

GW - 32

**GENERAL
CORRESPONDENCE**

YEAR(S):

3/07 ← 2/07

Chavez, Carl J, EMNRD

From: Steve Morris [smorris@giant.com]
Sent: Friday, March 30, 2007 7:03 AM
To: Monzeglio, Hope, NMENV; Chavez, Carl J, EMNRD
Cc: Jim Lieb; Ed Riege
Subject: First week samples.

Hope & Carl,

Here are the results from the first week of samples after the release from the NAPIS. While the level of benzene is elevated coming out of the NAPIS, it appears to have dropped significantly at the outlet of Lagoon two.

With the packing being cleaned in the benzene strippers, the benzene number in to Lagoon one will be much lower.

I am actually on my day off, but will be back in the office Monday the second.

Our phones are working at the refinery again.

Thanks,

Steve Morris

This inbound email has been scanned by the MessageLabs Email Security System.



COVER LETTER

Wednesday, March 28, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-3833
FAX (505) 722-0210

RE: NMED Weekly NAPIS Release Samples 3/

Order No.: 0703354

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 3/22/2007 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001



Hall Environmental Analysis Laboratory, Inc.

Date: 28-Mar-07

CLIENT: Giant Refining Co

Client Sample ID: AL-1 Inlet

Lab Order: 0703354

Collection Date: 3/22/2007 10:00:00 AM

Project: NMED Weekly NAPIS Release Samples 3/22/2

Date Received: 3/22/2007

Lab ID: 0703354-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	390	30		mg/L	10	3/28/2007 6:27:10 AM
Motor Oil Range Organics (MRO)	ND	150		mg/L	10	3/28/2007 6:27:10 AM
Surr: DNOP	132	58-140		%REC	10	3/28/2007 6:27:10 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	25	2.5		mg/L	50	3/26/2007 8:17:54 PM
Surr: BFB	112	79.2-121		%REC	50	3/26/2007 8:17:54 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	140	120		µg/L	50	3/26/2007 8:17:54 PM
Benzene	3400	50		µg/L	50	3/26/2007 8:17:54 PM
Toluene	4800	50		µg/L	50	3/26/2007 8:17:54 PM
Ethylbenzene	300	50		µg/L	50	3/26/2007 8:17:54 PM
Xylenes, Total	1900	100		µg/L	50	3/26/2007 8:17:54 PM
Surr: 4-Bromofluorobenzene	89.5	70.2-105		%REC	50	3/26/2007 8:17:54 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
MCL Maximum Contaminant Level
RL Reporting Limit

Page 1 of 3

Hall Environmental Analysis Laboratory, Inc.

Date: 28-Mar-07

CLIENT: Giant Refining Co
Lab Order: 0703354
Project: NMED Weekly NAPIS Release Samples 3/22/2
Lab ID: 0703354-02

Client Sample ID: AL-2 Outlet
Collection Date: 3/22/2007 10:20:00 AM
Date Received: 3/22/2007
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	65	1.0		mg/L	1	3/27/2007 3:19:35 PM
Motor Oil Range Organics (MRO)	9.8	5.0		mg/L	1	3/27/2007 3:19:35 PM
Surr: DNOP	118	58-140		%REC	1	3/27/2007 3:19:35 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	1.2	0.50		mg/L	10	3/27/2007 9:33:19 AM
Surr: BFB	110	79.2-121		%REC	10	3/27/2007 9:33:19 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	25		µg/L	10	3/27/2007 9:33:19 AM
Benzene	17	10		µg/L	10	3/27/2007 9:33:19 AM
Toluene	51	10		µg/L	10	3/27/2007 9:33:19 AM
Ethylbenzene	ND	10		µg/L	10	3/27/2007 9:33:19 AM
Xylenes, Total	59	20		µg/L	10	3/27/2007 9:33:19 AM
Surr: 4-Bromofluorobenzene	91.2	70.2-105		%REC	10	3/27/2007 9:33:19 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
MCL Maximum Contaminant Level
RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 28-Mar-07

CLIENT: Giant Refining Co

Client Sample ID: EP-2 Inlet

Lab Order: 0703354

Collection Date: 3/22/2007 10:40:00 AM

Project: NMED Weekly NAPIS Release Samples 3/22/2

Date Received: 3/22/2007

Lab ID: 0703354-03

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	84	1.0		mg/L	1	3/27/2007 3:54:00 PM
Motor Oil Range Organics (MRO)	13	5.0		mg/L	1	3/27/2007 3:54:00 PM
Surr: DNOP	115	58-140		%REC	1	3/27/2007 3:54:00 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	1.5	0.50		mg/L	10	3/27/2007 11:44:13 AM
Surr: BFB	110	79.2-121		%REC	10	3/27/2007 11:44:13 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	25		µg/L	10	3/27/2007 11:44:13 AM
Benzene	16	10		µg/L	10	3/27/2007 11:44:13 AM
Toluene	58	10		µg/L	10	3/27/2007 11:44:13 AM
Ethylbenzene	ND	10		µg/L	10	3/27/2007 11:44:13 AM
Xylenes, Total	69	20		µg/L	10	3/27/2007 11:44:13 AM
Surr: 4-Bromofluorobenzene	89.6	70.2-105		%REC	10	3/27/2007 11:44:13 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
MCL Maximum Contaminant Level
RL Reporting Limit

Page 3 of 3

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: NMED Weekly NAPIS Release Samples 3/22/2

Work Order: 0703354

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8015									
Sample ID: MB-12590		MBLK							
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-12590		LCS							
Diesel Range Organics (DRO)	4.535	mg/L	1.0	90.7	74	157			
Sample ID: LCSD-12590		LCSD							
Diesel Range Organics (DRO)	5.484	mg/L	1.0	110	74	157	18.9	23	
Method: SW8015									
Sample ID: 5ML REAGENT BLA		MBLK							
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 5ML REAGENT BLA		MBLK							
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		LCS							
Gasoline Range Organics (GRO)	0.4522	mg/L	0.050	87.2	80	115			
Sample ID: 2.5UG GRO LCS		LCS							
Gasoline Range Organics (GRO)	0.4678	mg/L	0.050	90.6	80	115			
Sample ID: 2.5UG GRO LCSD		LCSD							
Gasoline Range Organics (GRO)	0.4456	mg/L	0.050	85.9	80	115	1.47	8.39	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co

Project: NMED Weekly NAPIS Release Samples 3/22/2

Work Order: 0703354

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Method: SW8021

Sample ID: 5ML REAGENT BLA

MBLK

Batch ID: R22985

Analysis Date:

3/26/2007 8:01:09 AM

Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5
Benzene	ND	µg/L	1.0
Toluene	ND	µg/L	1.0
Ethylbenzene	ND	µg/L	1.0
Xylenes, Total	ND	µg/L	2.0

Sample ID: 5ML REAGENT BLA

MBLK

Batch ID: R23003

Analysis Date:

3/27/2007 7:04:31 AM

Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5
Benzene	ND	µg/L	1.0
Toluene	ND	µg/L	1.0
Ethylbenzene	ND	µg/L	1.0
Xylenes, Total	ND	µg/L	2.0

Sample ID: 100NG BTEX LCS

LCS

Batch ID: R22985

Analysis Date:

3/27/2007 12:31:13 AM

Methyl tert-butyl ether (MTBE)	19.00	µg/L	2.5	95.0	51.2	138
Benzene	19.27	µg/L	1.0	96.4	85.9	113
Toluene	19.26	µg/L	1.0	96.3	86.4	113
Ethylbenzene	19.57	µg/L	1.0	97.9	83.5	118
Xylenes, Total	58.31	µg/L	2.0	97.2	83.4	122

Sample ID: 100NG BTEX LCS

LCS

Batch ID: R23003

Analysis Date:

3/27/2007 1:47:13 PM

Methyl tert-butyl ether (MTBE)	19.29	µg/L	2.5	96.4	51.2	138
Benzene	19.59	µg/L	1.0	97.9	85.9	113
Toluene	19.65	µg/L	1.0	98.2	86.4	113
Ethylbenzene	20.05	µg/L	1.0	100	83.5	118
Xylenes, Total	59.57	µg/L	2.0	99.3	83.4	122

Sample ID: 100NG BTEX LCSD

LCSD

Batch ID: R22985

Analysis Date:

3/27/2007 1:01:06 AM

Methyl tert-butyl ether (MTBE)	19.46	µg/L	2.5	97.3	51.2	138	2.38	28
Benzene	19.95	µg/L	1.0	99.8	85.9	113	3.48	27
Toluene	20.03	µg/L	1.0	100	86.4	113	3.90	19
Ethylbenzene	20.27	µg/L	1.0	101	83.5	118	3.52	10
Xylenes, Total	60.05	µg/L	2.0	100	83.4	122	2.95	13

Qualifiers:

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

3/22/2007

Work Order Number 0703354

Received by AT

Checklist completed by Jamye S March 22, 07
Signature Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☒	
Chain of custody present?	Yes ☒	No ☐		
Chain of custody signed when relinquished and received?	Yes ☒	No ☐		
Chain of custody agrees with sample labels?	Yes ☒	No ☐		
Samples in proper container/bottle?	Yes ☒	No ☐		
Sample containers intact?	Yes ☒	No ☐		
Sufficient sample volume for indicated test?	Yes ☒	No ☐		
All samples received within holding time?	Yes ☒	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☒	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☒	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒	

Container/Temp Blank temperature?

2°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

QA/QC Package: ☐ Std ☐ Level 4 ☐Std ☐ Level 4 ☐

Grant Refining

Company - unpaid
Press: Route 3 Box 7

Gallup, NM 87301

Ken Morris

5057223833

505722 02/0

Sampler: Steve Davis
Sample Temperature: 7

Sample Temperature:

2.

[illegible]

Remarks:

Time: 1530

Relinquished By: (Signature)

Received By: (Signature)

Remarks:

Date: 22/07

Time:

Relinquished By: (Signature)

Received By: (Signature)

22/01

10

**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Air Bubbles or Headspace (Y or N)

Chavez, Carl J, EMNRD

From: Monzeglio, Hope, NMENV
Sent: Thursday, March 22, 2007 8:04 AM
To: Chavez, Carl J, EMNRD
Subject: FW: 2005 BW Samples - Metals

From: Steve Morris [mailto:smorris@giant.com]
Sent: Thursday, March 22, 2007 8:54 AM
To: Monzeglio, Hope, NMENV
Cc: Jim Lieb; Ed Riege
Subject: 2005 BW Samples - Metals

Hope,
I've attached the analytical for the boundary wells from 2005.
As you can see, metals were not run on that series of wells.
We didn't notice my mistake until well into 2006.
In 2006 we hired a temporary helper for the Groundwater Sampling, and I expect
to do the same this year.
The temp we use for this has several years experience doing groundwater sampling
here at Ciniza.
This should help eliminate the chances of similar mistakes in the future.
Thanks,
Steve Morris

This inbound email has been scanned by the MessageLabs Email Security System.



COVER LETTER

November 03, 2005

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-0258
FAX (505) 722-0210

RE: Cipiza Annual Groundwater Samples 2005

Order No.: 0510204

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 7 samples on 10/20/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager



Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Project: Ciniza Annual Groundwater Samples 2005

Lab Order: 0510204

CASE NARRATIVE

8270 sample BW-2-C was extracted at a x5 dilution due the heavy amount of sediment and turbidity of the sample.

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-I-C

Lab Order: 0510204

Collection Date: 10/17/2005 2:00:00 PM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	2.2	0.10		mg/L	1	10/22/2005
Chloride	34	0.10		mg/L	1	10/22/2005
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	10/22/2005
Sulfate	240	2.5		mg/L	5	11/1/2005
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/1/2005
EPA METHOD 8260B: VOLATILES						Analyst: HLM
Benzene	ND	1.0		µg/L	1	10/28/2005
Toluene	ND	1.0		µg/L	1	10/28/2005
Ethylbenzene	ND	1.0		µg/L	1	10/28/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/28/2005
Naphthalene	ND	2.0		µg/L	1	10/28/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
Acetone	ND	10		µg/L	1	10/28/2005
Bromobenzene	ND	1.0		µg/L	1	10/28/2005
Bromochloromethane	ND	1.0		µg/L	1	10/28/2005
Bromodichloromethane	ND	1.0		µg/L	1	10/28/2005
Bromoform	ND	1.0		µg/L	1	10/28/2005
Bromomethane	ND	2.0		µg/L	1	10/28/2005
2-Butanone	ND	10		µg/L	1	10/28/2005
Carbon disulfide	ND	10		µg/L	1	10/28/2005
Carbon Tetrachloride	ND	2.0		µg/L	1	10/28/2005
Chlorobenzene	ND	1.0		µg/L	1	10/28/2005
Chloroethane	ND	2.0		µg/L	1	10/28/2005
Chloroform	ND	1.0		µg/L	1	10/28/2005
Chloromethane	ND	1.0		µg/L	1	10/28/2005
2-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
4-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
cis-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/28/2005
Dibromochloromethane	ND	1.0		µg/L	1	10/28/2005
Dibromomethane	ND	2.0		µg/L	1	10/28/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co
Lab Order: 0510204
Project: Ciniza Annual Groundwater Samples 2005
Lab ID: 0510204-01

Client Sample ID: BW-I-C
Collection Date: 10/17/2005 2:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	10/28/2005
2-Hexanone	ND	10		µg/L	1	10/28/2005
Isopropylbenzene	ND	1.0		µg/L	1	10/28/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	10/28/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	10/28/2005
Methylene Chloride	ND	3.0		µg/L	1	10/28/2005
n-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
n-Propylbenzene	ND	1.0		µg/L	1	10/28/2005
sec-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
Styrene	ND	1.0		µg/L	1	10/28/2005
tert-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/28/2005
trans-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/28/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/28/2005
Vinyl chloride	ND	1.0		µg/L	1	10/28/2005
Xylenes, Total	ND	1.0		µg/L	1	10/28/2005
Surr: 1,2-Dichloroethane-d4	97.5	69.9-130		%REC	1	10/28/2005
Surr: 4-Bromofluorobenzene	100	71.2-123		%REC	1	10/28/2005
Surr: Dibromofluoromethane	97.7	73.9-134		%REC	1	10/28/2005
Surr: Toluene-d8	95.5	81.9-122		%REC	1	10/28/2005

EPA METHOD 8270C: SEMIVOLATILES

Analyst: BL

Acenaphthene	ND	10	µg/L	1	10/26/2005
Acenaphthylene	ND	10	µg/L	1	10/26/2005
Aniline	ND	20	µg/L	1	10/26/2005
Anthracene	ND	10	µg/L	1	10/26/2005
Azobenzene	ND	10	µg/L	1	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co
Lab Order: 0510204
Project: Ciniza Annual Groundwater Samples 2005
Lab ID: 0510204-01

Client Sample ID: BW-1-C
Collection Date: 10/17/2005 2:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Benz(a)anthracene	ND	15		µg/L	1	10/26/2005
Benzo(a)pyrene	ND	15		µg/L	1	10/26/2005
Benzo(b)fluoranthene	ND	15		µg/L	1	10/26/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/26/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	10/26/2005
Benzoic acid	ND	50		µg/L	1	10/26/2005
Benzyl alcohol	ND	20		µg/L	1	10/26/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/26/2005
Bis(2-chloroethyl)ether	ND	15		µg/L	1	10/26/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	10/26/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	10/26/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/26/2005
Butyl benzyl phthalate	ND	15		µg/L	1	10/26/2005
Carbazole	ND	10		µg/L	1	10/26/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	10/26/2005
4-Chloroaniline	ND	20		µg/L	1	10/26/2005
2-Chloronaphthalene	ND	10		µg/L	1	10/26/2005
2-Chlorophenol	ND	10		µg/L	1	10/26/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	10/26/2005
Chrysene	ND	15		µg/L	1	10/26/2005
Di-n-butyl phthalate	ND	10		µg/L	1	10/26/2005
Di-n-octyl phthalate	ND	15		µg/L	1	10/26/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/26/2005
Dibenzofuran	ND	10		µg/L	1	10/26/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	10/26/2005
Diethyl phthalate	ND	10		µg/L	1	10/26/2005
Dimethyl phthalate	ND	10		µg/L	1	10/26/2005
2,4-Dichlorophenol	ND	10		µg/L	1	10/26/2005
2,4-Dimethylphenol	ND	10		µg/L	1	10/26/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	10/26/2005
2,4-Dinitrophenol	ND	50		µg/L	1	10/26/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	10/26/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	10/26/2005
Fluoranthene	ND	10		µg/L	1	10/26/2005
Fluorene	ND	10		µg/L	1	10/26/2005
Hexachlorobenzene	ND	10		µg/L	1	10/26/2005
Hexachlorobutadiene	ND	10		µg/L	1	10/26/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/26/2005
Hexachloroethane	ND	10		µg/L	1	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-1-C

Lab Order: 0510204

Collection Date: 10/17/2005 2:00:00 PM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/26/2005
Isophorone	ND	10		µg/L	1	10/26/2005
2-Methylnaphthalene	ND	10		µg/L	1	10/26/2005
2-Methylphenol	ND	15		µg/L	1	10/26/2005
3+4-Methylphenol	ND	20		µg/L	1	10/26/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/26/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	10/26/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/26/2005
Naphthalene	ND	10		µg/L	1	10/26/2005
2-Nitroaniline	ND	50		µg/L	1	10/26/2005
3-Nitroaniline	ND	50		µg/L	1	10/26/2005
4-Nitroaniline	ND	20		µg/L	1	10/26/2005
Nitrobenzene	ND	10		µg/L	1	10/26/2005
2-Nitrophenol	ND	15		µg/L	1	10/26/2005
4-Nitrophenol	ND	50		µg/L	1	10/26/2005
Pentachlorophenol	ND	50		µg/L	1	10/26/2005
Phenanthrene	ND	10		µg/L	1	10/26/2005
Phenol	ND	10		µg/L	1	10/26/2005
Pyrene	ND	15		µg/L	1	10/26/2005
Pyridine	ND	30		µg/L	1	10/26/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/26/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/26/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	10/26/2005
Surr: 2,4,6-Tribromophenol	63.9	16.6-150		%REC	1	10/26/2005
Surr: 2-Fluorobiphenyl	51.1	19.6-134		%REC	1	10/26/2005
Surr: 2-Fluorophenol	55.9	9.54-113		%REC	1	10/26/2005
Surr: 4-Terphenyl-d14	80.3	22.7-145		%REC	1	10/26/2005
Surr: Nitrobenzene-d5	63.6	14.6-134		%REC	1	10/26/2005
Surr: Phenol-d6	27.8	10.7-80.3		%REC	1	10/26/2005
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: TES
Specific Conductance	1400	0.010		µmhos/cm	1	11/1/2005
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Calcium	3.1	1.0		mg/L	1	10/27/2005 5:16:35 PM
Magnesium	ND	1.0		mg/L	1	10/27/2005 5:16:35 PM
Potassium	1.5	1.0		mg/L	1	10/27/2005 5:16:35 PM
Sodium	310	10		mg/L	10	10/28/2005 10:45:13 AM

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co
Lab Order: 0510204
Project: Ciniza Annual Groundwater Samples 2005
Lab ID: 0510204-02

Client Sample ID: BW-2-A
Collection Date: 10/17/2005 3:30:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	1.1	0.10		mg/L	1	10/22/2005
Chloride	39	0.10		mg/L	1	10/22/2005
Phosphorus, Orthophosphate (As P)	0.59	0.50	H	mg/L	1	10/22/2005
Sulfate	6.9	0.50		mg/L	1	10/22/2005
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/1/2005
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	10/28/2005
Toluene	ND	1.0		µg/L	1	10/28/2005
Ethylbenzene	ND	1.0		µg/L	1	10/28/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/28/2005
Naphthalene	ND	2.0		µg/L	1	10/28/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
Acetone	ND	10		µg/L	1	10/28/2005
Bromobenzene	ND	1.0		µg/L	1	10/28/2005
Bromochloromethane	ND	1.0		µg/L	1	10/28/2005
Bromodichloromethane	ND	1.0		µg/L	1	10/28/2005
Bromoform	ND	1.0		µg/L	1	10/28/2005
Bromomethane	ND	2.0		µg/L	1	10/28/2005
2-Butanone	ND	10		µg/L	1	10/28/2005
Carbon disulfide	ND	10		µg/L	1	10/28/2005
Carbon Tetrachloride	ND	2.0		µg/L	1	10/28/2005
Chlorobenzene	ND	1.0		µg/L	1	10/28/2005
Chloroethane	ND	2.0		µg/L	1	10/28/2005
Chloroform	ND	1.0		µg/L	1	10/28/2005
Chloromethane	ND	1.0		µg/L	1	10/28/2005
2-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
4-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
cis-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/28/2005
Dibromochloromethane	ND	1.0		µg/L	1	10/28/2005
Dibromomethane	ND	2.0		µg/L	1	10/28/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-2-A

Lab Order: 0510204

Collection Date: 10/17/2005 3:30:00 PM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-02

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	10/28/2005
2-Hexanone	ND	10		µg/L	1	10/28/2005
Isopropylbenzene	ND	1.0		µg/L	1	10/28/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	10/28/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	10/28/2005
Methylene Chloride	ND	3.0		µg/L	1	10/28/2005
n-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
n-Propylbenzene	ND	1.0		µg/L	1	10/28/2005
sec-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
Styrene	ND	1.0		µg/L	1	10/28/2005
tert-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/28/2005
trans-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/28/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/28/2005
Vinyl chloride	ND	1.0		µg/L	1	10/28/2005
Xylenes, Total	ND	1.0		µg/L	1	10/28/2005
Surr: 1,2-Dichloroethane-d4	97.7	69.9-130		%REC	1	10/28/2005
Surr: 4-Bromofluorobenzene	98.4	71.2-123		%REC	1	10/28/2005
Surr: Dibromofluoromethane	119	73.9-134		%REC	1	10/28/2005
Surr: Toluene-d8	102	81.9-122		%REC	1	10/28/2005

EPA METHOD 8270C: SEMIVOLATILES

Analyst: BL

Acenaphthene	ND	10		µg/L	1	10/26/2005
Acenaphthylene	ND	10		µg/L	1	10/26/2005
Aniline	ND	20		µg/L	1	10/26/2005
Anthracene	ND	10		µg/L	1	10/26/2005
Azobenzene	ND	10		µg/L	1	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co
Lab Order: 0510204
Project: Ciniza Annual Groundwater Samples 2005
Lab ID: 0510204-02

Client Sample ID: BW-2-A
Collection Date: 10/17/2005 3:30:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Benz(a)anthracene	ND	15		µg/L	1	10/26/2005
Benzo(a)pyrene	ND	15		µg/L	1	10/26/2005
Benzo(b)fluoranthene	ND	15		µg/L	1	10/26/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/26/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	10/26/2005
Benzoic acid	ND	50		µg/L	1	10/26/2005
Benzyl alcohol	ND	20		µg/L	1	10/26/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/26/2005
Bis(2-chloroethyl)ether	ND	15		µg/L	1	10/26/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	10/26/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	10/26/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/26/2005
Butyl benzyl phthalate	ND	15		µg/L	1	10/26/2005
Carbazole	ND	10		µg/L	1	10/26/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	10/26/2005
4-Chloroaniline	ND	20		µg/L	1	10/26/2005
2-Chloronaphthalene	ND	10		µg/L	1	10/26/2005
2-Chlorophenol	ND	10		µg/L	1	10/26/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	10/26/2005
Chrysene	ND	15		µg/L	1	10/26/2005
Di-n-butyl phthalate	ND	10		µg/L	1	10/26/2005
Di-n-octyl phthalate	ND	15		µg/L	1	10/26/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/26/2005
Dibenzofuran	ND	10		µg/L	1	10/26/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	10/26/2005
Diethyl phthalate	ND	10		µg/L	1	10/26/2005
Dimethyl phthalate	ND	10		µg/L	1	10/26/2005
2,4-Dichlorophenol	ND	10		µg/L	1	10/26/2005
2,4-Dimethylphenol	ND	10		µg/L	1	10/26/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	10/26/2005
2,4-Dinitrophenol	ND	50		µg/L	1	10/26/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	10/26/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	10/26/2005
Fluoranthene	ND	10		µg/L	1	10/26/2005
Fluorene	ND	10		µg/L	1	10/26/2005
Hexachlorobenzene	ND	10		µg/L	1	10/26/2005
Hexachlorobutadiene	ND	10		µg/L	1	10/26/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/26/2005
Hexachloroethane	ND	10		µg/L	1	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-2-A

Lab Order: 0510204

Collection Date: 10/17/2005 3:30:00 PM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-02

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/26/2005
Isophorone	ND	10		µg/L	1	10/26/2005
2-Methylnaphthalene	ND	10		µg/L	1	10/26/2005
2-Methylphenol	ND	15		µg/L	1	10/26/2005
3+4-Methylphenol	ND	20		µg/L	1	10/26/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/26/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	10/26/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/26/2005
Naphthalene	ND	10		µg/L	1	10/26/2005
2-Nitroaniline	ND	50		µg/L	1	10/26/2005
3-Nitroaniline	ND	50		µg/L	1	10/26/2005
4-Nitroaniline	ND	20		µg/L	1	10/26/2005
Nitrobenzene	ND	10		µg/L	1	10/26/2005
2-Nitrophenol	ND	15		µg/L	1	10/26/2005
4-Nitrophenol	ND	50		µg/L	1	10/26/2005
Pentachlorophenol	ND	50		µg/L	1	10/26/2005
Phenanthrene	ND	10		µg/L	1	10/26/2005
Phenol	ND	10		µg/L	1	10/26/2005
Pyrene	ND	15		µg/L	1	10/26/2005
Pyridine	ND	30		µg/L	1	10/26/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/26/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/26/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	10/26/2005
Surr: 2,4,6-Tribromophenol	59.4	16.6-150		%REC	1	10/26/2005
Surr: 2-Fluorobiphenyl	49.4	19.6-134		%REC	1	10/26/2005
Surr: 2-Fluorophenol	47.2	9.54-113		%REC	1	10/26/2005
Surr: 4-Terphenyl-d14	80.3	22.7-145		%REC	1	10/26/2005
Surr: Nitrobenzene-d5	64.0	14.6-134		%REC	1	10/26/2005
Surr: Phenol-d6	23.0	10.7-80.3		%REC	1	10/26/2005

EPA 120.1: SPECIFIC CONDUCTANCE

Specific Conductance 1400 0.010 µmhos/cm 1 11/1/2005 Analyst: TES

EPA 6010: TOTAL RECOVERABLE METALS

Analyst: NMO
 Calcium 10 1.0 mg/L 1 10/27/2005 5:20:47 PM
 Magnesium 3.6 1.0 mg/L 1 10/27/2005 5:20:47 PM
 Potassium 1.1 1.0 mg/L 1 10/27/2005 5:20:47 PM
 Sodium 330 10 mg/L 10 10/28/2005 10:55:15 AM

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-2-B

Lab Order: 0510204

Collection Date: 10/18/2005 11:10:00 AM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-03

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	1.7	0.10		mg/L	1	10/22/2005
Chloride	29	0.10		mg/L	1	10/22/2005
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	10/22/2005
Sulfate	130	2.5		mg/L	5	11/1/2005
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/1/2005
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	10/28/2005
Toluene	ND	1.0		µg/L	1	10/28/2005
Ethylbenzene	ND	1.0		µg/L	1	10/28/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/28/2005
Naphthalene	ND	2.0		µg/L	1	10/28/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
Acetone	ND	10		µg/L	1	10/28/2005
Bromobenzene	ND	1.0		µg/L	1	10/28/2005
Bromochloromethane	ND	1.0		µg/L	1	10/28/2005
Bromodichloromethane	ND	1.0		µg/L	1	10/28/2005
Bromoform	ND	1.0		µg/L	1	10/28/2005
Bromomethane	ND	2.0		µg/L	1	10/28/2005
2-Butanone	ND	10		µg/L	1	10/28/2005
Carbon disulfide	ND	10		µg/L	1	10/28/2005
Carbon Tetrachloride	ND	2.0		µg/L	1	10/28/2005
Chlorobenzene	ND	1.0		µg/L	1	10/28/2005
Chloroethane	ND	2.0		µg/L	1	10/28/2005
Chloroform	ND	1.0		µg/L	1	10/28/2005
Chloromethane	ND	1.0		µg/L	1	10/28/2005
2-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
4-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
cis-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/28/2005
Dibromochloromethane	ND	1.0		µg/L	1	10/28/2005
Dibromomethane	ND	2.0		µg/L	1	10/28/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-2-B

Lab Order: 0510204

Collection Date: 10/18/2005 11:10:00 AM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-03

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	10/28/2005
2-Hexanone	ND	10		µg/L	1	10/28/2005
Isopropylbenzene	ND	1.0		µg/L	1	10/28/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	10/28/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	10/28/2005
Methylene Chloride	ND	3.0		µg/L	1	10/28/2005
n-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
n-Propylbenzene	ND	1.0		µg/L	1	10/28/2005
sec-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
Styrene	ND	1.0		µg/L	1	10/28/2005
tert-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/28/2005
trans-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
trans-1,3-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/28/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/28/2005
Vinyl chloride	ND	1.0		µg/L	1	10/28/2005
Xylenes, Total	ND	1.0		µg/L	1	10/28/2005
Surr: 1,2-Dichloroethane-d4	96.4	69.9-130		%REC	1	10/28/2005
Surr: 4-Bromofluorobenzene	106	71.2-123		%REC	1	10/28/2005
Surr: Dibromofluoromethane	116	73.9-134		%REC	1	10/28/2005
Surr: Toluene-d8	97.6	81.9-122		%REC	1	10/28/2005

EPA METHOD 8270C: SEMIVOLATILES

Analyst: BL

Acenaphthene	ND	10	µg/L	1	10/26/2005
Acenaphthylene	ND	10	µg/L	1	10/26/2005
Aniline	ND	20	µg/L	1	10/26/2005
Anthracene	ND	10	µg/L	1	10/26/2005
Azobenzene	ND	10	µg/L	1	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co
Lab Order: 0510204
Project: Ciniza Annual Groundwater Samples 2005
Lab ID: 0510204-03

Client Sample ID: BW-2-B
Collection Date: 10/18/2005 11:10:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Benz(a)anthracene	ND	15		µg/L	1	10/26/2005
Benzo(a)pyrene	ND	15		µg/L	1	10/26/2005
Benzo(b)fluoranthene	ND	15		µg/L	1	10/26/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/26/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	10/26/2005
Benzoic acid	ND	50		µg/L	1	10/26/2005
Benzyl alcohol	ND	20		µg/L	1	10/26/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/26/2005
Bis(2-chloroethyl)ether	ND	15		µg/L	1	10/26/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	10/26/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	10/26/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/26/2005
Butyl benzyl phthalate	ND	15		µg/L	1	10/26/2005
Carbazole	ND	10		µg/L	1	10/26/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	10/26/2005
4-Chloroaniline	ND	20		µg/L	1	10/26/2005
2-Chloronaphthalene	ND	10		µg/L	1	10/26/2005
2-Chlorophenol	ND	10		µg/L	1	10/26/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	10/26/2005
Chrysene	ND	15		µg/L	1	10/26/2005
Di-n-butyl phthalate	ND	10		µg/L	1	10/26/2005
Di-n-octyl phthalate	ND	15		µg/L	1	10/26/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/26/2005
Dibenzofuran	ND	10		µg/L	1	10/26/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	10/26/2005
Diethyl phthalate	ND	10		µg/L	1	10/26/2005
Dimethyl phthalate	ND	10		µg/L	1	10/26/2005
2,4-Dichlorophenol	ND	10		µg/L	1	10/26/2005
2,4-Dimethylphenol	ND	10		µg/L	1	10/26/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	10/26/2005
2,4-Dinitrophenol	ND	50		µg/L	1	10/26/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	10/26/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	10/26/2005
Fluoranthene	ND	10		µg/L	1	10/26/2005
Fluorene	ND	10		µg/L	1	10/26/2005
Hexachlorobenzene	ND	10		µg/L	1	10/26/2005
Hexachlorobutadiene	ND	10		µg/L	1	10/26/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/26/2005
Hexachloroethane	ND	10		µg/L	1	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-2-B

Lab Order: 0510204

Collection Date: 10/18/2005 11:10:00 AM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-03

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/26/2005
Isophorone	ND	10		µg/L	1	10/26/2005
2-Methylnaphthalene	ND	10		µg/L	1	10/26/2005
2-Methylphenol	ND	15		µg/L	1	10/26/2005
3+4-Methylphenol	ND	20		µg/L	1	10/26/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/26/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	10/26/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/26/2005
Naphthalene	ND	10		µg/L	1	10/26/2005
2-Nitroaniline	ND	50		µg/L	1	10/26/2005
3-Nitroaniline	ND	50		µg/L	1	10/26/2005
4-Nitroaniline	ND	20		µg/L	1	10/26/2005
Nitrobenzene	ND	10		µg/L	1	10/26/2005
2-Nitrophenol	ND	15		µg/L	1	10/26/2005
4-Nitrophenol	ND	50		µg/L	1	10/26/2005
Pentachlorophenol	ND	50		µg/L	1	10/26/2005
Phenanthrene	ND	10		µg/L	1	10/26/2005
Phenol	ND	10		µg/L	1	10/26/2005
Pyrene	ND	15		µg/L	1	10/26/2005
Pyridine	ND	30		µg/L	1	10/26/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/26/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/26/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	10/26/2005
Surr: 2,4,6-Tribromophenol	55.4	16.6-150		%REC	1	10/26/2005
Surr: 2-Fluorobiphenyl	45.0	19.6-134		%REC	1	10/26/2005
Surr: 2-Fluorophenol	47.8	9.54-113		%REC	1	10/26/2005
Surr: 4-Terphenyl-d14	78.1	22.7-145		%REC	1	10/26/2005
Surr: Nitrobenzene-d5	60.1	14.6-134		%REC	1	10/26/2005
Surr: Phenol-d6	24.7	10.7-80.3		%REC	1	10/26/2005

EPA 120.1: SPECIFIC CONDUCTANCE

Analyst: TES

Specific Conductance	2500	0.010	µmhos/cm	1	11/1/2005
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EPA 6010: TOTAL RECOVERABLE METALS

Analyst: NMO

Calcium	23	1.0	mg/L	1	10/27/2005 5:25:03 PM
Magnesium	3.9	1.0	mg/L	1	10/27/2005 5:25:03 PM
Potassium	2.1	1.0	mg/L	1	10/27/2005 5:25:03 PM
Sodium	540	10	mg/L	10	10/28/2005 10:57:58 AM

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co
Lab Order: 0510204
Project: Ciniza Annual Groundwater Samples 2005
Lab ID: 0510204-04

Client Sample ID: BW-2-C
Collection Date: 10/19/2005 10:45:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	1.5	0.50		mg/L	5	10/22/2005
Chloride	42	0.50		mg/L	5	10/22/2005
Phosphorus, Orthophosphate (As P)	ND	2.5	H	mg/L	5	10/22/2005
Sulfate	270	2.5		mg/L	5	10/22/2005
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/1/2005
EPA METHOD 8260B: VOLATILES						Analyst: HLM
Benzene	ND	1.0		µg/L	1	10/28/2005
Toluene	ND	1.0		µg/L	1	10/28/2005
Ethylbenzene	ND	1.0		µg/L	1	10/28/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/28/2005
Naphthalene	ND	2.0		µg/L	1	10/28/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
Acetone	ND	10		µg/L	1	10/28/2005
Bromobenzene	ND	1.0		µg/L	1	10/28/2005
Bromochloromethane	ND	1.0		µg/L	1	10/28/2005
Bromodichloromethane	ND	1.0		µg/L	1	10/28/2005
Bromoform	ND	1.0		µg/L	1	10/28/2005
Bromomethane	ND	2.0		µg/L	1	10/28/2005
2-Butanone	ND	10		µg/L	1	10/28/2005
Carbon disulfide	ND	10		µg/L	1	10/28/2005
Carbon Tetrachloride	ND	2.0		µg/L	1	10/28/2005
Chlorobenzene	ND	1.0		µg/L	1	10/28/2005
Chloroethane	ND	2.0		µg/L	1	10/28/2005
Chloroform	ND	1.0		µg/L	1	10/28/2005
Chloromethane	ND	1.0		µg/L	1	10/28/2005
2-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
4-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
cis-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/28/2005
Dibromochloromethane	ND	1.0		µg/L	1	10/28/2005
Dibromomethane	ND	2.0		µg/L	1	10/28/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-2-C

Lab Order: 0510204

Collection Date: 10/19/2005 10:45:00 AM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-04

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	10/28/2005
2-Hexanone	ND	10		µg/L	1	10/28/2005
Isopropylbenzene	ND	1.0		µg/L	1	10/28/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	10/28/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	10/28/2005
Methylene Chloride	ND	3.0		µg/L	1	10/28/2005
n-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
n-Propylbenzene	ND	1.0		µg/L	1	10/28/2005
sec-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
Styrene	ND	1.0		µg/L	1	10/28/2005
tert-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/28/2005
trans-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/28/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/28/2005
Vinyl chloride	ND	1.0		µg/L	1	10/28/2005
Xylenes, Total	ND	1.0		µg/L	1	10/28/2005
Surr: 1,2-Dichloroethane-d4	99.6	69.9-130		%REC	1	10/28/2005
Surr: 4-Bromofluorobenzene	104	71.2-123		%REC	1	10/28/2005
Surr: Dibromofluoromethane	98.2	73.9-134		%REC	1	10/28/2005
Surr: Toluene-d8	99.4	81.9-122		%REC	1	10/28/2005

EPA METHOD 8270C: SEMIVOLATILES

Analyst: BL

Acenaphthene	ND	50	µg/L	1	10/26/2005
Acenaphthylene	ND	50	µg/L	1	10/26/2005
Aniline	ND	100	µg/L	1	10/26/2005
Anthracene	ND	50	µg/L	1	10/26/2005
Azobenzene	ND	50	µg/L	1	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co
Lab Order: 0510204
Project: Ciniza Annual Groundwater Samples 2005
Lab ID: 0510204-04

Client Sample ID: BW-2-C
Collection Date: 10/19/2005 10:45:00 AM

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Benz(a)anthracene	ND	75		µg/L	1	10/26/2005
Benzo(a)pyrene	ND	75		µg/L	1	10/26/2005
Benzo(b)fluoranthene	ND	75		µg/L	1	10/26/2005
Benzo(g,h,i)perylene	ND	50		µg/L	1	10/26/2005
Benzo(k)fluoranthene	ND	50		µg/L	1	10/26/2005
Benzoic acid	ND	250		µg/L	1	10/26/2005
Benzyl alcohol	ND	100		µg/L	1	10/26/2005
Bis(2-chloroethoxy)methane	ND	50		µg/L	1	10/26/2005
Bis(2-chloroethyl)ether	ND	75		µg/L	1	10/26/2005
Bis(2-chloroisopropyl)ether	ND	75		µg/L	1	10/26/2005
Bis(2-ethylhexyl)phthalate	ND	75		µg/L	1	10/26/2005
4-Bromophenyl phenyl ether	ND	50		µg/L	1	10/26/2005
Butyl benzyl phthalate	ND	75		µg/L	1	10/26/2005
Carbazole	ND	50		µg/L	1	10/26/2005
4-Chloro-3-methylphenol	ND	100		µg/L	1	10/26/2005
4-Chloroaniline	ND	100		µg/L	1	10/26/2005
2-Chloronaphthalene	ND	50		µg/L	1	10/26/2005
2-Chlorophenol	ND	50		µg/L	1	10/26/2005
4-Chlorophenyl phenyl ether	ND	75		µg/L	1	10/26/2005
Chrysene	ND	75		µg/L	1	10/26/2005
Di-n-butyl phthalate	ND	50		µg/L	1	10/26/2005
Di-n-octyl phthalate	ND	75		µg/L	1	10/26/2005
Dibenz(a,h)anthracene	ND	50		µg/L	1	10/26/2005
Dibenzofuran	ND	50		µg/L	1	10/26/2005
1,2-Dichlorobenzene	ND	50		µg/L	1	10/26/2005
1,3-Dichlorobenzene	ND	50		µg/L	1	10/26/2005
1,4-Dichlorobenzene	ND	50		µg/L	1	10/26/2005
3,3'-Dichlorobenzidine	ND	75		µg/L	1	10/26/2005
Diethyl phthalate	ND	50		µg/L	1	10/26/2005
Dimethyl phthalate	ND	50		µg/L	1	10/26/2005
2,4-Dichlorophenol	ND	50		µg/L	1	10/26/2005
2,4-Dimethylphenol	ND	50		µg/L	1	10/26/2005
4,6-Dinitro-2-methylphenol	ND	250		µg/L	1	10/26/2005
2,4-Dinitrophenol	ND	250		µg/L	1	10/26/2005
2,4-Dinitrotoluene	ND	50		µg/L	1	10/26/2005
2,6-Dinitrotoluene	ND	50		µg/L	1	10/26/2005
Fluoranthene	ND	50		µg/L	1	10/26/2005
Fluorene	ND	50		µg/L	1	10/26/2005
Hexachlorobenzene	ND	50		µg/L	1	10/26/2005
Hexachlorobutadiene	ND	50		µg/L	1	10/26/2005
Hexachlorocyclopentadiene	ND	50		µg/L	1	10/26/2005
Hexachloroethane	ND	50		µg/L	1	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-2-C

Lab Order: 0510204

Collection Date: 10/19/2005 10:45:00 AM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-04

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Indeno(1,2,3-cd)pyrene	ND	50		µg/L	1	10/26/2005
Isophorone	ND	50		µg/L	1	10/26/2005
2-Methylnaphthalene	ND	50		µg/L	1	10/26/2005
2-Methylphenol	ND	75		µg/L	1	10/26/2005
3+4-Methylphenol	ND	100		µg/L	1	10/26/2005
N-Nitrosodi-n-propylamine	ND	50		µg/L	1	10/26/2005
N-Nitrosodimethylamine	ND	50		µg/L	1	10/26/2005
N-Nitrosodiphenylamine	ND	50		µg/L	1	10/26/2005
Naphthalene	ND	50		µg/L	1	10/26/2005
2-Nitroaniline	ND	250		µg/L	1	10/26/2005
3-Nitroaniline	ND	250		µg/L	1	10/26/2005
4-Nitroaniline	ND	100		µg/L	1	10/26/2005
Nitrobenzene	ND	50		µg/L	1	10/26/2005
2-Nitrophenol	ND	75		µg/L	1	10/26/2005
4-Nitrophenol	ND	250		µg/L	1	10/26/2005
Pentachlorophenol	ND	250		µg/L	1	10/26/2005
Phenanthrene	ND	50		µg/L	1	10/26/2005
Phenol	ND	50		µg/L	1	10/26/2005
Pyrene	ND	75		µg/L	1	10/26/2005
Pyridine	ND	150		µg/L	1	10/26/2005
1,2,4-Trichlorobenzene	ND	50		µg/L	1	10/26/2005
2,4,5-Trichlorophenol	ND	50		µg/L	1	10/26/2005
2,4,6-Trichlorophenol	ND	75		µg/L	1	10/26/2005
Surr: 2,4,6-Tribromophenol	52.2	16.6-150		%REC	1	10/26/2005
Surr: 2-Fluorobiphenyl	46.6	19.6-134		%REC	1	10/26/2005
Surr: 2-Fluorophenol	55.8	9.54-113		%REC	1	10/26/2005
Surr: 4-Terphenyl-d14	75.0	22.7-145		%REC	1	10/26/2005
Surr: Nitrobenzene-d5	62.4	14.6-134		%REC	1	10/26/2005
Surr: Phenol-d6	30.0	10.7-80.3		%REC	1	10/26/2005
EPA 120.1: SPECIFIC CONDUCTANCE						
Specific Conductance	1400	0.010		µmhos/cm	1	11/1/2005
EPA 6010: TOTAL RECOVERABLE METALS						
Calcium	140	10		mg/L	10	11/3/2005 12:55:59 PM
Magnesium	7.7	1.0		mg/L	1	10/27/2005 5:29:14 PM
Potassium	2.5	1.0		mg/L	1	10/27/2005 5:29:14 PM
Sodium	320	10		mg/L	10	10/28/2005 10:59:56 AM

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-3-B

Lab Order: 0510204

Collection Date: 10/20/2005 8:00:00 AM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-05

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	1.4	0.10		mg/L	1	10/22/2005
Chloride	34	0.10		mg/L	1	10/22/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	10/22/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	10/22/2005
Phosphorus, Orthophosphate (As P)	1.0	0.50		mg/L	1	10/22/2005
Sulfate	56	0.50		mg/L	1	10/22/2005
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	10/28/2005
Toluene	ND	1.0		µg/L	1	10/28/2005
Ethylbenzene	ND	1.0		µg/L	1	10/28/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/28/2005
Naphthalene	ND	2.0		µg/L	1	10/28/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
Acetone	ND	10		µg/L	1	10/28/2005
Bromobenzene	ND	1.0		µg/L	1	10/28/2005
Bromochloromethane	ND	1.0		µg/L	1	10/28/2005
Bromodichloromethane	ND	1.0		µg/L	1	10/28/2005
Bromofarm	ND	1.0		µg/L	1	10/28/2005
Bromomethane	ND	2.0		µg/L	1	10/28/2005
2-Butanone	ND	10		µg/L	1	10/28/2005
Carbon disulfide	ND	10		µg/L	1	10/28/2005
Carbon Tetrachloride	ND	2.0		µg/L	1	10/28/2005
Chlorobenzene	ND	1.0		µg/L	1	10/28/2005
Chloroethane	ND	2.0		µg/L	1	10/28/2005
Chloroform	ND	1.0		µg/L	1	10/28/2005
Chloromethane	ND	1.0		µg/L	1	10/28/2005
2-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
4-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
cis-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/28/2005
Dibromochloromethane	ND	1.0		µg/L	1	10/28/2005
Dibromomethane	ND	2.0		µg/L	1	10/28/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-3-B

Lab Order: 0510204

Collection Date: 10/20/2005 8:00:00 AM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-05

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	10/28/2005
2-Hexanone	ND	10		µg/L	1	10/28/2005
Isopropylbenzene	ND	1.0		µg/L	1	10/28/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	10/28/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	10/28/2005
Methylene Chloride	ND	3.0		µg/L	1	10/28/2005
n-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
n-Propylbenzene	ND	1.0		µg/L	1	10/28/2005
sec-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
Styrene	ND	1.0		µg/L	1	10/28/2005
tert-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/28/2005
trans-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/28/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/28/2005
Vinyl chloride	ND	1.0		µg/L	1	10/28/2005
Xylenes, Total	ND	1.0		µg/L	1	10/28/2005
Surr: 1,2-Dichloroethane-d4	96.7	69.9-130		%REC	1	10/28/2005
Surr: 4-Bromofluorobenzene	99.7	71.2-123		%REC	1	10/28/2005
Surr: Dibromofluoromethane	116	73.9-134		%REC	1	10/28/2005
Surr: Toluene-d8	97.8	81.9-122		%REC	1	10/28/2005

EPA METHOD 8270C: SEMIVOLATILES

Analyst: BL

Acenaphthene	ND	10		µg/L	1	10/26/2005
Acenaphthylene	ND	10		µg/L	1	10/26/2005
Aniline	ND	20		µg/L	1	10/26/2005
Anthracene	ND	10		µg/L	1	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-3-B

Lab Order: 0510204

Collection Date: 10/20/2005 8:00:00 AM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-05

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Azobenzene	ND	10		µg/L	1	10/26/2005
Benz(a)anthracene	ND	15		µg/L	1	10/26/2005
Benzo(a)pyrene	ND	15		µg/L	1	10/26/2005
Benzo(b)fluoranthene	ND	15		µg/L	1	10/26/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/26/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	10/26/2005
Benzofc acid	ND	50		µg/L	1	10/26/2005
Benzyl alcohol	ND	20		µg/L	1	10/26/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/26/2005
Bis(2-chloroethyl)ether	ND	15		µg/L	1	10/26/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	10/26/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	10/26/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/26/2005
Butyl benzyl phthalate	ND	15		µg/L	1	10/26/2005
Carbazole	ND	10		µg/L	1	10/26/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	10/26/2005
4-Chloroaniline	ND	20		µg/L	1	10/26/2005
2-Chloronaphthalene	ND	10		µg/L	1	10/26/2005
2-Chlorophenol	ND	10		µg/L	1	10/26/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	10/26/2005
Chrysene	ND	15		µg/L	1	10/26/2005
Di-n-butyl phthalate	ND	10		µg/L	1	10/26/2005
Di-n-octyl phthalate	ND	15		µg/L	1	10/26/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/26/2005
Dibenzofuran	ND	10		µg/L	1	10/26/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	10/26/2005
Diethyl phthalate	ND	10		µg/L	1	10/26/2005
Dimethyl phthalate	ND	10		µg/L	1	10/26/2005
2,4-Dichlorophenol	ND	10		µg/L	1	10/26/2005
2,4-Dimethylphenol	ND	10		µg/L	1	10/26/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	10/26/2005
2,4-Dinitrophenol	ND	50		µg/L	1	10/26/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	10/26/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	10/26/2005
Fluoranthene	ND	10		µg/L	1	10/26/2005
Fluorene	ND	10		µg/L	1	10/26/2005
Hexachlorobenzene	ND	10		µg/L	1	10/26/2005
Hexachlorobutadiene	ND	10		µg/L	1	10/26/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-3-B

Lab Order: 0510204

Collection Date: 10/20/2005 8:00:00 AM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-05

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Hexachloroethane	ND	10		µg/L	1	10/26/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/26/2005
Isophorone	ND	10		µg/L	1	10/26/2005
2-Methylnaphthalene	ND	10		µg/L	1	10/26/2005
2-Methylphenol	ND	15		µg/L	1	10/26/2005
3+4-Methylphenol	ND	20		µg/L	1	10/26/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/26/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	10/26/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/26/2005
Naphthalene	ND	10		µg/L	1	10/26/2005
2-Nitroaniline	ND	50		µg/L	1	10/26/2005
3-Nitroaniline	ND	50		µg/L	1	10/26/2005
4-Nitroaniline	ND	20		µg/L	1	10/26/2005
Nitrobenzene	ND	10		µg/L	1	10/26/2005
2-Nitrophenol	ND	15		µg/L	1	10/26/2005
4-Nitrophenol	ND	50		µg/L	1	10/26/2005
Pentachlorophenol	ND	50		µg/L	1	10/26/2005
Phenanthrene	ND	10		µg/L	1	10/26/2005
Phenol	ND	10		µg/L	1	10/26/2005
Pyrene	ND	15		µg/L	1	10/26/2005
Pyridine	ND	30		µg/L	1	10/26/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/26/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/26/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	10/26/2005
Surr: 2,4,6-Tribromophenol	59.8	16.6-150		%REC	1	10/26/2005
Surr: 2-Fluorobiphenyl	50.3	19.6-134		%REC	1	10/26/2005
Surr: 2-Fluorophenol	50.9	9.54-113		%REC	1	10/26/2005
Surr: 4-Terphenyl-d14	77.3	22.7-145		%REC	1	10/26/2005
Surr: Nitrobenzene-d5	63.6	14.6-134		%REC	1	10/26/2005
Surr: Phenol-d6	29.1	10.7-80.3		%REC	1	10/26/2005

EPA 120.1: SPECIFIC CONDUCTANCE

Analyst: TES

Specific Conductance 1600 0.010 µmhos/cm

1 11/1/2005

EPA 6010: TOTAL RECOVERABLE METALS

Analyst: NMO

Calcium	9.9	1.0	mg/L	1	10/27/2005 5:33:13 PM
Magnesium	2.9	1.0	mg/L	1	10/27/2005 5:33:13 PM
Potassium	1.4	1.0	mg/L	1	10/27/2005 5:33:13 PM
Sodium	370	10	mg/L	10	10/28/2005 11:02:39 AM

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co
Lab Order: 0510204
Project: Ciniza Annual Groundwater Samples 2005
Lab ID: 0510204-06

Client Sample ID: BW-3-C
Collection Date: 10/20/2005 9:45:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	1.6	0.10		mg/L	1	10/22/2005
Chloride	37	0.10		mg/L	1	10/22/2005
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	10/22/2005
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	10/22/2005
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	10/22/2005
Sulfate	350	5.0		mg/L	10	11/1/2005
EPA METHOD 8260B: VOLATILES						Analyst: HLM
Benzene	ND	1.0		µg/L	1	10/28/2005
Toluene	ND	1.0		µg/L	1	10/28/2005
Ethylbenzene	ND	1.0		µg/L	1	10/28/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/28/2005
Naphthalene	ND	2.0		µg/L	1	10/28/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
Acetone	ND	10		µg/L	1	10/28/2005
Bromobenzene	ND	1.0		µg/L	1	10/28/2005
Bromochloromethane	ND	1.0		µg/L	1	10/28/2005
Bromodichloromethane	ND	1.0		µg/L	1	10/28/2005
Bromoform	ND	1.0		µg/L	1	10/28/2005
Bromomethane	ND	2.0		µg/L	1	10/28/2005
2-Butanone	ND	10		µg/L	1	10/28/2005
Carbon disulfide	ND	10		µg/L	1	10/28/2005
Carbon Tetrachloride	ND	2.0		µg/L	1	10/28/2005
Chlorobenzene	ND	1.0		µg/L	1	10/28/2005
Chloroethane	ND	2.0		µg/L	1	10/28/2005
Chloroform	ND	1.0		µg/L	1	10/28/2005
Chloromethane	ND	1.0		µg/L	1	10/28/2005
2-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
4-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
cis-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/28/2005
Dibromochloromethane	ND	1.0		µg/L	1	10/28/2005
Dibromomethane	ND	2.0		µg/L	1	10/28/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-3-C

Lab Order: 0510204

Collection Date: 10/20/2005 9:45:00 AM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-06

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
Hexachlorobutadiene	ND	1.0		µg/L	1	10/28/2005
2-Hexanone	ND	10		µg/L	1	10/28/2005
Isopropylbenzene	ND	1.0		µg/L	1	10/28/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	10/28/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	10/28/2005
Methylene Chloride	ND	3.0		µg/L	1	10/28/2005
n-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
n-Propylbenzene	ND	1.0		µg/L	1	10/28/2005
sec-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
Styrene	ND	1.0		µg/L	1	10/28/2005
tert-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/28/2005
trans-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/28/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/28/2005
Vinyl chloride	ND	1.0		µg/L	1	10/28/2005
Xylenes, Total	ND	1.0		µg/L	1	10/28/2005
Surr: 1,2-Dichloroethane-d4	103	69.9-130		%REC	1	10/28/2005
Surr: 4-Bromofluorobenzene	105	71.2-123		%REC	1	10/28/2005
Surr: Dibromofluoromethane	102	73.9-134		%REC	1	10/28/2005
Surr: Toluene-d8	98.0	81.9-122		%REC	1	10/28/2005

EPA METHOD 8270C: SEMIVOLATILES

Analyst: BL

Acenaphthene	ND	10		µg/L	1	10/26/2005
Acenaphthylene	ND	10		µg/L	1	10/26/2005
Aniline	ND	20		µg/L	1	10/26/2005
Anthracene	ND	10		µg/L	1	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-3-C

Lab Order: 0510204

Collection Date: 10/20/2005 9:45:00 AM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-06

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Azobenzene	ND	10		µg/L	1	10/26/2005
Benz(a)anthracene	ND	15		µg/L	1	10/26/2005
Benzo(a)pyrene	ND	15		µg/L	1	10/26/2005
Benzo(b)fluoranthene	ND	15		µg/L	1	10/26/2005
Benzo(g,h,i)perylene	ND	10		µg/L	1	10/26/2005
Benzo(k)fluoranthene	ND	10		µg/L	1	10/26/2005
Benzoic acid	ND	50		µg/L	1	10/26/2005
Benzyl alcohol	ND	20		µg/L	1	10/26/2005
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	10/26/2005
Bis(2-chloroethyl)ether	ND	15		µg/L	1	10/26/2005
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	10/26/2005
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	10/26/2005
4-Bromophenyl phenyl ether	ND	10		µg/L	1	10/26/2005
Butyl benzyl phthalate	ND	15		µg/L	1	10/26/2005
Carbazole	ND	10		µg/L	1	10/26/2005
4-Chloro-3-methylphenol	ND	20		µg/L	1	10/26/2005
4-Chloroaniline	ND	20		µg/L	1	10/26/2005
2-Chloronaphthalene	ND	10		µg/L	1	10/26/2005
2-Chlorophenol	ND	10		µg/L	1	10/26/2005
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	10/26/2005
Chrysene	ND	15		µg/L	1	10/26/2005
Di-n-butyl phthalate	ND	10		µg/L	1	10/26/2005
Di-n-octyl phthalate	ND	15		µg/L	1	10/26/2005
Dibenz(a,h)anthracene	ND	10		µg/L	1	10/26/2005
Dibenzofuran	ND	10		µg/L	1	10/26/2005
1,2-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
1,3-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
1,4-Dichlorobenzene	ND	10		µg/L	1	10/26/2005
3,3'-Dichlorobenzidine	ND	15		µg/L	1	10/26/2005
Diethyl phthalate	ND	10		µg/L	1	10/26/2005
Dimethyl phthalate	ND	10		µg/L	1	10/26/2005
2,4-Dichlorophenol	ND	10		µg/L	1	10/26/2005
2,4-Dimethylphenol	ND	10		µg/L	1	10/26/2005
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	10/26/2005
2,4-Dinitrophenol	ND	50		µg/L	1	10/26/2005
2,4-Dinitrotoluene	ND	10		µg/L	1	10/26/2005
2,6-Dinitrotoluene	ND	10		µg/L	1	10/26/2005
Fluoranthene	ND	10		µg/L	1	10/26/2005
Fluorene	ND	10		µg/L	1	10/26/2005
Hexachlorobenzene	ND	10		µg/L	1	10/26/2005
Hexachlorobutadiene	ND	10		µg/L	1	10/26/2005
Hexachlorocyclopentadiene	ND	10		µg/L	1	10/26/2005

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: BW-3-C

Lab Order: 0510204

Collection Date: 10/20/2005 9:45:00 AM

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-06

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Hexachloroethane	ND	10		µg/L	1	10/26/2005
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	10/26/2005
Isophorone	ND	10		µg/L	1	10/26/2005
2-Methylnaphthalene	ND	10		µg/L	1	10/26/2005
2-Methylphenol	ND	15		µg/L	1	10/26/2005
3+4-Methylphenol	ND	20		µg/L	1	10/26/2005
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	10/26/2005
N-Nitrosodimethylamine	ND	10		µg/L	1	10/26/2005
N-Nitrosodiphenylamine	ND	10		µg/L	1	10/26/2005
Naphthalene	ND	10		µg/L	1	10/26/2005
2-Nitroaniline	ND	50		µg/L	1	10/26/2005
3-Nitroaniline	ND	50		µg/L	1	10/26/2005
4-Nitroaniline	ND	20		µg/L	1	10/26/2005
Nitrobenzene	ND	10		µg/L	1	10/26/2005
2-Nitrophenol	ND	15		µg/L	1	10/26/2005
4-Nitrophenol	ND	50		µg/L	1	10/26/2005
Pentachlorophenol	ND	50		µg/L	1	10/26/2005
Phenanthrene	ND	10		µg/L	1	10/26/2005
Phenol	ND	10		µg/L	1	10/26/2005
Pyrene	ND	15		µg/L	1	10/26/2005
Pyridine	ND	30		µg/L	1	10/26/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	1	10/26/2005
2,4,5-Trichlorophenol	ND	10		µg/L	1	10/26/2005
2,4,6-Trichlorophenol	ND	15		µg/L	1	10/26/2005
Surr: 2,4,6-Tribromophenol	56.6	16.6-150		%REC	1	10/26/2005
Surr: 2-Fluorobiphenyl	44.8	19.6-134		%REC	1	10/26/2005
Surr: 2-Fluorophenol	43.6	9.54-113		%REC	1	10/26/2005
Surr: 4-Terphenyl-d14	71.5	22.7-145		%REC	1	10/26/2005
Surr: Nitrobenzene-d5	54.6	14.6-134		%REC	1	10/26/2005
Surr: Phenol-d6	22.3	10.7-80.3		%REC	1	10/26/2005

EPA 120.1: SPECIFIC CONDUCTANCE

Analyst: TES

Specific Conductance 1500 0.010 µmhos/cm 1 11/1/2005

EPA 6010: TOTAL RECOVERABLE METALS

Analyst: NMO

Calcium	6.1	1.0	mg/L	1	10/27/2005 5:37:28 PM
Magnesium	1.1	1.0	mg/L	1	10/27/2005 5:37:28 PM
Potassium	1.8	1.0	mg/L	1	10/27/2005 5:37:28 PM
Sodium	290	10	mg/L	10	10/28/2005 11:05:24 AM

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co
Lab Order: 0510204
Project: Ciniza Annual Groundwater Samples 2005
Lab ID: 0510204-07

Client Sample ID: Trip Blank
Collection Date:
Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HLM
Benzene	ND	1.0		µg/L	1	10/28/2005
Toluene	ND	1.0		µg/L	1	10/28/2005
Ethylbenzene	ND	1.0		µg/L	1	10/28/2005
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/28/2005
Naphthalene	ND	2.0		µg/L	1	10/28/2005
1-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
2-Methylnaphthalene	ND	4.0		µg/L	1	10/28/2005
Acetone	ND	10		µg/L	1	10/28/2005
Bromobenzene	ND	1.0		µg/L	1	10/28/2005
Bromochloromethane	ND	1.0		µg/L	1	10/28/2005
Bromodichloromethane	ND	1.0		µg/L	1	10/28/2005
Bromoform	ND	1.0		µg/L	1	10/28/2005
Bromomethane	ND	2.0		µg/L	1	10/28/2005
2-Butanone	ND	10		µg/L	1	10/28/2005
Carbon disulfide	ND	10		µg/L	1	10/28/2005
Carbon Tetrachloride	ND	2.0		µg/L	1	10/28/2005
Chlorobenzene	ND	1.0		µg/L	1	10/28/2005
Chloroethane	ND	2.0		µg/L	1	10/28/2005
Chloroform	ND	1.0		µg/L	1	10/28/2005
Chloromethane	ND	1.0		µg/L	1	10/28/2005
2-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
4-Chlorotoluene	ND	1.0		µg/L	1	10/28/2005
cis-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/28/2005
Dibromochloromethane	ND	1.0		µg/L	1	10/28/2005
Dibromomethane	ND	2.0		µg/L	1	10/28/2005
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/28/2005
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloroethene	ND	1.0		µg/L	1	10/28/2005
1,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,3-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
2,2-Dichloropropane	ND	1.0		µg/L	1	10/28/2005
1,1-Dichloropropene	ND	1.0		µg/L	1	10/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co

Client Sample ID: Trip Blank

Lab Order: 0510204

Collection Date:

Project: Ciniza Annual Groundwater Samples 2005

Lab ID: 0510204-07

Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Hexachlorobutadiene	ND	1.0		µg/L	1	10/28/2005
2-Hexanone	ND	10		µg/L	1	10/28/2005
Isopropylbenzene	ND	1.0		µg/L	1	10/28/2005
4-Isopropyltoluene	ND	1.0		µg/L	1	10/28/2005
4-Methyl-2-pentanone	ND	10		µg/L	1	10/28/2005
Methylene Chloride	ND	3.0		µg/L	1	10/28/2005
n-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
n-Propylbenzene	ND	1.0		µg/L	1	10/28/2005
sec-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
Styrene	ND	1.0		µg/L	1	10/28/2005
tert-Butylbenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	10/28/2005
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/28/2005
trans-1,2-DCE	ND	1.0		µg/L	1	10/28/2005
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/28/2005
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/28/2005
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/28/2005
Trichlorofluoromethane	ND	1.0		µg/L	1	10/28/2005
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/28/2005
Vinyl chloride	ND	1.0		µg/L	1	10/28/2005
Xylenes, Total	ND	1.0		µg/L	1	10/28/2005
Surr: 1,2-Dichloroethane-d4	102	69.9-130		%REC	1	10/28/2005
Surr: 4-Bromofluorobenzene	102	71.2-123		%REC	1	10/28/2005
Surr: Dibromofluoromethane	102	73.9-134		%REC	1	10/28/2005
Surr: Toluene-d8	99.3	81.9-122		%REC	1	10/28/2005

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 * - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

CLIENT: Giant Refining Co
 Work Order: 0510204
 Project: Ciniza Annual Groundwater Samples 2005

QC SUMMARY REPORT

Method Blank

Sample ID	MBLK	Batch ID: R17038	Test Code: E300	Units: mg/L	Analysis Date 10/21/2005	Prep Date					
Client ID:		Run ID: WC_051021D	SeqNo: 413479								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									
Nitrate (As N)+Nitrite (As N)	ND	0.1									

Sample ID	MBLK	Batch ID: R17140	Test Code: E300	Units: mg/L	Analysis Date 10/31/2005	Prep Date					
Client ID:		Run ID:	LC_051031A		SeqNo: 417317						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.1									
Chloride	ND	0.1									
Nitrogen, Nitrite (As N)	ND	0.1									
Nitrogen, Nitrate (As N)	ND	0.1									
Phosphorus, Orthophosphate (As P)	ND	0.5									
Sulfate	ND	0.5									
Nitrate (As N)+Nitrite (As N)	ND	0.1									

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co

Work Order: 0510204

Project: Ciniza Annual Groundwater Samples 2005

Sample ID	MB-9023	Batch ID: 9023	Test Code: SW8270C	Units: µg/L	Analysis Date	10/26/2005	Prep Date	10/24/2005			
Client ID:			Run ID:	ELMO_051026A	SeqNo:	415322					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	10									
Acenaphthylene	ND	10									
Aniline	ND	20									
Anthracene	ND	10									
Azobenzene	ND	10									
Benz(a)anthracene	ND	15									
Benzo(a)pyrene	ND	15									
Benzo(b)fluoranthene	ND	15									
Benzo(g,h,i)perylene	ND	10									
Benzo(k)fluoranthene	ND	10									
Benzoic acid	ND	50									
Benzyl alcohol	ND	20									
Bis(2-chloroethoxy)methane	ND	10									
Bis(2-chloroethyl)ether	ND	15									
Bis(2-chloroisopropyl)ether	ND	15									
Bis(2-ethylhexyl)phthalate	ND	15									
4-Bromophenyl phenyl ether	ND	10									
Butyl benzyl phthalate	ND	15									
Carbazole	ND	10									
4-Chloro-3-methylphenol	ND	20									
4-Chloroaniline	ND	20									
2-Chloronaphthalene	ND	10									
2-Chlorophenol	ND	10									
4-Chlorophenyl phenyl ether	ND	15									
Chrysene	ND	15									
Di-n-butyl phthalate	ND	10									
Di-n-octyl phthalate	ND	15									
Dibenz(a,h)anthracene	ND	10									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
2

CLIENT: Giant Refining Co
Work Order: 0510204
Project: Ciniza Annual Groundwater Samples 2005

QC SUMMARY REPORT
 Method Blank

Dibenzofuran	ND	10
1,2-Dichlorobenzene	ND	10
1,3-Dichlorobenzene	ND	10
1,4-Dichlorobenzene	ND	10
3,3'-Dichlorobenzidine	ND	15
Diethyl phthalate	ND	10
Dimethyl phthalate	ND	10
2,4-Dichlorophenol	ND	10
2,4-Dimethylphenol	ND	10
4,6-Dinitro-2-methylphenol	ND	50
2,4-Dinitrophenol	ND	50
2,4-Dinitrotoluene	ND	10
2,6-Dinitrotoluene	ND	10
Fluoranthene	ND	10
Fluorene	ND	10
Hexachlorobenzene	ND	10
Hexachlorobutadiene	ND	10
Hexachlorocyclopentadiene	ND	10
Hexachloroethane	ND	10
Indeno(1,2,3-cd)pyrene	ND	10
Isophorone	ND	10
2-Methylnaphthalene	ND	10
2-Methylphenol	ND	15
3+4-Methylphenol	ND	20
N-Nitrosodi-n-propylamine	ND	10
N-Nitrosodimethylamine	ND	10
N-Nitrosodiphenylamine	ND	10
Naphthalene	ND	10
2-Nitroaniline	ND	50
3-Nitroaniline	ND	50
4-Nitroaniline	ND	20
Nitrobenzene	ND	10
2-Nitrophenol	ND	15

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
 3

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co

Work Order: 0510204

Project: Ciniza Annual Groundwater Samples 2005

[illegible]

31 / 42

Qualifiers:

ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

QC SUMMARY REPORT
Method Blank

CLIENT: Giant Refining Co
 Work Order: 0510204
 Project: Cimiza Annual Groundwater Samples 2005

Sample ID	rb 5ml	Batch ID: R17105	Test Code: SW8260B	Units: µg/L	Analysis Date 10/27/2005	Prep Date						
Client ID:			Run ID: THOR_051027A		SeqNo: 415606							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		ND	1									
Toluene		ND	1									
Ethylbenzene		ND	1									
Methyl tert-butyl ether (MTBE)		ND	1									
1,2,4-Trimethylbenzene		ND	1									
1,3,5-Trimethylbenzene		ND	1									
1,2-Dichloroethane (EDC)		ND	1									
1,2-Dibromoethane (EDB)		ND	1									
Naphthalene		ND	2									
1-Methylnaphthalene		0.782	4									J
2-Methylnaphthalene		ND	4									
Acetone		ND	10									
Bromobenzene		ND	1									
Bromochloromethane		ND	1									
Bromodichloromethane		ND	1									
Bromoform		ND	1									
Bromomethane		ND	2									
2-Butanone		ND	10									
Carbon disulfide		ND	10									
Carbon Tetrachloride		ND	2									
Chlorobenzene		ND	1									
Chloroethane		ND	2									
Chloroform		ND	1									
Chloromethane		ND	1									
2-Chlorotoluene		ND	1									
4-Chlorotoluene		ND	1									
cis-1,2-DCE		ND	1									

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
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QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co
 Work Order: 0510204
 Project: Ciniza Annual Groundwater Samples 2005

cis-1,3-Dichloropropene	ND	1
1,2-Dibromo-3-chloropropane	ND	2
Dibromochloromethane	ND	1
Dibromomethane	ND	2
1,2-Dichlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
Dichlorodifluoromethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichloropropane	ND	1
2,2-Dichloropropane	ND	1
1,1-Dichloropropene	ND	1
Hexachlorobutadiene	ND	1
2-Hexanone	ND	10
Isopropylbenzene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-pentanone	ND	10
Methylene Chloride	ND	3
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
1,1,1,2-Tetrachloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Tetrachloroethene (PCE)	ND	1
trans-1,2-DCE	ND	1
trans-1,3-Dichloropropene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,4-Trichlorobenzene	ND	1
1,1,1-Trichloroethane	ND	1

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT

Method Blank

Method Blank

CLIENT: Giant Refining Co

Work Order: 0510204

Project: Ciniza Annual Groundwater Samples 2005

1,1,2-Trichloroethane	1	ND																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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34 / 42

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	
			3

CLIENT: Giant Refining Co

Work Order: 0510204

Project: Ciniza Annual Groundwater Samples 2005

QC SUMMARY REPORT

Method Blank

Sample ID	5ml rb	Batch ID: R17125	Test Code: SW8260B	Units: µg/L	Analysis Date	10/28/2005	Prep Date				
Client ID:			Run ID: VAL_051028A		SeqNo: 416323						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1									
Toluene	ND	1									
Ethylbenzene	ND	1									
Methyl tert-butyl ether (MTBE)	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,2-Dichloroethane (EDC)	ND	1									
1,2-Dibromoethane (EDB)	ND	1									
Naphthalene	ND	2									
1-Methylnaphthalene	ND	4									
2-Methylnaphthalene	ND	4									
Acetone	ND	10									
Bromobenzene	ND	1									
Bromochloromethane	ND	1									
Bromodichloromethane	ND	1									
Bromoform	ND	1									
Bromomethane	ND	2									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	2									
Chlorobenzene	ND	1									
Chloroethane	ND	2									
Chloroform	ND	1									
Chloromethane	ND	1									
2-Chlorotoluene	ND	1									
4-Chlorotoluene	ND	1									
cis-1,2-DCE	ND	1									
cis-1,3-Dichloropropene	ND	1									

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
4

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co

Work Order: 0510204

Project: Ciniza Annual Groundwater Samples 2005

1,2-Dibromo-3-chloropropane	ND	2
Dibromochloromethane	ND	1
Dibromomethane	ND	2
1,2-Dichlorobenzene	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
Dichlorodifluoromethane	ND	1
1,1-Dichloroethane	ND	1
1,1-Dichloroethene	ND	1
1,2-Dichloropropane	ND	1
1,3-Dichloropropane	ND	1
2,2-Dichloropropane	ND	1
1,1-Dichloropropene	ND	1
Hexachlorobutadiene	ND	1
2-Hexanone	ND	10
Isopropylbenzene	ND	1
4-Isopropyltoluene	ND	1
4-Methyl-2-pentanone	ND	10
Methylene Chloride	ND	3
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1
1,1,1,2-Tetrachloroethane	ND	1
1,1,2,2-Tetrachloroethane	ND	1
Tetrachloroethene (PCE)	ND	1
trans-1,2-DCE	ND	1
trans-1,3-Dichloropropene	ND	1
1,2,3-Trichlorobenzene	ND	1
1,2,4-Trichlorobenzene	ND	1
1,1,1-Trichloroethane	ND	1
1,1,2-Trichloroethane	ND	1

Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Method Blank

CLIENT: Giant Refining Co

Work Order: 0510204

Project: Ciniza Annual Groundwater Samples 2005

[illegible]

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 03-Nov-05

QC SUMMARY REPORT

Laboratory Control Spike - generic

CLIENT: Giant Refining Co

Work Order: 0510204

Project: Ciniza Annual Groundwater Samples 2005

Sample ID	LCS-ST300-05022	Batch ID: R17038	Test Code: E300	Units: mg/L	Analysis Date 10/21/2005	Prep Date					
Client ID:	Run ID: WC_051021D				SeqNo: 413480						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.4799	0.1	0.5	0	96.0	90	110	0			
Chloride	4.71	0.1	5	0	94.2	90	110	0			
Nitrogen, Nitrite (As N)	0.9544	0.1	1	0	95.4	90	110	0			
Nitrogen, Nitrate (As N)	2.379	0.1	2.5	0	95.2	90	110	0			
Phosphorus, Orthophosphate (As P)	4.757	0.5	5	0	95.1	90	110	0			
Sulfate	9.504	0.5	10	0	95.0	90	110	0			
Nitrate (As N)+Nitrite (As N)	3.333	0.1	3.5	0	95.2	90	110	0			

38 / 42

Sample ID	LCS-ST300-05022	Batch ID: R17140	Test Code: E300	Units: mg/L	Analysis Date 10/31/2005	Prep Date					
Client ID:	Run ID: LC_051031A				SeqNo: 417318						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	0.5114	0.1	0.5	0	102	90	110	0			
Chloride	4.69	0.1	5	0	93.8	90	110	0			
Nitrogen, Nitrite (As N)	0.9863	0.1	1	0	96.6	90	110	0			
Nitrogen, Nitrate (As N)	2.4	0.1	2.5	0	96.0	90	110	0			
Phosphorus, Orthophosphate (As P)	4.786	0.5	5	0	95.7	90	110	0			
Sulfate	9.59	0.5	10	0	95.9	90	110	0			
Nitrate (As N)+Nitrite (As N)	3.365	0.1	3.5	0	96.2	90	110	0			

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

CLIENT: Giant Refining Co
Work Order: 0510204
Project: Ciniza Annual Groundwater Samples 2005

QC SUMMARY REPORT
 Laboratory Control Spike - generic

Sample ID	icv	Batch ID: R17105	Test Code: SW8260B	Units: µg/L	Analysis Date 10/27/2005				Prep Date		
Client ID:			Run ID: THOR_051027A		SeqNo: 415607						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.82	1	20	0	99.1	79.3	136	0			
Toluene	18.53	1	20	0	92.6	65.5	123	0			
Chlorobenzene	18.4	1	20	0	92.0	85.6	126	0			
1,1-Dichloroethene	17.12	1	20	0	85.6	72.7	135	0			
Trichloroethene (TCE)	17.38	1	20	0	86.9	85.6	119	0			

Sample ID	100ng Ics	Batch ID: R17125	Test Code: SW8260B	Units: µg/L	Analysis Date	10/28/2005	Prep Date					
Client ID:	Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
	Benzene	21.19	1	20	0	106	79.3	136	0			
	Toluene	17.45	1	20	0	87.2	65.5	123	0			
	Chlorobenzene	19.78	1	20	0	98.9	85.6	126	0			
	1,1-Dichloroethene	22.34	1	20	0	112	72.7	135	0			
	Trichloroethene (TCE)	19.61	1	20	0	98.1	85.6	119	0			

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT

Laboratory Control Spike - generic

CLIENT: Giant Refining Co
 Work Order: 0510204
 Project: Ciniza Annual Groundwater Samples 2005

Sample ID	LCS-9023	Batch ID: 9023	Test Code: SW8270C	Units: µg/L	Analysis Date	10/26/2005	Prep Date	10/24/2005			
Client ID:		Run ID:	ELMQ_051026A		SeqNo:	415323					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	65.38	10	100	0	65.4	11	123	0			
4-Chloro-3-methylphenol	110.3	20	200	0	55.2	15.4	119	0			
2-Chlorophenol	136.2	10	200	0	68.1	12.2	122	0			
1,4-Dichlorobenzene	61.5	10	100	0	61.5	16.9	100	0			
2,4-Dinitrotoluene	52.16	10	100	0	52.2	13	138	0			
N-Nitrosodi-n-propylamine	57.72	10	100	0	57.7	9.93	122	0			
4-Nitrophenol	75.6	50	200	0	37.8	-20.5	87.4	0			
Pentachlorophenol	101.2	50	200	0	50.6	-0.355	114	0			
Phenol	73.7	10	200	0	36.9	7.53	73.1	0			
Pyrene	71.3	15	100	0	71.3	12.6	140	0			
1,2,4-Trichlorobenzene	52.4	10	100	0	52.4	17.4	98.7	0			

Sample ID	LCSD-9023	Batch ID: 9023	Test Code: SW8270C	Units: µg/L	Analysis Date	10/26/2005	Prep Date	10/24/2005			
Client ID:		Run ID:	ELMO_051026A		SeqNo:	415324					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	64.36	10	100	0	64.4	11	123	65.38	1.57	30.5	
4-Chloro-3-methylphenol	104.6	20	200	0	52.3	15.4	119	110.3	5.29	28.6	
2-Chlorophenol	130.8	10	200	0	65.4	12.2	122	136.2	4.03	107	
1,4-Dichlorobenzene	60.42	10	100	0	60.4	16.9	100	61.5	1.77	62.1	
2,4-Dinitrotoluene	48.3	10	100	0	48.3	13	138	52.16	7.68	14.7	
N-Nitrosodi-n-propylamine	55.78	10	100	0	55.8	9.93	122	57.72	3.42	30.3	
4-Nitrophenol	77.7	50	200	0	38.9	12.5	87.4	75.6	2.74	36.3	
Pentachlorophenol	99.8	50	200	0	49.9	3.55	114	101.2	1.43	49	
Phenol	70.58	10	200	0	35.3	7.53	73.1	73.7	4.32	52.4	
Pyrene	71.12	15	100	0	71.1	12.6	140	71.3	0.253	16.3	
2,2,4-Trichlorobenzene	53.3	10	100	0	53.3	17.4	98.7	52.4	1.70	36.4	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated MultiBlank

CLIENT: Giant Refining Co
Work Order: 0510204
Project: Ciniza Annual Groundwater Samples 2005

QC SUMMARY REPORT
Laboratory Control Spike - generic

Sample ID	LCS-9044	Batch ID: 9044	Test Code: SW6010A	Units: mg/L	Analysis Date	10/27/2005 4:19:14 PM	Prep Date	10/25/2005			
Client ID:			Run ID: ICP_051027A		SeqNo:	415917					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	49.18	1	50	0	98.4	80	120	0			
Magnesium	48.8	1	50	0	97.6	80	120	0			
Potassium	50.1	1	50	0.1242	100	80	120	0			
Sodium	52.32	1	50	0	105	80	120	0			

Sample ID	LCS-9044	Batch ID: 9044	Test Code: SW6010A	Units: mg/L	Analysis Date	10/27/2005 4:21:36 PM	Prep Date	10/25/2005			
Client ID:			Run ID: ICP_051027A		SeqNo:	415918					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Calcium	49.58	1	50	0	99.2	80	120	49.18	0.823	20	
Magnesium	49	1	50	0	98.0	80	120	48.8	0.406	20	
Potassium	50.1	1	50	0.1242	100	80	120	50.1	0.00219	20	
Sodium	52.9	1	50	0	106	80	120	52.32	1.10	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

10/20/2005

Work Order Number 0510204

Received by AT

Checklist completed by

Signature

Date

10/20/05

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☒
Custody seals intact on sample bottles?	Yes ☐	No ☒	N/A ☐	
Chain of custody present?	Yes ☒	No ☐		
Chain of custody signed when relinquished and received?	Yes ☒	No ☐		
Chain of custody agrees with sample labels?	Yes ☒	No ☐		
Samples in proper container/bottle?	Yes ☒	No ☐		
Sample containers intact?	Yes ☒	No ☐		
Sufficient sample volume for indicated test?	Yes ☒	No ☐		
All samples received within holding time?	Yes ☒	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☒	No ☐	
Water - pH acceptable upon receipt?	Yes ☒	No ☐	N/A ☐	

Container/Temp Blank temperature?

3°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

QA/QC Package: ☐ Level 4 ☐ Std ☐

Project Name: Ciniza Cement

Project #:

Project Manager:

Ken Allen

Sample Temperature:

[illegible]

**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)
BTEX + MTBE + TPH (Gasoline Only)
TPH Method 8015B (Gas/Diesel)
TPH (Method 418.1)
EDB (Method 504.1)
EDC (Method 8021)
8310 (PNA or PAH)
RCRA 8 Metals
Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)
8081 Pesticides / PCB's (8082)
8260B (VOA)
8270 (Semi-VOA)
<i>Gen Chem</i>
Air Bubbles or Headspace (Y or N)

Remarks:

links: Tom Clam = Cations, Barions, & Conductivity

Chavez, Carl J, EMNRD

From: Monzeglio, Hope, NMENV
Sent: Wednesday, March 14, 2007 10:43 AM
To: Ed Riege; Jim Lieb; Steve Morris
Cc: Chavez, Carl J, EMNRD
Subject: FW: GRCC-07-002 RR Lagoon Approval with Mods.pdf

See attachment.

Jim

Please email to Regina. A hard copy will follow in the mail.

Thanks
Hope

3/15/2007



BILL RICHARDSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Telephone (505) 476-6000
Fax (505) 476-6030
www.nmenv.state.nm.us



RON CURRY
SECRETARY

CINDY PADILLA
DEPUTY SECRETARY

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

March 14, 2007

Ed Riege
Giant Refining Company,
Route 3, Box 7
Gallup, New Mexico 87301

RE: APPROVAL WITH DIRECTION
RAILROAD RACK LAGOON OVERFLOW DITCH AND FAN-OUT AREA,
SWMU #8 SUBSURFACE INVESTIGATION
GIANT REFINING COMPANY, CINIZA REFINERY
EPA ID #: NMD000333211, HWB-GRCC-07-002

Dear Mr. Riege:

The New Mexico Environment Department (NMED) has reviewed and approves Giant Refining Company, Ciniza Refinery's (Permittee) *Railroad Rack Lagoon Overflow Ditch and Fan-out Area, SWMU #8 Subsurface Investigation* (Report), dated February 8, 2007. The Permittee completed the investigation, however, failed to remove residual contamination detected at concentrations greater than applicable cleanup levels at locations B-1, B-7, B-8, and B-9. The cleanup level for diesel range organics (DRO) is 200 mg/kg, established in Table 2a of NMED's total petroleum hydrocarbon (TPH) screening guidelines, and addressed in Section 5.0 (Regulatory Criteria) of the Report. Giant must conduct further corrective action as described in this letter.

The Permittee must implement the investigation activities within 90 days of receipt of this letter and submit the investigation report to NMED within 90 days of completion of the excavation. The Permittee must adhere to all requirements established below.

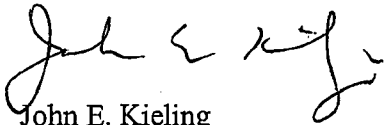
Mr. Riege
Giant Refining Company
March 14, 2007
Page 2

1. Continue to remove contaminated soils containing DRO concentrations greater than 200 mg/kg in the vicinity of sample locations B-1, B-7, B-8, and B-9. If additional contamination is discovered during the excavation activities, the additional contamination must also be removed.
2. If the excavation does not exceed three feet below ground surface (bgs), the Permittee may collect confirmation samples from the bottom of the excavations only. If the excavation exceeds three feet bgs, then confirmation samples must be collected from all sidewalls of the excavations in addition to from the base of the excavations.
3. All excavated soil must be stockpiled on plastic until disposal. If the Permittee chooses to dispose of the soil in the Oil Conservation Division (OCD) landfarm, the Permittee must contact OCD for approval. Both NMED and OCD must be informed of the final soil disposal location.
4. All samples must be submitted to a certified laboratory and analyzed for DRO by EPA Method 8015B.
5. The Permittee must submit an investigation report that describes the results of excavation activities and confirmation sampling and includes documentation of proper disposal. The report must be of similar format to the *Railroad Rack Lagoon Overflow Ditch and Fan-out Area, SWMU #8 Subsurface Investigation* Report. The report must include all analytical results and figures depicting the locations of the confirmation samples.
6. The Permittee must contact NMED one week prior to the start of the investigation/excavation activities.

Mr. Riege
Giant Refining Company
March 14, 2007
Page 3

If you have any questions regarding this letter please contact Hope Monzeglio of my staff at (505) 476-6045.

Sincerely,



John E. Kielling
Program Manager
Permits Management Program
Hazardous Waste Bureau

JEK/hm

cc: D. Cobrain, NMED HWB
C. Frischkorn, NMED HWB
H. Monzeglio, NMED HWB
W. Price, OCD
J. Lieb, GRCC
S. Morris, GRCC
R. Allen, Trihydro Corporation
File: GRCC 2007 and Reading
HWB-GRCC-07-002

Chavez, Carl J, EMNRD

From: Jim Lieb [jlieb@giant.com]
Sent: Wednesday, March 14, 2007 6:43 AM
To: Monzeglio, Hope, NMENV
Cc: Ed Riege; Ed Rios; Steve Morris; Kingsleywh@aol.com; Chavez, Carl J, EMNRD
Subject: RE: Monitoring well installation work plan NAPI

Hope,

I received the finalized monitoring well work plan from Bill Kingsley and have attached it to this email for your review and approval. If you have any questions, please reply to this email as the refinery phones are still out of order. I have asked Bill for a proposal for the installation of the wells.

Regards,
Jim Lieb
Environmental Engineer
Giant Industries, Inc.
Ciniza Refinery
I-40, Exit 39
Jamestown, NM 87347
(505) 722-0227
fax (505) 722-0210
jlieb@giant.com

From: Monzeglio, Hope, NMENV [mailto:hope.monzeglio@state.nm.us]
Sent: Tuesday, March 13, 2007 12:38 PM
To: Ed Riege; Jim Lieb
Cc: Chavez, Carl J, EMNRD; Cobrain, Dave, NMENV
Subject: Monitoring well installation work plan NAPI

Ed

Please provide me with a date the monitoring well installation work plan pertaining to the NAPI will be submitted. This was due 2/28/07, a due date created by Giant. If this cannot be provided to NMED/OCD within the week (by 3/16/07), and extension letter must be submitted. The extension letter must contain the new due date and an explanation why the extension is needed.

If you have any questions let me know.

Hope

Hope Monzeglio
Environmental Specialist
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2905 Rodeo Park Drive East, BLDG 1
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Websites:

3/15/2007

New Mexico Environment Department
Hazardous Waste Bureau

Please note the new phone numbers

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Work Plan for Monitoring Well Installation Giant Refining Company, Ciniza Refinery, API Separator

March 13, 2007

It is proposed to install three (3) monitoring wells adjacent to the API separator unit located at the Ciniza Refinery 17 miles east of Gallup, New Mexico. Geotechnical data obtained during the project development stage indicates there is a water bearing soil zone in the range of five (5) to eight (8) feet below the ground surface. Although continuous samples were not obtained during the geotechnical investigation, it is estimated the water bearing zone is on the order of three (3) feet in thickness. It is believed that below the bottom of the water bearing zone is a clay that is likely insitu weathered Chinle mudstones, although at this time this cannot be confirmed. At a depth of approximately fourteen (14) feet the geotechnical logs indicate the unweathered Petrified Forest Formation (Upper Chinle Group) is encountered. The Chinle Group materials are not water bearing at the depths investigated.

Based on this information it is proposed to monitor for potential contamination from the API Separator Secondary Containment System (APIS SCS) by installing monitoring wells up gradient and down gradient of the APIS SCS. The following tasks will be performed to install the monitoring wells:

1) Well locations will be identified. The locations will be near the exterior of the SCS. The up gradient well will be located within twenty (20) feet of the SCS, the down gradient well will be located within ten (10) feet of the SCS.

2) One boring will be drilled down gradient (west) of the APIS. The boring will be continuously sampled from the surface through the total explored depth. It is estimated the total depth of the boring will be on the order of twenty (20) to twenty five (25) feet deep. Once sampled, the boring will be converted to a monitoring well. The well will be installed such that the screen will be located below the base of the APIS. It is anticipated that the well will be installed in the Chinle Group mudstones and likely will be dry. It is the intent that the well will monitor for fluid accumulation below the APIS.

3) Two (2) wells will be installed and screened across the water bearing zone. One well will be installed up gradient of the APIS (east) and one down gradient (west) of the APIS. The two down gradient wells will be within ten (10) feet of each other. The screen will be sealed above and below the water bearing zone with a bentonite seal. The screen location will be determined based on the continuous sampling of the boring. The up gradient location will be bored and sampled continuously. Screen will be located based on the continuous log of the boring. The boring will be converted to the up gradient well.

4) All wells will be completed using above ground, lockable vaults.

Chavez, Carl J, EMNRD

From: Monzeglio, Hope, NMENV
Sent: Tuesday, March 13, 2007 12:16 PM
To: Chavez, Carl J, EMNRD
Subject: FW: Monitoring well installation work plan NAPI

FYI

From: Ed Riege [mailto:eriege@giant.com]
Sent: Tuesday, March 13, 2007 1:03 PM
To: Monzeglio, Hope, NMENV
Cc: Jim Lieb
Subject: RE: Monitoring well installation work plan NAPI

Jim will be submitting an extension request to you as soon as he talks to Bill Kingsley who Jim said has been very elusive the last couple of weeks. Thank You for the reminder.

Ed

From: Monzeglio, Hope, NMENV [mailto:hope.monzeglio@state.nm.us]
Sent: Tuesday, March 13, 2007 12:38 PM
To: Ed Riege; Jim Lieb
Cc: Chavez, Carl J, EMNRD; Cobrain, Dave, NMENV
Subject: Monitoring well installation work plan NAPI

Ed

Please provide me with a date the monitoring well installation work plan pertaining to the NAPI will be submitted. This was due 2/28/07, a due date created by Giant. If this cannot be provided to NMED/OCD within the week (by 3/16/07), and extension letter must be submitted. The extension letter must contain the new due date and an explanation why the extension is needed.

If you have any questions let me know.

Hope

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Please note the new phone numbers

3/13/2007

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This inbound email has been scanned by the MessageLabs Email Security System.

Chavez, Carl J, EMNRD

From: Monzeglio, Hope, NMENV
Sent: Tuesday, March 13, 2007 12:01 PM
To: Chavez, Carl J, EMNRD
Cc: Cobrain, Dave, NMENV
Subject: RE: Giant Order discussions

Carl

In a little bit I will email you the most recent version of the redline strike out. I have made a few changes today. We have adopted OCD's deadline July 1, 2007 as the due date for the Groundwater Monitoring Work Plan.

Hope

From: Chavez, Carl J, EMNRD
Sent: Tuesday, March 13, 2007 12:48 PM
To: Monzeglio, Hope, NMENV
Subject: RE: Giant Order discussions

Hope:

I will review the HWB draft order and schedule to see if it meets OCD's needs or OCD may recommend additions as entertained by David Cobrain at the time of the meeting. You may recall from our meeting that the OCD may not want to pursue a drawn out schedule of events with HWB, but I will let you know. Personally, I think killing 2-birds with one stone for both agencies would be most efficient if OCD can get some of our key ACO items addressed in the HWB draft order work schedule. Stay tuned.....

From: Monzeglio, Hope, NMENV
Sent: Tuesday, March 13, 2007 11:43 AM
To: Chavez, Carl J, EMNRD
Subject: RE: Giant Order discussions

Yes, this is the Order. We will avoid redundancy.

Hope

From: Chavez, Carl J, EMNRD
Sent: Tuesday, March 13, 2007 9:41 AM
To: Monzeglio, Hope, NMENV
Subject: FW: Giant Order discussions

Hi. Is this the Bloomfield Draft Order that we had a meeting about a while back with HWB and OCD Attorneys with discussion about the OCD's endorsement of the HWB's cleanup plan? I believe HWB wanted to keep our COs consistent to avoid any redundancy in the requirements of the agencies.

Also, Wayne has asked me why he is continuing to receive e-mails on the refineries, since he is no longer responsible for them. If there is a reason why you must continue to e-mail him instead of me, please let him or us know. Otherwise, please direct future e-mails to me on all refineries that the NMED and OCD are working from now on. I will make sure Wayne is kept in the loop and an OCD representative(s) will work to attend meetings as needed. Thank you.

From: Price, Wayne, EMNRD
Sent: Tuesday, March 13, 2007 7:52 AM
To: Chavez, Carl J, EMNRD

3/13/2007

Subject: FW: Giant Order discussions

Wayne Price-Senior Environmental Engr.
Oil Conservation Division
1220 S. Saint Francis
Santa Fe, NM 87505
E-mail wayne.price@state.nm.us
Tele: 505-476-3487
Fax: 505-4763462

From: Monzeglio, Hope, NMENV
Sent: Tue 3/13/2007 8:35 AM
To: Price, Wayne, EMNRD
Cc: Cobrain, Dave, NMENV
Subject: Giant Order discussions

Wayne

I think I cc you on a previous email. We will be meeting with Giant on Tuesday 3/27 at 9:00 here at our office in conference room A to discuss our Order. Let me know if you will be attending so I can be sure to make you copies of the handouts.

Thanks

Hope

Hope Monzeglio
Environmental Specialist
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
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Fax: (505)-476-6030
hope.monzeglio@state.nm.us

Websites:
New Mexico Environment Department
Hazardous Waste Bureau

Please note the new phone numbers

3/13/2007

Chavez, Carl J, EMNRD

From: Monzeglio, Hope, NMENV
Sent: Tuesday, March 13, 2007 11:38 AM
To: Ed Riege; Jim Lieb
Cc: Chavez, Carl J, EMNRD; Cobrain, Dave, NMENV
Subject: Monitoring well installation work plan NAPI

Ed

Please provide me with a date the monitoring well installation work plan pertaining to the NAPI will be submitted. This was due 2/28/07, a due date created by Giant. If this cannot be provided to NMED/OCD within the week (by 3/16/07), and extension letter must be submitted. The extension letter must contain the new due date and an explanation why the extension is needed.

If you have any questions let me know.

Hope

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Please note the new phone numbers

Chavez, Carl J, EMNRD

From: Steve Morris [smorris@giant.com]
Sent: Thursday, March 08, 2007 4:14 PM
To: Monzeglio, Hope, NMENV; Chavez, Carl J, EMNRD
Cc: Ed Riege; Jim Lieb
Subject: NAPIS Oil Sump Level Device

Hope, Carl, and All,

After checking into the level device at the oil sump in the new API Separator, it turns out the switch was left in the "off" position.

A new switch is being ordered with only Hand and Auto selections.

This new switch will eliminate the chance of the pump being inadvertently left in the off position.

Thanks, Steve Morris

This inbound email has been scanned by the MessageLabs Email Security System.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, March 08, 2007 11:30 AM
To: Monzeglio, Hope, NMENV; 'Jim Lieb'
Cc: Cobrain, Dave, NMENV; Price, Wayne, EMNRD; Kieling, John, NMENV
Subject: RE: Sampling requirements - NAPI release 3/07

Hope:

FYI, in the new discharge plan the OCD will be requiring Aeration Lagoons 1 & 2 (AL 1 & 2) to be lined with leak detection. In addition, we will be requiring an oil trap in AL2 before EP1 to prevent oil from impacting the ponds. If they continue to discharge into the ponds, we will require Giant to line evaporation pond 1 and 2 too. This will be required before May 16, 2009. Thanks.

From: Monzeglio, Hope, NMENV
Sent: Thursday, March 08, 2007 11:10 AM
To: Ed Riege; Jim Lieb; Steve Morris
Cc: Cobrain, Dave, NMENV; Price, Wayne, EMNRD; Chavez, Carl J, EMNRD; Kieling, John, NMENV
Subject: Sampling requirements - NAPI release 3/07

Ed

Attached is a letter defining sampling requirements as a result of the release to the aeration lagoons and evaporation ponds. A hard copy will follow in the mail.

Let me know if you have any questions.

Hope

Hope Monzeglio
Environmental Specialist
New Mexico Environment Department
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Chavez, Carl J, EMNRD

From: Monzeglio, Hope, NMENV
Sent: Thursday, March 01, 2007 10:40 AM
To: Chavez, Carl J, EMNRD
Cc: Price, Wayne, EMNRD
Subject: FW: Giant Ciniza SWMU 8

Carl

I just wanted to follow up with you about the fan out area and soil disposal at Ciniza for SWMU 8. I have put a comment in NMED's letter stating if Giant chooses to dispose of the soil in the landfarm, they must get approval from OCD. I also stated Giant must inform NMED and OCD of the final soil disposal location. I spoke with Steve and he said they have not thought about the soil disposal yet.

Just and FYI, Ciniza's phones and internet have been down for most of this week. Phones are still down, they are using cell phones. Some people have email and others do not.

Hope

From: Chavez, Carl J, EMNRD
Sent: Tuesday, February 27, 2007 4:12 PM
To: Monzeglio, Hope, NMENV
Cc: Price, Wayne, EMNRD
Subject: RE: Giant Ciniza SWMU 8

Hope:

Sounds good. Do you know if Giant is proposing to treat the DRO soils in its landfarm? Thanks.

From: Monzeglio, Hope, NMENV
Sent: Tuesday, February 27, 2007 2:22 PM
To: Chavez, Carl J, EMNRD
Cc: Price, Wayne, EMNRD
Subject: Giant Ciniza SWMU 8

Carl

To keep you posted. We received the investigation report for the Railroad Rack lagoon overflow ditch and fan out area. There are a few locations with elevated levels of DRO. NMED will be requiring Giant to remove the contaminated soil and have levels below 200 mg/kg, consistent with the RR lagoon excavation. If you have any additional concerns let me know.

Thanks
Hope

Hope Monzeglio
Environmental Specialist
New Mexico Environment Department
Hazardous Waste Bureau
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3/1/2007

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