (2)	09/27/93	JMC
APPENDIX IX BNA ORGANICS						
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			
3,3-Dichlorobenzidine	ND	660	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....:
TE SAMPLED.....: / /
ME SAMPLED.....: :
RK DESCRIPTION...: METHOD BLANK

LABORATORY I.D...: 931773-0053
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			
N-Nitrosopyrrolidine	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LABORATORY I.D...: 931773-0053
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

C ENT I.D.....:
E SAMPLED.....: / /
IE SAMPLED.....: :
ORK DESCRIPTION...: METHOD BLANK

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	660	ug/Kg			
4-Chloro-3-methylphenol	ND	330	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	1650	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	330	ug/Kg			
Ethyl methanesulfonate	ND	6600	ug/Kg			
Hexachlorophene	ND	330	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	1650	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	330	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol		*1		8270 (2)	09/30/93	JMC
APPENDIX IX ORGANOPHOSPHOROUS PEST						
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			
Ethyl Parathion	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....:
TE SAMPLED.....: / /
ME SAMPLED.....: :
RK DESCRIPTION...: METHOD BLANK

LABORATORY I.D...: 931773-0053
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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QUALITY CONTROL REPORT
10/05/93

B NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Chromium, Total (Cr) DATE/TIME ANALYZED:09/20/93 10:40 QC BATCH NUMBER:278811 TECHNICIAN:WGL										
PORTING LIMIT/DF: 0.01 UNITS:mg/L METHOD REFERENCE :6010 (2)										
BLANK	ICB	0913K	<0.01							
BLANK	CCB	0913K	<0.01							
ANK	MB	0916	<0.01							
ANK	CCB	0913K	<0.01							
ANK	CCB	0913K	<0.01							
BLANK	CCB	0913K	<0.01							
LANK	CCB	0913K	<0.01							
LANK	CCB	0913K	<0.01							
LANK	MB	0914	<0.01							
BLANK	CCB	0913K	<0.01							
BLANK	CCB	0913K	<0.01							
LANK	CCB	0913K	<0.01							
TANDARD	CCV	0910A	2.37			2.50	95			
TANDARD	CCV	0910A	2.40			2.50	96			
STANDARD	CCV	0910A	2.36			2.50	94			
STANDARD	ICV	0415F	1.89			2.00	94			
TANDARD	CCV	0910A	2.29			2.50	92			
TANDARD	ISB	0907K	0.45			0.50	90			
STANDARD	CCV	0910A	2.26			2.50	90			
STANDARD	CCV	0910A	2.37			2.50	95			
TANDARD	LCS	91086	1.94			2.00	97			
TANDARD	CCV	0910A	2.43			2.50	97			
STANDARD	CCV	0910A	2.46			2.50	98			
STANDARD	ISB	0907K	0.45			0.50	90			
STANDARD	CCV	0910A	2.40			2.50	96			
SPIKE	MS	931755-006	0.95					<0.01	1.00	95
SPIKE	MS	931631-005	0.87					<0.01	1.00	87
SPIKE	MS	931765-005	1.11					<0.01	1.00	111
DUPLICATE	MD	931755-007	<0.01	<0.01	NC					
DUPLICATE	SD/1X	931631-009	<0.01	<0.01	NC					
DUPLICATE	SD/1X	931765-001	<0.01	<0.01	NC					
DUPLICATE	MD	931765-004	<0.01	<0.01	NC					
DUPLICATE	MD	931631-003	<0.01	<0.01	NC					
PARAMETER:Lead, Total (Pb) DATE/TIME ANALYZED:09/20/93 10:40 QC BATCH NUMBER:278818 TECHNICIAN:WGL										
REPORTING LIMIT/DF: 0.05 UNITS:mg/L METHOD REFERENCE :6010 (2)										
BLANK	ICB	0913K	<0.05							
BLANK	CCB	0913K	<0.05							
BLANK	MB	0916	<0.05							
BLANK	CCB	0913K	<0.05							
BLANK	CCB	0913K	<0.05							
BLANK	CCB	0913K	<0.05							
BLANK	CCB	0913K	<0.05							
BLANK	CCB	0913K	<0.05							
BLANK	MB	0914	<0.05							

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CORE LABORATORIES

QUALITY CONTROL REPORT
10/05/93

3 NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Lead, Total (Pb) DATE/TIME ANALYZED:09/20/93 10:40 QC BATCH NUMBER:278818										
PORTING LIMIT/DF: 0.05 UNITS:mg/L METHOD REFERENCE :6010 (2) TECHNICIAN:WGL										
BLANK	CCB	0913K	<0.05							
BLANK	CCB	0913K	<0.05							
ANK	CCB	0913K	<0.05							
ANDARD	CCV	0910A	2.59			2.50	104			
ANDARD	CCV	0910A	2.58			2.50	103			
STANDARD	CCV	0910A	2.54			2.50	102			
STANDARD	ICV	0415F	1.84			2.00	92			
TANDARD	CCV	0910A	2.47			2.50	99			
TANDARD	ISB	0907K	0.89			1.00	89			
STANDARD	CCV	0910A	2.47			2.50	99			
STANDARD	CCV	0910A	2.45			2.50	98			
TANDARD	LCS	91086	2.00			2.00	100			
TANDARD	CCV	0910A	2.52			2.50	101			
TANDARD	CCV	0910A	2.53			2.50	101			
STANDARD	ISB	0907K	0.91			1.00	91			
STANDARD	CCV	0910A	2.47			2.50	99			
SPIKE	MS	931755-006	1.02					<0.05	1.00	102
SPIKE	MS	931631-005	1.00					<0.05	1.00	100
SPIKE	MS	931765-005	1.23					0.05	1.00	118
DUPLICATE	MD	931755-007	<0.05	<0.05	NC					
DUPLICATE	MD	931765-004	<0.05	<0.05	NC					
DUPLICATE	MD	931631-003	<0.05	<0.05	NC					
PARAMETER:Chromium, Total (Cr) DATE/TIME ANALYZED:09/24/93 14:50 QC BATCH NUMBER:279332										
REPORTING LIMIT/DF: 0.01 UNITS:mg/L METHOD REFERENCE :6010 (2) TECHNICIAN:WGL										
BLANK	ICB	0915K	<0.01							
BLANK	MB	0923	<0.01							
BLANK	CCB	0915K	<0.01							
BLANK	CCB	0915K	<0.01							
BLANK	CCB	0915K	<0.01							
BLANK	CCB	0915K	<0.01							
STANDARD	CCV	0916E	2.29			2.50	92			
STANDARD	ISB	0907K	0.46			0.50	92			
STANDARD	CCV	0916E	2.41			2.50	96			
STANDARD	ICV	0415E	1.88			2.00	94			
STANDARD	CCV	0916E	2.36			2.50	94			
STANDARD	LCS	0714C	1.48			1.89	78			
STANDARD	ISB	0907K	0.47			0.50	94			
STANDARD	CCV	0910A	2.38			2.50	95			
STANDARD	CCV	0916E	2.35			2.50	94			
SPIKE	PDS	931773-027	1.02					0.08	1.00	94
SPIKE	MS	931773-002	0.97					0.05	1.00	92
SPIKE	MS	931773-033	1.01					0.07	1.00	94
SPIKE	MS	931773-047	1.03					0.06	1.00	97
DUPLICATE	MD	931773-018	0.03	0.03	0.00					

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QUALITY CONTROL REPORT
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JOB NUMBER: 931773 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (|A-B|)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Chromium, Total (Cr) REPORTING LIMIT/DF: 0.01 UNITS:mg/L				DATE/TIME ANALYZED:09/24/93 14:50 METHOD REFERENCE :6010 (2)						QC BATCH NUMBER:279332 TECHNICIAN:WGL
DUPLICATE	MD	931773-032	0.09	0.09	0					
DUPLICATE	MD	931773-001	0.06	0.06	0					
DUPLICATE	MD	931773-046	0.09	0.08	12					
PARAMETER:Lead, Total (Pb) REPORTING LIMIT/DF: 0.05 UNITS:mg/L				DATE/TIME ANALYZED:09/24/93 14:50 METHOD REFERENCE :6010 (2)						QC BATCH NUMBER:279333 TECHNICIAN:WGL
BLANK	ICB	0915K	<0.05							
BLANK	MB	0923	<0.05							
BLANK	CCB	0915K	<0.05							
BLANK	CCB	0915K	<0.05							
BLANK	CCB	0915K	<0.05							
BLANK	CCB	0915K	<0.05							
STANDARD	CCV	0916E	2.39			2.50	96			
STANDARD	ISB	0907K	0.86			1.00	86			
STANDARD	CCV	0916E	2.50			2.50	100			
STANDARD	ICV	0415E	1.97			2.00	98			
STANDARD	CCV	0916E	2.46			2.50	98			
STANDARD	LCS	0714C	0.94			1.00	94			
STANDARD	ISB	0907K	1.01			1.00	101			
STANDARD	CCV	0910A	2.46			2.50	98			
STANDARD	CCV	0916E	2.41			2.50	96			
SPIKE	PDS	931773-027	1.13					0.10	1.00	103
SPIKE	MS	931773-002	1.10					0.12	1.00	98
SPIKE	MS	931773-033	1.12					0.15	1.00	97
SPIKE	MS	931773-047	1.12					<0.05	1.00	112
DUPLICATE	MD	931773-018	0.05	0.08	0.03					
DUPLICATE	MD	931773-032	0.10	0.12	0.02					
DUPLICATE	MD	931773-001	0.07	0.10	0.03					
DUPLICATE	MD	931773-046	0.12	0.15	0.03					

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QUALITY ASSURANCE REPORT
10-05-93

File No.: 931773

CUSTOMER: GIANT REFINING CO.

VOLATILE ANALYSIS - DATE AND TIME ANALYZED SUMMARY

Laboratory Sample I.D.	Client Sample I.D.	Date/Time Sampled	Date Received	Date/Time Analyzed
931773-22	BTZ-C-11-30.0E	09-08-93 1437	09-11-93	09-17-93 1908
931773-2	BTZ-C-13-7.5	09-08-93 0937	09-11-93	09-17-93 2340
931773-8	BTZ-C-12-7.5	09-08-93 1052	09-11-93	09-18-93 0035
931773-16	BTZ-C-11-7.5	09-08-93 1349	09-11-93	09-18-93 0130
931773-25	BTZ-C-10-7.5	09-08-93 1526	09-11-93	09-18-93 0224
931773-33	BTZ-C-9-7.5	09-09-93 0851	09-11-93	09-18-93 0319
METHOD BLANK				09-17-93 1814

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QUALITY ASSURANCE REPORT
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File No.: 931773

CUSTOMER: GIANT REFINING CO.

SEMI-VOLATILE ANALYSIS - DATE AND TIME ANALYZED SUMMARY

Laboratory Sample I.D.	Client Sample I.D.	Date/Time Sampled	Date Received	Date Extracted	Date/Time Analyzed
931773-2	BTZ-C-13-7.5	09-08-93 0937	09-11-93	09-21-93	09-27-93 1521
931773-8	BTZ-C-12-7.5	09-08-93 1052	09-11-93	09-21-93	09-27-93 1634
931773-16	BTZ-C-11-7.5	09-08-93 1349	09-11-93	09-21-93	09-27-93 1747
931773-25	BTZ-C-10-7.5	09-08-93 1526	09-11-93	09-21-93	09-27-93 1900
931773-33	BTZ-C-9-7.5	09-09-93 0851	09-11-93	09-21-93	09-27-93 2013
931773-33MS	BTZ-C-9-7.5	09-09-93 0851	09-11-93	09-21-93	09-27-93 2238
931773-33MSD	BTZ-C-9-7.5	09-09-93 0851	09-11-93	09-21-93	09-27-93 2351
METHOD BLANK				09-21-93	09-27-93 1254

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QUALITY ASSURANCE REPORT
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File No.: 931773

CUSTOMER: GIANT REFINING CO.

SEMI-VOLATILE ANALYSIS - DATE AND TIME ANALYZED SUMMARY

Laboratory Sample I.D.	Client Sample I.D.	Date/Time Sampled	Date Received	Date Extracted	Date/Time Analyzed
931773-2	BTZ-C-13-7.5	09-08-93 0937	09-11-93	09-21-93	09-30-93 1903
931773-8	BTZ-C-12-7.5	09-08-93 1052	09-11-93	09-21-93	09-30-93 1954
931773-16	BTZ-C-11-7.5	09-08-93 1349	09-11-93	09-21-93	09-30-93 2045
931773-25	BTZ-C-10-7.5	09-08-93 1526	09-11-93	09-21-93	09-30-93 2135
931773-33	BTZ-C-9-7.5	09-09-93 0851	09-11-93	09-21-93	09-30-93 2226
METHOD BLANK				09-21-93	09-30-93 1722

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QUALITY ASSURANCE REPORT
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File No.: 931773

CUSTOMER: GIANT REFINING CO.

SURROGATE PERCENT RECOVERY SUMMARY

Client Sample I.D.	BTZ-C-11-30.0E	BTZ-C-13-7.5	BTZ-C-12-7.5	BTZ-C-11-7.5	BTZ-C-10-7.5
Remark/Project	93299BJ	93299BJ	93299BJ	93299BJ	93299BJ
Sample Matrix	WATER	SOIL	SOIL	SOIL	SOIL
Laboratory Sample I.D.	931773-22	931773-2	931773-8	931773-16	931773-25
VOLATILE ORGANIC COMPOUNDS					
1,2-Dichloroethane (d4)	107	106	108	109	110
Toluene (d8)	92	98	96	96	95
4-Bromofluorobenzene	98	91	92	93	92

Client Sample I.D.	BTZ-C-9-7.5	09-17-93
Remark/Project	93299BJ	WATER
Sample Matrix	SOIL	METHOD BLANK
Laboratory Sample I.D.	931773-33	
VOLATILE ORGANIC COMPOUNDS		
1,2-Dichloroethane (d4)	104	107
Toluene (d8)	96	92
4-Bromofluorobenzene	95	97

SURROGATE RECOVERIES - ACCEPTANCE CRITERION

	Water Samples	Soil Samples
VOLATILE ORGANIC COMPOUNDS		
1,2-Dichloroethane (d4)	76 - 114 %	70 - 121 %
Toluene (d8)	88 - 110 %	81 - 117 %
4-Bromofluorobenzene	86 - 115 %	74 - 121 %

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File No.: 931773

CUSTOMER: GIANT REFINING CO.

SURROGATE PERCENT RECOVERY SUMMARY

Client Sample I.D.	BTZ-C-13-7.5	BTZ-C-12-7.5	BTZ-C-11-7.5	BTZ-C-10-7.5	BTZ-C-9-7.5
Remark/Project	93299BJ	93299BJ	93299BJ	93299BJ	93299BJ
Sample Matrix	SOIL	SOIL	SOIL	SOIL	SOIL
Laboratory Sample I.D.	931773-2	931773-8	931773-16	931773-25	931773-33
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS					
Nitrobenzene (d5)	69	77	74	70	68
2-Fluorobiphenyl	78	80	81	79	74
4-Terphenyl (d14)	100	100	99	98	97
SEMI-VOLATILE ACID COMPOUNDS					
Phenol (d6)	81	87	85	83	79
2-Fluorophenol	78	84	83	80	77
2,4,6-Tribromophenol	76	71	80	82	74

Client Sample I.D.	BTZ-C-9-7.5	BTZ-C-9-7.5	09-27-93		
Remark/Project	93299BJ	93299BJ	SOIL		
Sample Matrix	SOIL	SOIL	METHOD BLANK		
Laboratory Sample I.D.	931773-33MS	931773-33MSD			
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS					
Nitrobenzene (d5)	66	63	77		
2-Fluorobiphenyl	75	71	83		
4-Terphenyl (d14)	98	100	100		
SEMI-VOLATILE ACID COMPOUNDS					
Phenol (d6)	83	82	87		
2-Fluorophenol	78	77	85		
2,4,6-Tribromophenol	91	88	73		

SURROGATE RECOVERIES - ACCEPTANCE CRITERION	Water Samples	Soil Samples
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS		
Nitrobenzene (d5)	35 - 114 %	23 - 120 %
2-Fluorobiphenyl	43 - 116 %	30 - 115 %
4-Terphenyl (d14)	33 - 141 %	18 - 137 %
SEMI-VOLATILE ACID COMPOUNDS		
Phenol (d6)	10 - 94 %	24 - 113 %
2-Fluorophenol	21 - 100 %	25 - 121 %
2,4,6-Tribromophenol	10 - 123 %	19 - 122 %

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QUALITY ASSURANCE REPORT
10-5-93

File No.: 931773

CUSTOMER: GIANT REFINING CO.

SURROGATE PERCENT RECOVERY SUMMARY

Client Sample I.D.....	BTZ-C-13-7.5	BTZ-C-12-7.5	BTZ-C-11-7.5	BTZ-C-10-7.5	BTZ-C-9-7.5
Remark/Project.....	93299BJ	93299BJ	93299BJ	93299BJ	93299BJ
Sample Matrix.....	SOIL	SOIL	SOIL	SOIL	SOIL
Laboratory Sample I.D.....	931773-2	931773-8	931773-16	931773-25	931773-33
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS					
Nitrobenzene (d5)	73	81	77	76	72
2-Fluorobiphenyl	79	85	82	81	76
4-Terphenyl (d14)	89	91	92	90	87
SEMI-VOLATILE ACID COMPOUNDS					
Phenol (d6)	94	100	100	93	93
2-Fluorophenol	93	97	100	97	94
2,4,6-Tribromophenol	95	81	93	93	90

Client Sample I.D.....	09-30-93				
Remark/Project.....	SOIL				
Sample Matrix.....	METHOD BLANK				
Laboratory Sample I.D.....					
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS					
Nitrobenzene (d5)	83				
2-Fluorobiphenyl	86				
4-Terphenyl (d14)	93				
SEMI-VOLATILE ACID COMPOUNDS					
Phenol (d6)	102				
2-Fluorophenol	104				
2,4,6-Tribromophenol	84				

SURROGATE RECOVERIES - ACCEPTANCE CRITERION	Water Samples	Soil Samples
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS		
Nitrobenzene (d5)	35 - 114 %	23 - 120 %
2-Fluorobiphenyl	43 - 116 %	30 - 115 %
4-Terphenyl (d14)	33 - 141 %	18 - 137 %
SEMI-VOLATILE ACID COMPOUNDS		
Phenol (d6)	10 - 94 %	24 - 113 %
2-Fluorophenol	21 - 100 %	25 - 121 %
2,4,6-Tribromophenol	10 - 123 %	19 - 122 %

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QUALITY ASSURANCE REPORT
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File No.: 931773

CUSTOMER: GIANT REFINING CO.

MATRIX SPIKE RESULTS

Laboratory Sample I.D..... 931773-33
Sample Matrix..... SOIL
Units..... ug/Kg

	Spike Added	Original Value	Analyzed Value	% Recovery
SEMI-VOLATILE BASE/NEUTRAL/ACID COMPOUNDS				
Phenol	3330	<330	3000	90
2-Chlorophenol	3330	<330	3080	92
1,4-Dichlorobenzene	1670	<330	1150	69
N-Nitroso-di-n-propylamine	1670	<330	1610	96
1,2,4-Trichlorobenzene	1670	<330	1430	86
4-Chloro-3-methylphenol	3330	<660	3360	101
Acenaphthene	1670	<330	1660	99
4-Nitrophenol	3330	<1650	939	28
2,4-Dinitrotoluene	1670	<330	1550	93
Pentachlorophenol	3330	<1650	3390	102
Pyrene	1670	<330	1990	119

MATRIX SPIKE DUPLICATE RESULTS

	Spike Added	Original Value	Analyzed Value	% Recovery	RPD, %
SEMI-VOLATILE BASE/NEUTRAL/ACID COMPOUNDS					
Phenol	3330	<330	2790	84	7
2-Chlorophenol	3330	<330	2840	85	8
1,4-Dichlorobenzene	1670	<330	979	59	16
N-Nitroso-di-n-propylamine	1670	<330	1590	95	1
1,2,4-Trichlorobenzene	1670	<330	1340	80	6
4-Chloro-3-methylphenol	3330	<660	3290	99	2
Acenaphthene	1670	<330	1600	96	4
4-Nitrophenol	3330	<1650	861	26	9
2,4-Dinitrotoluene	1670	<330	1540	92	1
Pentachlorophenol	3330	<1650	3510	105	3
Pyrene	1670	<330	2000	120	1

MATRIX SPIKES - ACCEPTANCE CRITERION

	Percent Recoveries		RPD, Percent	
	Water Samples	Soil Samples	Water Samples	Soil Samples
SEMI-VOLATILE BASE/NEUTRAL/ACID COMPOUNDS				
Phenol	12 - 89 %	26 - 90 %	42	35
2-Chlorophenol	27 - 123 %	25 - 102 %	40	50
1,4-Dichlorobenzene	36 - 97 %	28 - 104 %	28	27
N-Nitroso-di-n-propylamine	41 - 116 %	41 - 126 %	38	38
1,2,4-Trichlorobenzene	39 - 98 %	38 - 107 %	28	23
4-Chloro-3-methylphenol	23 - 97 %	26 - 103 %	42	33
Acenaphthene	46 - 118 %	31 - 137 %	31	19
4-Nitrophenol	10 - 80 %	11 - 114 %	50	50
2,4-Dinitrotoluene	24 - 96 %	28 - 89 %	38	47
Pentachlorophenol	9 - 103 %	17 - 109 %	50	47
Pyrene	26 - 127 %	35 - 142 %	31	36

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ENVIRONMENTAL
RESOURCE ASSOCIATES
Arvada, Colorado 80002 1-800-ERA-0122

Certification

0507C 0714C

PriorityPollutnT™/CLP Quality Control Standards

Inorganics in Soil

Parameter	Lot Number 216 Certified Value mg/kg	Advisory Range mg/kg
TRACE METALS		
aluminum	6000	3600 - 8400
antimony	27.8	14 - 117
arsenic	67.7	41 - 105
barium	187	131 - 243
beryllium	57.5	35 - 81
cadmium	110	55 - 166
calcium	2040	1220 - 2860
chromium	189	95 - 265
cobalt	87.0	43 - 130
copper	141	84 - 200
iron	10800	7020 - 15100
lead	100	55 - 140
magnesium	2050	1200 - 3080
manganese	294	206 - 383
mercury	2.36	1.3 - 3.8
molybdenum	124	93 - 167
nickel	79.6	40 - 112
potassium	2130	1280 - 2770
selenium	99.1	54 - 149
silver	124	62 - 186
sodium	527	316 - 738
thallium	67.9	34 - 102
vanadium	84.8	59 - 115
zinc	197	98 - 280

.24 - .11

1.4 - .55

1. The Trace Metals Certified Values are equal to the mean recoveries for each parameter as determined in an interlaboratory round robin study (3 laboratories, 10 to 24 data points per parameter). The standard was digested using Method 3050, SW-846 and the digest analyzed by ICP and atomic absorption spectroscopy.

2. The Advisory Ranges are listed as guidelines for acceptable recoveries given the limitations of the EPA methodologies commonly used to determine these parameters. The range closely approximates the 95% confidence interval for these parameters based upon experimental data from this lot, previous ERA lots and published USEPA data.

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QUALITY CONTROL FOOTER

METHOD REFERENCES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Job Number: 931725
Prepared For:

GIANT REFINING
LYNN SHELTON
RT 3, BOX 7
GALLUP, NM 87301

Date: 10/06/93

Signature

10·13·93
Date:

Name: Ron Fuller

Core Laboratories
10703 East Bethany Drive
Aurora, CO 80014

Title: LABORATORY MANAGER

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Sample Delivery Group Narrative

October 13,1993

Customer: Giant Refining
Project: 93299BJ
Core Laboratories Project Number: 931725

The organic analysis of the samples submitted for this project did not include the quantitative analysis for following compounds: chloroprene, isobutanol, and 2-sec-butyl-4,6-dinitrophenol. The sample spectrum were reviewed and these compounds were manually searched for. The manual qualitative search of the samples did not detect the presence of these analytes, but no quantitative data was reported. The analysis of Core Laboratories sample 931725-9 (BTZ-C-20-7.5) was performed slightly after the EPA recommended analysis window had expired. The sample was injected 28 minutes after the 12 hour window had expired. The sample met all other quality control criteria and did not indicate any analytical problems. Core Laboratories samples 39, 40, and 47 were analyzed 1 day after the EPA recommended holding time had expired. The samples were prepared for analysis before the end of the holding time, but an instrument malfunction caused by a power outage aborted the instrument before the samples were analyzed. The samples were stored according to EPA recommended criteria and met all other quality control criteria.

Linda L. Benkers
QA/QC Coordinator

James M. Childs
Laboratory Supervisor

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LABORATORY TESTS RESULTS

10/06/93

'OB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....:
DATE SAMPLED.....: / /
IME SAMPLED.....: :
'ORK DESCRIPTION...: METHOD BLANK

LABORATORY I.D...: 931725-0053
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/15/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	ND	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	ND	5	ug/Kg			
Toluene	ND	5	ug/Kg			

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10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

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

LABORATORY I.D...: 931725-0053
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
APPENDIX IX BNA ORGANICS		*1		8270 (2)	09/21/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

B NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

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LABORATORY I.D...: 931725-0053
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....:
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WORK DESCRIPTION...: METHOD BLANK

LABORATORY I.D...: 931725-0053
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	330	ug/Kg			
4-Chloro-3-methylphenol	ND	660	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	330	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	1650	ug/Kg			
Ethyl methanesulfonate	ND	330	ug/Kg			
Hexachlorophene	ND	6600	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	330	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	1650	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol	ND	330	ug/Kg			
APPENDIX IX ORGANOPHOSPHOROUS PEST		*1		8270 (2)	09/21/93	JMC
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			
Ethyl Parathion	ND	330	ug/Kg			
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

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

LABORATORY I.D...: 931725-0053
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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

LABORATORY I.D...: 931725-0054
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/16/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Chloroprene	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	ND	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Isobutyl alcohol	ND	50	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
Methyl isobutyl ketone	ND	50	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			

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CORE LABORATORIES

LABORATORY TESTS RESULTS
10/06/93

'OB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

CLIENT I.D.....:
DATE SAMPLED.....: / /
ME SAMPLED.....: :
)RK DESCRIPTION...: METHOD BLANK

LABORATORY I.D...: 931725-0054
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

:ST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	ND	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
PPENDIX IX BNA ORGANICS		*1		8270 (2)	09/21/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
Benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			
3,3-Dichlorobenzidine	ND	660	ug/Kg			

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LABORATORY TESTS RESULTS

10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

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

LABORATORY I.D...: 931725-0054
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
1,4-Dioxane	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
Kepone	ND	1650	ug/Kg			
Methapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			
N-Nitrosopyrrolidine	ND	330	ug/Kg			

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TIME SAMPLED.....: :
ORK DESCRIPTION...: METHOD BLANK

LABORATORY I.D...: 931725-0054
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
Chlorobenzilate	ND	330	ug/Kg			
4-Chloro-3-methylphenol	ND	660	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Diallate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	330	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	1650	ug/Kg			
Ethyl methanesulfonate	ND	330	ug/Kg			
Hexachlorophene	ND	6600	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	330	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	1650	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol	ND	330	ug/Kg			
APPENDIX IX ORGANOPHOSPHOROUS PEST		*1		8140 (2)	09/30/93	JMC
Dimethoate	ND	330	ug/Kg			
Disulfoton	ND	330	ug/Kg			
Famphur	ND	330	ug/Kg			
Methyl Parathion	ND	330	ug/Kg			
Ethyl Parathion	ND	330	ug/Kg			

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LABORATORY TESTS RESULTS

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

LABORATORY I.D...: 931725-0054
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phorate	ND	330	ug/Kg			
Sulfotepp	ND	330	ug/Kg			
Thionazin	ND	330	ug/Kg			
o,o,o-Triethyl phosphorothioate	ND	330	ug/Kg			

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JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

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

LABORATORY I.D...: 931725-0055
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	09/17/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Chloroprene	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	ND	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Isobutyl alcohol	ND	50	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
Methyl isobutyl ketone	ND	50	ug/Kg			
4-Methyl-2-pentanone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			

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LABORATORY TESTS RESULTS
10/06/93

JOB NUMBER: 931725 CUSTOMER: GIANT REFINING ATTN: LYNN SHELTON

LIENT I.D.....:
ATE SAMPLED.....: / /
TIME SAMPLED.....: :
ORK DESCRIPTION...: METHOD BLANK

LABORATORY I.D...: 931725-0055
DATE RECEIVED....: / /
TIME RECEIVED....: :
REMARKS.....:

EST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	ND	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			

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CORE LABORATORIES

QUALITY ASSURANCE REPORT
10-06-93

File No.: 931725

CUSTOMER: GIANT REFINING CO.

VOLATILE ANALYSIS - DATE AND TIME ANALYZED SUMMARY

Laboratory Sample I.D.	Client Sample I.D.	Date/Time Sampled	Date Received	Date/Time Analyzed
931725-2	BTZ-C-19-7.5	09-01-93 1157	09-04-93	09-15-93 2059
931725-9	BTZ-C-20-7.5	09-01-93 1548	09-04-93	09-15-93 2154
931725-17	BTZ-C-18-7.5	09-02-93 0915	09-04-93	09-16-93 1818
931725-24	BTZ-C-17-7.5	09-02-93 1037	09-04-93	09-16-93 1913
931725-32	BTZ-C-16-7.5	09-02-93 1331	09-04-93	09-16-93 2008
931725-39	BTZ-C-15-7.5	09-02-93 1500	09-04-93	09-17-93 2057
931725-40	BTZ-C-15-7.5-D	09-02-93 1500	09-04-93	09-17-93 2152
931725-47	BTZ-C-14-7.5	09-02-93 1630	09-04-93	09-17-93 2246
METHOD BLANK				09-15-93 1055
METHOD BLANK				09-16-93 1249
METHOD BLANK				09-17-93 1814

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QUALITY ASSURANCE REPORT
10-06-93

CUSTOMER: GIANT REFINING CO.

File No.: 931725

SEMI-VOLATILE ANALYSIS - DATE AND TIME ANALYZED SUMMARY

Laboratory Sample I.D.	Client Sample I.D.	Date/Time Sampled	Date Received	Date Extracted	Date/Time Analyzed
931725-2	BTZ-C-19-7.5	09-01-93 1157	09-04-93	09-15-93	09-21-93 1807
931725-9	BTZ-C-20-7.5	09-01-93 1548	09-04-93	09-15-93	09-21-93 1920
931725-17	BTZ-C-18-7.5	09-02-93 0915	09-04-93	09-16-93	09-21-93 2033
931725-24	BTZ-C-17-7.5	09-02-93 1037	09-04-93	09-16-93	09-21-93 2145
931725-32	BTZ-C-16-7.5	09-02-93 1331	09-04-93	09-16-93	09-21-93 2258
931725-39	BTZ-C-15-7.5	09-02-93 1500	09-04-93	09-16-93	09-22-93 0010
931725-40	BTZ-C-15-7.5-D	09-02-93 1500	09-04-93	09-16-93	09-22-93 0123
931725-47	BTZ-C-14-7.5	09-02-93 1630	09-04-93	09-16-93	09-22-93 0236
931725-47MS	BTZ-C-14-7.5	09-02-93 1630	09-04-93	09-16-93	09-22-93 0348
931725-47MSD	BTZ-C-14-7.5	09-02-93 1630	09-04-93	09-16-93	09-22-93 0501
METHOD BLANK				09-15-93	09-21-93 1540
METHOD BLANK				09-16-93	09-21-93 1653

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QUALITY ASSURANCE REPORT
10-06-93

CUSTOMER: GAINT REFINING CO.

File No.: 931725

SEMI-VOLATILE ANALYSIS - DATE AND TIME ANALYZED SUMMARY

Laboratory Sample I.D.	Client Sample I.D.	Date/Time Sampled	Date Received	Date Extracted	Date/Time Analyzed
931725-2	BTZ-C-19-7.5	09-01-93 1157	09-04-93	09-15-93	09-30-93 2316
931725-9	BTZ-C-20-7.5	09-01-93 1548	09-04-93	09-15-93	10-01-93 0007
931725-17	BTZ-C-18-7.5	09-02-93 0915	09-04-93	09-16-93	10-01-93 0057
931725-24	BTZ-C-17-7.5	09-02-93 1037	09-04-93	09-16-93	10-01-93 0147
931725-32	BTZ-C-16-7.5	09-02-93 1331	09-04-93	09-16-93	10-01-93 0238
931725-39	BTZ-C-15-7.5	09-02-93 1500	09-04-93	09-16-93	10-01-93 0328
931725-40	BTZ-C-15-7.5D	09-02-93 1500	09-04-93	09-16-93	10-01-93 0418
931725-47	BTZ-C-14-7.5	09-02-93 1630	09-04-93	09-16-93	10-01-93 0508
METHOD BLANK				09-16-93	09-30-93 1813
METHOD BLANK				09-15-93	09-21-93 1540

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QUALITY ASSURANCE REPORT
10-06-93

CUSTOMER: GIANT REFINING CO.

File No.: 931725

SURROGATE PERCENT RECOVERY SUMMARY

Client Sample I.D.	BTZ-C-19-7.5	BTZ-C-20-7.5	BTZ-C-18-7.5	BTZ-C-17-7.5	BTZ-C-16-7.5
Remark/Project	93299BJ	93299BJ	93299BJ	93299BJ	93299BJ
Sample Matrix	SOIL	SOIL	SOIL	SOIL	SOIL
Laboratory Sample I.D.	931725-2	931725-9	931725-17	931725-24	931725-32
VOLATILE ORGANIC COMPOUNDS					
1,2-Dichloroethane (d4)	99	103	101	107	107
Toluene (d8)	97	95	95	97	98
4-Bromofluorobenzene	93	93	90	91	92

Client Sample I.D.	BTZ-C-15-7.5	BTZ-C-15-7.5-D	BTZ-C-14-7.5	09-15-93	09-16-93
Remark/Project	93299BJ	93299BJ	93299BJ	SOIL	SOIL
Sample Matrix	SOIL	SOIL	SOIL	METHOD BLANK	METHOD BLANK
Laboratory Sample I.D.	931725-39	931725-40	931725-47		
VOLATILE ORGANIC COMPOUNDS					
1,2-Dichloroethane (d4)	106	107	109	102	104
Toluene (d8)	94	96	95	93	92
4-Bromofluorobenzene	94	92	93	98	96

SURROGATE RECOVERIES - ACCEPTANCE CRITERION

	Water Samples	Soil Samples
VOLATILE ORGANIC COMPOUNDS		
1,2-Dichloroethane (d4)	76 - 114 %	70 - 121 %
Toluene (d8)	88 - 110 %	81 - 117 %
4-Bromofluorobenzene	86 - 115 %	74 - 121 %

10703 East Bethany Drive
Aurora, Colorado 80014
Tele. (303) 751-1780

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CORE LABORATORIES

QUALITY ASSURANCE REPORT
10-06-93

CUSTOMER: GIANT REFINING CO.

File No.: 931725

SURROGATE PERCENT RECOVERY SUMMARY

Client Sample I.D.....					
Remark/Project.....	09-17-93				
Sample Matrix.....	SOIL				
Laboratory Sample I.D.....	METHOD BLANK				
VOLATILE ORGANIC COMPOUNDS					
1,2-Dichloroethane (d4)	107				
Toluene (d8)	92				
4-Bromofluorobenzene	97				

Client Sample I.D.....					
Remark/Project.....					
Sample Matrix.....					
Laboratory Sample I.D.....					
VOLATILE ORGANIC COMPOUNDS					
1,2-Dichloroethane (d4)					
Toluene (d8)					
4-Bromofluorobenzene					

SURROGATE RECOVERIES - ACCEPTANCE CRITERION

	Water Samples	Soil Samples
VOLATILE ORGANIC COMPOUNDS		
1,2-Dichloroethane (d4)	76 - 114 %	70 - 121 %
Toluene (d8)	88 - 110 %	81 - 117 %
4-Bromofluorobenzene	86 - 115 %	74 - 121 %

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CORE LABORATORIES

QUALITY ASSURANCE REPORT
10-06-93

CUSTOMER: GIANT REFINING CO. File No.: 931725

SURROGATE PERCENT RECOVERY SUMMARY

Client Sample I.D.	BTZ-C-19-7.5	BTZ-C-20-7.5	BTZ-C-18-7.5	BTZ-C-17-7.5	BTZ-C-16-7.5
Remark/Project	93299BJ	93299BJ	93299BJ	93299BJ	93299BJ
Sample Matrix	SOIL	SOIL	SOIL	SOIL	SOIL
Laboratory Sample I.D.	931725-2	931725-9	931725-17	931725-24	931725-32
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS					
Nitrobenzene (d5)	71	72	62	78	69
2-Fluorobiphenyl	76	77	70	84	76
4-Terphenyl (d14)	93	92	91	90	91
SEMI-VOLATILE ACID COMPOUNDS					
Phenol (d6)	77	79	70	77	69
2-Fluorophenol	72	76	67	63	56
2,4,6-Tribromophenol	78	79	82	53	48

Client Sample I.D.	BTZ-C-15-7.5	BTZ-C-15-7.5-D	BTZ-C-14-7.5	BTZ-C-14-7.5	BTZ-C-14-7.5
Remark/Project	93299BJ	93299BJ	93299BJ	93299BJ	93299BJ
Sample Matrix	SOIL	SOIL	SOIL	SOIL	SOIL
Laboratory Sample I.D.	931725-39	931725-40	931725-47	931725-47MS	931725-47MSD
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS					
Nitrobenzene (d5)	61	75	73	66	74
2-Fluorobiphenyl	65	78	79	73	77
4-Terphenyl (d14)	89	92	89	90	88
SEMI-VOLATILE ACID COMPOUNDS					
Phenol (d6)	68	78	74	79	83
2-Fluorophenol	59	68	60	75	79
2,4,6-Tribromophenol	60	64	53	76	82

SURROGATE RECOVERIES - ACCEPTANCE CRITERION

	Water Samples	Soil Samples
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS		
Nitrobenzene (d5)	35 - 114 %	23 - 120 %
2-Fluorobiphenyl	43 - 116 %	30 - 115 %
4-Terphenyl (d14)	33 - 141 %	18 - 137 %
SEMI-VOLATILE ACID COMPOUNDS		
Phenol (d6)	10 - 94 %	24 - 113 %
2-Fluorophenol	21 - 100 %	25 - 121 %
2,4,6-Tribromophenol	10 - 123 %	19 - 122 %

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CORE LABORATORIES

QUALITY ASSURANCE REPORT
10-06-93

CUSTOMER: GIANT REFINING CO.

File No.: 931725

SURROGATE PERCENT RECOVERY SUMMARY

Client Sample I.D.....	09-21-93 1540	09-21-93 1653			
Remark/Project.....	SOIL	SOIL			
Sample Matrix.....	METHOD BLANK	METHOD BLANK			
Laboratory Sample I.D.....					
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS					
Nitrobenzene (d5)	72	75			
2-Fluorobiphenyl	77	79			
4-Terphenyl (d14)	93	90			
SEMI-VOLATILE ACID COMPOUNDS					
Phenol (d6)	76	81			
2-Fluorophenol	72	77			
2,4,6-Tribromophenol	61	65			

Client Sample I.D.....					
Remark/Project.....					
Sample Matrix.....					
Laboratory Sample I.D.....					
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS					
Nitrobenzene (d5)					
2-Fluorobiphenyl					
4-Terphenyl (d14)					
SEMI-VOLATILE ACID COMPOUNDS					
Phenol (d6)					
2-Fluorophenol					
2,4,6-Tribromophenol					

SURROGATE RECOVERIES - ACCEPTANCE CRITERION	Water Samples	Soil Samples
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS		
Nitrobenzene (d5)	35 - 114 %	23 - 120 %
2-Fluorobiphenyl	43 - 116 %	30 - 115 %
4-Terphenyl (d14)	33 - 141 %	18 - 137 %
SEMI-VOLATILE ACID COMPOUNDS		
Phenol (d6)	10 - 94 %	24 - 113 %
2-Fluorophenol	21 - 100 %	25 - 121 %
2,4,6-Tribromophenol	10 - 123 %	19 - 122 %

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QUALITY ASSURANCE REPORT
10-06-93

File No.: 931725

CUSTOMER: GAINT REFINING CO.

SURROGATE PERCENT RECOVERY SUMMARY

Client Sample I.D.	BTZ-C-19-7.5	BTZ-C-20-7.5	BTZ-C-18-7.5	BTZ-C-17-7.5	BTZ-C-16-7.5
Remark/Project	93299BJ	93299BJ	93299BJ	93299BJ	93299BJ
Sample Matrix	SOIL	SOIL	SOIL	SOIL	SOIL
Laboratory Sample I.D.	931725-2	931725-9	931725-17	931725-24	931725-32
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS					
Nitrobenzene (d5)	75	78	68	85	78
2-Fluorobiphenyl	77	80	72	86	79
4-Terphenyl (d14)	84	82	81	80	79
SEMI-VOLATILE ACID COMPOUNDS					
Phenol (d6)	91	93	80	79	75
2-Fluorophenol	80	89	75	51	50
2,4,6-Tribromophenol	85	103	87	43	41

Client Sample I.D.	BTZ-C-15-7.5	BTZ-C-15-7.5D	BTZ-C-14-7.5	09-30-93	09-21-93
Remark/Project	93299BJ	93299BJ	93299BJ	SOIL	SOIL
Sample Matrix	SOIL	SOIL	SOIL	METHOD BLANK	METHOD BLANK
Laboratory Sample I.D.	931725-39	931725-40	931725-47		
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS					
Nitrobenzene (d5)	67	82	81	81	72
2-Fluorobiphenyl	70	82	82	82	77
4-Terphenyl (d14)	79	79	81	79	93
SEMI-VOLATILE ACID COMPOUNDS					
Phenol (d6)	75	90	61	96	76
2-Fluorophenol	56	74	84	93	72
2,4,6-Tribromophenol	57	66	52	86	61

SURROGATE RECOVERIES - ACCEPTANCE CRITERION	Water Samples	Soil Samples
SEMI-VOLATILE BASE/NEUTRAL COMPOUNDS		
Nitrobenzene (d5)	35 - 114 %	23 - 120 %
2-Fluorobiphenyl	43 - 116 %	30 - 115 %
4-Terphenyl (d14)	33 - 141 %	18 - 137 %
SEMI-VOLATILE ACID COMPOUNDS		
Phenol (d6)	10 - 94 %	24 - 113 %
2-Fluorophenol	21 - 100 %	25 - 121 %
2,4,6-Tribromophenol	10 - 123 %	19 - 122 %

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QUALITY ASSURANCE REPORT
10-06-93

CUSTOMER: GIANT REFINING CO.

File No.: 931725

MATRIX SPIKE RESULTS

Laboratory Sample I.D..... 931725-47
Sample Matrix..... SOIL
Units..... ug/Kg

	Spike Added	Original Value	Analyzed Value	% Recovery
SEMI-VOLATILE BASE/NEUTRAL/ACID COMPOUNDS				
Phenol	3330	<330	2890	87
2-Chlorophenol	3330	<330	2880	86
1,4-Dichlorobenzene	1670	<330	1460	87
N-Nitroso-di-n-propylamine	1670	<330	1650	99
1,2,4-Trichlorobenzene	1670	<330	1560	93
4-Chloro-3-methylphenol	3330	<660	3200	96
Acenaphthene	1670	<330	1560	93
4-Nitrophenol	3330	<1650	915	27
2,4-Dinitrotoluene	1670	<330	1410	84
Pentachlorophenol	3330	<660	3360	101
Pyrene	1670	<330	1830	110

MATRIX SPIKE DUPLICATE RESULTS

	Spike Added	Original Value	Analyzed Value	% Recovery	RPD, %
SEMI-VOLATILE BASE/NEUTRAL/ACID COMPOUNDS					
Phenol	3330	<330	2950	89	2
2-Chlorophenol	3330	<330	3100	93	7
1,4-Dichlorobenzene	1670	<330	1610	96	10
N-Nitroso-di-n-propylamine	1670	<330	1750	105	6
1,2,4-Trichlorobenzene	1670	<330	1730	104	10
4-Chloro-3-methylphenol	3330	<660	3320	100	4
Acenaphthene	1670	<330	1720	103	10
4-Nitrophenol	3330	<1650	950	29	4
2,4-Dinitrotoluene	1670	<330	1390	83	1
Pentachlorophenol	3330	<660	3300	99	2
Pyrene	1670	<330	1860	111	2

MATRIX SPIKES - ACCEPTANCE CRITERION	Percent Recoveries		RPD, Percent	
	Water Samples	Soil Samples	Water Samples	Soil Samples
SEMI-VOLATILE BASE/NEUTRAL/ACID COMPOUNDS				
Phenol	12 - 89 %	26 - 90 %	42	35
2-Chlorophenol	27 - 123 %	25 - 102 %	40	50
1,4-Dichlorobenzene	36 - 97 %	28 - 104 %	28	27
N-Nitroso-di-n-propylamine	41 - 116 %	41 - 126 %	38	38
1,2,4-Trichlorobenzene	39 - 98 %	38 - 107 %	28	23
4-Chloro-3-methylphenol	23 - 97 %	26 - 103 %	42	33
Acenaphthene	46 - 118 %	31 - 137 %	31	19
4-Nitrophenol	10 - 80 %	11 - 114 %	50	50
2,4-Dinitrotoluene	24 - 96 %	28 - 89 %	38	47
Pentachlorophenol	9 - 103 %	17 - 109 %	50	47
Pyrene	26 - 127 %	35 - 142 %	31	36

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CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: GIANT REFINING CO.	PROJECT NAME/NUMBER: 93299BJ
SEND REPORT TO: LYNN SHELTON	BILLING INFORMATION
ADDRESS: ROUTE 3, BOX 7	BILL TO: GIANT REFINING CO.
GALLUP, NEW MEXICO 87301	ADDRESS: ROUTE 3, BOX 7
	GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833	PHONE: 1-505-722-3822
FAX:	FAX: PO NO.:

LAB JOB NO.

	SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	ICP 6010 (TOTAL METALS)	8240/8270 (MOD)	REMARKS / PRECAUTIONS
1		BTZ-C-19-5.0	9-1-93	1152	SOIL	GLASS	ICE	1	*		
2		BTZ-C-19-7.5		1157				1	*		Archive all samples
		BTZ-C-19-7.5		1405				1		*	> 20' as per
3		BTZ-C-19-10.0		1418				1	*		Lynn Shelton
4		BTZ-C-19-15.0		1423				1	*		DPM 9.7.93
5		BTZ-C-19-20.0		1437				1	*		
6		BTZ-C-19-25.0		1444				1	*		
7		BTZ-C-19-30.0		1448				1	*		
8		BTZ-C-20-5.0		1535				1	*		
9		BTZ-C-20-7.5		1548				2	*	*	

SAMPLER: Larry R Doney / SA&B

SHIPMENT METHOD: FED EX

AIRBILL NO.: 3856967962

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS TO ☒ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Larry R Doney	9/3/93	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: SA&B	TIME 1200	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE: (FEDEX)		SIGNATURE: [signature]	9.4.93	SIGNATURE:	
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY: D. Marshall CORE	TIME 1002	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ **Anaheim, California** 1250 E. Gene Autry Way Anaheim, California 92805 (714) 937-1094

☐ **Long Beach, California** 3700 Cherry Avenue Long Beach, California 90807 (310) 595-8401

☒ **Denver (Aurora), Colorado** 1300 S. Potomac St. - Suite 130 Aurora, Colorado 80012 (303) 751-1780

☐ **Casper, Wyoming** 420 West 1st Street Casper, Wyoming 82601 (307) 235-5741

☐ **Houston, Texas** 10201 Westheimer, Bldg. 1-A Houston, Texas 77042 (713) 972-6700

☐ **Houston, Texas** 8210 Mosely Road Houston, Texas 77075 (713) 943-9776

☐ **Corpus Christi, Texas** 1733 North Padre Island Dr. Corpus Christi, Texas 78408 (512) 289-2673

☐ **Lake Charles, Louisiana** 3645 Arizona Street Sulphur, Louisiana 70663 (318) 583-4926

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CHAIN OF CUSTODY RECORD

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GALLUP, NEW MEXICO 87301	ADDRESS: ROUTE 3, BOX 7
	GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833	PHONE: 1-505-722-3833
FAX:	FAX: PO NO.:

LAB JOB NO.

	SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	ANALYSIS/METHOD REQUEST: ICP 6010 (TOTAL METALS)	8240/8270 (MOD)							REMARKS / PRECAUTIONS
10		BTZ-C-20-10.0	9-1-93	1555	SOIL	GLASS	ICE	1	*								
11		BTZ-C-20-15.0	↓	1608	↓	↓	↓	1	*								
12		BTZ-C-20-20.0		1620				1	*								
13		BTZ-C-20-25.0		1624				1	*								
14		BTZ-C-20-30.0		1627				1	*								
15		BTZ-C-18-5.0	9-2-93	0912	SOIL	GLASS	ICE	1	*								
16		BTZ-C-18-5.0-D		0912				1	*								
17		BTZ-C-18-7.5		0915				2	*	*							
18		BTZ-C-18-10.0		0922				1	*								
19		BTZ-C-18-15.0		0927				1	*								

SAMPLER: Larry R Doney / SA&B

SHIPMENT METHOD: FED EX

AIRBILL NO.: 3856967962

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS TO ☒ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Larry R Doney	9/3/93	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: SA&B	TIME 1200	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE: (FED EX)		SIGNATURE: [illegible]	9-4-93	SIGNATURE:	
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY: D Marshall / CORE	TIME 1002	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

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☐ **Long Beach, California** 3700 Cherry Avenue, Long Beach, California 90807, (310) 595-8401

☒ **Denver (Aurora), Colorado** 1300 S. Potomac St. - Suite 130, Aurora, Colorado 80012, (303) 751-1780

☐ **Casper, Wyoming** 420 West 1st Street, Casper, Wyoming 82601, (307) 235-5741

☐ **Houston, Texas** 10201 Westheimer, Bldg. 1-A, Houston, Texas 77042, (713) 972-6700

☐ **Houston, Texas** 8210 Mosely Road, Houston, Texas 77075, (713) 943-9776

☐ **Corpus Christi, Texas** 1733 North Padre Island Dr., Corpus Christi, Texas 78408, (512) 289-2673

☐ **Lake Charles, Louisiana** 3645 Arizona Street, Sulphur, Louisiana 70663, (318) 583-4926

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CHAIN OF CUSTODY RECORD

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SEND REPORT TO: LYNN SHEATON	BILLING INFORMATION
ADDRESS: ROUTE 3, BOX 7	BILL TO: GIANT REFINING CO.
GALLUP, NEW MEXICO 87301	ADDRESS: ROUTE 3, BOX 7
	GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833	PHONE: 1-505-722-3833
FAX:	FAX: PO NO.:

LAB JOB NO.

	SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	ANALYSIS/METHOD REQUEST: ICP 601D (TOTAL METALS)	8240/8270 (MOD)							REMARKS / PRECAUTIONS
20		BTZ-C-18-20.0	9-2-93	0934	SOIL	GLASS	ICE	1	*								
21		BTZ-C-18-25.0	↓	0940	↓	↓	↓	1	*								
22		BTZ-C-18-30.0	↓	0952	↓	↓	↓	1	*								
23		BTZ-C-17-5.0	↓	1033	↓	↓	↓	1	*								
24		BTZ-C-17-7.5	↓	1037	↓	↓	↓	2	*	*							
25		BTZ-C-17-10.0	↓	1042	↓	↓	↓	1	*								
26		BTZ-C-17-15.0	↓	1048	↓	↓	↓	1	*								
27		BTZ-C-17-15.0-D	↓	1048	↓	↓	↓	1	*								
28		BTZ-C-17-20.0	↓	1054	↓	↓	↓	1	*								
29		BTZ-C-17-25.0	↓	1104	↓	↓	↓	1	*								

SAMPLER: Larry R Davy / SA&B

SHIPMENT METHOD: FED EX

AIRBILL NO.: 3856967962

REQUIRED TURNAROUND: ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS TO ☒ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY: SIGNATURE: Larry R Davy	DATE 9/3/93	2. RELINQUISHED BY: SIGNATURE:	DATE	3. RELINQUISHED BY: SIGNATURE:	DATE
PRINTED NAME/COMPANY: SA&B	TIME 1200	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY: SIGNATURE: (FED EX)	DATE	2. RECEIVED BY: SIGNATURE: [signature]	DATE 9-4-93	3. RECEIVED BY: SIGNATURE:	DATE
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY: D. Marshall / CORE	TIME 1002	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ **Anaheim, California** 1250 E. Gene Autry Way, Anaheim, California 92805, (714) 937-1094

☐ **Long Beach, California** 3700 Cherry Avenue, Long Beach, California 90807, (310) 595-8401

☒ **Denver (Aurora), Colorado** 1300 S. Potomac St. - Suite 130, Aurora, Colorado 80012, (303) 751-1780

☐ **Casper, Wyoming** 420 West 1st Street, Casper, Wyoming 82601, (307) 235-5741

☐ **Houston, Texas** 10201 Westheimer, Bldg. 1-A, Houston, Texas 77042, (713) 972-6700

☐ **Houston, Texas** 8210 Mosely Road, Houston, Texas 77075, (713) 943-9776

☐ **Corpus Christi, Texas** 1733 North Padre Island Dr., Corpus Christi, Texas 78408, (512) 289-2673

☐ **Lake Charles, Louisiana** 3645 Arizona Street, Sulphur, Louisiana 70663, (318) 583-4926

Western Atlas International
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CORE LABORATORIES

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: GIANT REFINING CO	PROJECT NAME/NUMBER: 93299BJ
SEND REPORT TO: LYNN SHELTON	BILLING INFORMATION
ADDRESS: ROUTE 3, BOX 7	BILL TO: GIANT REFINING CO.
GALLUP, NEW MEXICO 87301	ADDRESS: ROUTE 3, BOX 7
	GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833	PHONE: 1-505-722-3833
FAX:	FAX: PO NO.:

LAB JOB NO.

	SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	ANALYSIS/METHOD REQUEST: ICP 6010 (TOTAL METALS)	8240/8270 (MOD)	REMARKS / PRECAUTIONS
30		BTZ-C-17-28.7	9-2-93	1106	SOIL	GLASS	ICE	1	*		
31		BTZ-C-16-5.0		1328				1	*		
32		BTZ-C-16-7.5		1331				2	*	*	
33		BTZ-C-16-10.0		1345				1	*		
34		BTZ-C-16-15.0		1350				1	*		
35		BTZ-C-16-20.0		1358				1	*		
36		BTZ-C-16-25.0		1405				1	*		
37		BTZ-C-16-28.8		1407				1	*		
38		BTZ-C-15-5.0		1450				1	*		
39		BTZ-C-15-7.5		1500				2	*	*	

SAMPLER: Larry R Doty / SA&B

SHIPMENT METHOD: FED EX

AIRBILL NO.: 3856967962

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS TO ☒ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY: SIGNATURE: Larry R Doty	DATE 9/3/93	2. RELINQUISHED BY: SIGNATURE:	DATE	3. RELINQUISHED BY: SIGNATURE:	DATE
PRINTED NAME/COMPANY: SA&B	TIME 1200	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY: SIGNATURE: (FED EX)	DATE	2. RECEIVED BY: SIGNATURE: [illegible]	DATE 9/4/93	3. RECEIVED BY: SIGNATURE:	DATE
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY: D. Marshall	TIME 1002	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ **Anaheim, California** 1250 E. Gene Autry Way, Anaheim, California 92805, (714) 937-1094

☐ **Long Beach, California** 3700 Cherry Avenue, Long Beach, California 90807, (310) 595-8401

☒ **Denver (Aurora), Colorado** 1300 S. Potomac St. - Suite 130, Aurora, Colorado 80012, (303) 751-1780

☐ **Casper, Wyoming** 420 West 1st Street, Casper, Wyoming 82601, (307) 235-5741

☐ **Houston, Texas** 10201 Westheimer, Bldg. 1-A, Houston, Texas 77042, (713) 972-6700

☐ **Houston, Texas** 8210 Mosely Road, Houston, Texas 77075, (713) 943-9776

☐ **Corpus Christi, Texas** 1733 North Padre Island Dr., Corpus Christi, Texas 78408, (512) 289-2673

☐ **Lake Charles, Louisiana** 3645 Arizona Street, Sulphur, Louisiana 70663, (318) 583-4926

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CORE LABORATORIES

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION

COMPANY: GIANT REFINING CO.
SEND REPORT TO: LYNN SHELTON
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833
FAX:

PROJECT INFORMATION

PROJECT NAME/NUMBER: 93299BJ

BILLING INFORMATION

BILL TO: GIANT REFINING CO.
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833
FAX: PO NO.:

LAB JOB NO.

	SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	ICP 6010 (TOTAL METALS)	8240/8270 (MOD)	REMARKS / PRECAUTIONS
		BTZ-C-15-7.5-D	9-2-93	1500	SOIL	GLASS	ICE	2	*	*	
10		BTZ-C-15-10.0		1505				1	*		
11		BTZ-C-15-15.0		1513				1	*		
12		BTZ-C-15-20.0		1520				1	*		
13		BTZ-C-15-25.0		1530				1	*		
14		BTZ-C-15-30.0		1540				1	*		
45		BTZ-C-14-5.0		1624				1	*		
46		BTZ-C-14-7.5		1630				2	*	*	
47		BTZ-C-14-10.0		1635				1	*		
48		BTZ-C-14-15.0		1643				1	*		
49											

SAMPLER: Larry R Doty / SA & B
SHIPMENT METHOD: FED EX
AIRBILL NO.: 3856967962

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS TO ☒ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY: SIGNATURE: Larry R Doty	DATE 9/3/93	2. RELINQUISHED BY: SIGNATURE:	DATE	3. RELINQUISHED BY: SIGNATURE:	DATE
PRINTED NAME/COMPANY: SA & B	TIME 1200	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY: SIGNATURE: (FED EX)	DATE	2. RECEIVED BY: SIGNATURE:	DATE 9-4-93	3. RECEIVED BY: SIGNATURE:	DATE
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY: D. Maskell / CORE	TIME 1004	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ **Anaheim, California** 1250 E. Gene Autry Way, Anaheim, California 92805, (714) 937-1094
☐ **Long Beach, California** 3700 Cherry Avenue, Long Beach, California 90807, (310) 595-8401
☒ **Denver (Aurora), Colorado** 1300 S. Potomac St. - Suite 130, Aurora, Colorado 80012, (303) 751-1780
☐ **Casper, Wyoming** 420 West 1st Street, Casper, Wyoming 82601, (307) 235-5741
☐ **Houston, Texas** 10201 Westheimer, Bldg. 1-A, Houston, Texas 77042, (713) 972-6700
☐ **Houston, Texas** 8210 Mosely Road, Houston, Texas 77075, (713) 943-9776
☐ **Corpus Christi, Texas** 1733 North Padre Island Dr., Corpus Christi, Texas 78408, (512) 289-2673
☐ **Lake Charles, Louisiana** 3645 Arizona Street, Sulphur, Louisiana 70663, (318) 583-4926

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CORE LABORATORIES

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: GIANT REFINING CO	PROJECT NAME/NUMBER: 93299BJ
SEND REPORT TO: LYNN SHELTON	BILLING INFORMATION
ADDRESS: ROUTE 3, BOX 7	BILL TO: GIANT REFINING CO.
GALLUP, NEW MEXICO 87301	ADDRESS: ROUTE 3, BOX 7
	GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833	PHONE: 1-505-722-3833
FAX:	FAX: PO NO.:

LAB JOB NO.

	SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	ANALYSIS/METHOD REQUESTED: ICP 6010 (TOTAL METALS)	REMARKS / PRECAUTIONS
50		BTZ-C-14-20.0	9-2-93	1650	SOIL	GLASS	ICE	1	*	
51		BTZ-C-14-25.0	↓	1657	↓	↓	↓	1	*	
52		BTZ-C-14-29.0	↓	1700	↓	↓	↓	1	*	

SAMPLER: Larry R. Doty / SA&B

SHIPMENT METHOD: FED EX

AIRBILL NO.: 3856967962

REQUIRED TURNAROUND: ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS TO ☒ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Larry R. Doty	9/3/93	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: SA&B	TIME 1200	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE: (FED EX)		SIGNATURE: [signature]	9-4-93	SIGNATURE:	
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY: D. Marshall / CORE	TIME 1002	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ **Anaheim, California** 1250 E. Gene Autry Way, Anaheim, California 92805, (714) 937-1094

☐ **Long Beach, California** 3700 Cherry Avenue, Long Beach, California 90807, (310) 595-8401

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☐ **Houston, Texas** 8210 Mosely Road, Houston, Texas 77075, (713) 943-9776

☐ **Corpus Christi, Texas** 1733 North Padre Island Dr., Corpus Christi, Texas 78408, (512) 289-2673

☐ **Lake Charles, Louisiana** 3645 Arizona Street, Sulphur, Louisiana 70663, (318) 583-4926

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CORE LABORATORIES

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION

COMPANY: GIANT REFINING CO.
SEND REPORT TO: LYNN SHELTON
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833
FAX:

PROJECT INFORMATION

PROJECT NAME/NUMBER: 93299BJ

BILLING INFORMATION

BILL TO: GIANT REFINING CO.
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833
FAX: PO NO.:

LAB JOB NO.

SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	ICP 601D (TOTAL METALS)	8240/8270 (MOD.)	REMARKS/PRECAUTION
	BTZ-C-13-5.0	9-8-93	0932	SOIL	GLASS	ICE	1	*		
	BTZ-C-13-7.5		0937				2	*	*	
	BTZ-C-13-10.0		0942				1	*		
3	BTZ-C-13-15.0		0950				1	*		
4	BTZ-C-13-20.0-A		0955				1	*		
5	BTZ-C-13-25.0-A		1004				1	*		
6	BTZ-C-12-5.0		1047				1	*		
7	BTZ-C-12-7.5		1052				2	*	*	
8	BTZ-C-12-10.0		1056				1	*		
9	BTZ-C-12-15.0		1103				1	*		
10										

SAMPLER: Larry R Doty / SA&B

SHIPMENT METHOD: FED EX

AIRBILL NO.: 3856967973

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS ☒ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Larry R Doty	9-10-93	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: SA&B	TIME 1645	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	**2. RECEIVED BY:**	DATE	**3. RECEIVED BY:**	DATE
SIGNATURE: Mary Scott	9-11-93	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: Core	TIME 1070	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ **Anaheim, California** 1250 E. Gene Autry Way, Anaheim, California 92805, (714) 937-1094
☐ **Long Beach, California** 3700 Cherry Avenue, Long Beach, California 90807, (310) 595-8401
☒ **Denver (Aurora), Colorado** 1300 S. Potomac St. - Suite 130, Aurora, Colorado 80012, (303) 751-1780
☐ **Casper, Wyoming** 420 West 1st Street, Casper, Wyoming 82601, (307) 235-5741
☐ **Houston, Texas** 10201 Westheimer, Bldg. 1-A, Houston, Texas 77042, (713) 972-6700
☐ **Houston, Texas** 8210 Mosely Road, Houston, Texas 77075, (713) 943-9776
☐ **Corpus Christi, Texas** 1733 North Padre Island Dr., Corpus Christi, Texas 78408, (512) 289-2673
☐ **Lake Charles, Loui** 3645 Arizona Street, Sulphur, Louisiana, (318) 583-4926

CORE LABORATORIES

Western Atlas International
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CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION

COMPANY: GIANT REFINING CO
SEND REPORT TO: LYNN SHELTON
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833
FAX:

PROJECT INFORMATION

PROJECT NAME/NUMBER: 93299 BJ

BILLING INFORMATION

BILL TO: GIANT REFINING CO.
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833
FAX:
PO NO.:

LAB JOB NO.

SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	ANALYSIS/METHOD REQUEST: ICP 6010 (TOTAL METALS)	8240/8270 (MOD)							REMARKS/PRECAUTION
	BTZ-C-12-20.0-A	9-8-93	1112	SOIL	GLASS	ICE	1	*								
	BTZ-C-12-25.0-A		1123				1	*								
13	BTZ-C-12-30.0-A		1132				1	*								
14	BTZ-C-12-30.0-D		1132				1	*								
15	BTZ-C-11-5.0		1342				1	*								
16	BTZ-C-11-7.5		1349				2	*	*							
17	BTZ-C-11-10.0		1353				1	*								
18	BTZ-C-11-15.0		1400				1	*								
19	BTZ-C-11-20.0-A		1408				1	*								
20	BTZ-C-11-25.0-A		1417				1	*								

SAMPLER: Larry R Dorr / SA & B

SHIPMENT METHOD: FED EX

AIRBILL NO.: 3856 967973

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS TO ☒ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Larry R Dorr	9/10/93	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: SA & B	TIME 1645	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE:		SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ Anaheim, California
1250 E. Gene Autry Way
Anaheim, California 92805
(714) 937-1094

☐ Long Beach, California
3700 Cherry Avenue
Long Beach, California 90807
(310) 595-8401

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Aurora, Colorado 80012
(303) 751-1780

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Casper, Wyoming 82601
(307) 235-5741

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Houston, Texas 77042
(713) 972-6700

☐ Houston, Texas
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Houston, Texas 77075
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Corpus Christi, Texas 78408
(512) 289-2673

☐ Lake Charles, Louis
3645 Arizona Street
Sulphur, Louisiana 7
(318) 583-4926

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CORE LABORATORIES

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION

COMPANY: GIANT REFINING CO.
SEND REPORT TO: LYNN SHELTON
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833
FAX:

PROJECT INFORMATION

PROJECT NAME/NUMBER: 93299 BJ

BILLING INFORMATION

BILL TO: GIANT REFINING CO.
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO
PHONE: 1-505-722-3833
FAX: PO NO.:

LAB JOB NO.

SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	ICP 6010 (TOTAL METALS)	8240/8270 (MOD)	REMARKS/PRECAUTION
	BTZ-C-11-30.0-A	9-8-93	1426	SOIL	GLASS	ICE	1	*		
21	BTZ-C-11-30.0-E		1437	H_2O	GLASS	HCL	1		*	
22	BTZ-C-11-30,0-E		1442	H_2O	PLASTIC	HNO_3	1	*		
23	BTZ-C-10-5.0		1520	SOIL	GLASS	ICE	1	*		
24	BTZ-C-10-7.5		1526				2	*	*	
25	BTZ-C-10-10.0		1528				1	*		
26	BTZ-C-10-15.0		1536				1	*		
27	BTZ-C-10-20.0-A		1542				1	*		
28	BTZ-C-10-25.0-A		1548				1	*		
29	BTZ-C-10-25.0-D		1548				1	*		
30										

SAMPLER: Larry R Doty / SA & B
SHIPMENT METHOD: FED EX
AIRBILL NO.: 3856967973

REQUIRED TURNAROUND: ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS TO ☒ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Larry R Doty	9/10/93	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: SA & B	TIME 1645	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE:		SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ Anaheim, California
1250 E. Gene Autry Way
Anaheim, California 92805
(714) 937-1094

☐ Long Beach, California
3700 Cherry Avenue
Long Beach, California 90807
(310) 595-8401

☒ Denver (Aurora), Colorado
1300 S. Potomac St. - Suite 130
Aurora, Colorado 80012
(303) 751-1780

☐ Casper, Wyoming
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(307) 235-5741

☐ Houston, Texas
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Houston, Texas 77042
(713) 972-6700

☐ Houston, Texas
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Houston, Texas 77075
(713) 943-9776

☐ Corpus Christi, Texas
1733 North Padre Island Dr.
Corpus Christi, Texas 78408
(512) 289-2673

☐ Lake Charles, Louis
3645 Arizona Street
Sulphur, Louisiana 7
(318) 583-4926

CORE LABORATORIES

Western Atlas International
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CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION

COMPANY: GIANT REFINING CO.
SEND REPORT TO: LYNN SHELTON
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833
FAX:

PROJECT INFORMATION

PROJECT NAME/NUMBER: 93299BJ

BILLING INFORMATION

BILL TO: GIANT REFINING CO.
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833
FAX: PO NO.:

LAB JOB NO.

	SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	TCP 6010 (TOTAL METALS)	8240/8270 (MDD)							REMARKS / PRECAUTION
		BTZ-C-10-30.0-A	9-8-93	1557	SOIL	GLASS	ICE	1	*								
31		BTZ-C-9-5.0	9-9-93	0847				1	*								
32		BTZ-C-9-7.5		0851				2	*	*							
33		BTZ-C-9-10.0		0854				1	*								
34		BTZ-C-9-15.0		0902				1	*								
35		BTZ-C-9-20.0-A		0910				1	*								
36		BTZ-C-9-25.0-A		0918				1	*								
37		BTZ-C-9-30.0-A		0924				1	*								
38		LTA-BGRD-2-5.0		1010				2	*	*							No appendix 9 work this sa per verbal c
39		LTA-BGRD-2-7.5		1016													
40																	

AIRBILL NO.: 3856967973

SAMPLER: Larry R Dorey / SA&B

SHIPMENT METHOD: FED EX

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☐ 5 DAYS ☐ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Larry R Dorey	9/10/93	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: SA&B	TIME 1645	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	**2. RECEIVED BY:**	DATE	**3. RECEIVED BY:**	DATE
SIGNATURE:		SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

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☐ **Houston, Texas** 10201 Westheimer, Bldg. 1-A, Houston, Texas 77042, (713) 972-6700
☐ **Houston, Texas** 8210 Mosely Road, Houston, Texas 77075, (713) 943-9776
☐ **Corpus Christi, Texas** 1733 North Padre Island Dr., Corpus Christi, Texas 78408, (512) 289-2673
☐ **Lake Charles, Louis** 3645 Arizona Street, Sulphur, Louisiana 7, (318) 583-4926

CORE LABORATORIES

Western Atlas International
A Litton / Dresser Company

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION

COMPANY: GIANT REFINING CO.
SEND REPORT TO: LYNN SHELTON
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833
FAX:

PROJECT INFORMATION

PROJECT NAME/NUMBER: 93299BJ

BILLING INFORMATION

BILL TO: GIANT REFINING CO.
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO 87301
PHONE: 1-505-722-3833
FAX: PO NO.:

LAB JOB NO.

SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	ICP 6010 (TOTAL METALS)	8240/8270 (MOD)							REMARKS / PRECAUTION
	LTA-BGRD-2-10.0	9-9-93	1019	SOIL	GLASS	ICE	1	*								
	LTA-BGRD-2-15.0		1023				1	*								
	LTA-BGRD-2-20.0-A		1029				1	*								
	LTA-BGRD-2-25.0-A		1037				1	*								
	LTA-BGRD-2-30.0-A		1043				1	*								
	LTA-BGRD-1-5.0		1110				1	*								
	LTA-BGRD-1-7.5		1115				2	*	*							No appendix 9 work this sample per verbal com
	LTA-BGRD-1-10.0		1119				1	*								
	LTA-BGRD-1-15.0		1123				1	*								
	LTA-BGRD-1-20.0-A		1127				1	*								

SAMPLER: Larry R Dow / SA & B

SHIPMENT METHOD: FED EX

AIRBILL NO.: 3856967973

REQUIRED TURNAROUND:* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS TO ☒ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY: SIGNATURE: Larry R Dow	DATE 9/10/93	2. RELINQUISHED BY: SIGNATURE:	DATE	3. RELINQUISHED BY: SIGNATURE:	DATE
PRINTED NAME/COMPANY: SA & B	TIME 1645	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY: SIGNATURE:	DATE	2. RECEIVED BY: SIGNATURE:	DATE	3. RECEIVED BY: SIGNATURE:	DATE
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

* RUSH TURNAROUND MAY REQUIRE SURCHARGE

☐ **Anaheim, California** 1250 E. Gene Autry Way, Anaheim, California 92805, (714) 937-1094

☐ **Long Beach, California** 3700 Cherry Avenue, Long Beach, California 90807, (310) 595-8401

☒ **Denver (Aurora), Colorado** 1300 S. Potomac St. - Suite 130, Aurora, Colorado 80012, (303) 751-1780

☐ **Casper, Wyoming** 420 West 1st Street, Casper, Wyoming 82601, (307) 235-5741

☐ **Houston, Texas** 10201 Westheimer, Bldg. 1-A, Houston, Texas 77042, (713) 972-6700

☐ **Houston, Texas** 8210 Mosely Road, Houston, Texas 77075, (713) 943-9776

☐ **Corpus Christi, Texas** 1733 North Padre Island Dr., Corpus Christi, Texas 78408, (512) 289-2673

☐ **Lake Charles, Louisi** 3645 Arizona Street, Sulphur, Louisiana 70 (318) 583-4926

CORE LABORATORIES

Western Atlas International
A Litton / Dresser Company

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION

COMPANY: GIANT REFINING CO.
SEND REPORT TO: LYNN SHELTON
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO
PHONE: 1-505-722-3833
FAX:

PROJECT INFORMATION

PROJECT NAME/NUMBER: 93289BT

BILLING INFORMATION

BILL TO: GIANT REFINING CO.
ADDRESS: ROUTE 3, BOX 7
GALLUP, NEW MEXICO
PHONE: 1-505-722-3833
FAX: PO NO.:

LAB JOB NO.

SAMPLE NO.	SAMPLE ID	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRES.	NUMBER OF CONTAINERS	ANALYSIS/METHOD REQUEST: ICP 6010 (TOTAL METALS)	REMARKS / PRECAUTIONS
	LTA-BGRD-1-25.0-A	9-9-93	1145	SOIL	GLASS	ICE	1	*	
	LTA-BGRD-1-30.0-A	9-9-93	1150	SOIL	GLASS	ICE	1	*	

SAMPLER: Larry R Dorsey / SA&B
SHIPMENT METHOD: FED EX
AIRBILL NO.: 3856967973

REQUIRED TURNAROUND:* ☐ SAME DAY ☑ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☒ 5 DAYS TO ☒ 10 DAYS ☐ ROUTINE OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: Larry R Dorsey	9/10/93	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: SA&B	TIME 1645	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	**2. RECEIVED BY:**	DATE	**3. RECEIVED BY:**	DATE
SIGNATURE:		SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME

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☐ **Corpus Christi, Texas** 1733 North Padre Island Dr., Corpus Christi, Texas 78408, (512) 289-2673
☐ **Lake Charles, Louisiana** 3645 Arizona Street, Sulphur, Louisiana 706[illegible], (318) 583-4926