

GW - 32

**GENERAL
CORRESPONDENCE**

YEAR(S):

10/2005

Chavez, Carl J, EMNRD

Subject: Stormwater Conference Call- Ciniza Refinery
Location: Telephone Conference Call Initiated from Carl C's Office
Start: Wed 10/19/2005 8:30 AM
End: Wed 10/19/2005 9:00 AM
Recurrence: (none)
Meeting Status: Meeting organizer
Required Attendees: Price, Wayne, EMNRD; Powell, Richard, NMENV; Chavez, Carl J, EMNRD

Meeting to discuss NPDES options with James Romero.

Agenda

- 1) Stormwater Systems (Chemicals of Concern)
- 2) Current problems with discharge
- 3) Options

Richard Powell (SWQB) 827-2798
James Romero (Ciniza) 505-722-0227
Wayne Price (OCD)
Carl Chavez (OCD)

Possibly Hope Monzeglio (HWB) 428-2545?

Stormwater General Permitting vs. Individual Permitting (NPDES)
Conference Call between Giant, OCD, NMED
October 1, 2005
8:30am

AGENDA:

- 1) Discuss current stormwater configuration (process drains from stormwater)
- 2) Discussion of General Stormwater permit vs. NPDES Effluent Limitations
 - Is the general permit the appropriate way to handle stormwater at Ciniza
 - Pros and Cons to using the general permit vs. individual
 - If an individual NPDES permit is obtained whats next
 - What is OCD/NMED role
- 3) Open discussion (next steps)



COVER LETTER

October 19, 2005

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

RE: AL-2 to EP-1 Week of 10-3-05

Order No.: 0510048

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 1 sample on 10/6/2005 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: 19-Oct-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1 10/3/05

Lab Order: 0510048

Collection Date: 10/6/2005 11:30:00 AM

Project: AL-2 to EP-1 Week of 10-3-05

Lab ID: 0510048-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	25		µg/L	10	10/17/2005 4:43:11 PM
Benzene	10	5.0		µg/L	10	10/17/2005 4:43:11 PM
Toluene	12	5.0		µg/L	10	10/17/2005 4:43:11 PM
Ethylbenzene	5.8	5.0		µg/L	10	10/17/2005 4:43:11 PM
Xylenes, Total	26	5.0		µg/L	10	10/17/2005 4:43:11 PM
Surr: 4-Bromofluorobenzene	108	82.2-119		%REC	10	10/17/2005 4:43:11 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	50		µg/L	1	10/12/2005
Acenaphthylene	ND	50		µg/L	1	10/12/2005
Aniline	ND	100		µg/L	1	10/12/2005
Anthracene	ND	50		µg/L	1	10/12/2005
Azobenzene	ND	50		µg/L	1	10/12/2005
Benz(a)anthracene	ND	75		µg/L	1	10/12/2005
Benzo(a)pyrene	ND	75		µg/L	1	10/12/2005
Benzo(b)fluoranthene	ND	75		µg/L	1	10/12/2005
Benzo(g,h,i)perylene	ND	50		µg/L	1	10/12/2005
Benzo(k)fluoranthene	ND	50		µg/L	1	10/12/2005
Benzoic acid	ND	250		µg/L	1	10/12/2005
Benzyl alcohol	ND	100		µg/L	1	10/12/2005
Bis(2-chloroethoxy)methane	ND	50		µg/L	1	10/12/2005
Bis(2-chloroethyl)ether	ND	75		µg/L	1	10/12/2005
Bis(2-chloroisopropyl)ether	ND	75		µg/L	1	10/12/2005
Bis(2-ethylhexyl)phthalate	ND	75		µg/L	1	10/12/2005
4-Bromophenyl phenyl ether	ND	50		µg/L	1	10/12/2005
Butyl benzyl phthalate	ND	75		µg/L	1	10/12/2005
Carbazole	ND	50		µg/L	1	10/12/2005
4-Chloro-3-methylphenol	ND	100		µg/L	1	10/12/2005
4-Chloroaniline	ND	100		µg/L	1	10/12/2005
2-Chloronaphthalene	ND	50		µg/L	1	10/12/2005
2-Chlorophenol	ND	50		µg/L	1	10/12/2005
4-Chlorophenyl phenyl ether	ND	75		µg/L	1	10/12/2005
Chrysene	ND	75		µg/L	1	10/12/2005
Di-n-butyl phthalate	ND	50		µg/L	1	10/12/2005
Di-n-octyl phthalate	ND	75		µg/L	1	10/12/2005
Dibenz(a,h)anthracene	ND	50		µg/L	1	10/12/2005
Dibenzofuran	ND	50		µg/L	1	10/12/2005
1,2-Dichlorobenzene	ND	50		µg/L	1	10/12/2005
1,3-Dichlorobenzene	ND	50		µg/L	1	10/12/2005
1,4-Dichlorobenzene	ND	50		µg/L	1	10/12/2005
3,3'-Dichlorobenzidine	ND	75		µg/L	1	10/12/2005

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: 19-Oct-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1 10/3/05

Lab Order: 0510048

Collection Date: 10/6/2005 11:30:00 AM

Project: AL-2 to EP-1 Week of 10-3-05

Lab ID: 0510048-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Diethyl phthalate	ND	50		µg/L	1	10/12/2005
Dimethyl phthalate	ND	50		µg/L	1	10/12/2005
2,4-Dichlorophenol	ND	50		µg/L	1	10/12/2005
2,4-Dimethylphenol	ND	50		µg/L	1	10/12/2005
4,6-Dinitro-2-methylphenol	ND	250		µg/L	1	10/12/2005
2,4-Dinitrophenol	ND	250		µg/L	1	10/12/2005
2,4-Dinitrotoluene	ND	50		µg/L	1	10/12/2005
2,6-Dinitrotoluene	ND	50		µg/L	1	10/12/2005
Fluoranthene	ND	50		µg/L	1	10/12/2005
Fluorene	140	50		µg/L	1	10/12/2005
Hexachlorobenzene	ND	50		µg/L	1	10/12/2005
Hexachlorobutadiene	ND	50		µg/L	1	10/12/2005
Hexachlorocyclopentadiene	ND	50		µg/L	1	10/12/2005
Hexachloroethane	ND	50		µg/L	1	10/12/2005
Indeno(1,2,3-cd)pyrene	ND	50		µg/L	1	10/12/2005
Isophorone	ND	50		µg/L	1	10/12/2005
2-Methylnaphthalene	210	50		µg/L	1	10/12/2005
2-Methylphenol	ND	75		µg/L	1	10/12/2005
3+4-Methylphenol	ND	100		µg/L	1	10/12/2005
N-Nitrosodi-n-propylamine	ND	50		µg/L	1	10/12/2005
N-Nitrosodimethylamine	ND	50		µg/L	1	10/12/2005
N-Nitrosodiphenylamine	ND	50		µg/L	1	10/12/2005
Naphthalene	ND	50		µg/L	1	10/12/2005
2-Nitroaniline	ND	250		µg/L	1	10/12/2005
3-Nitroaniline	ND	250		µg/L	1	10/12/2005
4-Nitroaniline	ND	100		µg/L	1	10/12/2005
Nitrobenzene	ND	50		µg/L	1	10/12/2005
2-Nitrophenol	ND	75		µg/L	1	10/12/2005
4-Nitrophenol	ND	250		µg/L	1	10/12/2005
Pentachlorophenol	ND	250		µg/L	1	10/12/2005
Phenanthrene	220	50		µg/L	1	10/12/2005
Phenol	ND	50		µg/L	1	10/12/2005
Pyrene	ND	75		µg/L	1	10/12/2005
Pyridine	ND	150		µg/L	1	10/12/2005
1,2,4-Trichlorobenzene	ND	50		µg/L	1	10/12/2005
2,4,5-Trichlorophenol	ND	50		µg/L	1	10/12/2005
2,4,6-Trichlorophenol	ND	75		µg/L	1	10/12/2005
Surr: 2,4,6-Tribromophenol	79.7	16.6-150		%REC	1	10/12/2005
Surr: 2-Fluorobiphenyl	66.6	19.6-134		%REC	1	10/12/2005
Surr: 2-Fluorophenol	49.2	9.54-113		%REC	1	10/12/2005
Surr: 4-Terphenyl-d14	83.7	22.7-145		%REC	1	10/12/2005
Surr: Nitrobenzene-d5	66.8	14.6-134		%REC	1	10/12/2005

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E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 19-Oct-05

CLIENT: Giant Refining Co
Lab Order: 0510048
Project: AL-2 to EP-1 Week of 10-3-05
Lab ID: 0510048-01

Client Sample ID: AL-2 to EP-1 10/3/05
Collection Date: 10/6/2005 11:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: Phenol-d6	39.1	10.7-80.3		%REC	1	10/12/2005
EPA METHOD 7470: MERCURY						Analyst: CMC
Mercury	0.0018	0.00020		mg/L	1	10/10/2005
EPA METHOD 6010B: DISSOLVED METALS						Analyst: NMO
Antimony	ND	0.010		mg/L	1	10/17/2005 1:14:06 PM
Arsenic	ND	0.020		mg/L	1	10/17/2005 1:14:06 PM
Beryllium	ND	0.0030		mg/L	1	10/17/2005 1:14:06 PM
Cadmium	ND	0.0020		mg/L	1	10/17/2005 1:14:06 PM
Chromium	ND	0.0060		mg/L	1	10/17/2005 1:14:06 PM
Copper	ND	0.0060		mg/L	1	10/17/2005 1:14:06 PM
Lead	ND	0.0050		mg/L	1	10/17/2005 1:14:06 PM
Nickel	0.018	0.010		mg/L	1	10/17/2005 1:14:06 PM
Selenium	ND	0.020		mg/L	1	10/17/2005 1:14:06 PM
Silver	ND	0.0050		mg/L	1	10/17/2005 1:14:06 PM
Thallium	ND	0.010		mg/L	1	10/17/2005 1:14:06 PM
Zinc	0.18	0.050		mg/L	1	10/17/2005 1:14:06 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Antimony	ND	0.010		mg/L	1	10/13/2005 9:14:53 AM
Arsenic	ND	0.020		mg/L	1	10/13/2005 9:14:53 AM
Beryllium	ND	0.0030		mg/L	1	10/13/2005 9:14:53 AM
Cadmium	ND	0.0020		mg/L	1	10/13/2005 9:14:53 AM
Chromium	0.0099	0.0060		mg/L	1	10/13/2005 9:14:53 AM
Copper	0.020	0.0060		mg/L	1	10/13/2005 9:14:53 AM
Lead	ND	0.0050		mg/L	1	10/13/2005 9:14:53 AM
Nickel	0.022	0.010		mg/L	1	10/13/2005 9:14:53 AM
Selenium	ND	0.050		mg/L	1	10/13/2005 9:14:53 AM
Silver	ND	0.0050		mg/L	1	10/13/2005 9:14:53 AM
Thallium	ND	0.010		mg/L	1	10/13/2005 9:14:53 AM
Zinc	1.3	1.0		mg/L	20	10/13/2005 10:48:21 AM

Qualifiers: ND - Not Detected at the Reporting Limit
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R - RPD outside accepted recovery limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 19-Oct-05

CLIENT: Giant Refining Co
 Work Order: 0510048
 Project: AL-2 to EP-1 Week of 10-3-05

QC SUMMARY REPORT

Method Blank

Sample ID	Reagent Blank 5m	Batch ID: R16987	Test Code: SW8021	Units: µg/L	Analysis Date 10/17/2005 8:21:37 AM	Prep Date					
Client ID:			Run ID: PIDFID_051017A		SeqNo: 412278						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.25	0	20	0	96.3	82.2	119	0			

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
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 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: 0510048
 Project: AL-2 to EP-1 Week of 10-3-05

Sample ID	MB-8926	Batch ID: 8926	Test Code: SW8270C	Units: µg/L	Analysis Date	10/13/2005	Prep Date	10/10/2005				
Client ID:			Run ID:	ELMQ_051013A	SeqNo:	411315						
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

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co
 Work Order: 0510048
 Project: AL-2 to EP-1 Week of 10-3-05

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

Quantifiers: ND - Not Detected at the Reporting Limit
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Method Blank

Project: AL-2 to EP-1 Week of 10-3-05

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

CLIENT:

Giant Refining Co

Work Order:

0510048

Project:

AL-2 to EP-1 Week of 10-3-05

QC SUMMARY REPORT

Method Blank

Sample ID	MB	Batch ID: R16994	Test Code: SW6010A	Units: mg/L	Analysis Date	10/18/2005 12:28:27 P	Prep Date				
Client ID:		Run ID: ICP_051018B			SeqNo: 412433						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.01									
Arsenic	ND	0.02									
Beryllium	ND	0.003									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Copper	ND	0.006									
Lead	ND	0.005									
Nickel	ND	0.01									
Selenium	ND	0.02									
Silver	ND	0.005									
Thallium	ND	0.01									
Zinc	ND	0.05									

Qualifiers:

ND - Not Detected at the Reporting Limit
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R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
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CLIENT:

Giant Refining Co

Work Order:

0510048

Project:

AL-2 to EP-1 Week of 10-3-05

QC SUMMARY REPORT

Method Blank

Sample ID	MB	Batch ID: R16994	Test Code: SW6010A	Units: mg/L	Analysis Date 10/17/2005 12:58:38 P	Prep Date					
Client ID:			Run ID: ICP_051018B		SeqNo: 412447						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.01									
Arsenic	ND	0.02									
Beryllium	ND	0.003									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Copper	ND	0.006									
Lead	ND	0.005									
Nickel	ND	0.01									
Selenium	0.01363	0.02									J
Silver	ND	0.005									
Thallium	ND	0.01									
Zinc	ND	0.05									

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:

0510048

Project:

AL-2 to EP-1 Week of 10-3-05

QC SUMMARY REPORT

Method Blank

Sample ID	MB-8942	Batch ID: 8942	Test Code: SW6010A	Units: mg/L	Analysis Date	10/13/2005 9:08:24 AM	Prep Date	10/12/2005				
Client ID:			Run ID: ICP_051013A		SeqNo: 410968							
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony		ND	0.01									
Arsenic		ND	0.02									
Beryllium		ND	0.003									
Cadmium		ND	0.002									
Chromium		ND	0.006									
Copper		ND	0.006									
Lead		ND	0.005									
Nickel		ND	0.01									
Selenium		ND	0.05									
Silver		ND	0.005									
Thallium		ND	0.01									
Zinc		ND	0.05									

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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Hall Environmental Analysis Laboratory

Date: 19-Oct-05

CLIENT: Giant Refining Co
 Work Order: 0510048
 Project: AL-2 to EP-1 Week of 10-3-05

QC SUMMARY REPORT
 Laboratory Control Spike - generic

Sample ID	BTEX lev 100ng	Batch ID: R16987	Test Code: SW8021	Units: µg/L	Analysis Date	10/17/2005 2:37:17 PM	Prep Date				
Client ID:			Run ID: PIDFID_051017A		SeqNo:	412279					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	17.27	2.5	20	0	86.4	64.5	133	0			
Benzene	20.29	0.5	20	0	101	88.5	114	0			
Toluene	19.92	0.5	20	0	99.6	87.2	114	0			
Ethylbenzene	20.11	0.5	20	0	101	88.6	113	0			
Xylenes, Total	40.97	0.5	40	0	102	83.3	114	0			

Sample ID	LCS-8926	Batch ID: 8926	Test Code: SW8270C	Units: µg/L	Analysis Date	10/12/2005	Prep Date	10/10/2005			
Client ID:			Run ID:	ELMO_051012A	SeqNo:	410878					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	69.98	10	100	0	70.0	11	123	0			
4-Chloro-3-methylphenol	136.9	20	200	0	68.4	15.4	119	0			
2-Chlorophenol	118.9	10	200	0	59.5	12.2	122	0			
1,4-Dichlorobenzene	53.66	10	100	0	53.7	16.9	100	0			
2,4-Dinitrotoluene	72.48	10	100	0	72.5	13	138	0			
N-Nitrosodi-n-propylamine	61.94	10	100	0	61.9	9.93	122	0			
4-Nitrophenol	85.66	50	200	0	42.8	-20.5	87.4	0			
Pentachlorophenol	118	50	200	0	59.0	-0.355	114	0			
Phenol	65.76	10	200	0	32.9	7.53	73.1	0			
Pyrene	69.34	15	100	0	69.3	12.6	140	0			
1,2,4-Trichlorobenzene	57.52	10	100	0	57.5	17.4	98.7	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 Duplicate

CLIENT: Giant Refining Co
 Work Order: 0510048
 Project: AL-2 to EP-1 Week of 10-3-05

Sample ID	LCSD-8926	Batch ID: 8926	Test Code: SW8270C	Units: µg/L	Analysis Date	10/12/2005	Prep Date	10/10/2005			
Client ID:	Run ID:	ELMQ_051012A	SeqNo:	410879							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	60.52	10	100	0	60.5	11	123	69.98	14.5	30.5	
4-Chloro-3-methylphenol	122.1	20	200	0	61.1	15.4	119	136.9	11.4	28.6	
2-Chlorophenol	126.6	10	200	0	63.3	12.2	122	118.9	6.27	107	
1,4-Dichlorobenzene	56.4	10	100	0	56.4	16.9	100	53.66	4.98	62.1	
2,4-Dinitrotoluene	60.94	10	100	0	60.9	13	138	72.48	17.3	14.7	R
N-Nitrosodi-n-propylamine	57.66	10	100	0	57.7	9.93	122	61.94	7.16	30.3	
4-Nitrophenol	71.28	50	200	0	35.6	12.5	87.4	85.66	18.3	36.3	
Pentachlorophenol	108.7	50	200	0	54.4	3.55	114	118	8.19	49	
Phenol	68	10	200	0	34.0	7.53	73.1	65.76	3.35	52.4	
Pyrene	60.06	15	100	0	60.1	12.6	140	69.34	14.3	16.3	
1,2,4-Trichlorobenzene	57.6	10	100	0	57.6	17.4	98.7	57.52	0.139	36.4	

Sample ID	LCS-8925	Batch ID: 8925	Test Code: SW7470	Units: mg/L	Analysis Date	10/10/2005	Prep Date	10/10/2005			
Client ID:			Run ID: MI-LA254_051010B		SeqNo: 409764						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005086	0.0002	0.005	0	102	75.2	134	0			

Sample ID	LCSD-8925	Batch ID: 8925	Test Code: SW7470	Units: mg/L	Analysis Date	10/10/2005	Prep Date	10/10/2005			
Client ID:			Run ID: MI-LA254_051010B		SeqNo: 409785						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005046	0.0002	0.005	0	101	75.2	134	0.005086	0.791	0	

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

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

10/6/2005

Work Order Number 0510048

Received by AT

Checklist completed by

Signature

Date

10/6/05

Matrix

Carrier name Client drop-off

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

Container/Temp Blank temperature?

6°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

[illegible]

NPOES Proposed Fee Schedule
(based on current permit universe)
[date]

General Permits	# facilities	Minimum annual fee	Maximum annual fee	Annual Fee Calculation Multiplier	MT App	MT Aft	AR App	AR Aft	NV App	NV Aft	WY App	WY Aft
Stormwater - Contr Residential - Less than 10 acres disturbed	800	\$100	NA	NA	250	NA	200	200	200	200	113-449 *	100
Stormwater - Contr Residential - 10 or more acres disturbed	200	\$200	NA	NA								100
Stormwater - Contr Commercial/Public - Less than 10 acres disturbed	400	\$200	NA	NA	450	450	200	200	200	200	449	100
Stormwater - Contr Commercial/Public - 10 or more acres disturbed	200	\$300	NA	NA								100
Stormwater - Industrial Mining (non-coal) Less than 10 acres disturbed	80	\$300	NA	NA	500	650	200-400	200-400	200	200	258-770	100
Stormwater - Industrial Mining (non-coal) 10 or more acres disturbed	10	\$500	NA	NA								100
Stormwater - Industrial other Less than 10 acres disturbed	400	\$300	NA	NA	500	650	200-400	200-400	200	200	385	100
Stormwater - Industrial other 10 or more acres disturbed	60	\$500	NA	NA	450	300	400	400	400	400	418-677AU	100
CFO - >=1000 AUs	152	\$200	NA	NA	300	250	400	400	1500-2500	1855-2756	418-677AU	100
CFO - < 1000 AUs	31	\$100	NA	NA	300	250	400	400	1500-2500	1855-2756	418-677AU	100
Totals	2353										1 - 4 qtr duration only	100

* Actual breakdown of residential vs. commercial construction stormwater not available at this time

NPDES Proposed Fee Schedule
(based on current permit universe)
[Date]

EMNRD Permits	# facilities	Minimum NOI fee	Maximum NOI fee	NOI Fee Calculation Multiplier	Minimum annual fee	Maximum annual fee	Annual Fee Calculation Multiplier	MT App	MT Ant	AR App	AR Ant	NV App	NV Ant	WY App	WY Ant
Oil & Gas - Major Ind. Permit	0	\$4,000			\$4,000										
Oil & Gas - Minor Ind. Permit	0	\$4,000			\$4,000			400*	350*			6000-10000	6075-44100	11722	100
Minor Gas - Major Ind. Permit	0	\$5,000			\$5,000			4500	3000**	15000	15000	20000-60000	20000-60000	13523-3879	100
Minor Gas - Minor Ind. Permit	0	\$5,000	\$30,000	??	\$5,000			4500	3000**	15000	15000	20000-60000	20000-60000	13523-3879	100
Mined Coal - Major Ind. Permit	7	\$1,000	\$5,000	??	\$1,000			2500	1000**	200*	200*	2000-5000	2205-5912	1165-1571	100
Stormwater - Oil & Gas General Permit (Multiplier x number of 10 acre increments disturbed)	22	\$200	\$2,000	\$100	\$200	\$2,000	\$100	500	650	200-400	200-400	200	200		100
Stormwater - Mining (coal) General Permit (Multiplier x number of 10 acre increments disturbed)	9	\$200	\$2,000	\$100	\$200	\$2,000	\$100							924	
Totals	39														
Modification (individual permits only)		full application fee						full fee							
Minor amendment (individual permits only)		150						200		varies 300-5000				50% of ant fee up to 7062	
1 acre permit		150						150-250		NA		250		25% of ant fee up to 3337	

Price, Wayne, EMNRD

From: Chavez, Carl J, EMNRD
To: Monzeglio, Hope, NMENV
Cc: Price, Wayne, EMNRD
Subject: Ciniza Follow-Up & NPDES Inspection- November 05
Attachments:

Sent: Wed 10/19/2005 11:45 AM

Hope:

Good morning. OCD recently participated in a conference call with Richard Powell (SWQB) and Ciniza at the request of James Romero to determine whether they are in compliance with their current stormwater permit and to brainstorm on any NPDES options that would allow Ciniza to be in compliance with all applicable regulations. James is a little confused about all of the applicable regulations, who regulates what, why they're analyzing and what they should be comparing their analytical results to for compliance with regulations, subsequent to our September 8, 2005 inspection.

OCD is planning to go to the Ciniza Refinery sometime in November of 2005. Richard Powell of SWQB will be conducting an NPDES stormwater inspection and would like to meet w/ HWB, OCD, and Ciniza to conduct the stormwater inspection and confirm the areas affected by the stormwater permit versus areas under the jurisdiction of HWB and OCD. The inspection will also allow HWB and OCD to assess Ciniza's corrective actions, since our September 8, 2005 inspection.

During the conference call, it was determined that Ciniza is operating correctly under the best NPDES option, the general stormwater permit. However, the areas covered under the permit needed some clarification and SWQB proposed to conduct an inspection with HWB and OCD. What Ciniza refers to as stormwater drains are actually process drains that feed into their refinery treatment process and are not subject to water quality standards unless surface water and/or groundwater are impacted. OCD emphasized the need for best management plans/ SOPs to prevent Ciniza from discharging contaminants into the process drains. Therefore, James concern that Ciniza was discharging above water quality standards in violation of their stormwater permit was incorrect. It appears that surface water quality standards and groundwater standards would only apply to any discharges at the outfall areas, while HWB and OCD are concerned about the confirmation of hazardous constituents discharging into the evaporation ponds in their refinery process. I think James may be asking HWB about its basis or jurisdiction for what HWB is proposing from Ciniza subsequent to our September 8, 2005 inspection?

The visit to Ciniza is tentatively schedules for November 2005. Richard Powell preferred Wednesday - Friday. I will be away from the office on 11/14-16, Wayne will be away during the first week of November or sometime in November (he's checking). What is the best day in November for you? Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/>
(Pollution Prevention Guidance is under "Publications")

Chavez, Carl J, EMNRD

From: James Romero [jromero@giant.com]
Sent: Wednesday, October 19, 2005 11:42 AM
To: Monzeglio, Hope, NMENV; Chavez, Carl J, EMNRD; Price, Wayne, EMNRD
Cc: Ed Riege; Steve Morris; James Romero
Subject: AL2 into EP1 Lab Results



HALL5105_000.pdf (145 KB)



HALL5368_000.pdf (465 KB)



HALL5470_000.pdf (416 KB)



HALL5692_000.pdf (411 KB)



HALL5796_000.pdf (390 KB)



HALL5839_000.pdf (445 KB)



HALL6072_000.pdf (377 KB)



weekly sample.xls
(23 KB)

As promised, attached are the lab results/chart of the effluent from Aeration Lagoon 2 into Evaporation Pond 1 covering 7 consecutive weeks. In addition to these reports, we also have two grab samples at the lab (week of Oct 3 and 10). Moreover, we plan to sample for this week Oct 17th. After your review, Giant would appreciate your comments as to future sampling requirements.

<<HALL5105_000.pdf>> <<HALL5368_000.pdf>> <<HALL5470_000.pdf>> <<HALL5692_000.pdf>>
<<HALL5796_000.pdf>> <<HALL5839_000.pdf>> <<HALL6072_000.pdf>> <<weekly sample.xls>>

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Aeration Lagoon 2 into Evap Pond 1							
	mg/L	DATE SAMPLED	AL2 into EP1	WQCC 20 NMAC	TCLP	EPA Region 6	
EPA METHOD 8260 VOLATILES	Benzene	09-Aug-05	1	0.01	0.5		
		23-Aug-05	ND				
		30-Aug-05	0.083				
		09-Sep-05	ND				
		15-Sep-05	0.077				
		21-Sep-05	0.8				
		29-Sep-05	0.056				
	Toluene	09-Aug-05	0.076	0.75			
		23-Aug-05	ND				
		30-Aug-05	0.44				
		09-Sep-05	ND				
		15-Sep-05	0.13				
		21-Sep-05	2.2				
		29-Sep-05	0.096				
	EthylBen	09-Aug-05	ND	0.75			
		23-Aug-05	ND				
		30-Aug-05	0.053				
		09-Sep-05	ND				
		15-Sep-05	0.016				
		21-Sep-05	0.29				
		29-Sep-05	0.018				
	Xylene	09-Aug-05	0.044	0.62			
		23-Aug-05	0.035				
		30-Aug-05	0.38				
		09-Sep-05	0.02				
		15-Sep-05	0.096				
		21-Sep-05	2				
		29-Sep-05	0.12				
	MTBE	09-Aug-05	0.06				0.2
		23-Aug-05	0.031				
		30-Aug-05	not tested				
		09-Sep-05	ND				
		15-Sep-05	0.072				
		21-Sep-05	0.067				
		29-Sep-05	0.19				

* Lab Results have not been received



COVER LETTER

August 12, 2005

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

RE: Evap Pond 1 & Lagoon 2 8/2005

Order No.: 0508109

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 2 samples on 8/10/2005 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: 12-Aug-05

CLIENT: Giant Refining Co
Project: Evap Pond 1 & Lagoon 2 8/2005
Lab Order: 0508109

CASE NARRATIVE

Analytical Comments for METHOD 8021BTEX_W, SAMPLE 0508109-02a: Sample analyzed at dilution because of foamy matrix.

Hall Environmental Analysis Laboratory

Date: 12-Aug-05

CLIENT: Giant Refining Co
Project: Evap Pond 1 & Lagoon 2 8/2005**Lab Order:** 0508109**Lab ID:** 0508109-01
Client Sample ID: Evap Pond 1**Collection Date:** 8/9/2005 1:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	60	50		µg/L	20	8/12/2005 12:58:49 AM
Benzene	1000	10		µg/L	20	8/12/2005 12:58:49 AM
Toluene	76	10		µg/L	20	8/12/2005 12:58:49 AM
Ethylbenzene	ND	10		µg/L	20	8/12/2005 12:58:49 AM
Xylenes, Total	44	10		µg/L	20	8/12/2005 12:58:49 AM
Surr: 4-Bromofluorobenzene	103	82.2-119		%REC	20	8/12/2005 12:58:49 AM

Lab ID: 0508109-02
Client Sample ID: Lagoon 2**Collection Date:** 8/9/2005 1:15:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	88	13		µg/L	5	8/12/2005 1:29:54 AM
Benzene	3.6	2.5		µg/L	5	8/12/2005 1:29:54 AM
Toluene	8.7	2.5		µg/L	5	8/12/2005 1:29:54 AM
Ethylbenzene	ND	2.5		µg/L	5	8/12/2005 1:29:54 AM
Xylenes, Total	23	2.5		µg/L	5	8/12/2005 1:29:54 AM
Surr: 4-Bromofluorobenzene	103	82.2-119		%REC	5	8/12/2005 1:29:54 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: 12-Aug-05

CLIENT: Giant Refining Co
Work Order: 0508109
Project: Evap Pond 1 & Lagoon 2 8/2005

QC SUMMARY REPORT

Method Blank

Sample ID	Reagent Blank	Batch ID: R16274	Test Code: SW8021	Units: µg/L	Analysis Date 8/11/2005 8:37:53 AM	Prep Date					
Client ID:			Run ID: PIDFID_050811A		SeqNo: 387374						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	18.11	0	20	0	90.5	82.2	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

Hall Environmental Analysis Laboratory

Date: 12-Aug-05

CLIENT: Giant Refining Co

Work Order: 0508109

Project: Evap Pond 1 & Lagoon 2 8/2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID	BTEX Ics 100ng	Batch ID: R16274	Test Code: SW8021	Units: µg/L	Analysis Date 8/12/2005 2:31:50 AM	Prep Date					
Client ID:		Run ID: PIDFID_050811A			SeqNo: 387381						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	19.26	2.5	40	0	48.2	64.5	133	0			S
Benzene	18.54	0.5	20	0	92.7	88.5	114	0			
Toluene	18.49	0.5	20	0	92.5	87.2	114	0			
Ethylbenzene	18.43	0.5	20	0	92.2	88.6	113	0			
Xylenes, Total	36.75	0.5	60	0	61.2	83.3	114	0			S

Sample ID	BTEX Icsd 100ng	Batch ID: R16274	Test Code: SW8021	Units: µg/L	Analysis Date 8/12/2005 3:02:54 AM	Prep Date					
Client ID:		Run ID: PIDFID_050811A			SeqNo: 387390						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	22.99	2.5	40	0	57.5	64.5	133	19.26	17.6	28	S
Benzene	18.04	0.5	20	0	90.2	88.5	114	18.54	2.73	27	
Toluene	17.94	0.5	20	0	89.7	87.2	114	18.49	3.06	19	
Ethylbenzene	18.12	0.5	20	0	90.6	88.6	113	18.43	1.72	10	
Xylenes, Total	36.6	0.5	60	0	61.0	83.3	114	36.75	0.390	13	S

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:

8/10/2005

Work Order Number 0508109

Received by AT

Checklist completed by

Signature

Date

8/10/05

Matrix

Carrier name Client drop-off

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

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 _____



COVER LETTER

October 18, 2005

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

RE: AL-2 to EP-1 Week of 9/26/05

Order No.: 0509325

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 1 sample on 9/30/2005 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: 18-Oct-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order: 0509325

Collection Date: 9/29/2005 3:00:00 PM

Project: AL-2 to EP-1 Week of 9/26/05

Lab ID: 0509325-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	190	50		µg/L	20	10/3/2005 11:53:34 AM
Benzene	56	10		µg/L	20	10/3/2005 11:53:34 AM
Toluene	96	10		µg/L	20	10/3/2005 11:53:34 AM
Ethylbenzene	18	10		µg/L	20	10/3/2005 11:53:34 AM
Xylenes, Total	120	10		µg/L	20	10/3/2005 11:53:34 AM
Surr: 4-Bromofluorobenzene	106	82.2-119		%REC	20	10/3/2005 11:53:34 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	50		µg/L	1	10/12/2005
Acenaphthylene	ND	50		µg/L	1	10/12/2005
Aniline	680	100		µg/L	1	10/12/2005
Anthracene	ND	50		µg/L	1	10/12/2005
Azobenzene	ND	50		µg/L	1	10/12/2005
Benz(a)anthracene	ND	75		µg/L	1	10/12/2005
Benzo(a)pyrene	ND	75		µg/L	1	10/12/2005
Benzo(b)fluoranthene	ND	75		µg/L	1	10/12/2005
Benzo(g,h,i)perylene	ND	50		µg/L	1	10/12/2005
Benzo(k)fluoranthene	ND	50		µg/L	1	10/12/2005
Benzoic acid	ND	250		µg/L	1	10/12/2005
Benzyl alcohol	ND	100		µg/L	1	10/12/2005
Bis(2-chloroethoxy)methane	ND	50		µg/L	1	10/12/2005
Bis(2-chloroethyl)ether	ND	75		µg/L	1	10/12/2005
Bis(2-chloroisopropyl)ether	ND	75		µg/L	1	10/12/2005
Bis(2-ethylhexyl)phthalate	ND	75		µg/L	1	10/12/2005
4-Bromophenyl phenyl ether	ND	50		µg/L	1	10/12/2005
Butyl benzyl phthalate	ND	75		µg/L	1	10/12/2005
Carbazole	ND	50		µg/L	1	10/12/2005
4-Chloro-3-methylphenol	ND	100		µg/L	1	10/12/2005
4-Chloroaniline	ND	100		µg/L	1	10/12/2005
2-Chloronaphthalene	ND	50		µg/L	1	10/12/2005
2-Chlorophenol	ND	50		µg/L	1	10/12/2005
4-Chlorophenyl phenyl ether	ND	75		µg/L	1	10/12/2005
Chrysene	ND	75		µg/L	1	10/12/2005
Di-n-butyl phthalate	ND	50		µg/L	1	10/12/2005
Di-n-octyl phthalate	ND	75		µg/L	1	10/12/2005
Dibenz(a,h)anthracene	ND	50		µg/L	1	10/12/2005
Dibenzofuran	ND	50		µg/L	1	10/12/2005
1,2-Dichlorobenzene	ND	50		µg/L	1	10/12/2005
1,3-Dichlorobenzene	ND	50		µg/L	1	10/12/2005
1,4-Dichlorobenzene	ND	50		µg/L	1	10/12/2005
3,3'-Dichlorobenzidine	ND	75		µg/L	1	10/12/2005

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: 18-Oct-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order: 0509325

Collection Date: 9/29/2005 3:00:00 PM

Project: AL-2 to EP-1 Week of 9/26/05

Lab ID: 0509325-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Diethyl phthalate	ND	50		µg/L	1	10/12/2005
Dimethyl phthalate	ND	50		µg/L	1	10/12/2005
2,4-Dichlorophenol	ND	50		µg/L	1	10/12/2005
2,4-Dimethylphenol	100	50		µg/L	1	10/12/2005
4,6-Dinitro-2-methylphenol	ND	250		µg/L	1	10/12/2005
2,4-Dinitrophenol	ND	250		µg/L	1	10/12/2005
2,4-Dinitrotoluene	ND	50		µg/L	1	10/12/2005
2,6-Dinitrotoluene	ND	50		µg/L	1	10/12/2005
Fluoranthene	ND	50		µg/L	1	10/12/2005
Fluorene	140	50		µg/L	1	10/12/2005
Hexachlorobenzene	ND	50		µg/L	1	10/12/2005
Hexachlorobutadiene	ND	50		µg/L	1	10/12/2005
Hexachlorocyclopentadiene	ND	50		µg/L	1	10/12/2005
Hexachloroethane	ND	50		µg/L	1	10/12/2005
Indeno(1,2,3-cd)pyrene	ND	50		µg/L	1	10/12/2005
Isophorone	ND	50		µg/L	1	10/12/2005
2-Methylnaphthalene	380	50		µg/L	1	10/12/2005
2-Methylphenol	460	75		µg/L	1	10/12/2005
3+4-Methylphenol	300	100		µg/L	1	10/12/2005
N-Nitrosodi-n-propylamine	ND	50		µg/L	1	10/12/2005
N-Nitrosodimethylamine	ND	50		µg/L	1	10/12/2005
N-Nitrosodiphenylamine	ND	50		µg/L	1	10/12/2005
Naphthalene	68	50		µg/L	1	10/12/2005
2-Nitroaniline	ND	250		µg/L	1	10/12/2005
3-Nitroaniline	ND	250		µg/L	1	10/12/2005
4-Nitroaniline	ND	100		µg/L	1	10/12/2005
Nitrobenzene	ND	50		µg/L	1	10/12/2005
2-Nitrophenol	ND	75		µg/L	1	10/12/2005
4-Nitrophenol	ND	250		µg/L	1	10/12/2005
Pentachlorophenol	ND	250		µg/L	1	10/12/2005
Phenanthrene	200	50		µg/L	1	10/12/2005
Phenol	140	50		µg/L	1	10/12/2005
Pyrene	ND	75		µg/L	1	10/12/2005
Pyridine	ND	150		µg/L	1	10/12/2005
1,2,4-Trichlorobenzene	ND	50		µg/L	1	10/12/2005
2,4,5-Trichlorophenol	ND	50		µg/L	1	10/12/2005
2,4,6-Trichlorophenol	ND	75		µg/L	1	10/12/2005
Surr: 2,4,6-Tribromophenol	88.6	16.6-150		%REC	1	10/12/2005
Surr: 2-Fluorobiphenyl	72.6	19.6-134		%REC	1	10/12/2005
Surr: 2-Fluorophenol	41.6	9.54-113		%REC	1	10/12/2005
Surr: 4-Terphenyl-d14	50.1	22.7-145		%REC	1	10/12/2005
Surr: Nitrobenzene-d5	69.0	14.6-134		%REC	1	10/12/2005

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: 18-Oct-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order: 0509325

Collection Date: 9/29/2005 3:00:00 PM

Project: AL-2 to EP-1 Week of 9/26/05

Lab ID: 0509325-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: Phenol-d6	36.5	10.7-80.3		%REC	1	10/12/2005
EPA METHOD 7470: MERCURY						Analyst: IC
Mercury	0.0025	0.00020		mg/L	1	10/6/2005
EPA METHOD 6010B: DISSOLVED METALS						Analyst: NMO
Antimony	ND	0.010		mg/L	1	10/4/2005 10:43:59 AM
Arsenic	ND	0.020		mg/L	1	10/4/2005 10:43:59 AM
Beryllium	ND	0.0030		mg/L	1	10/4/2005 10:43:59 AM
Cadmium	ND	0.0020		mg/L	1	10/4/2005 10:43:59 AM
Chromium	0.0070	0.0060		mg/L	1	10/4/2005 10:43:59 AM
Copper	ND	0.0060		mg/L	1	10/4/2005 10:43:59 AM
Lead	ND	0.0050		mg/L	1	10/4/2005 10:43:59 AM
Nickel	0.019	0.010		mg/L	1	10/4/2005 10:43:59 AM
Selenium	ND	0.020		mg/L	1	10/4/2005 10:43:59 AM
Silver	ND	0.0050		mg/L	1	10/4/2005 10:43:59 AM
Thallium	ND	0.010		mg/L	1	10/4/2005 10:43:59 AM
Zinc	0.15	0.050		mg/L	1	10/4/2005 10:43:59 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Antimony	ND	0.010		mg/L	1	10/7/2005 8:40:31 AM
Arsenic	ND	0.020		mg/L	1	10/6/2005 11:35:11 AM
Beryllium	ND	0.0030		mg/L	1	10/6/2005 11:35:11 AM
Cadmium	ND	0.0020		mg/L	1	10/6/2005 11:35:11 AM
Chromium	0.022	0.0060		mg/L	1	10/6/2005 11:35:11 AM
Copper	0.098	0.0060		mg/L	1	10/6/2005 11:35:11 AM
Lead	0.017	0.0050		mg/L	1	10/6/2005 11:35:11 AM
Nickel	0.041	0.010		mg/L	1	10/6/2005 11:35:11 AM
Selenium	ND	0.050		mg/L	1	10/6/2005 11:35:11 AM
Silver	ND	0.0050		mg/L	1	10/6/2005 11:35:11 AM
Thallium	ND	0.010		mg/L	1	10/6/2005 11:35:11 AM
Zinc	2.6	0.25		mg/L	5	10/11/2005 9:21:26 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: 18-Oct-05

QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0509325
Project: AL-2 to EP-1 Week of 9/26/05

Method Blank

Sample ID	Reagent Blank 5m	Batch ID: R16840	Test Code: SW8021	Units: µg/L	Analysis Date	10/3/2005 8:46:25 AM	Prep Date				
Client ID:			Run ID: PIDFID_051003A		SeqNo: 406636						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	21.02	0	20	0	105	82.2	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

Method Blank

CLIENT: Giant Refining Co
 Work Order: 0509325
 Project: AL-2 to EP-1 Week of 9/26/05

Sample ID	MB-8864	Batch ID: 8864	Test Code: SW8270C	Units: µg/L	Analysis Date	10/12/2005	Prep Date	10/3/2005			
Client ID:			Run ID:	ELMO_051012A	SeqNo:	410869					
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

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co
 Work Order: 0509325
 Project: AL-2 to EP-1 Week of 9/26/05

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	5.7	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

Quantifiers: 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

Project: AL-2 to EP-1 Week of 9/26/05

[illegible]

Sample ID	MB-8897	Batch ID:	8897	Test Code:	SW7470	Units:	mg/L	Analysis Date	10/6/2005	Prep Date	10/6/2005
Client ID:		Run ID:	MI-LA254_051006A					SeqNo:	408247		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Mercury		ND	0.0002								Qual

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	

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co
 Work Order: 0509325
 Project: AL-2 to EP-1 Week of 9/26/05

Sample ID	MB	Batch ID: R16850	Test Code: SW6010A	Units: mg/L	Analysis Date	10/4/2005 9:06:33 AM	Prep Date				
Client ID:			Run ID: ICP_051004A		SeqNo: 407014						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.01									
Arsenic	ND	0.02									
Beryllium	ND	0.003									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Copper	ND	0.006									
Lead	ND	0.005									
Nickel	ND	0.01									
Selenium	ND	0.02									
Silver	ND	0.005									
Thallium	ND	0.01									
Zinc	ND	0.05									

Sample ID	MB-8884	Batch ID: 8884	Test Code: SW6010A	Units: mg/L	Analysis Date	10/6/2005 10:00:44 AM	Prep Date	10/5/2005			
Client ID:			Run ID:	ICP_051006B	SeqNo:	408450					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.02									
Beryllium	ND	0.003									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Copper	ND	0.006									
Lead	ND	0.005									
Nickel	ND	0.01									
Selenium	ND	0.05									
Silver	ND	0.005									
Thallium	ND	0.01									
Zinc	ND	0.05									

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: 0509325
Project: AL-2 to EP-1 Week of 9/26/05

QC SUMMARY REPORT
 Method Blank

Sample ID	MB-8884	Batch ID:	8884	Test Code:	SW6010A	Units:	mg/L	Analysis Date	10/7/2005 8:25:39 AM	Prep Date	10/5/2005
Client ID:		Run ID:	ICP_051006B					SeqNo:	408568		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD
Antimony		ND		0.01							

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

Date: 18-Oct-05

CLIENT:

Giant Refining Co

Work Order:

0509325

Project:

AL-2 to EP-1 Week of 9/26/05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID	BTEX lcs 100ng	Batch ID: R16840	Test Code: SW8021	Units: µg/L	Analysis Date	10/3/2005 1:58:23 PM	Prep Date				
Client ID:			Run ID: PIDFID_051003A		SeqNo: 406644						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	17.2	2.5	20	0	86.0	64.5	133	0			
Benzene	19.89	0.5	20	0	99.5	88.5	114	0			
Toluene	19.34	0.5	20	0	96.7	87.2	114	0			
Ethylbenzene	19.19	0.5	20	0	96.0	88.6	113	0			
Xylenes, Total	39.4	0.5	40	0	98.5	83.3	114	0			

Sample ID	BTEX lcsd 100ng	Batch ID: R16840	Test Code: SW8021	Units: µg/L	Analysis Date	10/3/2005 2:30:36 PM	Prep Date				
Client ID:			Run ID: PIDFID_051003A		SeqNo: 406647						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	17.37	2.5	20	0	86.8	64.5	133	17.2	0.951	28	
Benzene	19.92	0.5	20	0	99.6	88.5	114	19.89	0.170	27	
Toluene	19.3	0.5	20	0	96.5	87.2	114	19.34	0.176	19	
Ethylbenzene	19.33	0.5	20	0	96.6	88.6	113	19.19	0.691	10	
Xylenes, Total	39.41	0.5	40	0	98.5	83.3	114	39.4	0.0142	13	

Quantifiers:

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: 0509325
Project: AL-2 to EP-1 Week of 9/26/05

QC SUMMARY REPORT
 Laboratory Control Spike - generic

Sample ID	LCS-8864	Batch ID: 8864	Test Code: SW8270C	Units: µg/L	Analysis Date	10/12/2005	Prep Date	10/3/2005			
Client ID:			Run ID:	ELMO_051012A	SeqNo:	410870					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	75.04	10	100	0	75.0	11	123	0			
4-Chloro-3-methylphenol	151.7	20	200	0	75.8	15.4	119	0			
2-Chlorophenol	150	10	200	0	75.0	12.2	122	0			
1,4-Dichlorobenzene	68.78	10	100	0	68.8	16.9	100	0			
2,4-Dinitrotoluene	77.38	10	100	0	77.4	13	138	0			
N-Nitrosodi-n-propylamine	71.46	10	100	0	71.5	9.93	122	0			
4-Nitrophenol	96.16	50	200	0	48.1	-20.5	87.4	0			
Pentachlorophenol	-144.2	50	200	0	72.1	-0.355	114	0			
Phenol	81.16	10	200	0	40.6	7.53	73.1	0			
Pyrene	73.62	15	100	0	73.6	12.6	140	0			
1,2,4-Trichlorobenzene	68.44	10	100	0	68.4	17.4	98.7	0			

Sample ID	LCSD-8864	Batch ID: 8864	Test Code: SW8270C	Units: µg/L	Analysis Date	10/12/2005	Prep Date	10/3/2005			
Client ID:	Run ID:	ELMO_051012A	SeqNo:	410871							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	65.84	10	100	0	65.8	11	123	75.04	13.1	30.5	
4-Chloro-3-methylphenol	137.4	20	200	0	68.7	15.4	119	151.7	9.87	28.6	
2-Chlorophenol	112.8	10	200	0	56.4	12.2	122	150	28.3	107	
1,4-Dichlorobenzene	51.84	10	100	0	51.8	16.9	100	68.78	28.1	62.1	
2,4-Dinitrotoluene	73.66	10	100	0	73.7	13	138	77.38	4.93	14.7	
N-Nitrosodi-n-propylamine	60.32	10	100	0	60.3	9.93	122	71.46	16.9	30.3	
4-Nitrophenol	26.08	50	200	0	13.0	12.5	87.4	96.16	0	36.3	J
Pentachlorophenol	46.76	50	200	0	23.4	3.55	114	144.2	0	49	J
Phenol	54.62	10	200	0	32.3	7.53	73.1	81.16	22.7	52.4	
Pyrene	73.1	15	100	0	73.1	12.6	140	73.62	0.709	16.3	
2,4-Trichlorobenzene	54.58	10	100	0	54.6	17.4	98.7	68.44	22.5	36.4	

Qualifiers: ND - Not Detected at the Reporting Limit
 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: 0509325

Project: AL-2 to EP-1 Week of 9/26/05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID	LCS-8897	Batch ID: 8897	Test Code: SW7470	Units: mg/L	Analysis Date 10/6/2005	Prep Date 10/6/2005
Client ID:			Run ID: MI-LA254_051006A	SeqNo: 408248		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit	%RPD RPDLimit Qual
Mercury	0.005624	0.0002	0.005	0	112 75.2 134	0
Sample ID	LCS-8897	Batch ID: 8897	Test Code: SW7470	Units: mg/L	Analysis Date 10/6/2005	Prep Date 10/6/2005
Client ID:			Run ID: MI-LA254_051006A	SeqNo: 408249		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit	%RPD RPDLimit Qual
Mercury	0.005469	0.0002	0.005	0	109 75.2 134	0.005624 2.81 0
Sample ID	LCS	Batch ID: R16850	Test Code: SW6010A	Units: mg/L	Analysis Date 10/4/2005 9:21:30 AM	Prep Date
Client ID:			Run ID: ICP_051004A	SeqNo: 407017		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit	%RPD RPDLimit Qual
Antimony	0.4721	0.01	0.5	0	94.4 80 120	0
Arsenic	0.5112	0.02	0.5	0	102 80 120	0
Beryllium	0.4925	0.003	0.5	0	98.5 80 120	0
Cadmium	0.4791	0.002	0.5	0	95.8 80 120	0
Chromium	0.4837	0.006	0.5	0	96.7 80 120	0
Copper	0.4693	0.006	0.5	0	93.9 80 120	0
Lead	0.4778	0.005	0.5	0	95.6 80 120	0
Nickel	0.4653	0.01	0.5	0	93.1 80 120	0
Selenium	0.4503	0.02	0.5	0	90.1 80 120	0
Silver	0.4774	0.005	0.5	0	95.5 80 120	0
Thallium	0.5033	0.01	0.5	0	101 80 120	0
Zinc	0.4944	0.05	0.5	0	98.9 80 120	0

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limitsS - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

3

CLIENT:

Giant Refining Co

Work Order:

0509325

Project:

AL-2 to EP-1 Week of 9/26/05

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID	LCSD	Batch ID: R16850	Test Code: SW6010A	Units: mg/L	Analysis Date	10/4/2005 9:23:50 AM	Prep Date				
Client ID:		Run ID:	ICP_051004A		SeqNo:	407018					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.4767	0.01	0.5	0	95.3	80	120	0.4721	0.983	20	
Arsenic	0.5013	0.02	0.5	0	100	80	120	0.5112	1.96	20	
Beryllium	0.4988	0.003	0.5	0	99.8	80	120	0.4925	1.26	20	
Cadmium	0.4813	0.002	0.5	0	96.3	80	120	0.4791	0.454	20	
Chromium	0.4861	0.006	0.5	0	97.2	80	120	0.4837	0.493	20	
Copper	0.4747	0.006	0.5	0	94.9	80	120	0.4693	1.14	20	
Lead	0.4825	0.005	0.5	0	96.5	80	120	0.4778	0.971	20	
Nickel	0.4683	0.01	0.5	0	93.7	80	120	0.4653	0.649	20	
Selenium	0.4548	0.02	0.5	0	91.0	80	120	0.4503	1.00	20	
Silver	0.4776	0.005	0.5	0	95.5	80	120	0.4774	0.0367	20	
Thallium	0.5	0.01	0.5	0	100	80	120	0.5033	0.661	20	
Zinc	0.5063	0.05	0.5	0	101	80	120	0.4944	2.37	20	

Sample ID	LCS-8884	Batch ID: 8884	Test Code: SW6010A	Units: mg/L	Analysis Date	10/6/2005 10:03:05 AM	Prep Date	10/5/2005			
Client ID:		Run ID:	ICP_051006B		SeqNo:	408451					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4875	0.02	0.5	0	97.5	80	120	0			
Beryllium	0.4843	0.003	0.5	0	96.9	80	120	0			
Cadmium	0.4561	0.002	0.5	0	91.2	80	120	0			
Chromium	0.4746	0.006	0.5	0	94.9	80	120	0			
Copper	0.4697	0.006	0.5	0	93.9	80	120	0			
Lead	0.4596	0.005	0.5	0	91.9	80	120	0			
Nickel	0.4492	0.01	0.5	0	89.8	80	120	0			
Selenium	0.4143	0.05	0.5	0	82.9	80	120	0			
Silver	0.4596	0.005	0.5	0	91.9	80	120	0			
Thallium	0.4818	0.01	0.5	0	96.4	80	120	0			
Zinc	0.4615	0.05	0.5	0	92.3	80	120	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

4

CLIENT: Giant Refining Co

Work Order: 0509325

Project: AL-2 to EP-1 Week of 9/26/05

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID	LCSD-8884	Batch ID: 8884	Test Code: SW6010A	Units: mg/L	Analysis Date	10/6/2005 10:06:23 AM	Prep Date	10/5/2005			
Client ID:			Run ID: ICP_051006B		SeqNo: 408452						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4937	0.02	0.5	0	98.7	80	120	0.4875	1.26	20	
Beryllium	0.4927	0.003	0.5	0	98.5	80	120	0.4843	1.72	20	
Cadmium	0.4612	0.002	0.5	0	92.2	80	120	0.4561	1.11	20	
Chromium	0.4796	0.006	0.5	0	95.9	80	120	0.4746	1.06	20	
Copper	0.473	0.006	0.5	0	94.6	80	120	0.4697	0.698	20	
Lead	0.4616	0.005	0.5	0	92.3	80	120	0.4596	0.431	20	
Nickel	0.4535	0.01	0.5	0	90.7	80	120	0.4492	0.951	20	
Selenium	0.425	0.05	0.5	0	85.0	80	120	0.4143	2.55	20	
Silver	0.4639	0.005	0.5	0	92.8	80	120	0.4596	0.936	20	
Thallium	0.4757	0.01	0.5	0	95.1	80	120	0.4818	1.26	20	
Zinc	0.4653	0.05	0.5	0	93.1	80	120	0.4615	0.804	20	

Sample ID	LCS-8884	Batch ID: 8884	Test Code: SW6010A	Units: mg/L	Analysis Date	10/7/2005 8:28:07 AM	Prep Date	10/5/2005			
Client ID:			Run ID: ICP_051006B		SeqNo:	408569					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.4601	0.01	0.5	0	92.0	80	120	0			

Sample ID	LCSD-8884	Batch ID: 8884	Test Code: SW6010A	Units: mg/L	Analysis Date	10/7/2005 8:30:35 AM	Prep Date	10/5/2005			
Client ID:			Run ID: ICP_051006B		SeqNo: 408570						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.4612	0.01	0.5	0	92.2	80	120	0.4601	0.250	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
5

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

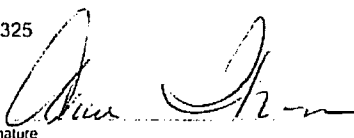
Date and Time Received:

9/30/2005

Work Order Number 0509325

Received by AT

Checklist completed by


Signature

Date

9/30/05

Matrix

Carrier name Client drop-off

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

Container/Temp Blank temperature?

6°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____



COVER LETTER

October 03, 2005

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

RE: AL-2 to EP-1 Week of 9-19-2005

Order No.: 0509234

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 1 sample on 9/21/2005 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-Oct-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 TO EP-1

Lab Order: 0509234

Collection Date: 9/21/2005 1:00:00 PM

Project: AL-2 to EP-1 Week of 9-19-2005

Lab ID: 0509234-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	67	25		µg/L	10	9/23/2005 7:34:17 PM
Benzene	800	5.0		µg/L	10	9/23/2005 7:34:17 PM
Toluene	2200	5.0		µg/L	10	9/23/2005 7:34:17 PM
Ethylbenzene	290	5.0		µg/L	10	9/23/2005 7:34:17 PM
1,2,4-Trimethylbenzene	580	5.0		µg/L	10	9/23/2005 7:34:17 PM
1,3,5-Trimethylbenzene	230	5.0		µg/L	10	9/23/2005 7:34:17 PM
Xylenes, Total	2000	5.0		µg/L	10	9/23/2005 7:34:17 PM
Surr: 4-Bromofluorobenzene	117	82.2-119		%REC	10	9/23/2005 7:34:17 PM

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

Rx Date/Time OCT-03-2005(MON) 13:37
10/03/2005 14:14 FAX 406 252 6069

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LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque
Project: 0509234
Lab ID: B05091570-001
Client Sample ID: AL-2 TO EP-1, 0509234-01D

Report Date: 09/29/05
Collection Date: 09/21/05 13:00
Date Received: 09/23/05
Matrix: Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
METALS, DISSOLVED							
Antimony	ND	mg/L		0.005		E200.8	09/26/05 16:34 / car
Arsenic	ND	mg/L		0.005		E200.8	09/26/05 16:34 / car
Barium	0.1	mg/L		0.1		E200.8	09/26/05 16:34 / car
Cadmium	ND	mg/L		0.001		E200.8	09/26/05 16:34 / car
Copper	ND	mg/L		0.01		E200.8	09/26/05 16:34 / car
Lead	ND	mg/L		0.01		E200.8	09/26/05 16:34 / car
Nickel	0.01	mg/L		0.01		E200.8	09/26/05 16:34 / car
Selenium	0.010	mg/L		0.005		E200.8	09/29/05 01:57 / car
Silver	ND	mg/L		0.005		E200.8	09/26/05 16:34 / car
Thallium	ND	mg/L		0.005		E200.8	09/26/05 16:34 / car
Vanadium	ND	mg/L		0.1		E200.8	09/26/05 16:34 / car
Zinc	0.65	mg/L		0.01		E200.8	09/26/05 16:34 / car
METALS, TOTAL							
Antimony	ND	mg/L		0.005		E200.8	09/26/05 13:19 / car
Arsenic	0.022	mg/L		0.005		E200.8	09/26/05 13:19 / car
Barium	0.6	mg/L		0.1		E200.7	09/26/05 17:04 / rth
Cadmium	ND	mg/L		0.001		E200.8	09/26/05 13:19 / car
Copper	0.09	mg/L		0.01		E200.8	09/26/05 13:19 / car
Lead	0.03	mg/L		0.01		E200.8	09/26/05 13:19 / car
Mercury	0.007	mg/L		0.001		E245.1	09/27/05 08:05 / klc
Nickel	0.04	mg/L		0.01		E200.8	09/26/05 13:19 / car
Selenium	0.012	mg/L		0.005		E200.8	09/29/05 01:24 / car
Silver	ND	mg/L		0.005		E200.8	09/26/05 13:19 / car
Thallium	ND	mg/L		0.005		E200.8	09/26/05 13:19 / car
Vanadium	ND	mg/L		0.1		E200.7	09/26/05 17:04 / rth
Zinc	3.14	mg/L		0.01		E200.7	09/26/05 17:04 / rth
SEMI-VOLATILE ORGANIC COMPOUNDS							
1,2,4-Trichlorobenzene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
1,2-Dichlorobenzene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
1,3-Dichlorobenzene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
1,4-Dichlorobenzene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
1-Methylnaphthalene	430	ug/L		100		SW8270C	09/27/05 22:57 / dsm
2,4,5-Trichlorophenol	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
2,4,6-Trichlorophenol	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
2,4-Dichlorophenol	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
2,4-Dimethylphenol	218	ug/L		100		SW8270C	09/27/05 22:57 / dsm
2,4-Dinitrophenol	ND	ug/L		500		SW8270C	09/27/05 22:57 / dsm
2,4-Dinitrotoluene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
2,6-Dinitrotoluene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque
Project: 0509234
Lab ID: B05091570-001
Client Sample ID: AL-2 TO EP-1, 0509234-01D

Report Date: 09/29/05
Collection Date: 09/21/05 13:00
Date Received: 09/23/05
Matrix: Aqueous

Analyscs	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SEMI-VOLATILE ORGANIC COMPOUNDS							
2-Chloronaphthalene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
2-Chlorophenol	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
2-Methylnaphthalene	608	ug/L		100		SW8270C	09/27/05 22:57 / dsm
2-Nitrophenol	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
3,3'-Dichlorobenzidine	ND	ug/L		200		SW8270C	09/27/05 22:57 / dsm
4,6-Dinitro-2-methylphenol	ND	ug/L		500		SW8270C	09/27/05 22:57 / dsm
4-Bromophenyl phenyl ether	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
4-Chloro-3-methylphenol	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
4-Chlorophenol	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
4-Chlorophenyl phenyl ether	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
4-Nitrophenol	ND	ug/L		500		SW8270C	09/27/05 22:57 / dsm
Acenaphthene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Acenaphthylene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Anthracene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Azobenzene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Benzidine	ND	ug/L		200		SW8270C	09/27/05 22:57 / dsm
Benzo(a)anthracene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Benzo(a)pyrene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Benzo(b)fluoranthene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Benzo(g,h,i)perylene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Benzo(k)fluoranthene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
bis(-2-chloroethoxy)Methane	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
bis(-2-chloroethyl)Ether	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
bis(2-chloroisopropyl)Ether	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
bis(2-ethylhexyl)Phthalate	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Butylbenzylphthalate	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Chrysene	11	ug/L	J	100		SW8270C	09/27/05 22:57 / dsm
Dibenzo(a,h)anthracene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Diethyl phthalate	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Dimethyl phthalate	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Di-n-butyl phthalate	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Di-n-octyl phthalate	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Fluoranthene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Fluorene	95	ug/L	J	100		SW8270C	09/27/05 22:57 / dsm
Hexachlorobenzene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Hexachlorobutadiene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Hexachlorocyclopentadiene	ND	ug/L		200		SW8270C	09/27/05 22:57 / dsm
Hexachloroethane	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Indeno(1,2,3-cd)pyrene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Isophorone	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
m+p-Cresols	95	ug/L	J	100		SW8270C	09/27/05 22:57 / dsm

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

J - Estimated value. The analyte was present but less than the reporting limit.

Rx Date/Time OCT-03-2005(MON) 13:37
10/03/2005 14:14 FAX 406 252 6069

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LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque
Project: 0509234
Lab ID: B05091570-001
Client Sample ID: AL-2 TO EP-1, 0509234-01D

Report Date: 09/29/05
Collection Date: 09/21/05 13:00
Date Received: 09/23/05
Matrix: Aqueous

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
SEMI-VOLATILE ORGANIC COMPOUNDS							
Naphthalene	202	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Nitrobenzene	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
n-Nitrosodimethylamine	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
n-Nitroso-di-n-propylamine	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
n-Nitrosodiphenylamine	ND	ug/L		100		SW8270C	09/27/05 22:57 / dsm
o-Cresol	58	ug/L	J	100		SW8270C	09/27/05 22:57 / dsm
Pentachlorophenol	ND	ug/L		500		SW8270C	09/27/05 22:57 / dsm
Phenanthrene	156	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Phenol	84	ug/L	J	100		SW8270C	09/27/05 22:57 / dsm
Pyrene	21	ug/L	J	100		SW8270C	09/27/05 22:57 / dsm
Pyridine	ND	ug/L		200		SW8270C	09/27/05 22:57 / dsm
Surr: 2,4,6-Tribromophenol	56.5	%REC			10-123	SW8270C	09/27/05 22:57 / dsm
Surr: 2-Fluorobiphenyl	44.1	%REC	J		43-116	SW8270C	09/27/05 22:57 / dsm
Surr: 2-Fluorophenol	28.0	%REC	J		21-100	SW8270C	09/27/05 22:57 / dsm
Surr: Nitrobenzene-d5	88.1	%REC	J		35-114	SW8270C	09/27/05 22:57 / dsm
Surr: Phenol-d5	24.6	%REC	J		10-94	SW8270C	09/27/05 22:57 / dsm
Surr: Terphenyl-d14	51.8	%REC	J		33-141	SW8270C	09/27/05 22:57 / dsm

- The sample extract was diluted 10 times at analysis due to non-target compound sample matrix interference. The Reporting Limit reflects this dilution.

Report RL - Analyte reporting limit.

Definitions: QCL - Quality control limit.

J - Estimated value. The analyte was present but less than the reporting limit.

MCL - Maximum contaminant level.

ND - Not detected at the reporting limit.

Rx Date/Time OCT-03-2005(MON) 13:37
10/03/2005 14:16 FAX 406 252 6069

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QA/QC Summary Report

Client: Hall Environmental-Albuquerque
Project: 0509234

Report Date: 09/28/05
Work Order: B05091570

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8270C							Batch: 17765		
Sample ID: MB-17765							09/28/05 16:18		
Method Blank									
1,2,4-Trichlorobenzene	ND	ug/L	10						
1,2-Dichlorobenzene	ND	ug/L	10						
1,3-Dichlorobenzene	ND	ug/L	10						
1,4-Dichlorobenzene	ND	ug/L	10						
1-Methylnaphthalene	ND	ug/L	10						
2,4,5-Trichlorophenol	ND	ug/L	10						
2,4,6-Trichlorophenol	ND	ug/L	10						
2,4-Dichlorophenol	ND	ug/L	10						
2,4-Dimethylphenol	ND	ug/L	10						
2,4-Dinitrophenol	ND	ug/L	50						
2,4-Dinitrotoluene	ND	ug/L	10						
2,6-Dinitrotoluene	ND	ug/L	10						
2-Chloronaphthalene	ND	ug/L	10						
2-Chlorophenol	ND	ug/L	10						
2-Methylnaphthalene	ND	ug/L	10						
2-Nitrophenol	ND	ug/L	10						
3,3'-Dichlorobenzidine	ND	ug/L	20						
4,6-Dinitro-2-methylphenol	ND	ug/L	50						
4-Bromophenyl phenyl ether	ND	ug/L	10						
4-Chloro-3-methylphenol	ND	ug/L	10						
4-Chlorophenol	ND	ug/L	10						
4-Chlorophenyl phenyl ether	ND	ug/L	10						
4-Nitrophenol	ND	ug/L	50						
Acenaphthene	ND	ug/L	10						
Acenaphthylene	ND	ug/L	10						
Anthracene	ND	ug/L	10						
Azobenzene	ND	ug/L	10						
Benzidine	ND	ug/L	20						
Benzo(a)anthracene	ND	ug/L	10						
Benzo(a)pyrene	ND	ug/L	10						
Benzo(b)fluoranthene	ND	ug/L	10						
Benzo(g,h,i)perylene	ND	ug/L	10						
Benzo(k)fluoranthene	ND	ug/L	10						
bis(-2-chloroethoxy)Methane	ND	ug/L	10						
bis(-2-chloroethyl)Ether	ND	ug/L	10						
bis(2-chloroisopropyl)Ether	ND	ug/L	10						
bis(2-ethylhexyl)Phthalate	ND	ug/L	10						
Butylbenzylphthalate	ND	ug/L	10						
Chrysene	ND	ug/L	10						
Dibenzo(a,h)anthracene	ND	ug/L	10						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Rx Date/Time OCT-03-2005(MON) 13:37
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QA/QC Summary Report

Client: Hall Environmental-Albuquerque
Project: 0509234

Report Date: 09/28/05
Work Order: B05091570

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8270C							Batch: 17765		
Sample ID: MB-17765	Method Blank		09/26/05 16:18						
Diethyl phthalate	ND	ug/L	10						
Dimethyl phthalate	ND	ug/L	10						
Di-n-butyl phthalate	ND	ug/L	10						
Di-n-octyl phthalate	ND	ug/L	10						
Fluoranthene	ND	ug/L	10						
Fluorene	ND	ug/L	10						
Hexachlorobenzene	ND	ug/L	10						
Hexachlorobutadiene	ND	ug/L	10						
Hexachlorocyclopentadiene	ND	ug/L	20						
Hexachloroethane	ND	ug/L	10						
Indeno(1,2,3-cd)pyrene	ND	ug/L	10						
Isophorone	ND	ug/L	10						
m+p-Cresols	ND	ug/L	10						
Naphthalene	ND	ug/L	10						
Nitrobenzene	ND	ug/L	10						
n-Nitrosodimethylamine	ND	ug/L	10						
n-Nitroso-di-n-propylamine	ND	ug/L	10						
n-Nitrosodiphenylamine	ND	ug/L	10						
o-Cresol	ND	ug/L	10						
Pentachlorophenol	ND	ug/L	50						
Phenanthrene	ND	ug/L	10						
Phenol	ND	ug/L	10						
Pyrene	ND	ug/L	10						
Pyridine	ND	ug/L	20						
Surr: 2,4,6-Tribromophenol			10	51	10	123			
Surr: 2-Fluorobiphenyl			10	48.2	43	116			
Surr: 2-Fluorophenol			10	33	21	100			
Surr: Nitrobenzene-d5			10	49.5	35	114			
Surr: Phenol-d5			10	28	10	94			
Surr: Terphenyl-d14			10	53.4	33	141			
Sample ID: LCS-17765							09/26/05 17:01		
		Laboratory Control Spike							
1,2,4-Trichlorobenzene	61.5	ug/L	10	61.5	43	82			
1,2-Dichlorobenzene	56.3	ug/L	10	56.3	37	77			
1,3-Dichlorobenzene	52.6	ug/L	10	52.6	28	77			
1,4-Dichlorobenzene	53.1	ug/L	10	53.1	38	74			
2,4,5-Trichlorophenol	65.0	ug/L	10	65	47	96			
2,4,6-Trichlorophenol	61.1	ug/L	10	61.1	47	96			
2,4-Dichlorophenol	60.4	ug/L	10	60.4	40	90			
2,4-Dimethylphenol	62.4	ug/L	10	62.4	28	86			
2,4-Dinitrophenol	27.6	ug/L	50	27.6	10	132			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

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QA/QC Summary Report

Client: Hall Environmental-Albuquerque
Project: 0509234

Report Date: 09/28/05
Work Order: B05091570

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8270C							Batch: 17765		
Sample ID: LCS-17765	Laboratory Control Spike						09/28/05 17:01		
2,4-Dinitrotoluene	78.9	ug/L	10	78.9	60	102			
2,6-Dinitrotoluene	76.4	ug/L	10	76.4	59	100			
2-Chloronaphthalene	68.6	ug/L	10	68.6	52	89			
2-Chlorophenol	52.8	ug/L	10	52.8	39	78			
2-Methylnaphthalene	69.0	ug/L	10	69	30	130			
2-Nitrophenol	60.2	ug/L	10	60.2	44	87			
4,6-Dinitro-2-methylphenol	50.8	ug/L	50	50.8	24	123			
4-Bromophenyl phenyl ether	74.7	ug/L	10	74.7	51	105			
4-Chloro-3-methylphenol	68.4	ug/L	10	68.4	50	94			
4-Chlorophenyl phenyl ether	76.9	ug/L	10	76.9	54	98			
4-Nitrophenol	23.6	ug/L	50	23.6	10	95			
Acenaphthene	72.4	ug/L	10	72.4	53	101			
Acenaphthylene	68.8	ug/L	10	68.8	50	94			
Anthracene	82.6	ug/L	10	82.6	51	109			
Azobenzene	77.0	ug/L	10	77	10	227			
Benzo(a)anthracene	85.7	ug/L	10	85.7	57	115			
Benzo(a)pyrene	81.6	ug/L	10	81.6	44	122			
Benzo(b)fluoranthene	80.0	ug/L	10	80	54	120			
Benzo(g,h,i)perylene	82.1	ug/L	10	82.1	43	121			
Benzo(k)fluoranthene	86.6	ug/L	10	86.6	48	118			
bis(-2-chloroethoxy)Methane	65.8	ug/L	10	65.8	45	102			
bis(-2-chloroethyl)Ether	61.6	ug/L	10	61.6	13	122			
bis(2-chloroisopropyl)Ether	60.9	ug/L	10	60.9	40	91			
bis(2-ethylhexyl)Phthalate	74.1	ug/L	10	74.1	47	128			
Butylbenzylphthalate	88.7	ug/L	10	88.7	45	130			
Chrysene	87.9	ug/L	10	87.9	54	122			
Dibenzo(a,h)anthracene	87.5	ug/L	10	87.5	39	120			
Diethyl phthalate	77.1	ug/L	10	77.1	51	108			
Dimethyl phthalate	72.9	ug/L	10	72.9	53	106			
Di-n-butyl phthalate	78.3	ug/L	10	78.3	51	114			
Di-n-octyl phthalate	76.4	ug/L	10	76.4	45	134			
Fluoranthene	76.6	ug/L	10	76.6	50	121			
Fluorene	73.9	ug/L	10	73.9	54	101			
Hexachlorobenzene	76.7	ug/L	10	76.7	49	101			
Hexachlorobutadiene	51.3	ug/L	10	51.3	38	94			
Hexachlorocyclopentadiene	55.2	ug/L	20	55.2	17	93			
Hexachloroethane	48.4	ug/L	10	48.4	34	74			
Indeno(1,2,3-cd)pyrene	80.0	ug/L	10	80	43	125			
Isophorone	66.6	ug/L	10	66.6	51	100			
m+p-Cresols	54.5	ug/L	10	54.5	30	130			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

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QA/QC Summary Report

Client: Hall Environmental-Albuquerque
Project: 0509234

Report Date: 09/28/05
Work Order: B05091570

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8270C Batch: 17765									
Sample ID: LCS-17765 Laboratory Control Spike 09/26/05 17:01									
Naphthalene	64.1	ug/L	10	64.1	43	93			
Nitrobenzene	64.4	ug/L	10	64.4	47	87			
n-Nitrosodimethylamine	32.2	ug/L	10	32.2	12	78			
n-Nitroso-di-n-propylamine	67.0	ug/L	10	67	30	116			
o-Cresol	58.8	ug/L	10	58.8	30	130			
Pentachlorophenol	57.0	ug/L	50	57	16	117			
Phenanthrene	78.4	ug/L	10	78.4	52	108			
Phenol	31.1	ug/L	10	31.1	10	78			
Pyrene	85.9	ug/L	10	85.9	56	116			
Surr: 2,4,6-Tribromophenol			10	71.5	10	123			
Surr: 2-Fluorobiphenyl			10	60.8	43	116			
Surr: 2-Fluorophenol			10	39.6	21	100			
Surr: Nitrobenzene-d5			10	62.5	35	114			
Surr: Phenol-d5			10	33.2	10	94			
Surr: Terphenyl-d14			10	91.8	33	141			
Sample ID: SknAELCS-17765 Laboratory Control Spike 09/26/05 17:44									
2,4-Dimethylphenol	64.9	ug/L	10	64.9	28	86			
2,4-Dinitrophenol	58.1	ug/L	50	58.1	10	132			
4-Nitrophenol	22.8	ug/L	50	22.8	10	95			
m+p-Cresols	103	ug/L	10	103	30	130			
o-Cresol	64.8	ug/L	10	64.8	30	130			
Phenol	28.3	ug/L	10	28.3	10	78			
Surr: 2,4,6-Tribromophenol			10	85	10	123			
Surr: 2-Fluorobiphenyl			10	60	43	116			
Surr: 2-Fluorophenol			10	40	21	100			
Surr: Nitrobenzene-d5			10	58.9	35	114			
Surr: Phenol-d5			10	31.5	10	94			
Surr: Terphenyl-d14			10	89.4	33	141			
Sample ID: SknBNLCS-17765 Laboratory Control Spike 09/26/05 18:27									
1,2-Dichlorobenzene	53.7	ug/L	10	53.7	37	77			
1,3-Dichlorobenzene	51.5	ug/L	10	51.5	28	77			
1,4-Dichlorobenzene	52.2	ug/L	10	52.2	38	74			
1-Methylnaphthalene	67.1	ug/L	10	67.1	30	130			
Anthracene	82.0	ug/L	10	82	51	109			
Benzo(a)anthracene	80.0	ug/L	10	80	57	115			
Benzo(a)pyrene	80.7	ug/L	10	80.7	44	122			
Benzo(b)fluoranthene	87.6	ug/L	10	87.6	54	120			
Benzo(k)fluoranthene	85.3	ug/L	10	85.3	48	118			
bis(2-ethylhexyl)Phthalate	70.6	ug/L	10	70.6	47	128			

Qualifiers:

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ND - Not detected at the reporting limit.



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QA/QC Summary Report

Client: Hall Environmental-Albuquerque
Project: 0509234

Report Date: 09/28/05
Work Order: B05091570

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW8270C							Batch: 17765		
Sample ID: SknBNLCS-17765	Laboratory Control Spike						09/26/05 18:27		
Butylbenzylphthalate	77.7	ug/L	10	77.7	45	130			
Chrysene	84.3	ug/L	10	84.3	54	122			
Dibenzo(a,h)anthracene	82.4	ug/L	10	82.4	39	120			
Diethyl phthalate	69.6	ug/L	10	69.6	51	108			
Dimethyl phthalate	69.2	ug/L	10	69.2	53	106			
Di-n-butyl phthalate	75.1	ug/L	10	75.1	51	114			
Fluoranthene	84.1	ug/L	10	84.1	50	121			
Naphthalene	62.7	ug/L	10	62.7	43	93			
Phenanthrene	77.7	ug/L	10	77.7	52	108			
Pyrene	79.2	ug/L	10	79.2	56	116			
Pyridine	26.7	ug/L	20	26.7	20	130			
Surr: 2,4,6-Tribromophenol			10	62	10	123			
Surr: 2-Fluorobiphenyl			10	56	43	116			
Surr: 2-Fluorophenol			10	36.2	21	100			
Surr: Nitrobenzene-d5			10	58.7	35	114			
Surr: Phenol-d5			10	33.6	10	94			
Surr: Terphenyl-d14			10	83.2	33	141			
Sample ID: B05091406-003FMS	Sample Matrix Spike						09/26/05 20:35		
1,2,4-Trichlorobenzene	41.2	ug/L	10	41.2	39	98			
1,4-Dichlorobenzene	38.4	ug/L	10	38.4	36	97			
2,4-Dinitrotoluene	49.7	ug/L	10	49.7	24	96			
2-Chlorophenol	71.7	ug/L	10	47.8	27	123			
4-Chloro-3-methylphenol	79.3	ug/L	10	52.9	23	97			
4-Nitrophenol	66.5	ug/L	50	44.3	10	80			
Acenaphthene	49.3	ug/L	10	49.3	46	118			
n-Nitroso-di-n-propylamine	49.8	ug/L	10	49.8	41	116			
Pentachlorophenol	92.8	ug/L	50	61.9	9	103			
Phenol	60.0	ug/L	10	40	12	110			
Pyrene	56.5	ug/L	10	56.5	26	127			
Surr: 2,4,6-Tribromophenol			10	65.5	10	123			
Surr: 2-Fluorobiphenyl			10	50	43	116			
Surr: 2-Fluorophenol			10	45.6	21	100			
Surr: Nitrobenzene-d5			10	50.2	35	114			
Surr: Phenol-d5			10	47.6	10	94			
Surr: Terphenyl-d14			10	59.5	33	141			
Sample ID: B05091406-005FMS	Sample Matrix Spike Duplicate						09/26/05 22:00		
1,2,4-Trichlorobenzene	47.8	ug/L	10	47.8	39	98	15	28	
1,4-Dichlorobenzene	43.6	ug/L	10	43.6	36	97	13	28	
2,4-Dinitrotoluene	54.9	ug/L	10	54.9	24	96	9.9	36	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Rx Date/Time OCT-03-2005(MON) 13:37
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QA/QC Summary Report

Client: Hall Environmental-Albuquerque
Project: 0509234

Report Date: 09/28/05
Work Order: B05091570

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SWB270C							Batch: 17765		
Sample ID: B05091405-005FMS							09/26/05 22:00		
Sample Matrix Spike Duplicate									
2-Chlorophenol	76.0	ug/L	10	50.7	27	123	5.8	40	
4-Chloro-3-methylphenol	88.1	ug/L	10	58.7	23	97	11	42	
4-Nitrophenol	55.6	ug/L	50	37.1	10	80	18	50	
Acenaphthene	55.4	ug/L	10	55.4	46	118	12	31	
n-Nitroso-di-n-propylamine	52.2	ug/L	10	52.2	41	116	4.7	38	
Pentachlorophenol	103	ug/L	50	68.7	9	103	10	50	
Phenol	60.9	ug/L	10	40.6	12	110	1.5	42	
Pyrene	59.6	ug/L	10	59.6	26	127	5.3	31	
Surr: 2,4,6-Tribromophenol			10	68	10	123			
Surr: 2-Fluorobiphenyl			10	54.8	43	116			
Surr: 2-Fluorophenol			10	43.6	21	100			
Surr: Nitrobenzene-d5			10	54.8	35	114			
Surr: Phenol-d5			10	46.3	10	94			
Surr: Terphenyl-d14			10	60.7	33	141			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Rx Date/Time OCT-03-2005(MON) 13:37
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QA/QC Summary Report

Client: Hall Environmental-Albuquerque
Project: 0509234

Report Date: 09/29/05
Work Order: B05091570

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7									
Batch: 17781									
Sample ID: MB-17781	Method Blank								
Barium	0.002	mg/L	0.0003						09/28/05 15:52
Vanadium	ND	mg/L	0.002						
Zinc	ND	mg/L	0.002						
Sample ID: LCS1-17781	Laboratory Control Spike								
Barium	0.0918	mg/L	0.10	89.7	85	115			09/26/05 15:59
Vanadium	0.0928	mg/L	0.10	92.8	85	115			
Zinc	0.0951	mg/L	0.010	95.1	85	115			
Sample ID: LCS3-17781	Laboratory Control Spike								
Barium	0.934	mg/L	0.10	93.2	85	115			09/26/05 16:03
Vanadium	0.954	mg/L	0.10	95.4	85	115			
Zinc	0.947	mg/L	0.010	94.7	85	115			
Sample ID: B05091309-003AMS3	Sample Matrix Spike								
Barium	0.999	mg/L	0.10	91.1	70	130			09/26/05 16:10
Vanadium	0.944	mg/L	0.10	94.4	70	130			
Zinc	1.05	mg/L	0.010	83	70	130			
Sample ID: B05091309-003AMSD3	Sample Matrix Spike Duplicate								
Barium	1.04	mg/L	0.10	95.2	70	130	4.0	20	09/26/05 16:14
Vanadium	0.972	mg/L	0.10	97.2	70	130	2.9	20	
Zinc	1.08	mg/L	0.010	95.5	70	130	2.3	20	
Sample ID: B05091558-001DMS1	Sample Matrix Spike								
Barium	0.120	mg/L	0.10	92	70	130			09/26/05 16:21
Vanadium	0.0939	mg/L	0.10	93.9	70	130			
Zinc	0.103	mg/L	0.010	95.6	70	130			
Sample ID: B05091558-001DMSD1	Sample Matrix Spike Duplicate								
Barium	0.122	mg/L	0.10	93.8	70	130	1.4	20	09/26/05 16:24
Vanadium	0.0946	mg/L	0.10	94.6	70	130	0	20	
Zinc	0.104	mg/L	0.010	97.2	70	130	1.5	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Rx Date/Time OCT-03-2005(MON) 13:37
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QA/QC Summary Report

Client: Hall Environmental-Albuquerque
Project: 0509234

Report Date: 09/29/05
Work Order: B05091570

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8									
Sample ID: MB-17770 Method Blank									
Antimony	0.0001	mg/L	0.00001						
Arsenic	0.00005	mg/L	0.00004						
Barium	0.0005	mg/L	0.00003						
Cadmium	ND	mg/L	9.0E-06						
Copper	0.0002	mg/L	0.00007						
Lead	0.0001	mg/L	8.0E-06						
Nickel	ND	mg/L	0.00003						
Selenium	ND	mg/L	0.0001						
Silver	ND	mg/L	0.00003						
Thallium	ND	mg/L	7.0E-06						
Vanadium	0.0003	mg/L	0.00003						
Zinc	0.005	mg/L	0.00003						
Sample ID: B05091570-001CMS Sample Matrix Spike									
Antimony	0.244	mg/L	0.0050	97.4	70	130			
Arsenic	0.236	mg/L	0.0050	93	70	130			
Barium	0.383	mg/L	0.10	99.8	70	130			
Cadmium	0.218	mg/L	0.0010	87.3	70	130			
Copper	0.222	mg/L	0.010	85.5	70	130			
Lead	0.244	mg/L	0.010	96.7	70	130			
Nickel	0.228	mg/L	0.010	86.8	70	130			
Selenium	0.217	mg/L	0.0050	82.7	70	130			
Silver	0.0833	mg/L	0.0050	63.3	70	130			S
Thallium	0.241	mg/L	0.0050	96.2	70	130			
Vanadium	0.242	mg/L	0.10	93.6	70	130			
Zinc	0.820	mg/L	0.010	68.4	70	130			S
Sample ID: B05091570-001CMSD Sample Matrix Spike Duplicate									
Antimony	0.246	mg/L	0.0050	98.3	70	130	0.9	20	
Arsenic	0.239	mg/L	0.0050	94	70	130	1.1	20	
Barium	0.387	mg/L	0.10	102	70	130	1.1	20	
Cadmium	0.222	mg/L	0.0010	88.7	70	130	1.7	20	
Copper	0.225	mg/L	0.010	87	70	130	1.7	20	
Lead	0.249	mg/L	0.010	98.8	70	130	2.1	20	
Nickel	0.230	mg/L	0.010	87.9	70	130	1.2	20	
Selenium	0.220	mg/L	0.0050	84.2	70	130	1.7	20	
Silver	0.0714	mg/L	0.0050	71.4	70	130	12	20	
Thallium	0.243	mg/L	0.0050	97.3	70	130	1.1	20	
Vanadium	0.243	mg/L	0.10	94.1	70	130	0.5	20	
Zinc	0.822	mg/L	0.010	68.8	70	130	0.1	20	S

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

Rx Date/Time OCT-03-2005(MON) 13:37
10/03/2005 14:17 FAX 406 252 6069

ENERGY LABS.

406 252 6069

P.019
019



ENERGY LABORATORIES, INC. • P.O. Box 30916 • 1120 South 27th Street • Billings, MT 59107-0916
800-795-4489 • 406-252-6325 • 406-252-6069 fax • eli@energylab.com

QA/QC Summary Report

Client: Hall Environmental-Albuquerque
Project: 0509234

Report Date: 09/29/05
Work Order: B05091570

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1									Batch: 17798
Sample ID: MB-17798	Method Blank								09/27/05 07:49
Mercury	ND	mg/L	0.00005						
Sample ID: LFB-17798	Laboratory Fortified Blank								09/27/05 07:52
Mercury	0.00213	mg/L	0.0010	106	85	115			
Sample ID: B05091317-001BMS	Sample Matrix Spike								09/27/05 07:56
Mercury	0.00199	mg/L	0.0010	99.5	70	130			
Sample ID: B05091317-001BMSD	Sample Matrix Spike Duplicate								09/27/05 07:59
Mercury	0.00209	mg/L	0.0010	104	70	130	4.9	30	
Sample ID: B05091295-001AMS	Sample Matrix Spike								09/27/05 08:10
Mercury	0.00210	mg/L	0.00020	105	70	130			
Sample ID: B05091295-001AMSD	Sample Matrix Spike Duplicate								09/27/05 09:11
Mercury	0.00207	mg/L	0.00020	104	70	130	1.4	10	
Sample ID: B05091357-008BMS	Sample Matrix Spike								09/27/05 10:00
Mercury	0.0020	mg/L	0.0010	98.5	70	130			
Sample ID: B05091357-008BMSD	Sample Matrix Spike Duplicate								09/27/05 10:07
Mercury	0.0020	mg/L	0.0010	102	70	130	3.0	30	
Sample ID: B05091434-001DMS	Sample Matrix Spike								09/27/05 12:19
Mercury	0.00198	mg/L	0.00020	99	70	130			
Sample ID: B05091434-001DMSD	Sample Matrix Spike Duplicate								09/27/05 12:22
Mercury	0.00196	mg/L	0.00020	98	70	130	0	10	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Hall Environmental Analysis Laboratory

Date: 03-Oct-05

CLIENT: Giant Refining Co
 Work Order: 0509234
 Project: AL-2 to EP-1 Week of 9-19-2005

QC SUMMARY REPORT
 Method Blank

Sample ID	Reagent Blank 5m	Batch ID: R16759	Test Code: SW8021	Units: µg/L	Analysis Date	9/23/2005 9:37:19 AM	Prep Date				
Client ID:			Run ID: PIDFID_050923A		SeqNo:	403397					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
1,2,4-Trimethylbenzene	ND	0.5									
1,3,5-Trimethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	18.66	0	20	0	93.3	82.2	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

Hall Environmental Analysis Laboratory

Date: 03-Oct-05

CLIENT: Giant Refining Co

Work Order: 0509234

Project: AL-2 to EP-1 Week of 9-19-2005

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID	BTEX lcs 100ng	Batch ID: R16759	Test Code: SW8021	Units: µg/L	Analysis Date	9/23/2005 10:09:01 PM	Prep Date				
Client ID:			Run ID: PIDFID_050923A		SeqNo:	403402					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	23.97	2.5	20	0	120	64.5	133	0			
Benzene	18.83	0.5	20	0	94.1	88.5	114	0			
Toluene	19.17	0.5	20	0	95.9	87.2	114	0			
Ethylbenzene	19.35	0.5	20	0	96.7	88.6	113	0			
1,2,4-Trimethylbenzene	19.13	0.5	20	0	95.7	83.8	114	0			
1,3,5-Trimethylbenzene	18.83	0.5	20	0	94.1	82.8	114	0			
Xylenes, Total	39.79	0.5	40	0	99.5	83.3	114	0			

Qualifiers:

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

9/21/2005

Work Order Number 0509234

Received by GLS

Checklist completed by

Sandra Ben 9/22/05
Signature Date

Matrix

Carrier name Client drop-off

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

Container/Temp Blank temperature?

3°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

*all samples SUBDED
TO Energy BILLING S per: ANDY*

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action



COVER LETTER

September 30, 2005

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

RE: AL-2 to EP-1 Week of Sept. 12, 2005

Order No.: 0509182

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 1 sample on 9/19/2005 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: 30-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 TO EP-1

Lab Order: 0509182

Collection Date: 9/15/2005 7:00:00 AM

Project: AL-2 to EP-1 Week of Sept. 12, 2005

Lab ID: 0509182-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: HLM
Benzene	77	10		µg/L	10	9/20/2005
Toluene	130	10		µg/L	10	9/20/2005
Ethylbenzene	16	10		µg/L	10	9/20/2005
Methyl tert-butyl ether (MTBE)	72	10		µg/L	10	9/20/2005
Xylenes, Total	96	10		µg/L	10	9/20/2005
Surrogate: 4-Bromofluorobenzene	103	86.1-121		%REC	10	9/20/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	200		µg/L	1	9/22/2005
Acenaphthylene	ND	200		µg/L	1	9/22/2005
Aniline	ND	200		µg/L	1	9/22/2005
Anthracene	ND	200		µg/L	1	9/22/2005
Azobenzene	ND	200		µg/L	1	9/22/2005
Benz(a)anthracene	ND	300		µg/L	1	9/22/2005
Benzo(a)pyrene	ND	200		µg/L	1	9/22/2005
Benzo(b)fluoranthene	ND	200		µg/L	1	9/22/2005
Benzo(g,h,i)perylene	ND	200		µg/L	1	9/22/2005
Benzo(k)fluoranthene	ND	200		µg/L	1	9/22/2005
Benzoic acid	ND	1000		µg/L	1	9/22/2005
Benzyl alcohol	ND	400		µg/L	1	9/22/2005
Bis(2-chloroethoxy)methane	ND	200		µg/L	1	9/22/2005
Bis(2-chloroethyl)ether	ND	300		µg/L	1	9/22/2005
Bis(2-chloroisopropyl)ether	ND	300		µg/L	1	9/22/2005
Bis(2-ethylhexyl)phthalate	ND	300		µg/L	1	9/22/2005
4-Bromophenyl phenyl ether	ND	200		µg/L	1	9/22/2005
Butyl benzyl phthalate	ND	300		µg/L	1	9/22/2005
Carbazole	ND	200		µg/L	1	9/22/2005
4-Chloro-3-methylphenol	ND	400		µg/L	1	9/22/2005
4-Chloroaniline	ND	400		µg/L	1	9/22/2005
2-Chloronaphthalene	ND	200		µg/L	1	9/22/2005
2-Chlorophenol	ND	200		µg/L	1	9/22/2005
4-Chlorophenyl phenyl ether	ND	300		µg/L	1	9/22/2005
Chrysene	ND	300		µg/L	1	9/22/2005
Di-n-butyl phthalate	ND	200		µg/L	1	9/22/2005
Di-n-octyl phthalate	ND	300		µg/L	1	9/22/2005
Dibenz(a,h)anthracene	ND	200		µg/L	1	9/22/2005
Dibenzofuran	ND	200		µg/L	1	9/22/2005
1,2-Dichlorobenzene	ND	200		µg/L	1	9/22/2005
1,3-Dichlorobenzene	ND	200		µg/L	1	9/22/2005
1,4-Dichlorobenzene	ND	200		µg/L	1	9/22/2005
3,3'-Dichlorobenzidine	ND	300		µg/L	1	9/22/2005

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: 30-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 TO EP-1

Lab Order: 0509182

Collection Date: 9/15/2005 7:00:00 AM

Project: AL-2 to EP-1 Week of Sept. 12, 2005

Lab ID: 0509182-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Diethyl phthalate	ND	200		µg/L	1	9/22/2005
Dimethyl phthalate	ND	200		µg/L	1	9/22/2005
2,4-Dichlorophenol	ND	200		µg/L	1	9/22/2005
2,4-Dimethylphenol	ND	200		µg/L	1	9/22/2005
4,6-Dinitro-2-methylphenol	ND	1000		µg/L	1	9/22/2005
2,4-Dinitrophenol	ND	1000		µg/L	1	9/22/2005
2,4-Dinitrotoluene	ND	200		µg/L	1	9/22/2005
2,6-Dinitrotoluene	ND	200		µg/L	1	9/22/2005
Fluoranthene	ND	200		µg/L	1	9/22/2005
Fluorene	ND	200		µg/L	1	9/22/2005
Hexachlorobenzene	ND	200		µg/L	1	9/22/2005
Hexachlorobutadiene	ND	200		µg/L	1	9/22/2005
Hexachlorocyclopentadiene	ND	200		µg/L	1	9/22/2005
Hexachloroethane	ND	200		µg/L	1	9/22/2005
Indeno(1,2,3-cd)pyrene	ND	200		µg/L	1	9/22/2005
Isophorone	ND	200		µg/L	1	9/22/2005
2-Methylnaphthalene	280	200		µg/L	1	9/22/2005
2-Methylphenol	1800	300		µg/L	1	9/22/2005
3+4-Methylphenol	2900	200		µg/L	1	9/22/2005
N-Nitrosodi-n-propylamine	ND	200		µg/L	1	9/22/2005
N-Nitrosodimethylamine	ND	200		µg/L	1	9/22/2005
N-Nitrosodiphenylamine	ND	200		µg/L	1	9/22/2005
Naphthalene	ND	200		µg/L	1	9/22/2005
2-Nitroaniline	ND	1000		µg/L	1	9/22/2005
3-Nitroaniline	ND	1000		µg/L	1	9/22/2005
4-Nitroaniline	ND	400		µg/L	1	9/22/2005
Nitrobenzene	ND	200		µg/L	1	9/22/2005
2-Nitrophenol	ND	300		µg/L	1	9/22/2005
4-Nitrophenol	ND	1000		µg/L	1	9/22/2005
Pentachlorophenol	ND	1000		µg/L	1	9/22/2005
Phenanthrene	270	200		µg/L	1	9/22/2005
Phenol	6400	1000		µg/L	5	9/23/2005
Pyrene	ND	300		µg/L	1	9/22/2005
Pyridine	ND	600		µg/L	1	9/22/2005
1,2,4-Trichlorobenzene	ND	200		µg/L	1	9/22/2005
2,4,5-Trichlorophenol	ND	200		µg/L	1	9/22/2005
2,4,6-Trichlorophenol	ND	300		µg/L	1	9/22/2005
Surr: 2,4,6-Tribromophenol	82.6	16.6-150		%REC	1	9/22/2005
Surr: 2-Fluorobiphenyl	66.9	19.6-134		%REC	1	9/22/2005
Surr: 2-Fluorophenol	48.9	9.54-113		%REC	1	9/22/2005
Surr: 4-Terphenyl-d14	75.5	22.7-145		%REC	1	9/22/2005
Surr: Nitrobenzene-d5	64.8	14.6-134		%REC	1	9/22/2005

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: 30-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 TO EP-1

Lab Order: 0509182

Collection Date: 9/15/2005 7:00:00 AM

Project: AL-2 to EP-1 Week of Sept. 12, 2005

Lab ID: 0509182-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: Phenol-d6	41.0	10.7-80.3		%REC	1	9/22/2005
EPA METHOD 7470: MERCURY						Analyst: IC
Mercury	0.00062	0.00020		mg/L	1	9/28/2005
EPA METHOD 6010B: DISSOLVED METALS						Analyst: NMO
Antimony	ND	0.010		mg/L	1	9/27/2005 3:34:34 PM
Arsenic	ND	0.020		mg/L	1	9/27/2005 3:34:34 PM
Beryllium	ND	0.0030		mg/L	1	9/27/2005 3:34:34 PM
Cadmium	ND	0.0020		mg/L	1	9/27/2005 3:34:34 PM
Chromium	ND	0.0060		mg/L	1	9/27/2005 3:34:34 PM
Copper	ND	0.0060		mg/L	1	9/27/2005 3:34:34 PM
Lead	ND	0.0050		mg/L	1	9/27/2005 3:34:34 PM
Nickel	ND	0.010		mg/L	1	9/27/2005 3:34:34 PM
Selenium	ND	0.020		mg/L	1	9/27/2005 3:34:34 PM
Silver	ND	0.0050		mg/L	1	9/27/2005 3:34:34 PM
Thallium	ND	0.010		mg/L	1	9/27/2005 3:34:34 PM
Zinc	0.050	0.050		mg/L	1	9/27/2005 3:34:34 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Antimony	ND	0.010		mg/L	1	9/22/2005 11:25:59 AM
Arsenic	ND	0.020		mg/L	1	9/22/2005 11:25:59 AM
Beryllium	ND	0.0030		mg/L	1	9/21/2005 2:49:30 PM
Cadmium	ND	0.0020		mg/L	1	9/21/2005 2:49:30 PM
Chromium	ND	0.0060		mg/L	1	9/21/2005 2:49:30 PM
Copper	0.022	0.0060		mg/L	1	9/21/2005 2:49:30 PM
Lead	ND	0.0050		mg/L	1	9/21/2005 2:49:30 PM
Nickel	0.011	0.010		mg/L	1	9/21/2005 2:49:30 PM
Selenium	ND	0.050		mg/L	1	9/21/2005 2:49:30 PM
Silver	ND	0.0050		mg/L	1	9/21/2005 2:49:30 PM
Thallium	ND	0.010		mg/L	1	9/22/2005 11:25:59 AM
Zinc	1.2	0.10		mg/L	2	9/21/2005 3:19:36 PM

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: 30-Sep-05

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co

Work Order: 0509182

Project: AL-2 to EP-1 Week of Sept. 12, 2005

Sample ID	MB-8785	Batch ID: 8785	Test Code: SW8270C	Units: µg/L	Analysis Date	9/22/2005	Prep Date	9/19/2005			
Client ID:			Run ID:	ELMO_050921A	SeqNo:	403263					
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	10									
Anthracene	ND	10									
Azobenzene	ND	10									
Benz(a)anthracene	ND	15									
Benzo(a)pyrene	ND	10									
Benzo(b)fluoranthene	ND	10									
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									

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

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co

Work Order: 0509182

Project: AL-2 to EP-1 Week of Sept. 12, 2005

Dibenz(a,h)anthracene	ND	10
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	10
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

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: 0509182
 Project: AL-2 to EP-1 Week of Sept. 12, 2005

Sample ID	MB	Batch ID: R16791	Test Code: SW6010A	Units: mg/L	Analysis Date	9/27/2005 3:18:56 PM	Prep Date				
Client ID:		Run ID: ICP_050927C			SeqNo: 404507						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.01									
Arsenic	ND	0.02									
Beryllium	ND	0.003									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Copper	ND	0.006									
Lead	ND	0.005									
Nickel	ND	0.01									
Selenium	ND	0.02									
Silver	ND	0.005									
Thallium	ND	0.01									
Zinc	ND	0.05									

Sample ID	MB-8790	Batch ID: 8790	Test Code: SW6010A	Units: mg/L	Analysis Date	9/21/2005 2:21:15 PM	Prep Date	9/20/2005			
Client ID:		Run ID: ICP_050921B	SeqNo: 402645								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	ND	0.003									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Copper	ND	0.006									
Lead	ND	0.005									
Nickel	ND	0.01									
Selenium	ND	0.05									
Silver	ND	0.005									
Zinc	ND	0.05									

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: 0509182
 Project: AL-2 to EP-1 Week of Sept. 12, 2005

Sample ID	MB-8790	Batch ID: 8790	Test Code: SW6010A	Units: mg/L	Analysis Date	9/22/2005 10:53:46 AM	Prep Date	9/20/2005				
Client ID:		Run ID:	ICP_050922B		SeqNo:	402880						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony		0.01878										
Arsenic		ND										
Thallium		ND										

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

Date: 30-Sep-05

CLIENT: Giant Refining Co
 Work Order: 0509182
 Project: AL-2 to EP-1 Week of Sept. 12, 2005

QC SUMMARY REPORT

Method Blank

Sample ID	5ml rb	Batch ID: R16716	Test Code: SW8260B	Units: µg/L	Analysis Date	9/20/2005	Prep Date				
Client ID:		Run ID: VAL_050920A			SeqNo:	401902					
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									
Xylenes, Total	0.282	1									J
Surr: 4-Bromofluorobenzene	11.21	0	10	0	112	86.1	121	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

Hall Environmental Analysis Laboratory

Date: 30-Sep-05

QC SUMMARY REPORT

Laboratory Control Spike - generic

CLIENT: Giant Refining Co

Work Order: 0509182

Project: AL-2 to EP-1 Week of Sept. 12, 2005

Sample ID	100ng Ics	Batch ID: R16716	Test Code: SW8260B	Units: µg/L	Analysis Date 9/20/2005	Prep Date
Client ID:		Run ID: VAL_050920A			SeqNo: 401905	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit	%RPD RPDLimit Qual
Benzene	19.27	1	20	0	96.4 130	0
Toluene	23.3	1	20	0	117 121	0

Sample ID	LCS-8785	Batch ID: 8785	Test Code: SW8270C	Units: µg/L	Analysis Date 9/22/2005	Prep Date 9/19/2005
Client ID:		Run ID: ELMO_050921A			SeqNo: 403264	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit	%RPD RPDLimit Qual
Acenaphthene	71.18	10	100	0	71.2 11 123	0
4-Chloro-3-methylphenol	128.1	20	200	0	64.5 15.4 119	0
2-Chlorophenol	140.3	10	200	0	70.2 12.2 122	0
1,4-Dichlorobenzene	66.48	10	100	0	66.5 16.9 100	0
2,4-Dinitrotoluene	66.08	10	100	0	66.1 13 138	0
N-Nitrosodi-n-propylamine	66.52	10	100	0	66.5 9.93 122	0
4-Nitrophenol	63.48	50	200	0	31.7 -20.5 87.4	0
Pentachlorophenol	128.3	50	200	0	64.2 -0.355 114	0
Phenol	75.38	10	200	0	37.7 7.53 73.1	0
Pyrene	69.74	15	100	0	69.7 12.6 140	0
1,2,4-Trichlorobenzene	64.46	10	100	0	64.5 17.4 98.7	0

10/15

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

CLIENT: Giant Refining Co
Work Order: 0509182
Project: AL-2 to EP-1 Week of Sept. 12, 2005

QC SUMMARY REPORT
 Laboratory Control Spike Duplicate

Sample ID	LCSD-8785	Batch ID: 8785	Test Code: SW8270C	Units: µg/L	Analysis Date	9/22/2005	Prep Date	9/19/2005			
Client ID:			Run ID:	ELMO_050921A	SeqNo:	403265					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	67.9	10	100	0	67.9	11	123	71.18	4.72	30.5	
4-Chloro-3-methylphenol	129.2	20	200	0	64.6	15.4	119	129.1	0.0929	28.6	
2-Chlorophenol	123.6	10	200	0	61.8	12.2	122	140.3	12.7	107	
1,4-Dichlorobenzene	57.4	10	100	0	57.4	16.9	100	66.48	14.7	62.1	
2,4-Dinitrotoluene	64.72	10	100	0	64.7	13	138	66.08	2.08	14.7	
N-Nitrosodi-n-propylamine	67.04	10	100	0	67.0	9.93	122	66.52	0.779	30.3	
4-Nitrophenol	73.86	50	200	0	36.9	12.5	87.4	63.48	15.1	36.3	
Pentachlorophenol	147.6	50	200	0	73.8	3.55	114	128.3	13.9	49	
Phenol	70.36	10	200	0	35.2	7.53	73.1	75.38	6.89	52.4	
Pyrene	68.02	15	100	0	68.0	12.6	140	69.74	2.50	16.3	
1,2,4-Trichlorobenzene	52.52	10	100	0	52.5	17.4	98.7	64.46	20.4	36.4	

Sample ID	LCS-8834	Batch ID: 8834	Test Code: SW7470		Units: mg/L	Analysis Date 9/28/2005		Prep Date 9/28/2005				
Client ID:			Run ID:	MI-LA254_050928C		SeqNo:	404922					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		0.004734	0.0002	0.005	0	94.7	75.2	134	0			

Sample ID	LCSD-8834	Batch ID: 8834	Test Code: SW7470		Units: mg/L	Analysis Date 9/28/2005		Prep Date 9/28/2005				
Client ID:			Run ID:	MI-LA254_050928C		SeqNo:	404935					
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		0.004779	0.0002	0.005	0	95.6	75.2	134	0.004734	0.937	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: 0509182
 Project: AL-2 to EP-1 Week of Sept. 12, 2005

Sample ID	LCS	Batch ID: R16791	Test Code: SW6010A	Units: mg/L	Analysis Date	9/27/2005 3:21:59 PM	Prep Date					
Client ID:		Run ID:	ICP_050927C		SeqNo:	404508						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony		0.5461	0.01	0.5	0	109	80	120	0			
Arsenic		0.5781	0.02	0.5	0	116	80	120	0			
Beryllium		0.5656	0.003	0.5	0	113	80	120	0			
Cadmium		0.5667	0.002	0.5	0	113	80	120	0			
Chromium		0.5781	0.006	0.5	0	116	80	120	0			
Copper		0.5645	0.006	0.5	0	113	80	120	0			
Lead		0.5552	0.005	0.5	0	111	80	120	0			
Nickel		0.5496	0.01	0.5	0	110	80	120	0			
Selenium		0.5345	0.02	0.5	0	107	80	120	0			
Silver		0.5539	0.005	0.5	0	111	80	120	0			
Thallium		0.5653	0.01	0.5	0	113	80	120	0			
Zinc		0.5622	0.05	0.5	0	112	80	120	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

CLIENT: Giant Refining Co
 Work Order: 0509182
 Project: AL-2 to EP-1 Week of Sept. 12, 2005

Laboratory Control Spike Duplicate

Sample ID	LCSD	Batch ID: R16791	Test Code: SW6010A	Units: mg/L	Analysis Date	9/27/2005 3:25:13 PM	Prep Date				
Client ID:		Run ID:	ICP_050927C	SeqNo:	404509						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.5436	0.01	0.5	0	109	80	120	0.5461	0.447	20	
Arsenic	0.5719	0.02	0.5	0	114	80	120	0.5781	1.08	20	
Beryllium	0.5637	0.003	0.5	0	113	80	120	0.5656	0.349	20	
Cadmium	0.5632	0.002	0.5	0	113	80	120	0.5667	0.616	20	
Chromium	0.5694	0.006	0.5	0	114	80	120	0.5781	1.52	20	
Copper	0.5533	0.006	0.5	0	111	80	120	0.5645	2.01	20	
Lead	0.5559	0.005	0.5	0	111	80	120	0.5552	0.132	20	
Nickel	0.5406	0.01	0.5	0	108	80	120	0.5496	1.65	20	
Selenium	0.5396	0.02	0.5	0	108	80	120	0.5345	0.961	20	
Silver	0.5381	0.005	0.5	0	108	80	120	0.5539	2.88	20	
Thallium	0.5581	0.01	0.5	0	112	80	120	0.5653	1.27	20	
Zinc	0.5552	0.05	0.5	0	111	80	120	0.5622	1.26	20	

Sample ID	LCS-8790	Batch ID: 8790	Test Code: SW6010A	Units: mg/L	Analysis Date	9/21/2005 2:24:19 PM	Prep Date	9/20/2005			
Client ID:		Run ID: ICP_050921B	SeqNo: 402646								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	0.5112	0.003	0.5	0	102	80	120	0			
Cadmium	0.4939	0.002	0.5	0	98.8	80	120	0			
Chromium	0.4974	0.006	0.5	0	99.5	80	120	0			
Copper	0.5088	0.006	0.5	0	102	80	120	0			
Lead	0.4932	0.005	0.5	0	98.6	80	120	0			
Nickel	0.4797	0.01	0.5	0	95.9	80	120	0			
Selenium	0.487	0.05	0.5	0	97.4	80	120	0			
Silver	0.4989	0.005	0.5	0	99.8	80	120	0			
Zinc	0.4874	0.05	0.5	0	97.5	80	120	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

CLIENT: Giant Refining Co
 Work Order: 0509182
 Project: AL-2 to EP-1 Week of Sept. 12, 2005

Laboratory Control Spike Duplicate

Sample ID	LCSD-8790	Batch ID: 8790	Test Code: SW6010A	Units: mg/L	Analysis Date	9/21/2005 2:27:26 PM	Prep Date	9/20/2005			
Client ID:			Run ID: ICP_050921B		SeqNo: 402647						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium	0.5118	0.003	0.5	0	102	80	120	0.5112	0.128	20	
Cadmium	0.4993	0.002	0.5	0	99.9	80	120	0.4939	1.08	20	
Chromium	0.4994	0.006	0.5	0	99.9	80	120	0.4974	0.402	20	
Copper	0.5129	0.006	0.5	0	103	80	120	0.5088	0.790	20	
Lead	0.4927	0.005	0.5	0	98.5	80	120	0.4932	0.0901	20	
Nickel	0.4849	0.01	0.5	0	97.0	80	120	0.4797	1.08	20	
Selenium	0.4837	0.05	0.5	0	96.7	80	120	0.487	0.688	20	
Silver	0.5033	0.005	0.5	0	101	80	120	0.4989	0.894	20	
Zinc	0.4936	0.05	0.5	0	98.7	80	120	0.4874	1.27	20	

Sample ID	LCS-8790	Batch ID: 8790	Test Code: SW6010A	Units: mg/L	Analysis Date	9/22/2005 10:56:26 AM	Prep Date	9/20/2005			
Client ID:			Run ID: ICP_050922B		SeqNo: 402881						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.5026	0.01	0.5	0.01878	96.8	80	120	0			B
Arsenic	0.4931	0.02	0.5	0	98.6	80	120	0			
Thallium	0.4937	0.01	0.5	0	98.7	80	120	0			

Sample ID	LCSD-8790	Batch ID: 8790	Test Code: SW6010A	Units: mg/L	Analysis Date	9/22/2005 10:58:56 AM	Prep Date	9/20/2005			
Client ID:			Run ID: ICP_050922B		SeqNo: 402882						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.497	0.01	0.5	0.01878	95.6	80	120	0.5026	1.13	20	B
Arsenic	0.4943	0.02	0.5	0	98.9	80	120	0.4931	0.254	20	
Thallium	0.4977	0.01	0.5	0	99.5	80	120	0.4937	0.809	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:

9/19/2005

Work Order Number 0509182

Received by GLS

Checklist completed by

Signature

Date

Matrix

Carrier name Client drop-off

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

Container/Temp Blank temperature?

4°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: Bottles for total and Dissolved Metals were both preserved in
Lab on 9/19/05 as. Dissolved Metals was filtered in Lab 9/19/05 as.

Corrective Action _____

QA/QC Package: ☐ Std ☐ Level 4 ☐

QA/QC Package: ☐ Std ☐ Level 4 ☐

Client: Sam - Adams

Project Name: AL-2 to EP-1

Company - Limited

Page 3 of 7

Project #:

Block of 9-12-2005

Fallup, NH 8750

Project Manager:

505 722 3833

Sampler:

Sampler: Steve Morris

595 722 0210

Sample Temperature:

40

[illegible]

**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**
4501 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)

Remarks:

5: PASH SPAY

Date:	Time:	Refinquired By: (Signature)
7/19/05	0845	<i>[Signature]</i>

Receiver By: (Signature)  2/10/05



COVER LETTER

September 20, 2005

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

RE: AL-2 to EP-1 Week of 9/5/05

Order No.: 0509108

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 1 sample on 9/12/2005 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: 20-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0509108
Project: AL-2 to EP-1 Week of 9/5/05
Lab ID: 0509108-01

Client Sample ID: AL-2 to EP-1
Collection Date: 9/9/2005 11:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	40	9/17/2005 4:20:59 AM
Benzene	ND	5.0		µg/L	10	9/19/2005 9:34:19 AM
Toluene	ND	5.0		µg/L	10	9/19/2005 9:34:19 AM
Ethylbenzene	ND	5.0		µg/L	10	9/19/2005 9:34:19 AM
Xylenes, Total	20	5.0		µg/L	10	9/19/2005 9:34:19 AM
Surr: 4-Bromofluorobenzene	105	82.2-119		%REC	10	9/19/2005 9:34:19 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	100		µg/L	10	9/15/2005
Acenaphthylene	ND	100		µg/L	10	9/15/2005
Aniline	ND	100		µg/L	10	9/15/2005
Anthracene	ND	100		µg/L	10	9/15/2005
Azobenzene	ND	100		µg/L	10	9/15/2005
Benz(a)anthracene	ND	150		µg/L	10	9/15/2005
Benzo(a)pyrene	ND	100		µg/L	10	9/15/2005
Benzo(b)fluoranthene	ND	100		µg/L	10	9/15/2005
Benzo(g,h,i)perylene	ND	100		µg/L	10	9/15/2005
Benzo(k)fluoranthene	ND	100		µg/L	10	9/15/2005
Benzoic acid	ND	500		µg/L	10	9/15/2005
Benzyl alcohol	ND	200		µg/L	10	9/15/2005
Bis(2-chloroethoxy)methane	ND	100		µg/L	10	9/15/2005
Bis(2-chloroethyl)ether	ND	150		µg/L	10	9/15/2005
Bis(2-chloroisopropyl)ether	ND	150		µg/L	10	9/15/2005
Bis(2-ethylhexyl)phthalate	ND	150		µg/L	10	9/15/2005
4-Bromophenyl phenyl ether	ND	100		µg/L	10	9/15/2005
Bulyl benzyl phthalate	ND	150		µg/L	10	9/15/2005
Carbazole	ND	100		µg/L	10	9/15/2005
4-Chloro-3-methylphenol	ND	200		µg/L	10	9/15/2005
4-Chloroaniline	ND	200		µg/L	10	9/15/2005
2-Chloronaphthalene	ND	100		µg/L	10	9/15/2005
2-Chlorophenol	ND	100		µg/L	10	9/15/2005
4-Chlorophenyl phenyl ether	ND	150		µg/L	10	9/15/2005
Chrysene	ND	150		µg/L	10	9/15/2005
Di-n-butyl phthalate	ND	100		µg/L	10	9/15/2005
Di-n-octyl phthalate	ND	150		µg/L	10	9/15/2005
Dibenz(a,h)anthracene	ND	100		µg/L	10	9/15/2005
Dibenzofuran	120	100		µg/L	10	9/15/2005
1,2-Dichlorobenzene	ND	100		µg/L	10	9/15/2005
1,3-Dichlorobenzene	ND	100		µg/L	10	9/15/2005
1,4-Dichlorobenzene	ND	100		µg/L	10	9/15/2005
3,3'-Dichlorobenzidine	ND	150		µg/L	10	9/15/2005

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: 20-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0509108
Project: AL-2 to EP-1 Week of 9/5/05
Lab ID: 0509108-01

Client Sample ID: AL-2 to EP-1
Collection Date: 9/9/2005 11:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Diethyl phthalate	ND	100		µg/L	10	9/15/2005
Dimethyl phthalate	ND	100		µg/L	10	9/15/2005
2,4-Dichlorophenol	ND	100		µg/L	10	9/15/2005
2,4-Dimethylphenol	ND	100		µg/L	10	9/15/2005
4,6-Dinitro-2-methylphenol	ND	500		µg/L	10	9/15/2005
2,4-Dinitrophenol	ND	500		µg/L	10	9/15/2005
2,4-Dinitrotoluene	ND	100		µg/L	10	9/15/2005
2,6-Dinitrotoluene	ND	100		µg/L	10	9/15/2005
Fluoranthene	ND	100		µg/L	10	9/15/2005
Fluorene	340	100		µg/L	10	9/15/2005
Hexachlorobenzene	ND	100		µg/L	10	9/15/2005
Hexachlorobutadiene	ND	100		µg/L	10	9/15/2005
Hexachlorocyclopentadiene	ND	100		µg/L	10	9/15/2005
Hexachloroethane	ND	100		µg/L	10	9/15/2005
Indeno(1,2,3-cd)pyrene	ND	100		µg/L	10	9/15/2005
Isophorone	ND	100		µg/L	10	9/15/2005
2-Methylnaphthalene	ND	100		µg/L	10	9/15/2005
2-Methylphenol	ND	150		µg/L	10	9/15/2005
3+4-Methylphenol	ND	100		µg/L	10	9/15/2005
N-Nitrosodi-n-propylamine	ND	100		µg/L	10	9/15/2005
N-Nitrosodimethylamine	ND	100		µg/L	10	9/15/2005
N-Nitrosodiphenylamine	ND	100		µg/L	10	9/15/2005
Naphthalene	ND	100		µg/L	10	9/15/2005
2-Nitroaniline	ND	500		µg/L	10	9/15/2005
3-Nitroaniline	ND	500		µg/L	10	9/15/2005
4-Nitroaniline	ND	200		µg/L	10	9/15/2005
Nitrobenzene	ND	100		µg/L	10	9/15/2005
2-Nitrophenol	ND	150		µg/L	10	9/15/2005
4-Nitrophenol	ND	500		µg/L	10	9/15/2005
Pentachlorophenol	ND	500		µg/L	10	9/15/2005
Phenanthrene	390	100		µg/L	10	9/15/2005
Phenol	ND	100		µg/L	10	9/15/2005
Pyrene	ND	150		µg/L	10	9/15/2005
Pyridine	ND	300		µg/L	10	9/15/2005
1,2,4-Trichlorobenzene	ND	100		µg/L	10	9/15/2005
2,4,5-Trichlorophenol	ND	100		µg/L	10	9/15/2005
2,4,6-Trichlorophenol	ND	150		µg/L	10	9/15/2005
Surr: 2,4,6-Tribromophenol	78.4	16.6-150		%REC	10	9/15/2005
Surr: 2-Fluorobiphenyl	88.4	19.6-134		%REC	10	9/15/2005
Surr: 2-Fluorophenol	46.5	9.54-113		%REC	10	9/15/2005
Surr: 4-Terphenyl-d14	73.2	22.7-145		%REC	10	9/15/2005
Surr: Nitrobenzene-d5	70.2	14.6-134		%REC	10	9/15/2005

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: 20-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order: 0509108

Collection Date: 9/9/2005 11:00:00 AM

Project: AL-2 to EP-1 Week of 9/5/05

Lab ID: 0509108-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: Phenol-d6	30.8	10.7-80.3		%REC	10	9/15/2005
EPA METHOD 7470: MERCURY						Analyst: CMC
Mercury	0.012	0.0010		mg/L	5	9/13/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Antimony	ND	0.010		mg/L	1	9/19/2005 3:42:11 PM
Arsenic	ND	0.020		mg/L	1	9/19/2005 3:42:11 PM
Beryllium	ND	0.0030		mg/L	1	9/19/2005 3:42:11 PM
Cadmium	ND	0.0020		mg/L	1	9/19/2005 3:42:11 PM
Chromium	0.0070	0.0060		mg/L	1	9/19/2005 3:42:11 PM
Copper	ND	0.0060		mg/L	1	9/19/2005 3:42:11 PM
Lead	ND	0.0050		mg/L	1	9/19/2005 3:42:11 PM
Nickel	0.027	0.010		mg/L	1	9/19/2005 3:42:11 PM
Selenium	ND	0.020		mg/L	1	9/19/2005 3:42:11 PM
Silver	ND	0.0050		mg/L	1	9/19/2005 3:42:11 PM
Thallium	ND	0.010		mg/L	1	9/19/2005 3:42:11 PM
Zinc	0.094	0.050		mg/L	1	9/19/2005 3:42:11 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Antimony	ND	0.010		mg/L	1	9/19/2005 10:23:10 AM
Arsenic	ND	0.020		mg/L	1	9/19/2005 10:23:10 AM
Beryllium	ND	0.0030		mg/L	1	9/19/2005 10:23:10 AM
Cadmium	ND	0.0020		mg/L	1	9/19/2005 10:23:10 AM
Chromium	0.014	0.0060		mg/L	1	9/19/2005 10:23:10 AM
Copper	0.031	0.0060	B	mg/L	1	9/19/2005 10:23:10 AM
Lead	0.0094	0.0050		mg/L	1	9/19/2005 10:23:10 AM
Nickel	0.036	0.010		mg/L	1	9/19/2005 10:23:10 AM
Selenium	ND	0.050		mg/L	1	9/19/2005 10:23:10 AM
Silver	ND	0.0050		mg/L	1	9/19/2005 10:23:10 AM
Thallium	ND	0.010		mg/L	1	9/19/2005 10:23:10 AM
Zinc	1.1	0.25		mg/L	5	9/19/2005 2:33:01 PM

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: 20-Sep-05

CLIENT: Giant Refining Co
 Work Order: 0509108
 Project: AL-2 to EP-1 Week of 9/5/05

QC SUMMARY REPORT
 Method Blank

Sample ID	RB-II 5ml	Batch ID: R16692	Test Code: SW8021	Units: µg/L	Analysis Date	9/16/2005 11:46:06 PM	Prep Date				
Client ID:		Run ID: PIDFID_050916B			SeqNo: 401074						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.26	0	20	0	96.3	82.2	119	0			

Sample ID	Reagent Blank 5m	Batch ID: R16698	Test Code: SW8021	Units: µg/L	Analysis Date	9/19/2005 7:56:38 AM	Prep Date				
Client ID:	Run ID: PIDFID_050919A		SeqNo: 401251								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.67	0	20	0	98.4	82.2	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

Method Blank

CLIENT: Giant Refining Co
 Work Order: 0509108
 Project: AL-2 to EP-1 Week of 9/5/05

Sample ID	MB-8746	Batch ID: 8746	Test Code: SW8270C	Units: µg/L	Analysis Date	9/15/2005	Prep Date	9/13/2005			
Client ID:			Run ID:	ELMO_050915A	SeqNo:	400760					
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	10									
Anthracene	ND	10									
Azobenzene	ND	10									
Benz(a)anthracene	ND	15									
Benzo(a)pyrene	ND	10									
Benzo(b)fluoranthene	ND	10									
Benzo(g,h,i)perylene	ND	10									
Benzo(k)fluoranthene	ND	10									
Benzole 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

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co

Work Order: 0509108

Project: AL-2 to EP-1 Week of 9/5/05

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	10
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

Method Blank

CLIENT: Giant Refining Co

Work Order: 0509108

Project: AL-2 to EP-1 Week of 9/5/05

[illegible]

7 / 15

Sample ID	MB-8742	Batch ID: 8742	Test Code: SW7470	Units: mg/L	Analysis Date	9/13/2005	Prep Date	9/13/2005
Client ID:			Run ID:	MI-LA254_050913B	SeqNo:	399552		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val
Mercury	ND		0.0002					%RPD RPDLimit Qual

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	

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co
 Work Order: 0509108
 Project: AL-2 to EP-1 Week of 9/5/05

Sample ID	MB	Batch ID: R16711	Test Code: SW6010A	Units: mg/L	Analysis Date	9/19/2005 3:28:22 PM	Prep Date				
Client ID:		Run ID: ICP_050919A			SeqNo: 401491						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.01									
Arsenic	ND	0.02									
Beryllium	ND	0.003									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Copper	ND	0.006									
Lead	ND	0.005									
Nickel	ND	0.01									
Selenium	ND	0.02									
Silver	ND	0.005									
Thallium	ND	0.01									
Zinc	ND	0.05									

Sample ID	MB-8756	Batch ID: 8756	Test Code: SW6010A	Units: mg/L	Analysis Date	9/19/2005 1:46:24 PM	Prep Date	9/15/2005			
Client ID:			Run ID: ICP_050919B		SeqNo: 401724						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	ND	0.05									

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: 0509108
 Project: AL-2 to EP-1 Week of 9/5/05

Sample ID	MB-8756	Batch ID: 8756	Test Code: SW6010A	Units: mg/L	Analysis Date	9/19/2005 10:08:18 AM	Prep Date	9/15/2005
Client ID:		Run ID:	ICP_050919B	PQL		SPK value		SPK Ref Val
Analyte	Result	%REC	LowLimit	HighLimit	RPD Limit	%RPD	RPDLimit	Qual
Antimony	0.01014							J
Arsenic	ND							
Beryllium	ND							
Cadmium	ND							
Chromium	ND							
Copper	0.01422							
Lead	0.003863							
Nickel	ND							
Selenium	ND							
Silver	ND							
Thallium	ND							

J

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

- Date: 20-Sep-05

QC SUMMARY REPORT

Laboratory Control Spike - generic

CLIENT: Giant Refining Co

Work Order: 0509108

Project: AL-2 to EP-1 Week of 9/5/05

Sample ID	BTEX Ics 100ng	Batch ID: R16692	Test Code: SW8021	Units: µg/L	Analysis Date	9/17/2005 4:51:23 AM	Prep Date				
Client ID:		Run ID:	PIDFID_050916B		SeqNo:	401076					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	15.79	2.5	20	0	79.0	64.5	133	0			
Benzene	20.64	0.5	20	0	103	88.5	114	0			
Toluene	19.66	0.5	20	0	98.3	87.2	114	0			
Ethylbenzene	20.04	0.5	20	0	100	88.6	113	0			
Xylenes, Total	40.66	0.5	40	0	102	83.3	114	0			

Sample ID	BTEX Icsd 100ng	Batch ID: R16692	Test Code: SW8021	Units: µg/L	Analysis Date	9/17/2005 5:22:28 AM	Prep Date				
Client ID:		Run ID:	PIDFID_050916B		SeqNo:	401078					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	15.13	2.5	20	0	75.7	64.5	133	15.79	4.24	28	
Benzene	20.54	0.5	20	0	103	88.5	114	20.64	0.503	27	
Toluene	19.8	0.5	20	0	99.0	87.2	114	19.66	0.696	19	
Ethylbenzene	19.57	0.5	20	0	97.8	88.6	113	20.04	2.38	10	
Xylenes, Total	40.68	0.5	40	0	102	83.3	114	40.66	0.0615	13	

Sample ID	BTEX Icv 100ng	Batch ID: R16698	Test Code: SW8021	Units: µg/L	Analysis Date	9/19/2005 8:41:08 PM	Prep Date				
Client ID:		Run ID:	PIDFID_050919A		SeqNo:	401344					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	21.75	2.5	20	0	109	64.5	133	0			
Benzene	19.58	0.5	20	0	97.9	88.5	114	0			
Toluene	19.46	0.5	20	0	97.3	87.2	114	0			
EEthylbenzene	19.87	0.5	20	0	99.4	88.6	113	0			
Xylenes, Total	40.35	0.5	40	0	101	83.3	114	0			

Qualifiers:

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

CLIENT: Giant Refining Co

Work Order: 0509108

Project: AL-2 to EP-1 Week of 9/5/05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID	LCS-8746	Batch ID: 8746	Test Code: SW8270C	Units: µg/L	Analysis Date	9/15/2005	Prep Date	9/13/2005			
Client ID:			Run ID: ELMO_050915A		SeqNo: 400761						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	73.54	10	100	0	73.5	11	123	0			
4-Chloro-3-methylphenol	149.3	20	200	0	74.7	15.4	119	0			
2-Chlorophenol	145.1	10	200	0	72.6	12.2	122	0			
1,4-Dichlorobenzene	63.92	10	100	0	63.9	16.9	100	0			
2,4-Dinitrotoluene	70.8	10	100	0	70.8	13	138	0			
N-Nitrosodi-n-propylamine	70.74	10	100	0	70.7	9.93	122	0			
4-Nitrophenol	80.04	50	200	0	40.0	-20.5	87.4	0			
Pentachlorophenol	134.3	50	200	0	67.2	-0.355	114	0			
Phenol	89.48	10	200	0	44.7	7.53	73.1	0			
Pyrene	74.08	15	100	0	74.1	12.6	140	0			
1,2,4-Trichlorobenzene	63.66	10	100	0	63.7	17.4	98.7	0			

Sample ID	LCSD-8746	Batch ID: 8746	Test Code: SW8270C	Units: µg/L	Analysis Date	9/15/2005	Prep Date	9/13/2005			
Client ID:			Run ID: ELMO_050915A		SeqNo:	400762					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	75.62	10	100	0	75.6	11	123	73.54	2.79	30.5	
4-Chloro-3-methylphenol	153.9	20	200	0	77.0	15.4	119	149.3	3.05	28.6	
2-Chlorophenol	150.3	10	200	0	75.2	12.2	122	145.1	3.55	107	
1,4-Dichlorobenzene	66.08	10	100	0	66.1	16.9	100	63.92	3.32	62.1	
2,4-Dinitrotoluene	76.42	10	100	0	76.4	13	138	70.8	7.63	14.7	
N-Nitrosodi-n-propylamine	68.18	10	100	0	68.2	9.93	122	70.74	3.69	30.3	
4-Nitrophenol	90.32	50	200	0	45.2	12.5	87.4	80.04	12.1	36.3	
Pentachlorophenol	149.8	50	200	0	74.9	3.55	114	134.3	10.9	49	
Phenol	89.98	10	200	0	45.0	7.53	73.1	89.48	0.557	52.4	
Pyrene	73.82	15	100	0	73.8	12.6	140	74.06	0.325	16.3	
1,2,4-Trichlorobenzene	64	10	100	0	64.0	17.4	98.7	63.66	0.533	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 Method Blank

QC SUMMARY REPORT

CLIENT: Giant Refining Co
 Work Order: 0509108
 Project: AL-2 to EP-1 Week of 9/5/05

Laboratory Control Spike - generic

Sample ID	LCS-8742	Batch ID: 8742	Test Code: SW7470	Units: mg/L	Analysis Date	9/13/2005	Prep Date	9/13/2005				
Client ID:			Run ID: MI-LA254_050913B		SeqNo:	399553						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		0.004975	0.0002	0.005	0	99.5	75.2	134	0			

Sample ID	LCSD-8742	Batch ID: 8742	Test Code: SW7470	Units: mg/L	Analysis Date	9/13/2005	Prep Date	9/13/2005				
Client ID:			Run ID: MI-LA254_050913B		SeqNo:	399577						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		0.00498	0.0002	0.005	0	99.6	75.2	134	0.004975	0.102	0	

Sample ID	LCS	Batch ID: R16711	Test Code: SW6010A	Units: mg/L	Analysis Date	9/19/2005 3:32:06 PM	Prep Date					
Client ID:			Run ID: ICP_050919A		SeqNo:	401492						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony		0.5185	0.01	0.5	0	104	80	120	0			

Antimony	0.5185	0.01	0.5	0	104	80	120	0				
Arsenic	0.5378	0.02	0.5	0	108	80	120	0				
Beryllium	0.5245	0.003	0.5	0	105	80	120	0				
Cadmium	0.5256	0.002	0.5	0	105	80	120	0				
Chromium	0.5361	0.006	0.5	0	107	80	120	0				
Copper	0.5297	0.006	0.5	0	106	80	120	0				
Lead	0.5207	0.005	0.5	0	104	80	120	0				
Nickel	0.5092	0.01	0.5	0	102	80	120	0				
Selenium	0.4946	0.02	0.5	0	98.9	80	120	0				
Silver	0.5122	0.005	0.5	0	102	80	120	0				
Thallium	0.5365	0.01	0.5	0	107	80	120	0				
Zinc	0.5184	0.05	0.5	0	104	80	120	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 Duplicate

CLIENT: Giant Refining Co
Work Order: 0509108
Project: AL-2 to EP-1 Week of 9/5/05

Sample ID	LCSD	Batch ID: R16711	Test Code: SW6010A	Units: mg/L	Analysis Date	9/19/2005 3:34:33 PM	Prep Date				
Client ID:		Run ID:	ICP_050919A		SeqNo:	401493					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.5293	0.01	0.5	0	106	80	120	0.5185	2.07	20	
Arsenic	0.5345	0.02	0.5	0	107	80	120	0.5378	0.614	20	
Beryllium	0.5239	0.003	0.5	0	105	80	120	0.5245	0.104	20	
Cadmium	0.5313	0.002	0.5	0	106	80	120	0.5256	1.07	20	
Chromium	0.5403	0.006	0.5	0	108	80	120	0.5361	0.773	20	
Copper	0.537	0.006	0.5	0	107	80	120	0.5297	1.37	20	
Lead	0.5208	0.005	0.5	0	104	80	120	0.5207	0.0318	20	
Nickel	0.5125	0.01	0.5	0	103	80	120	0.5092	0.650	20	
Selenium	0.5034	0.02	0.5	0	101	80	120	0.4946	1.76	20	
Silver	0.516	0.005	0.5	0	103	80	120	0.5122	0.732	20	
Thallium	0.5496	0.01	0.5	0	110	80	120	0.5365	2.41	20	
Zinc	0.522	0.05	0.5	0	104	80	120	0.5184	0.686	20	

Sample ID	LCS-8756	Batch ID: 8756	Test Code: SW6010A	Units: mg/L	Analysis Date	9/19/2005 1:48:34 PM	Prep Date	9/15/2005			
Client ID:		Run ID: ICP_050919B			SeqNo: 401725						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.477	0.05	0.5	0	95.4	80	120	0			

Sample ID	LCSD-8756	Batch ID: 8756	Test Code: SW6010A	Units: mg/L	Analysis Date	9/19/2005 1:51:03 PM	Prep Date	9/15/2005			
Client ID:		Run ID: ICP_050919B			SeqNo: 401726						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.474	0.05	0.5	0	94.8	80	120	0.477	0.633	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

QC SUMMARY REPORT

Laboratory Control Spike - generic

CLIENT: Giant Refining Co

Work Order: 0509108

Project: AL-2 to EP-1 Week of 9/5/05

Sample ID	LCS-8756	Batch ID: 8756	Test Code: SW6010A	Units: mg/L	Analysis Date	9/19/2005 10:11:23 AM	Prep Date	9/15/2005			
Client ID:			Run ID:	ICP_050919B	SeqNo:	401793					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.5101	0.01	0.5	0.01014	100	80	120	0			B
Arsenic	0.4947	0.02	0.5	0	98.9	80	120	0			
Beryllium	0.4986	0.003	0.5	0	99.7	80	120	0			
Cadmium	0.4846	0.002	0.5	0	96.9	80	120	0			
Chromium	0.4822	0.006	0.5	0	96.4	80	120	0			
Copper	0.4977	0.006	0.5	0.01422	96.7	80	120	0			B
Lead	0.4805	0.005	0.5	0.003863	95.3	80	120	0			
Nickel	0.4703	0.01	0.5	0	94.1	80	120	0			
Selenium	0.4626	0.05	0.5	0	92.5	80	120	0			
Silver	0.4906	0.005	0.5	0	98.1	80	120	0			
Thallium	0.4981	0.01	0.5	0	99.6	80	120	0			

Sample ID	LCSD-8756	Batch ID: 8756	Test Code: SW6010A	Units: mg/L	Analysis Date	9/19/2005 10:14:32 AM	Prep Date	9/15/2005			
Client ID:		Run ID:	ICP_050919B		SeqNo:	401794					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.504	0.01	0.5	0.01014	98.8	80	120	0.5101	1.21	20	B
Arsenic	0.4883	0.02	0.5	0	97.7	80	120	0.4947	1.30	20	
Beryllium	0.4965	0.003	0.5	0	99.3	80	120	0.4986	0.407	20	
Cadmium	0.4815	0.002	0.5	0	96.3	80	120	0.4846	0.628	20	
Chromium	0.4786	0.006	0.5	0	95.7	80	120	0.4822	0.742	20	
Copper	0.4952	0.006	0.5	0.01422	96.2	80	120	0.4977	0.510	20	B
Lead	0.4773	0.005	0.5	0.003863	94.7	80	120	0.4805	0.675	20	
Nickel	0.465	0.01	0.5	0	93.0	80	120	0.4703	1.12	20	
Selenium	0.4718	0.05	0.5	0	94.4	80	120	0.4626	1.96	20	
Silver	0.4869	0.005	0.5	0	97.4	80	120	0.4906	0.758	20	
Thallium	0.4983	0.01	0.5	0	99.7	80	120	0.4981	0.0539	20	

Quantifiers: 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

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

9/12/2005

Work Order Number 0509108

Received by AT

Checklist completed by

Signature

Date

9/12/05

Matrix

Carrier name Client drop-off

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

Container/Temp Blank temperature?

1°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

Other:

QA/QC Package:
Std ☐ Level 4 ☐

Client: Grant Refining

Project Name: AL-2 to EP-1

Address:

Project #:

Company - Cimiga

Work of Sept. 5th 2005

Project Manager:

Phone #:

Sampler:

Fax #:

Sample Temperature:

Date

Time

Matrix

Sample I.D. No.

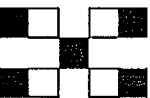
Number/Volume

Preservative
HgCl₂ HNO₃

HEAL No.

2/9/05 1100 H₂O AL-2 to EP-1

0509108-1



**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)	
	EOC (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)	
X	8270 (Semi-VOA)	
X	8021-BTEX+MTBE	
X	PPL 9 Metals total and dissolved	
	Air Bubbles or Headspace (Y or N)	

Date: 2/9/05 Time: 0925

Relinquished By: (Signature)

Received By: (Signature)

9/12/05

Date:

Time:

Relinquished By: (Signature)

Received By: (Signature)

Remarks:

PLASH

Dissolved metal sample Altered in lab

1/17/05



COVER LETTER

September 07, 2005

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

RE: AL-2 to EP-1 Week of 8-29-05

Order No.: 0508345

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 1 sample on 8/31/2005 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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order: 0508345

Collection Date: 8/30/2005 11:00:00 AM

Project: AL-2 to EP-1 Week of 8-29-05

Lab ID: 0508345-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: KTM
Benzene	83	10		µg/L	10	9/6/2005
Toluene	440	10		µg/L	10	9/6/2005
Ethylbenzene	53	10		µg/L	10	9/6/2005
Xylenes, Total	380	10		µg/L	10	9/6/2005
Surr: 4-Bromofluorobenzene	107	86.1-121		%REC	10	9/6/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	6300	4000		µg/L	10	9/5/2005
Acenaphthylene	ND	4000		µg/L	10	9/5/2005
Aniline	ND	4000		µg/L	10	9/5/2005
Anthracene	ND	4000		µg/L	10	9/5/2005
Azobenzene	ND	4000		µg/L	10	9/5/2005
Benz(a)anthracene	ND	6000		µg/L	10	9/5/2005
Benzo(a)pyrene	ND	4000		µg/L	10	9/5/2005
Benzo(b)fluoranthene	ND	4000		µg/L	10	9/5/2005
Benzo(g,h,i)perylene	ND	4000		µg/L	10	9/5/2005
Benzo(k)fluoranthene	ND	4000		µg/L	10	9/5/2005
Benzoic acid	ND	20000		µg/L	10	9/5/2005
Benzyl alcohol	ND	8000		µg/L	10	9/5/2005
Bis(2-chloroethoxy)methane	ND	4000		µg/L	10	9/5/2005
Bis(2-chloroethyl)ether	ND	6000		µg/L	10	9/5/2005
Bis(2-chloroisopropyl)ether	ND	6000		µg/L	10	9/5/2005
Bis(2-ethylhexyl)phthalate	ND	6000		µg/L	10	9/5/2005
4-Bromophenyl phenyl ether	ND	4000		µg/L	10	9/5/2005
Butyl benzyl phthalate	ND	6000		µg/L	10	9/5/2005
Carbazole	ND	4000		µg/L	10	9/5/2005
4-Chloro-3-methylphenol	ND	8000		µg/L	10	9/5/2005
4-Chloroaniline	ND	8000		µg/L	10	9/5/2005
2-Chloronaphthalene	ND	4000		µg/L	10	9/5/2005
2-Chlorophenol	ND	4000		µg/L	10	9/5/2005
4-Chlorophenyl phenyl ether	ND	6000		µg/L	10	9/5/2005
Chrysene	ND	6000		µg/L	10	9/5/2005
Di-n-butyl phthalate	ND	4000		µg/L	10	9/5/2005
Di-n-octyl phthalate	ND	6000		µg/L	10	9/5/2005
Dibenz(a,h)anthracene	ND	4000		µg/L	10	9/5/2005
Dibenzofuran	7200	4000		µg/L	10	9/5/2005
1,2-Dichlorobenzene	ND	4000		µg/L	10	9/5/2005
1,3-Dichlorobenzene	ND	4000		µg/L	10	9/5/2005
1,4-Dichlorobenzene	ND	4000		µg/L	10	9/5/2005
3,3'-Dichlorobenzidine	ND	6000		µg/L	10	9/5/2005
Diethyl phthalate	ND	4000		µg/L	10	9/5/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order: 0508345

Collection Date: 8/30/2005 11:00:00 AM

Project: AL-2 to EP-1 Week of 8-29-05

Lab ID: 0508345-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Dimethyl phthalate	ND	4000		µg/L	10	9/5/2005
2,4-Dichlorophenol	ND	4000		µg/L	10	9/5/2005
2,4-Dimethylphenol	ND	4000		µg/L	10	9/5/2005
4,6-Dinitro-2-methylphenol	ND	20000		µg/L	10	9/5/2005
2,4-Dinitrophenol	ND	20000		µg/L	10	9/5/2005
2,4-Dinitrotoluene	ND	4000		µg/L	10	9/5/2005
2,6-Dinitrotoluene	ND	4000		µg/L	10	9/5/2005
Fluoranthene	ND	4000		µg/L	10	9/5/2005
Fluorene	15000	4000		µg/L	10	9/5/2005
Hexachlorobenzene	ND	4000		µg/L	10	9/5/2005
Hexachlorobutadiene	ND	4000		µg/L	10	9/5/2005
Hexachlorocyclopentadiene	ND	4000		µg/L	10	9/5/2005
Hexachloroethane	ND	4000		µg/L	10	9/5/2005
Indeno(1,2,3-cd)pyrene	ND	4000		µg/L	10	9/5/2005
Isophorone	ND	4000		µg/L	10	9/5/2005
2-Methylnaphthalene	57000	4000		µg/L	10	9/5/2005
2-Methylphenol	ND	6000		µg/L	10	9/5/2005
3+4-Methylphenol	ND	4000		µg/L	10	9/5/2005
N-Nitrosodi-n-propylamine	ND	4000		µg/L	10	9/5/2005
N-Nitrosodimethylamine	ND	4000		µg/L	10	9/5/2005
N-Nitrosodiphenylamine	ND	4000		µg/L	10	9/5/2005
Naphthalene	6800	4000		µg/L	10	9/5/2005
2-Nitroaniline	ND	20000		µg/L	10	9/5/2005
3-Nitroaniline	ND	20000		µg/L	10	9/5/2005
4-Nitroaniline	ND	8000		µg/L	10	9/5/2005
Nitrobenzene	ND	4000		µg/L	10	9/5/2005
2-Nitrophenol	ND	6000		µg/L	10	9/5/2005
4-Nitrophenol	ND	20000		µg/L	10	9/5/2005
Pentachlorophenol	ND	20000		µg/L	10	9/5/2005
Phenanthrene	27000	4000		µg/L	10	9/5/2005
Phenol	ND	4000		µg/L	10	9/5/2005
Pyrene	ND	6000		µg/L	10	9/5/2005
Pyridine	ND	12000		µg/L	10	9/5/2005
1,2,4-Trichlorobenzene	ND	4000		µg/L	10	9/5/2005
2,4,5-Trichlorophenol	ND	4000		µg/L	10	9/5/2005
2,4,6-Trichlorophenol	ND	6000		µg/L	10	9/5/2005
Surr: 2,4,6-Tribromophenol	74.2	16.6-150		%REC	10	9/5/2005
Surr: 2-Fluorobiphenyl	88.8	19.6-134		%REC	10	9/5/2005
Surr: 2-Fluorophenol	25.4	9.54-113		%REC	10	9/5/2005
Surr: 4-Terphenyl-d14	72.0	22.7-145		%REC	10	9/5/2005
Surr: Nitrobenzene-d5	96.0	14.6-134		%REC	10	9/5/2005
Surr: Phenol-d6	20.2	10.7-80.3		%REC	10	9/5/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order: 0508345

Collection Date: 8/30/2005 11:00:00 AM

Project: AL-2 to EP-1 Week of 8-29-05

Lab ID: 0508345-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: CMC
Mercury	0.096	0.0040		mg/L	20	9/7/2005
EPA METHOD 6010C: DISSOLVED METALS						Analyst: NMO
Antimony	ND	0.010		mg/L	1	9/7/2005 3:38:54 PM
Arsenic	ND	0.020		mg/L	1	9/7/2005 3:38:54 PM
Beryllium	ND	0.0030		mg/L	1	9/7/2005 3:38:54 PM
Cadmium	ND	0.0020		mg/L	1	9/7/2005 3:38:54 PM
Chromium	ND	0.0060		mg/L	1	9/7/2005 3:38:54 PM
Copper	ND	0.0060		mg/L	1	9/7/2005 3:38:54 PM
Lead	ND	0.0050		mg/L	1	9/7/2005 3:38:54 PM
Nickel	0.032	0.010		mg/L	1	9/7/2005 3:38:54 PM
Selenium	ND	0.020		mg/L	1	9/7/2005 3:38:54 PM
Silver	ND	0.0050		mg/L	1	9/7/2005 3:38:54 PM
Thallium	ND	0.010		mg/L	1	9/7/2005 3:38:54 PM
Zinc	ND	0.050		mg/L	1	9/7/2005 3:38:54 PM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Antimony	ND	0.010		mg/L	1	9/7/2005 3:42:45 PM
Arsenic	0.12	0.020		mg/L	1	9/7/2005 3:42:45 PM
Beryllium	ND	0.0030		mg/L	1	9/7/2005 3:42:45 PM
Cadmium	0.0052	0.0020		mg/L	1	9/7/2005 3:42:45 PM
Chromium	0.15	0.0060		mg/L	1	9/7/2005 3:42:45 PM
Copper	0.96	0.030		mg/L	5	9/7/2005 4:23:35 PM
Lead	0.24	0.0050		mg/L	1	9/7/2005 3:42:45 PM
Nickel	0.31	0.010		mg/L	1	9/7/2005 3:42:45 PM
Selenium	ND	0.050		mg/L	1	9/7/2005 3:42:45 PM
Silver	ND	0.0050		mg/L	1	9/7/2005 3:42:45 PM
Thallium	ND	0.050		mg/L	5	9/7/2005 4:23:35 PM
Zinc	27	2.5		mg/L	50	9/7/2005 4:49:30 PM

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

CLIENT: Giant Refining Co
Work Order: 0508345

Project: AL-2 to EP-1 Week of 8-29-05

QC SUMMARY REPORT

Method Blank

Sample ID: MB-8667

Batch ID: 8667

Test Code: SW6010A

Units: mg/L

Analysis Date: 9/7/2005 3:18:12 PM

Prep Date: 9/2/2005

Client ID:

Run ID: ICP_050907A

SeqNo: 396479

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.01									
Arsenic	ND	0.02									
Beryllium	ND	0.003									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Copper	ND	0.006									
Lead	ND	0.005									
Nickel	ND	0.01									
Selenium	ND	0.05									
Silver	ND	0.005									
Thallium	ND	0.01									
Zinc	ND	0.05									

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: 0508345
Project: AL-2 to EP-1 Week of 8-29-05

QC SUMMARY REPORT
 Method Blank

Sample ID: MB	Batch ID: R16572	Test Code: SW6010A	Units: mg/L	Analysis Date: 9/7/2005 3:05:39 PM	Prep Date:						
Client ID:	Run ID: ICP_050907A	SeqNo: 396484									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.01									
Arsenic	ND	0.02									
Beryllium	ND	0.003									
Cadmium	ND	0.002									
Chromium	ND	0.006									
Copper	ND	0.006									
Lead	ND	0.005									
Nickel	ND	0.01									
Selenium	ND	0.02									
Silver	ND	0.005									
Thallium	ND	0.01									
Zinc	ND	0.05									

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

QC SUMMARY REPORT

Method Blank

[illegible]

Prep Date: 9/7/2005

SeqNo: 396456

[illegible]

B - Analyte detected in the associated Method Blank

CLIENT: Giant Refining Co
 Work Order: 0508345
 Project: AL-2 to EP-1 Week of 8-29-05

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	10		
N-Nitrosodl-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 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

CLIENT: Giant Refining Co
Work Order: 0508345

Project: AL-2 to EP-1 Week of 8-29-05

QC SUMMARY REPORT

Method Blank

Sample ID: MB-8645 Batch ID: 8645 Test Code: SW6270C Units: µg/L Analysis Date: 9/5/2005 Prep Date: 8/31/2005

Client ID: Run ID: ELMQ_050904A SeqNo: 395739

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	10									
Anthracene	ND	10									
Azobenzene	ND	10									
Benz(a)anthracene	ND	15									
Benzo(a)pyrene	ND	10									
Benzo(b)fluoranthene	ND	10									
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

Hall Environmental Analysis Laboratory

Date: 07-Sep-05

CLIENT: Giant Refining Co
 Work Order: 0508345
 Project: AL-2 to EP-1 Week of 8-29-05

QC SUMMARY REPORT

Method Blank

Sample ID: 5mL rb	Batch ID: R16542	Test Code: SW8260B	Units: µg/L	Analysis Date: 9/2/2005	Prep Date:
Client ID:	Run ID: NEPTUNE_050902A	SeqNo: 395636			
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			
Xylenes, Total	ND	1			
Surf: 4-Bromofluorobenzene	10.88	0	10	0	109 86.1 121 0
Sample ID: 5mL rb-b	Batch ID: R16559	Test Code: SW8260B	Units: µg/L	Analysis Date: 9/6/2005	Prep Date:
Client ID:	Run ID: NEPTUNE_050906A	SeqNo: 395687			
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			
Xylenes, Total	ND	1			
Surf: 4-Bromofluorobenzene	10.83	0	10	0	108 86.1 121 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

Hall Environmental Analysis Laboratory

Date: 07-Sep-05

CLIENT: Giant Refining Co
Work Order: 0508345
Project: AL-2 to EP-1 Week of 8-29-05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: 100ng Ics	Batch ID: R16542	Test Code: SW6260B	Units: µg/L	Analysis Date: 9/2/2005	Prep Date:						
Client ID:	Run ID: NEPTUNE_050902A	SeqNo: 395645									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	Lowlimit	Highlimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.98	1	20	0	99.9	80	130	0			
Toluene	20.18	1	20	0	101	77	121	0			

Sample ID: 100ng Ics	Batch ID: R16559	Test Code: SW6260B	Units: µg/L	Analysis Date: 9/6/2005	Prep Date:						
Client ID:	Run ID: NEPTUNE_050906A	SeqNo: 395888									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.75	1	20	0	98.8	80	130	0			
Toluene	20.72	1	20	0	104	77	121	0			

Sample ID: LCS-8645	Batch ID: 8645	Test Code: SW6270C	Units: µg/L	Analysis Date: 9/5/2005	Prep Date: 8/31/2005						
Client ID:	Run ID: ELMO_050904A	SeqNo: 395740									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	73.26	10	100	0	73.3	11	123	0			
4-Chloro-3-methylphenol	143.6	20	200	0	71.8	15.4	119	0			
2-Chlorophenol	134.4	10	200	0	67.2	12.2	122	0			
1,4-Dichlorobenzene	59.08	10	100	0	59.1	16.9	100	0			
2,4-Dinitrotoluene	73.7	10	100	0	73.7	13	138	0			
N-Nitrosodi-n-propylamine	66.8	10	100	0	66.8	9.93	122	0			
4-Nitrophenol	88.14	50	200	0	44.1	-20.5	87.4	0			
Pentachlorophenol	160.4	50	200	0	80.2	-0.355	114	0			
Phenol	76.56	10	200	0	38.3	7.53	73.1	0			
Pyrene	76.84	15	100	0	76.8	12.6	140	0			
1,2,4-Trichlorobenzene	61.3	10	100	0	61.3	17.4	98.7	0			

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

CLIENT: Giant Refining Co
 Work Order: 0508345
 Project: AL-2 to EP-1 Week of 8-29-05

QC SUMMARY REPORT Laboratory Control Spike Duplicate

Sample ID: LCS-D-8645 Batch ID: 8645 Test Code: SW8270C Units: µg/L Analysis Date: 9/5/2005 Prep Date: 8/31/2005
 Client ID: Run ID: ELMO_050904A SeqNo: 395741

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	75.98	10	100	0	76.0	11	123	73.26	3.65	30.5	
4-Chloro-3-methylphenol	152.6	20	200	0	76.3	15.4	119	143.6	6.08	28.6	
2-Chlorophenol	135.8	10	200	0	67.9	12.2	122	134.4	1.08	107	
1,4-Dichlorobenzene	63	10	100	0	63.0	16.9	100	59.08	6.42	62.1	
2,4-Dinitrochlorobenzene	74.68	10	100	0	74.7	13	138	73.7	1.32	14.7	
N-Nitrosodi-n-propylamine	68.04	10	100	0	68.0	9.93	122	66.8	0.318	30.3	
4-Nitrophenol	87.86	50	200	0	43.9	12.5	87.4	88.14	1.84	36.3	
Pentachlorophenol	157.7	50	200	0	78.8	3.55	114	160.4	1.70	49	
Phenol	78.84	10	200	0	39.4	7.53	73.1	76.56	2.93	52.4	
Pyrene	71.9	15	100	0	71.9	12.6	140	76.84	6.64	16.3	
1,2,4-Trichlorobenzene	64.54	10	100	0	64.5	17.4	98.7	61.3	5.15	36.4	

Sample ID: LCS-8699 Batch ID: 8699 Test Code: SW7470 Units: mg/L Analysis Date: 9/7/2005 Prep Date: 9/7/2005
 Client ID: Run ID: MI-LA254_050907A SeqNo: 396457

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005182	0.0002	0.005	0	104	75.2	134	0			

Sample ID:	Batch ID:	Test Code:	Units:	Analysis Date:	Prep Date:
LCS-D-8699	8699	SW7470	mg/L	9/7/2005	9/7/2005

Client ID:	Run ID:	SeqNo:
	MI-LA254_050907A	396471

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005394	0.0002	0.005	0	108	75.2	134	0.005182	4.01	0	

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

CLIENT: Giant Refining Co
Work Order: 0508345
Project: AL-2 to EP-1 Week of 8-29-05

QC SUMMARY REPORT Laboratory Control Spike Duplicate

Sample ID: LCSD	Batch ID: R16572	Test Code: SW6010A	Units: mg/L	Analysis Date: 9/7/2005 3:27:33 PM	Prep Date:						
Client ID:	Run ID: ICP_050907A	SeqNo: 396487									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.4273	0.01	0.5	0	85.5	80	120	0.4598	7.33	20	
Arsenic	0.4503	0.02	0.5	0	90.1	80	120	0.4892	8.26	20	
Beryllium	0.4503	0.003	0.5	0	90.1	80	120	0.4796	6.31	20	
Cadmium	0.4427	0.002	0.5	0	88.5	80	120	0.4751	7.07	20	
Chromium	0.4381	0.006	0.5	0	87.6	80	120	0.4729	7.63	20	
Copper	0.449	0.006	0.5	0	89.8	80	120	0.4821	7.12	20	
Lead	0.447	0.005	0.5	0	89.4	80	120	0.4778	6.66	20	
Nickel	0.4358	0.01	0.5	0	87.2	80	120	0.4673	6.97	20	
Selenium	0.4072	0.02	0.5	0	81.4	80	120	0.4314	5.78	20	
Silver	0.4468	0.005	0.5	0	89.4	80	120	0.4806	7.27	20	
Thallium	0.4647	0.01	0.5	0	92.9	80	120	0.4925	5.82	20	
Zinc	0.4436	0.05	0.5	0	88.7	80	120	0.4727	6.35	20	

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

CLIENT: Giant Refining Co
 Work Order: 0508345
 Project: AL-2 to EP-1 Week of 8-29-05

QC SUMMARY REPORT Laboratory Control Spike - generic

Sample ID: LCS Batch ID: R16572 Test Code: SW6010A Units: mg/L Analysis Date: 9/7/2005 3:30:12 PM Prep Date:
 Client ID: Run ID: ICP_050907A SeqNo: 396488

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.4598	0.01	0.5	0	92.0	80	120	0			
Arsenic	0.4892	0.02	0.5	0	97.8	80	120	0			
Beryllium	0.4796	0.003	0.5	0	95.9	80	120	0			
Cadmium	0.4751	0.002	0.5	0	95.0	80	120	0			
Chromium	0.4728	0.006	0.5	0	94.6	80	120	0			
Copper	0.4821	0.006	0.5	0	96.4	80	120	0			
Lead	0.4778	0.005	0.5	0	95.6	80	120	0			
Nickel	0.4673	0.01	0.5	0	93.5	80	120	0			
Selenium	0.4314	0.02	0.5	0	86.3	80	120	0			
Silver	0.4806	0.005	0.5	0	96.1	80	120	0			
Thallium	0.4925	0.01	0.5	0	98.5	80	120	0			
Zinc	0.4727	0.05	0.5	0	94.5	80	120	0			

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

CLIENT: Giant Refining Co

Work Order: 0508345

Project: AL-2 to EP-1 Week of 8-29-05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS-8667

Batch ID: 8667

Client ID:

Test Code: SW6010A
Run ID: ICP_050907A

Analysis Date: 9/7/2005 3:21:13 PM
SeqNo: 396480

Prep Date: 9/2/2005

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.5224	0.01	0.5	0	104	80	120	0			
Arsenic	0.5295	0.02	0.5	0	106	80	120	0			
Beryllium	0.5269	0.003	0.5	0	105	80	120	0			
Cadmium	0.5108	0.002	0.5	0	102	80	120	0			
Chromium	0.5029	0.006	0.5	0	101	80	120	0			
Copper	0.5189	0.006	0.5	0	104	80	120	0			
Lead	0.5083	0.005	0.5	0	102	80	120	0			
Nickel	0.4979	0.01	0.5	0	99.6	80	120	0			
Selenium	0.5011	0.05	0.5	0	100	80	120	0			
Silver	0.5148	0.005	0.5	0	103	80	120	0			
Thallium	0.5234	0.01	0.5	0	105	80	120	0			
Zinc	0.5017	0.05	0.5	0	100	80	120	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: 0508345
 Project: AL-2 to EP-1 Week of 8-29-05

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: LCSD-8667	Batch ID: 8667	Test Code: SW6010A	Units: mg/L	Analysis Date: 9/7/2005 3:23:47 PM	Prep Date: 9/2/2005						
Client ID:	Run ID: ICP_050907A	SeqNo: 396481									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.5079	0.01	0.5	0	102	80	120	0.5224	2.81	20	
Arsenic	0.5145	0.02	0.5	0	103	80	120	0.5295	2.87	20	
Beryllium	0.5182	0.003	0.5	0	104	80	120	0.5269	1.66	20	
Cadmium	0.5044	0.002	0.5	0	101	80	120	0.5108	1.25	20	
Chromium	0.4965	0.006	0.5	0	99.3	80	120	0.5029	1.28	20	
Copper	0.5115	0.006	0.5	0	102	80	120	0.5189	1.44	20	
Lead	0.5027	0.005	0.5	0	101	80	120	0.5083	1.11	20	
Nickel	0.4874	0.01	0.5	0	97.5	80	120	0.4979	2.13	20	
Selenium	0.4885	0.05	0.5	0	97.7	80	120	0.5011	2.56	20	
Silver	0.5053	0.005	0.5	0	101	80	120	0.5148	1.87	20	
Thallium	0.5211	0.01	0.5	0	104	80	120	0.5234	0.435	20	
Zinc	0.4922	0.05	0.5	0	98.4	80	120	0.5017	1.92	20	

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

CHAIN-OF-CUSTODY RECORD

Other:

QA/QC Package:
Std ☐ Level 4 ☐

Client: Sierra Refining

Project Name: AL-2 to EP-1

Company: Conifer

Week of 8-29-05

Address:

Route 3 Box 7

Project #:

Gallop, NM 87301

Project Manager:

Steve Smith

Phone #:

505 722 3833

Sampler:

Steve Smith

Fax #:

505 722 0210

Sample Temperature:

3°C

Date

Time

Matrix

Sample I.D. No.

Number/Volume

Preservative
HgCl₂ HNO₃

HEAL No.

8/31/05

1100

H₂O

AL-2 to EP-1

058345-1



**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)

PCBA & Metals PPL At Total + Dissolved

Anions (F, Cl, NO₃, NO₂, PO₄, SO₄)

8081 Pesticides / PCB's (8082)

8260B (VOA)

8270 (Semi-VOA)

8021 - BTEX

Air Bubbles or Headspace (Y or N)

Date:

8/31/05

Relinquished By: (Signature)

Steve Smith

Received By: (Signature)

8/31/05

Remarks:

RUSH

Date:

Time:

Relinquished By: (Signature)

Received By: (Signature)

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

8/31/2005

Work Order Number 0508345

Received by AT

Checklist completed by

Signature

Date

8/31/05

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/> Not Shipped <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - VOA vials have zero headspace?	No VOA vials submitted <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
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: for SM Change RUCAS Total & Dissolved
to PPL Total & Dissolved

& Proj name from A-1 to A-2 /AT 9/1/05

Corrective Action _____



COVER LETTER

August 31, 2005

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

RE: Aeration Lagoon 2 Outlet to Evap Pond 1

Order No.: 0508271

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 1 sample on 8/24/2005 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,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager



Hall Environmental Analysis Laboratory

Date: 31-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order: 0508271

Collection Date: 8/23/2005 11:00:00 AM

Project: Aeration Lagoon 2 Outlet to Evap Pond 1

Lab ID: 0508271-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: BDH
Benzene	ND	10		µg/L	10	8/30/2005
Toluene	ND	10		µg/L	10	8/30/2005
Ethylbenzene	ND	10		µg/L	10	8/30/2005
Methyl tert-butyl ether (MTBE)	31	10		µg/L	10	8/30/2005
1,2,4-Trimethylbenzene	57	10		µg/L	10	8/30/2005
1,3,5-Trimethylbenzene	13	10		µg/L	10	8/30/2005
Xylenes, Total	35	10		µg/L	10	8/30/2005
Surr: 1,2-Dichloroethane-d4	93.1	85.3-113		%REC	10	8/30/2005
Surr: 4-Bromofluorobenzene	106	86.1-121		%REC	10	8/30/2005
Surr: Dibromofluoromethane	96.1	80.4-115		%REC	10	8/30/2005
Surr: Toluene-d8	114	84.7-111	S	%REC	10	8/30/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	50		µg/L	1	8/29/2005
Acenaphthylene	ND	50		µg/L	1	8/29/2005
Aniline	ND	50		µg/L	1	8/29/2005
Anthracene	ND	50		µg/L	1	8/29/2005
Azobenzene	ND	50		µg/L	1	8/29/2005
Benz(a)anthracene	ND	75		µg/L	1	8/29/2005
Benzo(a)pyrene	ND	50		µg/L	1	8/29/2005
Benzo(b)fluoranthene	ND	50		µg/L	1	8/29/2005
Benzo(g,h,i)perylene	ND	50		µg/L	1	8/29/2005
Benzo(k)fluoranthene	ND	50		µg/L	1	8/29/2005
Benzoic acid	ND	250		µg/L	1	8/29/2005
Benzyl alcohol	ND	100		µg/L	1	8/29/2005
Bis(2-chloroethoxy)methane	ND	50		µg/L	1	8/29/2005
Bis(2-chloroethyl)ether	ND	75		µg/L	1	8/29/2005
Bis(2-chloroisopropyl)ether	ND	75		µg/L	1	8/29/2005
Bis(2-ethylhexyl)phthalate	ND	75		µg/L	1	8/29/2005
4-Bromophenyl phenyl ether	ND	50		µg/L	1	8/29/2005
Butyl benzyl phthalate	ND	75		µg/L	1	8/29/2005
Carbazole	ND	50		µg/L	1	8/29/2005
4-Chloro-3-methylphenol	ND	100		µg/L	1	8/29/2005
4-Chloroaniline	ND	100		µg/L	1	8/29/2005
2-Chloronaphthalene	ND	50		µg/L	1	8/29/2005
2-Chlorophenol	ND	50		µg/L	1	8/29/2005
4-Chlorophenyl phenyl ether	ND	75		µg/L	1	8/29/2005
Chrysene	ND	75		µg/L	1	8/29/2005
Di-n-butyl phthalate	ND	50		µg/L	1	8/29/2005
Di-n-octyl phthalate	ND	75		µg/L	1	8/29/2005
Dibenz(a,h)anthracene	ND	50		µg/L	1	8/29/2005

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: 31-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order: 0508271

Collection Date: 8/23/2005 11:00:00 AM

Project: Aeration Lagoon 2 Outlet to Evap Pond 1

Lab ID: 0508271-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Dibenzofuran	ND	50		µg/L	1	8/29/2005
1,2-Dichlorobenzene	ND	50		µg/L	1	8/29/2005
1,3-Dichlorobenzene	ND	50		µg/L	1	8/29/2005
1,4-Dichlorobenzene	ND	50		µg/L	1	8/29/2005
3,3'-Dichlorobenzidine	ND	75		µg/L	1	8/29/2005
Diethyl phthalate	ND	50		µg/L	1	8/29/2005
Dimethyl phthalate	ND	50		µg/L	1	8/29/2005
2,4-Dichlorophenol	ND	50		µg/L	1	8/29/2005
2,4-Dimethylphenol	ND	50		µg/L	1	8/29/2005
4,6-Dinitro-2-methylphenol	ND	250		µg/L	1	8/29/2005
2,4-Dinitrophenol	ND	250		µg/L	1	8/29/2005
2,4-Dinitrotoluene	ND	50		µg/L	1	8/29/2005
2,6-Dinitrotoluene	ND	50		µg/L	1	8/29/2005
Fluoranthene	ND	50		µg/L	1	8/29/2005
Fluorene	170	50		µg/L	1	8/29/2005
Hexachlorobenzene	ND	50		µg/L	1	8/29/2005
Hexachlorobutadiene	ND	50		µg/L	1	8/29/2005
Hexachlorocyclopentadiene	ND	50		µg/L	1	8/29/2005
Hexachloroethane	ND	50		µg/L	1	8/29/2005
Indeno(1,2,3-cd)pyrene	ND	50		µg/L	1	8/29/2005
Isophorone	ND	50		µg/L	1	8/29/2005
2-Methylnaphthalene	ND	50		µg/L	1	8/29/2005
2-Methylphenol	ND	75		µg/L	1	8/29/2005
3+4-Methylphenol	ND	50		µg/L	1	8/29/2005
N-Nitrosodi-n-propylamine	ND	50		µg/L	1	8/29/2005
N-Nitrosodimethylamine	ND	50		µg/L	1	8/29/2005
N-Nitrosodiphenylamine	ND	50		µg/L	1	8/29/2005
Naphthalene	ND	50		µg/L	1	8/29/2005
2-Nitroaniline	ND	250		µg/L	1	8/29/2005
3-Nitroaniline	ND	250		µg/L	1	8/29/2005
4-Nitroaniline	ND	100		µg/L	1	8/29/2005
Nitrobenzene	ND	50		µg/L	1	8/29/2005
2-Nitrophenol	ND	75		µg/L	1	8/29/2005
4-Nitrophenol	ND	250		µg/L	1	8/29/2005
Pentachlorophenol	ND	250		µg/L	1	8/29/2005
Phenanthrene	170	50		µg/L	1	8/29/2005
Phenol	ND	50		µg/L	1	8/29/2005
Pyrene	ND	75		µg/L	1	8/29/2005
Pyridine	ND	150		µg/L	1	8/29/2005
1,2,4-Trichlorobenzene	ND	50		µg/L	1	8/29/2005
2,4,5-Trichlorophenol	ND	50		µg/L	1	8/29/2005
2,4,6-Trichlorophenol	ND	75		µg/L	1	8/29/2005

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: 31-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order: 0508271

Collection Date: 8/23/2005 11:00:00 AM

Project: Aeration Lagoon 2 Outlet to Evap Pond 1

Lab ID: 0508271-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: 2,4,6-Tribromophenol	95.6	16.6-150		%REC	1	8/29/2005
Surr: 2-Fluorobiphenyl	75.3	19.6-134		%REC	1	8/29/2005
Surr: 2-Fluorophenol	45.4	9.54-113		%REC	1	8/29/2005
Surr: 4-Terphenyl-d14	75.4	22.7-145		%REC	1	8/29/2005
Surr: Nitrobenzene-d5	68.8	14.6-134		%REC	1	8/29/2005
Surr: Phenol-d6	36.2	10.7-80.3		%REC	1	8/29/2005

EPA METHOD 7470: MERCURY

Analyst: CMC

Mercury	0.0013	0.00020	mg/L	1	8/31/2005
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EPA METHOD 6010C: DISSOLVED METALS

Analyst: NMO

Arsenic	ND	0.020	mg/L	1	8/31/2005 12:26:19 PM
Barium	0.18	0.020	mg/L	1	8/31/2005 12:26:19 PM
Cadmium	ND	0.0020	mg/L	1	8/31/2005 12:26:19 PM
Chromium	ND	0.0060	mg/L	1	8/31/2005 12:26:19 PM
Lead	ND	0.0050	mg/L	1	8/31/2005 12:26:19 PM
Selenium	ND	0.020	mg/L	1	8/31/2005 12:26:19 PM
Silver	ND	0.0050	mg/L	1	8/31/2005 12:26:19 PM

EPA 6010: TOTAL RECOVERABLE METALS

Analyst: NMO

Arsenic	ND	0.020	mg/L	1	8/31/2005 11:20:21 AM
Barium	0.36	0.020	mg/L	1	8/31/2005 11:20:21 AM
Cadmium	ND	0.0020	mg/L	1	8/31/2005 11:20:21 AM
Chromium	0.0082	0.0060	mg/L	1	8/31/2005 11:20:21 AM
Lead	0.0075	0.0050	mg/L	1	8/31/2005 11:20:21 AM
Selenium	ND	0.050	mg/L	1	8/31/2005 11:20:21 AM
Silver	ND	0.0050	mg/L	1	8/31/2005 11:20:21 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: 31-Aug-05

QC SUMMARY REPORT

CLIENT: Giant Refining Co

Work Order: 0508271

Project: Aeration Lagoon 2 Outlet to Evap Pond 1

Method Blank

Sample ID	5ml rb	Batch ID: R16479	Test Code: SW8260B	Units: µg/L	Analysis Date 8/30/2005	Prep Date					
Client ID:		Run ID:	THOR_050830A		SeqNo: 393534						
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									
Xylenes, Total	ND	1									
Surr: 1,2-Dichloroethane-d4	8.834	0	10	0	88.3	85.3	113	0			
Surr: 4-Bromofluorobenzene	11.07	0	10	0	111	86.1	121	0			
Surr: Dibromofluoromethane	8.58	0	10	0	85.8	80.4	115	0			
Surr: Toluene-d8	10.79	0	10	0	108	84.7	111	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

Method Blank

CLIENT: Giant Refining Co

Work Order: 0508271

Project: Aeration Lagoon 2 Outlet to Evap Pond 1

Sample ID	MB-8627	Batch ID: 8627	Test Code: SW8270C	Units: µg/L	Analysis Date	8/29/2005	Prep Date	8/26/2005			
Client ID:			Run ID: ELMO_050829A		SeqNo:	393749					
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	10									
Anthracene	ND	10									
Azobenzene	ND	10									
Benz(a)anthracene	ND	15									
Benzo(a)pyrene	ND	10									
Benzo(b)fluoranthene	ND	10									
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

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co

Work Order: 0508271

Project: Aeration Lagoon 2 Outlet to Evap Pond 1

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
Isophorane	ND	10
2-Methylnaphthalene	ND	10
2-Methylphenol	ND	15
3+4-Methylphenol	ND	10
N-Nitrosdi-n-propylamine	ND	10
N-Nitrosdimethylamine	ND	10
N-Nitrosdiphenylamine	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

Method Blank

CLIENT: Giant Refining Co

Work Order: 0508271

Project: Aeration Lagoon 2 Outlet to Evap Pond 1

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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	4

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co

Work Order: 0508271

Project: Aeration Lagoon 2 Outlet to Evap Pond 1

Sample ID MB Batch ID: R16494 Test Code: SW6010A Units: mg/L Analysis Date 8/31/2005 11:59:16 AM Prep Date
Client ID: Run ID: ICP_050831C SeqNo: 393997

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.02866	0.02									
Antimony	ND	0.01									
Arsenic	ND	0.02									
Barium	0.001033	0.02									J
Beryllium	0.0006694	0.003									J
Boron	ND	0.04									
Cadmium	ND	0.002									
Calcium	0.5903	1									J
Chromium	ND	0.006									
Cobalt	ND	0.006									
Copper	ND	0.006									
Iron	0.02793	0.02									
Lead	ND	0.005									
Magnesium	0.1778	1									J
Manganese	0.001599	0.002									J
Molybdenum	0.000748	0.008									J
Nickel	0.001105	0.01									J
Potassium	0.3436	1									J
Selenium	ND	0.02									
Silicon	ND	0.8									
Silver	ND	0.005									
Sodium	0.343	1									
Strontium	ND	0.006									J
Thallium	ND	0.01									
Tin	ND	0.02									
Titanium	0.0007024	0.005									
Uranium	ND	0.1									J
Vanadium	ND	0.05									

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 5

CLIENT: Giant Refining Co
Work Order: 0508271
Project: Aeration Lagoon 2 Outlet to Evap Pond 1

QC SUMMARY REPORT
Method Blank

Zinc	ND	0.05
Yttrium	98.78	0
Yttrium Radial	99.61	0
Silica	ND	0.8

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

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co

Work Order: 0508271

Project: Aeration Lagoon 2 Outlet to Evap Pond 1

Sample ID	MB-8633	Batch ID: 8633	Test Code: SW6010A	Units: mg/L	Analysis Date	8/31/2005 11:09:26 AM	Prep Date	8/29/2005			
Client ID:			Run ID:	ICP_050831C <th>SeqNo:</th> <td>393980</td> <td></td> <td></td>	SeqNo:	393980					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	ND	0.02									
Antimony	ND	0.01									
Arsenic	ND	0.02									
Barium	ND	0.02									
Beryllium	ND	0.003									
Boron	ND	0.04									
Cadmium	ND	0.002									
Calcium	ND	1									
Chromium	ND	0.006									
Cobalt	ND	0.006									
Copper	ND	0.006									
Iron	ND	0.05									
Lead	ND	0.005									
Magnesium	ND	1									
Manganese	0.001988	0.002									J
Molybdenum	ND	0.008									
Nickel	ND	0.01									
Potassium	ND	1									
Selenium	ND	0.05									
Silver	0.0006273	0.005									J
Sodium	ND	1									
Thallium	ND	0.01									
Tin	ND	0.01									
Titanium	ND	0.005									
Uranium	ND	0.1									
Vanadium	ND	0.05									
Zinc	ND	0.05									
Silica	ND	1.1									

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

Hall Environmental Analysis Laboratory

Date: 31-Aug-05

CLIENT: Giant Refining Co
Work Order: 0508271
Project: Aeration Lagoon 2 Outlet to Evap Pond 1

QC SUMMARY REPORT Sample Duplicate

Sample ID	0508271-01C DUP	Batch ID	8650	Test Code	SW7470	Units	mg/L	Analysis Date	8/31/2005	Prep Date	8/31/2005
Client ID	AL-2 to EP-1	Run ID	M1-LA254_050831A	SeqNo	394018						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Mercury		0.001289	0.0002	0	0	0	0	0	0.001294	0.383	20

Sample ID	0508271-01D DUP	Batch ID	R16494	Test Code	SW6010A	Units	mg/L	Analysis Date	8/31/2005 12:30:26 PM	Prep Date	
Client ID	AL-2 to EP-1	Run ID	ICP_050831C	SeqNo	394004						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Arsenic		ND	0.02	0	0	0	0	0	0	0	30
Barium		0.1755	0.02	0	0	0	0	0	0.1758	0.151	30
Cadmium		ND	0.002	0	0	0	0	0	0	0	30
Chromium		0.002086	0.006	0	0	0	0	0	0.002768	0	30
Lead		ND	0.005	0	0	0	0	0	0	0	30
Selenium		ND	0.02	0	0	0	0	0	0	0	30
Silver		ND	0.005	0	0	0	0	0	0	0	30

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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

Date: 31-Aug-05

CLIENT: Giant Refining Co
Work Order: 0508271
Project: Aeration Lagoon 2 Outlet to Evap Pond 1

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID	0508271-01C MS	Batch ID: 8650	Test Code: SW7470	Units: mg/L	Analysis Date	8/31/2005	Prep Date	8/31/2005
Client ID:	AL-2 to EP-1		Run ID:	MI-LA254_050831A	SeqNo:	394019		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val
Mercury	0.005086	0.0002	0.005	0.001294	75.8	75.2	134	0

Sample ID	0508271-01C MSD	Batch ID: 8650	Test Code: SW7470	Units: mg/L	Analysis Date	8/31/2005	Prep Date	8/31/2005
Client ID:	AL-2 to EP-1		Run ID:	MI-LA254_050831A	SeqNo:	394020		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val
Mercury	0.005127	0.0002	0.005	0.001294	76.7	75.2	134	0.005086

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

Date: 31-Aug-05

CLIENT: Giant Refining Co
Work Order: 0508271
Project: Aeration Lagoon 2 Outlet to Evap Pond 1

QC SUMMARY REPORT Laboratory Control Spike - generic

Sample ID: 100ng lcs Batch ID: R16479 Test Code: SW6260B Units: µg/L Analysis Date: 8/30/2005 Prep Date:
Client ID: Run ID: THOR_050830A SeqNo: 393535

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.58	1	20	0	97.9	80	130	0			
Toluene	19.36	1	20	0	96.8	77	121	0			

Sample ID: 100ng lcsd Batch ID: R16479 Test Code: SW6260B Units: µg/L Analysis Date: 8/30/2005 Prep Date:
Client ID: Run ID: THOR_050830A SeqNo: 393536

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.85	1	20	0	99.3	80	130	19.58	1.37	15	
Toluene	17.85	1	20	0	89.3	77	121	19.36	8.07	14	

Sample ID: LCS-8627 Batch ID: 8627 Test Code: SW6270C Units: µg/L Analysis Date: 8/29/2005 Prep Date: 8/26/2005
Client ID: Run ID: ELMO_050829A SeqNo: 393751

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aceapthene	68.44	10	100	0	68.4	11	123	0			
4-Chloro-3-methylphenol	135.8	20	200	0	67.9	15.4	119	0			
2-Chlorophenol	133.7	10	200	0	66.9	12.2	122	0			
1,4-Dichlorobenzene	53.68	10	100	0	53.7	16.9	100	0			
2,4-Dinitrotoluene	67.8	10	100	0	67.8	13	138	0			
N-Nitrosodi-n-propylamine	63.98	10	100	0	64.0	9.93	122	0			
4-Nitrophenol	59.06	50	200	0	29.5	-20.5	87.4	0			
Pentachlorophenol	164.2	50	200	0	82.1	-0.355	114	0			
Phenol	79.56	10	200	0	39.8	7.53	73.1	0			
Pyrene	77.02	15	100	0	77.0	12.6	140	0			
1,2,4-Trichlorobenzene	57.42	10	100	0	57.4	17.4	98.7	0			

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

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

CLIENT: Giant Refining Co

Work Order: 0508271

Project: Aeration Lagoon 2 Outlet to Evap Pond 1

Sample ID: LCSD-8627	Batch ID: 8627	Test Code: SW8270C	Units: µg/L	Analysis Date: 8/29/2005	Prep Date: 8/26/2005
Client ID:	Run ID: ELMO_050829A	SeqNo: 393753			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Acenaphthene	67.48	10	100	0	67.5 11 123 68.44 1.41 30.5
4-Chloro-3-methylphenol	133.1	20	200	0	66.6 15.4 119 135.8 2.01 28.6
2-Chlorophenol	132.7	10	200	0	66.4 12.2 122 133.7 0.751 107
1,4-Dichlorobenzene	47.68	10	100	0	47.7 16.9 100 53.68 11.8 62.1
2,4-Dinitrotoluene	68.52	10	100	0	68.5 13 138 67.8 1.06 14.7
N-Nitrosodi-n-propylamine	61.64	10	100	0	61.6 9.93 122 63.98 3.73 30.3
4-Nitrophenol	60.26	50	200	0	30.1 12.5 87.4 59.06 2.01 36.3
Pentachlorophenol	159.4	50	200	0	79.7 3.55 114 164.2 2.92 49
Phenol	78.56	10	200	0	39.3 7.53 73.1 79.56 1.26 52.4
Pyrene	74.16	15	100	0	74.2 12.6 140 77.02 3.78 16.3
1,2,4-Trichlorobenzene	49.54	10	100	0	49.5 17.4 98.7 57.42 14.7 36.4

Sample ID: LCS-8650	Batch ID: 8650	Test Code: SW7470	Units: mg/L	Analysis Date: 8/31/2005	Prep Date: 8/31/2005
Client ID:	Run ID: MI-LA254_050831A	SeqNo: 394016			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	0.005142	0.0002	0.005	0	103 75.2 134 0 0

Sample ID: LCS-8650	Batch ID: 8650	Test Code: SW7470	Units: mg/L	Analysis Date: 8/31/2005	Prep Date: 8/31/2005
Client ID:	Run ID: MI-LA254_050831A	SeqNo: 394021			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	0.00498	0.0002	0.005	0	99.6 75.2 134 0.005142 3.19 0

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

CLIENT: Giant Refining Co
 Work Order: 0508271
 Project: Aeration Lagoon 2 Outlet to Evap Pond 1

QC SUMMARY REPORT Laboratory Control Spike - generic

Sample ID: LCS Batch ID: R16494 Test Code: SW6010A Units: mg/L Analysis Date: 8/31/2005 12:02:16 PM Prep Date:
 Client ID: Run ID: ICP_050831C SeqNo: 393998

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.5519	0.01	0.5	0	110	80	120	0			
Arsenic	0.5393	0.02	0.5	0	108	80	120	0			
Barium	0.5312	0.02	0.5	0.001033	106	80	120	0			
Beryllium	0.5206	0.003	0.5	0.000684	104	80	120	0			
Boron	0.5483	0.04	0.5	0	110	80	120	0			
Cadmium	0.5373	0.002	0.5	0	107	80	120	0			
Calcium	55.1	1	50.5	0.5903	108	80	120	0			
Chromium	0.5369	0.006	0.5	0	107	80	120	0			
Cobalt	0.5875	0.006	0.5	0	117	80	120	0			
Copper	0.5458	0.006	0.5	0	109	80	120	0			
Lead	0.5179	0.005	0.5	0	104	80	120	0			
Magnesium	55.61	1	50.5	0.1778	110	80	120	0			
Manganese	0.4918	0.002	0.5	0.001589	98.0	80	120	0			
Molybdenum	0.5323	0.008	0.5	0.000748	106	80	120	0			
Nickel	0.5076	0.01	0.5	0.001105	101	80	120	0			
Potassium	58.82	1	55	0.3436	106	80	120	0			
Selenium	0.5256	0.02	0.5	0	105	80	120	0			
Silicon	2.531	0.8	2.5	0	101	80	120	0			
Silver	0.5115	0.005	0.5	0	102	80	120	0			
Sodium	60.22	1	50.5	0.343	119	80	120	0			
Thallium	0.5378	0.01	0.5	0	108	80	120	0			
Titanium	0.5161	0.005	0.5	0.0007024	103	80	120	0			
Vanadium	0.5296	0.05	0.5	0	106	80	120	0			
Zinc	0.5256	0.05	0.5	0	105	80	120	0			
Yttrium	92.07	0	100	0	92.1	70	130	0			
Yttrium Radial	98.85	0	100	0	98.9	70	130	0			
Silica	ND	0.8	5.42	0	0	0	0	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:

0508271

Project:

Aeration Lagoon 2 Outlet to Evap Pond 1

QC SUMMARY REPORT

Laboratory Control Spike Duplicate

Sample ID: LCSD	Batch ID: R16494	Test Code: SW6010A	Units: mg/L	Analysis Date: 8/31/2005 12:08:55 PM	Prep Date:						
Client ID:	Run ID:	ICP_050831C		SeqNo: 394000							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.5328	0.01	0.5	0	107	80	120	0.5519	3.53	20	
Arsenic	0.5251	0.02	0.5	0	105	80	120	0.5393	2.67	20	
Barium	0.5129	0.02	0.5	0.001033	102	80	120	0.5312	3.51	20	
Beryllium	0.5117	0.003	0.5	0.0006694	102	80	120	0.5206	1.72	20	
Boron	0.5438	0.04	0.5	0	109	80	120	0.5483	0.820	20	
Cadmium	0.5184	0.002	0.5	0	104	80	120	0.5373	3.39	20	
Calcium	53.29	1	50.5	0.5903	104	80	120	55.1	3.35	20	
Chromium	0.519	0.006	0.5	0	104	80	120	0.5369	3.40	20	
Cobalt	0.563	0.006	0.5	0	113	80	120	0.5875	4.25	20	
Copper	0.5246	0.006	0.5	0	105	80	120	0.5458	3.96	20	
Lead	0.4988	0.005	0.5	0	99.8	80	120	0.5179	3.74	20	
Magnesium	54.07	1	50.5	0.1778	107	80	120	55.61	2.81	20	
Manganese	0.4741	0.002	0.5	0.001599	94.5	80	120	0.4918	3.67	20	
Molybdenum	0.513	0.008	0.5	0.000748	102	80	120	0.5323	3.69	20	
Nickel	0.4905	0.01	0.5	0.001105	97.9	80	120	0.5076	3.44	20	
Potassium	57.1	1	55	0.3436	103	80	120	58.82	2.97	20	
Selenium	0.4944	0.02	0.5	0	98.9	80	120	0.5256	6.12	20	
Silicon	2.481	0.8	2.5	0	98.4	80	120	2.531	2.79	20	
Silver	0.4925	0.005	0.5	0	98.5	80	120	0.5115	3.77	20	
Sodium	58.29	1	50.5	0.343	115	80	120	60.22	3.27	20	
Thallium	0.517	0.01	0.5	0	103	80	120	0.5378	3.96	20	
Titanium	0.5068	0.005	0.5	0.0007024	101	80	120	0.5161	1.80	20	
Vanadium	0.5105	0.05	0.5	0	102	80	120	0.5296	3.67	20	
Zinc	0.5084	0.05	0.5	0	101	80	120	0.5256	3.73	20	
Yttrium	93.3	0	100	0	93.3	70	130	92.07	1.32	20	
Yttrium Radial	98.78	0	100	0	98.8	70	130	98.85	0.0761	20	
Silica	ND	0.8	5.42	0	0	0	0	0	0	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

CLIENT: Giant Refining Co
Work Order: 0508271
Project: Aeration Lagoon 2 Outlet to Evap Pond 1

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID: LCS-8633 Batch ID: 8633 Test Code: SW6010A Units: mg/L Analysis Date: 8/31/2005 11:12:29 AM Prep Date: 8/29/2005

Client ID: Run ID: ICP_050831C SeqNo: 393981

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.4826	0.02	0.5	0	96.5	80	120	0			
Antimony	0.5101	0.01	0.5	0	102	80	120	0			
Arsenic	0.4883	0.02	0.5	0	97.7	80	120	0			
Barium	0.4744	0.02	0.5	0	94.9	80	120	0			
Beryllium	0.4934	0.003	0.5	0	98.7	80	120	0			
Boron	0.5043	0.04	0.5	0	101	80	120	0			
Cadmium	0.4772	0.002	0.5	0	95.4	80	120	0			
Calcium	51.31	1	50	0	103	80	120	0			
Chromium	0.4721	0.006	0.5	0	94.4	80	120	0			
Cobalt	0.5164	0.006	0.5	0	103	80	120	0			
Copper	0.4961	0.006	0.5	0	99.2	80	120	0			
Iron	0.4609	0.05	0.5	0	92.2	80	120	0			
Lead	0.4656	0.005	0.5	0	93.1	80	120	0			
Magnesium	51.53	1	50	0	103	80	120	0			
Manganese	0.4481	0.002	0.5	0.001988	89.2	80	120	0			
Molybdenum	0.4815	0.008	0.5	0	96.3	80	120	0			
Nickel	0.4589	0.01	0.5	0	91.8	80	120	0			
Potassium	54.17	1	50	0	108	80	120	0			
Selenium	0.4629	0.05	0.5	0	92.6	80	120	0			
Silver	0.4783	0.005	0.5	0.0006273	95.5	80	120	0			
Sodium	54.98	1	50	0	110	80	120	0			
Thallium	0.4783	0.01	0.5	0	95.7	80	120	0			
Titanium	0.4814	0.005	0.5	0	96.3	80	120	0			
Vanadium	0.4798	0.05	0.5	0	96.0	80	120	0			
Zinc	0.4735	0.05	0.5	0	94.7	80	120	0			
Silica	4.899	1.1	5.42	0	90.4	80	120	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 Duplicate

CLIENT: Giant Refining Co
 Work Order: 0508271
 Project: Aeration Lagoon 2 Outlet to Evap Pond 1

Sample ID: LCSD-8633		Batch ID: 8633		Test Code: SW6010A		Units: mg/L		Analysis Date: 8/31/2005 11:14:54 AM		Prep Date: 8/29/2005	
Client ID:		Run ID:		ICP_050831C				SeqNo: 393982			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.4893	0.02	0.5	0	97.9	80	120	0.4826	1.39	20	
Antimony	0.5261	0.01	0.5	0	105	80	120	0.5101	3.07	20	
Arsenic	0.4977	0.02	0.5	0	99.5	80	120	0.4883	1.90	20	
Barium	0.4837	0.02	0.5	0	96.7	80	120	0.4744	1.95	20	
Beryllium	0.4966	0.003	0.5	0	99.3	80	120	0.4934	0.658	20	
Boron	0.5214	0.04	0.5	0	104	80	120	0.5043	3.33	20	
Cadmium	0.4871	0.002	0.5	0	97.4	80	120	0.4772	2.05	20	
Calcium	57.98	1	50	0	116	80	120	51.31	12.2	20	
Chromium	0.4805	0.006	0.5	0	96.1	80	120	0.4721	1.75	20	
Cobalt	0.5246	0.006	0.5	0	105	80	120	0.5164	1.58	20	
Copper	0.5081	0.006	0.5	0	102	80	120	0.4961	2.38	20	
Iron	0.4671	0.05	0.5	0	93.4	80	120	0.4609	1.33	20	
Lead	0.475	0.005	0.5	0	95.0	80	120	0.4656	2.00	20	
Magnesium	58.28	1	50	0	117	80	120	51.53	12.3	20	
Manganese	0.4564	0.002	0.5	0.001988	90.9	80	120	0.4481	1.84	20	
Molybdenum	0.4906	0.008	0.5	0	98.1	80	120	0.4815	1.86	20	
Nickel	0.4666	0.01	0.5	0	93.3	80	120	0.4589	1.64	20	
Selenium	0.4496	0.05	0.5	0	89.9	80	120	0.4629	2.91	20	
Silver	0.4872	0.005	0.5	0.0006273	97.3	80	120	0.4783	1.85	20	
Thallium	0.4944	0.01	0.5	0	98.9	80	120	0.4783	3.32	20	
Titanium	0.4887	0.005	0.5	0	97.7	80	120	0.4814	1.51	20	
Vanadium	0.4876	0.05	0.5	0	97.5	80	120	0.4798	1.63	20	
Zinc	0.4767	0.05	0.5	0	95.3	80	120	0.4735	0.681	20	

Qualifiers: ND - Not Detected at the Reporting Limit
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 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:

8/24/2005

Work Order Number 0508271

Received by AT

Checklist completed by E. Schleppe Date 8-24-05

Matrix

Carrier name Client drop-off

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

Container/Temp Blank temperature?

6°

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

Other:

Client: C - 421

Project Name: Das T. Jaeger 2

THE
Grant Refining
Company - Canada

Project Name: Donation Station 2
Outlet to Shop front 1

Address: 729 E. 17th

Project #:

Gallup NM 87301

Project Manager:

Phone #: 000 777 2822

Sampler:

Fax #: 595 222 0310

Sample Temperature:

Date	Time	Matrix	Sample I.D. No.
------	------	--------	-----------------

Number/Volume

Preservative	
HgCl ₂	HNO ₃

HEAL NO.

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 *Total + Dissolved*

Anions (F, Cl, NO₂, NO₃, PO₄, SO₄)

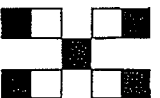
8081 Pesticides / PCB's (8082)

8260B (VOA)

8270 (Semi-VOA)

8021-RTEx

Air Bubbles or Headspace (Y or N)



**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

Date: 8/24/05 Time: 9:00 Relinquished By: (Signature) [Signature] Received By: (Signature) [Signature]					
Date: 8/23/05 Time: 11:00 Matrix: H ₂ O Sample I.D. No.: AL-2 K E F 1 Number/Volume: HgCl ₂ HNO ₃ HEAL No.: 0508271 -1					
Phone #: 505 722 3833 Fax #: 505 722 0210 Project Manager: [Signature] Sampler: [Signature] Sample Temperature: 6 °C					
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 Total + Dissolved X					
Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)					
BOB1 Pesticides / PCB's (8082)					
8260B (VOA)					
8270 (Semi-VOA) X					
8021-BTEX X					
Air Bubbles or Headspace (Y or N)					

Chavez, Carl J, EMNRD

From: Ed Riege [eriege@giant.com]
Sent: Thursday, October 20, 2005 1:15 PM
To: Price, Wayne, EMNRD; Monzeglio, Hope, NMENV
Cc: Foust, Denny, EMNRD; Cobrain, Dave, NMENV; Chavez, Carl J, EMNRD; Ed Rios; James Romero
Subject: RE: API Separator

The API mechanical repairs have been made, except for the installation of the chopper pump and the API is in good working order. The chopper pump has arrived and final installation specifications are being worked out. The pump should be installed the week of November 7. The oil from the sump is no longer being removed by vacuum truck to the 55,000 BBL tanks. The API west bay primary containment has been repaired sealing all cracks. This bay is currently empty while the contractor is waiting for a warm day to apply sealant for the lids. Once this bay is put back into service the east bay will be taken out of service for cleaning, inspection and repair. The secondary containment for the API is being continuously pumped out until all the repairs can be made on the API primary structures.

Thanks
Ed Riege

-----Original Message-----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nm.us]
Sent: Thursday, October 20, 2005 10:01 AM
To: Monzeglio, Hope, NMENV; eriege@giant.com
Cc: Foust, Denny, EMNRD; Cobrain, Dave, NMENV; Chavez, Carl J, EMNRD
Subject: RE: API Separator

OCD has the same questions:

PS: Carl Chavez of the OCD will be taking the lead on all of the OCD permitted refineries. If everyone could CC him including me will work for us.

Thanks:

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: Thu 10/20/2005 9:51 AM
To: eriege@giant.com
Cc: Foust, Denny, EMNRD; Price, Wayne, EMNRD; Cobrain, Dave, NMENV
Subject: API Separator

Ed

What is the status of the API Separator, have all the necessary repairs been made, if not is Giant still removing oil from the sump to the 55,000 bbl tanks? Has the secondary containment to the API Separator been fixed?

Thanks

Hope

Hope Monzeglio
Environmental Specialist

10/20/2005

New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
Santa Fe NM 87505
Phone: (505) 428-2545
Fax: (505)-428-2567
hope.monzeglio@state.nm.us

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Chavez, Carl J, EMNRD

From: James Romero [jromero@giant.com]
Sent: Thursday, October 20, 2005 2:16 PM
To: Monzeglio, Hope, NMENV; Chavez, Carl J, EMNRD; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Cobrain, Dave, NMENV
Cc: Ed Riege; Steve Morris; Johnny Sanchez; Ed Rios
Subject: The Following is an update for Week 6



Picture 069.jpg (1 MB)



Picture 075.jpg (602 KB)



Picture 076.jpg (839 KB)

The Following is a summary of week six:

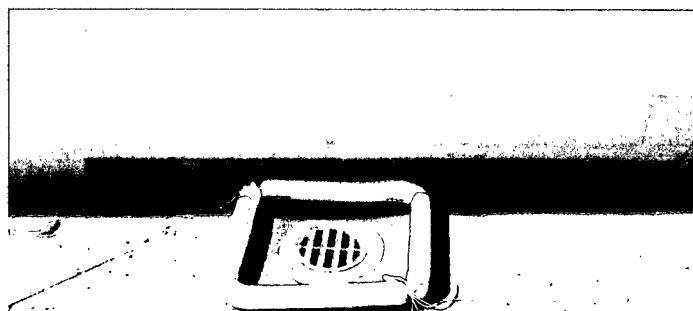
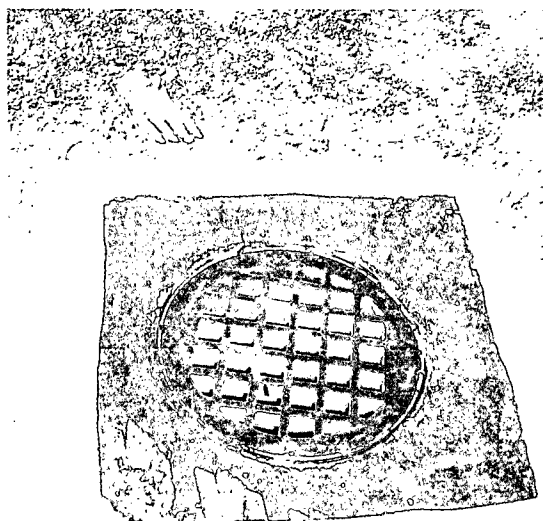
- 1) Annual Groundwater sampling for 2005 has been completed
- 2) Absorbent socks have been put in placed along storm drains (see attached pics of stormwater drains near the FCC)
- 3) Daily inspections of stormwater separator continue with no oil being observed
- 4) AP2 to EP1 lab results have been submitted to OCD/NMED (8/10 to 9/21)
- 5) Weekly samples taken - AP2 to EP1, and Stormwater Separator effluent,
- 6) The primary on the API Separator (west bay) has been repaired *
- 7) Work on the East bay will follow*
- 8) Continuous pumping of the Secondary (API Separator) is underway*
- 9) Serviced both benzene strippers and replaced packing
- 10) Removed 27,480lbs of cooling tower salts with disposal at the Red rock Landfill
- 11) Prepared Notice of Change (Internal SOP) specific to stormwater practices. Giant to forward copy of NOC to OCD/NMED after final signature

* See email from Ed Riege to Hope Monzeglio and Wayne Price dated October 20, 2005

<<Picture 069.jpg>> <<Picture 075.jpg>> <<Picture 076.jpg>>

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**Photos of Refinery Process Drains discharging to Old API Separator
Near Fluid Catalytic Cracker Unit & Refinery Area**



**Photos of Refinery Process Drains discharging to Old API Separator
Near Fluid Catalytic Cracker Unit & Refinery Area**





Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, October 19, 2005 4:54 PM
To: 'James Romero'
Cc: Price, Wayne, EMNRD
Subject: RE: Notes to Conference call

Dear James:

OCD recognizes that there are stormwater issues at Ciniza that Giant may want to consider; however, please note after discussing this morning's meeting with OCD staff, Giant will need to resolve extraneous details with the appropriate agencies. OCD regards this morning's conference call as a brainstorm meeting to address some of Giant's concerns and was conducted without any formal conclusions or rulings during or after the meeting. We did agree to conduct a stormwater inspection with SWQB and also, with the help of the HWB, assess Giant's corrective actions based on our September 8, 2005 inspection.

I am currently reviewing the weekly monitoring from AL2 to EP2 and am keying on the hazardous characteristics. If samples results indicate hazardous compounds are present in the evaporation pond(s), then this constitutes a violation of OCD Permit #19. HWB's assessment under RCRA may be similar, but there may be other D, F or K listed wastes involved? You will need to resolve this with HWB.

I recommend that you not send your notes for interpretation or correction to meeting attendants. I hope this helps. Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau 1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/> (Pollution Prevention Guidance is under "Publications")

-----Original Message-----

From: James Romero [mailto:jromero@giant.com]
Sent: Wednesday, October 19, 2005 2:53 PM
To: Chavez, Carl J, EMNRD
Subject: Notes to Conference call

Carl:

Attached are rough notes from this mornings meeting. I'm sure you will want to add to this. Can you pls review and send it back to me so I can finalize and sent to everyone involved. Also, again your help has been greatly appreciate in this. Also, I was told by our Operations Manager a "Notice of Change" is being completed which would serve as our internal SOP for Stormwater.

-----Original Message-----

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Wednesday, October 19, 2005 10:49 AM
To: James Romero
Subject: RE: Conference call (2nd email)

James:

Thanks. Sorry about our Internet Service Provider problems. We appreciate your follow-up efforts. Good day...

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau 1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3491
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E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/> (Pollution Prevention Guidance is under "Publications")

-----Original Message-----

From: James Romero [mailto:jromero@giant.com]
Sent: Wednesday, October 19, 2005 7:22 AM
To: Ed Riege; Chavez, Carl J, EMNRD
Subject: Conference call (2nd email)

Carl

The first email was kicked back again, hopefully this one goes through.
Can you call us on Ed's phone for the conference call 505-722-0217

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DRAFT NOTES

Notes from October 19, 2005 Conference call between OCD, NMED, and Giant

Participants: Carl Chavez, OCD; Richard Powell, NMED; Ed Riege, Giant; James Romero, Giant

Purpose: To discuss Stormwater General Permit (MSGP) vs. Individual NPDES and the applicability at Giant Ciniza

OCD: Opened the meeting with a brief summary of conversation between OCD and Giant regarding the requirements of the General Stormwater Permit. Giant was not sure the MSGP was the appropriate tool

Giant: Thanked OCD (Carl) for setting up the meeting and stated the call was to brainstorm and discuss MSGP vs. Individual Permit. Giant stated no decision had been made and the call to (1) brainstorm; (2) express Giant's concern on meeting the requirements of the MSGP (3) update OCD/NMED on our stormwater system vs. process water.

NMED: Gave a description of the multi sector permit (MSG) stating there is limited coverage under the MSG. Areas that would be covered would be parking lots, truck rack, the fueling facility, and scarp yard. The MSG does not cover contaminated stormwater and all areas (excluding above) would be considered contaminated stormwater.

NMED: Any discharge of contaminated stormwater must meet groundwater quality standards. Discharges of contaminated stormwater into our old API, and lagoons were not considered a discharge per EPA 40CFR419. Any requirement to meet water quality standards is an OCD requirement and not a Stormwater requirement. NMED under stormwater requires the use of Best Management Practices.

Giant: Should remove these areas, including the old API stormwater separator from their stormwater plan

NMED/OCD: Agreed and stated he has asked previous personnel at Giant to remove these areas from their stormwater plan. The Stormwater plan should only include those areas covered under the MSGP; everything else is met in SWPPP

OCD/NMED/Giant: A discussion was held on what water quality standards apply and when (Surface Water Quality Standards and/or Groundwater Quality Standards). Giant expressed their concern with applying water quality standards to the Stormwater Separator (old API) and lagoons. Giant noted they were required to sample and compare against surface water quality standards for both the stormwater separator (old api) and lagoon. Giant asked for help in clarifying what criteria (i.e., NMWQS) met compliance or non-compliance.

OCD: OCD requires Giant to meet groundwater quality standards and not discharge any hazardous material into the stormwater or lagoons. Sampling requirements compared to Surface standards are being used as an indicator not necessary as a violation.

Giant stated they have no problem using indicators but we need to clarify they are indicators and not an issue of non compliance

NMED: Stated Giant doesn't need an individual permit or have to meet SWQS if we don't discharge to a surface water

OCD/NMED: Both agreed that any discharge into the lagoons needed to (1) be non hazardous; (2) meet groundwater quality standards. Surface water quality standards do not apply. However, where giant discharges to any surface water (outfall #1/outfall#2) surface water quality standards do apply.

OCD: Clarified this did not mean Giant could wash equipment and vehicles and allow the water the stormwater drains. OCD also noted that Giant still needs to prepare and submit SOP's.

OCD/NMED: NMED offered to conduct a site visit in early spring. OCD asked NMED to visit earlier along with the Hazardous Waste Bureau. It was agreed OCD and NMED would visit Ciniza sometime in November. OCD offered to set up the site visit

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, October 19, 2005 11:46 AM
To: Monzeglio, Hope, NMENV
Cc: Price, Wayne, EMNRD
Subject: Ciniza Follow-Up & NPDES Inspection- November 05

Hope:

Good morning. OCD recently participated in a conference call with Richard Powell (SWQB) and Ciniza at the request of James Romero to determine whether they are in compliance with their current stormwater permit and to brainstorm on any NPDES options that would allow Ciniza to be in compliance with all applicable regulations. James is a little confused about all of the applicable regulations, who regulates what, why they're analyzing and what they should be comparing their analytical results to for compliance with regulations, subsequent to our September 8, 2005 inspection.

OCD is planning to go to the Ciniza Refinery sometime in November of 2005. Richard Powell of SWQB will be conducting an NPDES stormwater inspection and would like to meet w/ HWB, OCD, and Ciniza to conduct the stormwater inspection and confirm the areas affected by the stormwater permit versus areas under the jurisdiction of HWB and OCD. The inspection will also allow HWB and OCD to assess Ciniza's corrective actions, since our September 8, 2005 inspection.

During the conference call, it was determined that Ciniza is operating correctly under the best NPDES option, the general stormwater permit. However, the areas covered under the permit needed some clarification and SWQB proposed to conduct an inspection with HWB and OCD. What Ciniza refers to as stormwater drains are actually process drains that feed into their refinery treatment process and are not subject to water quality standards unless surface water and/or groundwater are impacted. OCD emphasized the need for best management plans/ SOPs to prevent Ciniza from discharging contaminants into the process drains. Therefore, James concern that Ciniza was discharging above water quality standards in violation of their stormwater permit was incorrect. It appears that surface water quality standards and groundwater standards would only apply to any discharges at the outfall areas, while HWB and OCD are concerned about the confirmation of hazardous constituents discharging into the evaporation ponds in their refinery process. I think James may be asking HWB about its basis or jurisdiction for what HWB is proposing from Ciniza subsequent to our September 8, 2005 inspection?

The visit to Ciniza is tentatively schedules for November 2005. Richard Powell preferred Wednesday - Friday. I will be away from the office on 11/14-16, Wayne will be away during the first week of November or sometime in November (he's checking). What is the best day in November for you? Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM
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(Pollution Prevention Guidance is under "Publications")

Chavez, Carl J, EMNRD

From: James Romero [jromero@giant.com]
Sent: Tuesday, October 18, 2005 3:20 PM
To: Chavez, Carl J, EMNRD
Subject: Draft Agenda for NPDES/Stormwater Conference Call



Stormwater General
Permitting ...

Carl

Attached is a draft agenda for tomorrow call, can you review and add what you feel necessary. Thanks <<Stormwater General Permitting vs.doc>>

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Chavez, Carl J, EMNRD

From: James Romero [jromero@giant.com]
Sent: Tuesday, October 18, 2005 11:31 AM
To: Monzeglio, Hope, NMENV; James Romero
Cc: Price, Wayne, EMNRD; Chavez, Carl J, EMNRD
Subject: RE: API Spill Reports

Not a problem, starting this week we'll send our weekly updates separate from old ones. Also, Giant determined/estimated the quantity/volume by comparing the volume of the vacuum truck and what was remaining the ground.

-----Original Message-----

From: Monzeglio, Hope, NMENV [mailto:hope.monzeglio@state.nm.us]
Sent: Tuesday, October 18, 2005 10:12 AM
To: jromero@giant.com
Cc: Price, Wayne, EMNRD; Chavez, Carl J, EMNRD
Subject: API Spill Reports

James

I have a request, when you send API weekly updates can you please start them as a new email and not add on to the old ones. When I print the first few pages of the emails for our administrative record, the emails are forming a long column and are getting cut off when I print. It is also confusing for me when you send attachments to determine which email the attachment belongs to and if I actually received the attachment.

On a side note, how did Giant determine the quantity and/or volume of the spill at tank 232?

Thanks

Hope

Hope Monzeglio
Environmental Specialist
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
Santa Fe NM 87505
Phone: (505) 428-2545
Fax: (505)-428-2567
hope.monzeglio@state.nm.us

Chavez, Carl J, EMNRD

From: James Romero [jromero@giant.com]
Sent: Tuesday, October 18, 2005 7:53 AM
To: Monzeglio, Hope, NMENV; Ed Riege; James Romero; Steve Morris
Cc: Cobrain, Dave, NMENV; Price, Wayne, EMNRD; Chavez, Carl J, EMNRD
Subject: RE: RR Lagoon confirmatory sampling results.

Hope

Attached are electronic versions of sampling results for the Railroad Rack Lagoon.

-----Original Message-----

From: Monzeglio, Hope, NMENV [mailto:hope.monzeglio@state.nm.us]
Sent: Friday, October 14, 2005 8:04 AM
To: eriege@giant.com; jromero@giant.com; smorris@giant.com
Cc: Cobrain, Dave, NMENV; Price, Wayne, EMNRD; Chavez, Carl J, EMNRD
Subject: RR Lagoon confirmatory sampling results.

James

I know you are out of the office today, sometime next week can you send NMED and OCD the confirmatory analytical results for railroad rack lagoon. NMED and OCD would like to review these prior to providing Giant with the closure report guidelines.

Thanks

Hope

Hope Monzeglio
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hope.monzeglio@state.nm.us

10/19/2005



COVER LETTER

September 07, 2005

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

RE: RR Rock Lagoon Add. Exc. 8-30-05

Order No.: 0508346

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 10 samples on 8/31/2005 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: 07-Sep-05

CLIENT: Giant Refining Co
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab Order: 0508346

CASE NARRATIVE

"S" flags denote that the surrogate was not recoverable due to sample dilution or matrix interferences.

Hall Environmental Analysis Laboratory

Date: 07-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab ID: 0508346-01

Client Sample ID: RR-1-83005
Collection Date: 8/30/2005 7:15:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	640	10		mg/Kg	1	9/2/2005 2:55:36 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/2/2005 2:55:36 AM
Surr: DNOP	93.8	60-124		%REC	1	9/2/2005 2:55:36 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: BDH
Benzene	ND	0.050		mg/Kg	1	9/4/2005
Toluene	ND	0.050		mg/Kg	1	9/4/2005
Ethylbenzene	ND	0.050		mg/Kg	1	9/4/2005
Xylenes, Total	ND	0.050		mg/Kg	1	9/4/2005
Surr: 4-Bromofluorobenzene	102	72.9-143		%REC	1	9/4/2005
Surr: Dibromofluoromethane	103	85.2-118		%REC	1	9/4/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	0.56	0.20		mg/Kg	1	9/4/2005
Acenaphthylene	ND	0.20		mg/Kg	1	9/4/2005
Aniline	ND	0.20		mg/Kg	1	9/4/2005
Anthracene	ND	0.20		mg/Kg	1	9/4/2005
Azobenzene	ND	0.20		mg/Kg	1	9/4/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Benzidine	ND	0.20		mg/Kg	1	9/4/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	9/4/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	9/4/2005
Benzoic acid	ND	0.50		mg/Kg	1	9/4/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	9/4/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	9/4/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	9/4/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Carbazole	ND	0.20		mg/Kg	1	9/4/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	9/4/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	9/4/2005
Chrysene	ND	0.20		mg/Kg	1	9/4/2005
Di-n-butyl phthalate	ND	0.25		mg/Kg	1	9/4/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	9/4/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-1-83005

Lab Order: 0508346

Collection Date: 8/30/2005 7:15:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-01

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Dibenzofuran	ND	0.50		mg/Kg	1	9/4/2005
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	9/4/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	9/4/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
Fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Fluorene	0.91	0.20		mg/Kg	1	9/4/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	9/4/2005
Hexachloroethane	ND	0.50		mg/Kg	1	9/4/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Isophorone	ND	0.20		mg/Kg	1	9/4/2005
2-Methylnaphthalene	7.9	1.0		mg/Kg	5	9/6/2005
2-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	9/4/2005
Naphthalene	1.0	0.20		mg/Kg	1	9/4/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	9/4/2005
Nitrobenzene	ND	0.20		mg/Kg	1	9/4/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	9/4/2005
Phenanthrene	3.8	0.20		mg/Kg	1	9/4/2005
Phenol	ND	0.20		mg/Kg	1	9/4/2005
Pyrene	ND	0.20		mg/Kg	1	9/4/2005
Pyridine	ND	0.50		mg/Kg	1	9/4/2005
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
Surr: 2,4,6-Tribromophenol	98.3	35.5-141		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-1-83005

Lab Order: 0508346

Collection Date: 8/30/2005 7:15:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-01

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorobiphenyl	107	30.4-128		%REC	1	9/4/2005
Surr: 2-Fluorophenol	76.7	28.1-129		%REC	1	9/4/2005
Surr: 4-Terphenyl-d14	78.3	34.6-151		%REC	1	9/4/2005
Surr: Nitrobenzene-d5	78.3	26.5-122		%REC	1	9/4/2005
Surr: Phenol-d6	84.5	37.6-118		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab ID: 0508346-02

Client Sample ID: RR-2-83005
Collection Date: 8/30/2005 7:30:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	1900	100		mg/Kg	10	9/3/2005 12:54:13 AM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	9/3/2005 12:54:13 AM
Surr: DNOP	105	60-124		%REC	10	9/3/2005 12:54:13 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: BDH
Benzene	ND	0.050		mg/Kg	1	9/4/2005
Toluene	ND	0.050		mg/Kg	1	9/4/2005
Ethylbenzene	ND	0.050		mg/Kg	1	9/4/2005
Xylenes, Total	0.41	0.050		mg/Kg	1	9/4/2005
Surr: 4-Bromofluorobenzene	126	72.9-143		%REC	1	9/4/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	0.20		mg/Kg	1	9/4/2005
Acenaphthylene	ND	0.20		mg/Kg	1	9/4/2005
Aniline	ND	0.20		mg/Kg	1	9/4/2005
Anthracene	ND	0.20		mg/Kg	1	9/4/2005
Azobenzene	ND	0.20		mg/Kg	1	9/4/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Benzidine	ND	0.20		mg/Kg	1	9/4/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	9/4/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	9/4/2005
Benzoic acid	ND	0.50		mg/Kg	1	9/4/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	9/4/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	9/4/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	9/4/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Carbazole	ND	0.20		mg/Kg	1	9/4/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	9/4/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	9/4/2005
Chrysene	ND	0.20		mg/Kg	1	9/4/2005
Di-n-butyl phthalate	0.26	0.25	B	mg/Kg	1	9/4/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	9/4/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Dibenzofuran	ND	0.50		mg/Kg	1	9/4/2005

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

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

Hall Environmental Analysis Laboratory

Date: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-2-83005

Lab Order: 0508346

Collection Date: 8/30/2005 7:30:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-02

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	9/4/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dimethylphenol	0.22	0.20		mg/Kg	1	9/4/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
Fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Fluorene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	9/4/2005
Hexachloroethane	ND	0.50		mg/Kg	1	9/4/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Isophorone	ND	0.20		mg/Kg	1	9/4/2005
2-Methylnaphthalene	2.2	0.20		mg/Kg	1	9/4/2005
2-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	9/4/2005
Naphthalene	2.2	0.20		mg/Kg	1	9/4/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	9/4/2005
Nitrobenzene	ND	0.20		mg/Kg	1	9/4/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	9/4/2005
Phenanthrene	1.3	0.20		mg/Kg	1	9/4/2005
Phenol	ND	0.20		mg/Kg	1	9/4/2005
Pyrene	ND	0.20		mg/Kg	1	9/4/2005
Pyridine	ND	0.50		mg/Kg	1	9/4/2005
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
Surr: 2,4,6-Tribromophenol	91.1	35.5-141		%REC	1	9/4/2005
Surr: 2-Fluorobiphenyl	94.2	30.4-128		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-2-83005

Lab Order: 0508346

Collection Date: 8/30/2005 7:30:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-02

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	78.2	28.1-129		%REC	1	9/4/2005
Surr: 4-Terphenyl-d14	85.0	34.6-151		%REC	1	9/4/2005
Surr: Nitrobenzene-d5	82.8	26.5-122		%REC	1	9/4/2005
Surr: Phenol-d6	89.6	37.6-118		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab ID: 0508346-03

Client Sample ID: RR-3-83005
Collection Date: 8/30/2005 7:40:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	2900	100		mg/Kg	10	9/3/2005 1:27:00 AM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	9/3/2005 1:27:00 AM
Surr: DNOP	122	60-124		%REC	10	9/3/2005 1:27:00 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: BDH
Benzene	ND	0.050		mg/Kg	1	9/4/2005
Toluene	ND	0.050		mg/Kg	1	9/4/2005
Ethylbenzene	ND	0.050		mg/Kg	1	9/4/2005
Xylenes, Total	2.8	0.050		mg/Kg	1	9/4/2005
Surr: 4-Bromofluorobenzene	97.2	72.9-143		%REC	1	9/4/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	2.0		mg/Kg	10	9/4/2005
Acenaphthylene	ND	2.0		mg/Kg	10	9/4/2005
Aniline	ND	2.0		mg/Kg	10	9/4/2005
Anthracene	ND	2.0		mg/Kg	10	9/4/2005
Azobenzene	ND	2.0		mg/Kg	10	9/4/2005
Benz(a)anthracene	ND	2.5		mg/Kg	10	9/4/2005
Benzidine	ND	2.0		mg/Kg	10	9/4/2005
Benzo(a)pyrene	ND	2.0		mg/Kg	10	9/4/2005
Benzo(b)fluoranthene	ND	2.0		mg/Kg	10	9/4/2005
Benzo(g,h,i)perylene	ND	3.0		mg/Kg	10	9/4/2005
Benzo(k)fluoranthene	ND	5.0		mg/Kg	10	9/4/2005
Benzoic acid	ND	5.0		mg/Kg	10	9/4/2005
Benzyl alcohol	ND	5.0		mg/Kg	10	9/4/2005
Bis(2-chloroethoxy)methane	ND	5.0		mg/Kg	10	9/4/2005
Bis(2-chloroethyl)ether	ND	2.5		mg/Kg	10	9/4/2005
Bis(2-chloroisopropyl)ether	ND	5.0		mg/Kg	10	9/4/2005
Bis(2-ethylhexyl)phthalate	ND	2.0		mg/Kg	10	9/4/2005
4-Bromophenyl phenyl ether	ND	2.5		mg/Kg	10	9/4/2005
Butyl benzyl phthalate	ND	2.0		mg/Kg	10	9/4/2005
Carbazole	ND	2.0		mg/Kg	10	9/4/2005
4-Chloro-3-methylphenol	ND	2.0		mg/Kg	10	9/4/2005
4-Chloroaniline	ND	2.0		mg/Kg	10	9/4/2005
2-Chloronaphthalene	ND	2.0		mg/Kg	10	9/4/2005
2-Chlorophenol	ND	2.0		mg/Kg	10	9/4/2005
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	10	9/4/2005
Chrysene	ND	2.0		mg/Kg	10	9/4/2005
Di-n-butyl phthalate	ND	2.5		mg/Kg	10	9/4/2005
Di-n-octyl phthalate	ND	5.0		mg/Kg	10	9/4/2005
Dibenz(a,h)anthracene	ND	2.5		mg/Kg	10	9/4/2005
Dibenzofuran	ND	5.0		mg/Kg	10	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-3-83005

Lab Order: 0508346

Collection Date: 8/30/2005 7:40:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-03

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dichlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
1,3-Dichlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
1,4-Dichlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
3,3'-Dichlorobenzidine	ND	2.0		mg/Kg	10	9/4/2005
Diethyl phthalate	ND	2.0		mg/Kg	10	9/4/2005
Dimethyl phthalate	ND	2.0		mg/Kg	10	9/4/2005
2,4-Dichlorophenol	ND	2.0		mg/Kg	10	9/4/2005
2,4-Dimethylphenol	ND	2.0		mg/Kg	10	9/4/2005
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	10	9/4/2005
2,4-Dinitrophenol	ND	5.0		mg/Kg	10	9/4/2005
2,4-Dinitrotoluene	ND	2.0		mg/Kg	10	9/4/2005
2,6-Dinitrotoluene	ND	2.0		mg/Kg	10	9/4/2005
Fluoranthene	ND	2.0		mg/Kg	10	9/4/2005
Fluorene	ND	2.0		mg/Kg	10	9/4/2005
Hexachlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
Hexachlorobuladiene	ND	2.0		mg/Kg	10	9/4/2005
Hexachlorocyclopentadiene	ND	2.5		mg/Kg	10	9/4/2005
Hexachloroethane	ND	5.0		mg/Kg	10	9/4/2005
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	10	9/4/2005
Isophorone	ND	2.0		mg/Kg	10	9/4/2005
2-Methylnaphthalene	11	2.0		mg/Kg	10	9/4/2005
2-Methylphenol	ND	2.0		mg/Kg	10	9/4/2005
3+4-Methylphenol	ND	2.0		mg/Kg	10	9/4/2005
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	10	9/4/2005
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	10	9/4/2005
Naphthalene	2.6	2.0		mg/Kg	10	9/4/2005
2-Nitroaniline	ND	5.0		mg/Kg	10	9/4/2005
3-Nitroaniline	ND	5.0		mg/Kg	10	9/4/2005
4-Nitroaniline	ND	2.5		mg/Kg	10	9/4/2005
Nitrobenzene	ND	2.0		mg/Kg	10	9/4/2005
2-Nitrophenol	ND	2.0		mg/Kg	10	9/4/2005
4-Nitrophenol	ND	2.0		mg/Kg	10	9/4/2005
Pentachlorophenol	ND	5.0		mg/Kg	10	9/4/2005
Phenanthrene	4.5	2.0		mg/Kg	10	9/4/2005
Phenol	ND	2.0		mg/Kg	10	9/4/2005
Pyrene	ND	2.0		mg/Kg	10	9/4/2005
Pyridine	ND	5.0		mg/Kg	10	9/4/2005
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	10	9/4/2005
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	10	9/4/2005
Surr: 2,4,6-Tribromophenol	113	35.5-141		%REC	10	9/4/2005
Surr: 2-Fluorobiphenyl	83.6	30.4-128		%REC	10	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-3-83005

Lab Order: 0508346

Collection Date: 8/30/2005 7:40:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-03

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	70.0	28.1-129		%REC	10	9/4/2005
Surr: 4-Terphenyl-d14	80.6	34.6-151		%REC	10	9/4/2005
Surr: Nitrobenzene-d5	78.4	26.5-122		%REC	10	9/4/2005
Surr: Phenol-d6	66.8	37.6-118		%REC	10	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab ID: 0508346-04

Client Sample ID: RR-4-83005
Collection Date: 8/30/2005 7:50:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	4000	200		mg/Kg	20	9/3/2005 1:59:51 AM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	9/3/2005 1:59:51 AM
Surr: DNOP	0	60-124	S	%REC	20	9/3/2005 1:59:51 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: BDH
Benzene	ND	0.050		mg/Kg	1	9/4/2005
Toluene	ND	0.050		mg/Kg	1	9/4/2005
Ethylbenzene	0.38	0.050		mg/Kg	1	9/4/2005
Xylenes, Total	4.1	0.050		mg/Kg	1	9/4/2005
Surr: 4-Bromofluorobenzene	121	72.9-143		%REC	1	9/4/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	2.0		mg/Kg	10	9/4/2005
Acenaphthylene	ND	2.0		mg/Kg	10	9/4/2005
Aniline	ND	2.0		mg/Kg	10	9/4/2005
Anthracene	ND	2.0		mg/Kg	10	9/4/2005
Azobenzene	ND	2.0		mg/Kg	10	9/4/2005
Benz(a)anthracene	ND	2.5		mg/Kg	10	9/4/2005
Benzidine	ND	2.0		mg/Kg	10	9/4/2005
Benzo(a)pyrene	ND	2.0		mg/Kg	10	9/4/2005
Benzo(b)fluoranthene	ND	2.0		mg/Kg	10	9/4/2005
Benzo(g,h,i)perylene	ND	3.0		mg/Kg	10	9/4/2005
Benzo(k)fluoranthene	ND	5.0		mg/Kg	10	9/4/2005
Benzoic acid	ND	5.0		mg/Kg	10	9/4/2005
Benzyl alcohol	ND	5.0		mg/Kg	10	9/4/2005
Bis(2-chloroethoxy)methane	ND	5.0		mg/Kg	10	9/4/2005
Bis(2-chloroethyl)ether	ND	2.5		mg/Kg	10	9/4/2005
Bis(2-chloroisopropyl)ether	ND	5.0		mg/Kg	10	9/4/2005
Bis(2-ethylhexyl)phthalate	ND	2.0		mg/Kg	10	9/4/2005
4-Bromophenyl phenyl ether	ND	2.5		mg/Kg	10	9/4/2005
Butyl benzyl phthalate	ND	2.0		mg/Kg	10	9/4/2005
Carbazole	ND	2.0		mg/Kg	10	9/4/2005
4-Chloro-3-methylphenol	ND	2.0		mg/Kg	10	9/4/2005
4-Chloroaniline	ND	2.0		mg/Kg	10	9/4/2005
2-Chloronaphthalene	ND	2.0		mg/Kg	10	9/4/2005
2-Chlorophenol	ND	2.0		mg/Kg	10	9/4/2005
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	10	9/4/2005
Chrysene	ND	2.0		mg/Kg	10	9/4/2005
Di-n-butyl phthalate	ND	2.5		mg/Kg	10	9/4/2005
Di-n-octyl phthalate	ND	5.0		mg/Kg	10	9/4/2005
Dibenz(a,h)anthracene	ND	2.5		mg/Kg	10	9/4/2005
Dibenzofuran	ND	5.0		mg/Kg	10	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-4-83005

Lab Order: 0508346

Collection Date: 8/30/2005 7:50:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-04

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dichlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
1,3-Dichlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
1,4-Dichlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
3,3'-Dichlorobenzidine	ND	2.0		mg/Kg	10	9/4/2005
Diethyl phthalate	ND	2.0		mg/Kg	10	9/4/2005
Dimethyl phthalate	ND	2.0		mg/Kg	10	9/4/2005
2,4-Dichlorophenol	ND	2.0		mg/Kg	10	9/4/2005
2,4-Dimethylphenol	ND	2.0		mg/Kg	10	9/4/2005
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	10	9/4/2005
2,4-Dinitrophenol	ND	5.0		mg/Kg	10	9/4/2005
2,4-Dinitrotoluene	ND	2.0		mg/Kg	10	9/4/2005
2,6-Dinitrotoluene	ND	2.0		mg/Kg	10	9/4/2005
Fluoranthene	ND	2.0		mg/Kg	10	9/4/2005
Fluorene	3.2	2.0		mg/Kg	10	9/4/2005
Hexachlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
Hexachlorobutadiene	ND	2.0		mg/Kg	10	9/4/2005
Hexachlorocyclopentadiene	ND	2.5		mg/Kg	10	9/4/2005
Hexachloroethane	ND	5.0		mg/Kg	10	9/4/2005
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	10	9/4/2005
Isophorone	ND	2.0		mg/Kg	10	9/4/2005
2-Methylnaphthalene	20	2.0		mg/Kg	10	9/4/2005
2-Methylphenol	ND	2.0		mg/Kg	10	9/4/2005
3+4-Methylphenol	ND	2.0		mg/Kg	10	9/4/2005
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	10	9/4/2005
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	10	9/4/2005
Naphthalene	4.2	2.0		mg/Kg	10	9/4/2005
2-Nitroaniline	ND	5.0		mg/Kg	10	9/4/2005
3-Nitroaniline	ND	5.0		mg/Kg	10	9/4/2005
4-Nitroaniline	ND	2.5		mg/Kg	10	9/4/2005
Nitrobenzene	ND	2.0		mg/Kg	10	9/4/2005
2-Nitrophenol	ND	2.0		mg/Kg	10	9/4/2005
4-Nitrophenol	ND	2.0		mg/Kg	10	9/4/2005
Pentachlorophenol	ND	5.0		mg/Kg	10	9/4/2005
Phenanthrene	7.1	2.0		mg/Kg	10	9/4/2005
Phenol	ND	2.0		mg/Kg	10	9/4/2005
Pyrene	ND	2.0		mg/Kg	10	9/4/2005
Pyridine	ND	5.0		mg/Kg	10	9/4/2005
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	10	9/4/2005
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	10	9/4/2005
Surr: 2,4,6-Tribromophenol	108	35.5-141		%REC	10	9/4/2005
Surr: 2-Fluorobiphenyl	97.4	30.4-128		%REC	10	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-4-83005

Lab Order: 0508346

Collection Date: 8/30/2005 7:50:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-04

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	65.1	28.1-129		%REC	10	9/4/2005
Surr: 4-Terphenyl-d14	90.4	34.6-151		%REC	10	9/4/2005
Surr: Nitrobenzene-d5	116	26.5-122		%REC	10	9/4/2005
Surr: Phenol-d6	70.8	37.6-118		%REC	10	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab ID: 0508346-05

Client Sample ID: RR-5-83005
Collection Date: 8/30/2005 8:00:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	1000	20		mg/Kg	2	9/3/2005 2:32:52 AM
Motor Oil Range Organics (MRO)	ND	100		mg/Kg	2	9/3/2005 2:32:52 AM
Surr: DNOP	98.4	60-124		%REC	2	9/3/2005 2:32:52 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: BDH
Benzene	ND	0.050		mg/Kg	1	9/4/2005
Toluene	ND	0.050		mg/Kg	1	9/4/2005
Ethylbenzene	ND	0.050		mg/Kg	1	9/4/2005
Xylenes, Total	0.33	0.050		mg/Kg	1	9/4/2005
Surr: 4-Bromofluorobenzene	97.2	72.9-143		%REC	1	9/4/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	0.29	0.20		mg/Kg	1	9/4/2005
Acenaphthylene	ND	0.20		mg/Kg	1	9/4/2005
Aniline	ND	0.20		mg/Kg	1	9/4/2005
Anthracene	ND	0.20		mg/Kg	1	9/4/2005
Azobenzene	ND	0.20		mg/Kg	1	9/4/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Benzidine	ND	0.20		mg/Kg	1	9/4/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	9/4/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	9/4/2005
Benzoic acid	ND	0.50		mg/Kg	1	9/4/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	9/4/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	9/4/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	9/4/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Carbazole	ND	0.20		mg/Kg	1	9/4/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	9/4/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	9/4/2005
Chrysene	ND	0.20		mg/Kg	1	9/4/2005
Di-n-butyl phthalate	ND	0.25		mg/Kg	1	9/4/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	9/4/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Dibenzofuran	ND	0.50		mg/Kg	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-5-83005

Lab Order: 0508346

Collection Date: 8/30/2005 8:00:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-05

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	9/4/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	9/4/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
Fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Fluorene	0.49	0.20		mg/Kg	1	9/4/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	9/4/2005
Hexachloroethane	ND	0.50		mg/Kg	1	9/4/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Isophorone	ND	0.20		mg/Kg	1	9/4/2005
2-Methylnaphthalene	2.7	0.20		mg/Kg	1	9/4/2005
2-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	9/4/2005
Naphthalene	0.59	0.20		mg/Kg	1	9/4/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	9/4/2005
Nitrobenzene	ND	0.20		mg/Kg	1	9/4/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	9/4/2005
Phenanthrene	1.4	0.20		mg/Kg	1	9/4/2005
Phenol	ND	0.20		mg/Kg	1	9/4/2005
Pyrene	ND	0.20		mg/Kg	1	9/4/2005
Pyridine	ND	0.50		mg/Kg	1	9/4/2005
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
Surr: 2,4,6-Tribromophenol	92.3	35.5-141		%REC	1	9/4/2005
Surr: 2-Fluorobiphenyl	91.4	30.4-128		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-5-83005

Lab Order: 0508346

Collection Date: 8/30/2005 8:00:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-05

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	78.5	28.1-129		%REC	1	9/4/2005
Surr: 4-Terphenyl-d14	80.8	34.6-151		%REC	1	9/4/2005
Surr: Nitrobenzene-d5	80.9	26.5-122		%REC	1	9/4/2005
Surr: Phenol-d6	84.3	37.6-118		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-6-83005

Lab Order: 0508346

Collection Date: 8/30/2005 8:10:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-06

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	5300	200		mg/Kg	20	9/2/2005 11:48:37 PM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	9/2/2005 11:48:37 PM
Surr: DNOP	0	60-124	S	%REC	20	9/2/2005 11:48:37 PM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: BDH
Benzene	ND	0.050		mg/Kg	1	9/4/2005
Toluene	ND	0.050		mg/Kg	1	9/4/2005
Ethylbenzene	ND	0.050		mg/Kg	1	9/4/2005
Xylenes, Total	1.8	0.050		mg/Kg	1	9/4/2005
Surr: 4-Bromofluorobenzene	111	72.9-143		%REC	1	9/4/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	0.20		mg/Kg	1	9/4/2005
Acenaphthylene	ND	0.20		mg/Kg	1	9/4/2005
Aniline	ND	0.20		mg/Kg	1	9/4/2005
Anthracene	ND	0.20		mg/Kg	1	9/4/2005
Azobenzene	ND	0.20		mg/Kg	1	9/4/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Benidine	ND	0.20		mg/Kg	1	9/4/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	9/4/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	9/4/2005
Benzoic acid	ND	0.50		mg/Kg	1	9/4/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	9/4/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	9/4/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	9/4/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Carbazole	ND	0.20		mg/Kg	1	9/4/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	9/4/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	9/4/2005
Chrysene	ND	0.20		mg/Kg	1	9/4/2005
Di-n-butyl phthalate	ND	0.25		mg/Kg	1	9/4/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	9/4/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Dibenzofuran	0.68	0.50		mg/Kg	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-6-83005

Lab Order: 0508346

Collection Date: 8/30/2005 8:10:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-06

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	9/4/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	9/4/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
Fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Fluorene	0.34	0.20		mg/Kg	1	9/4/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	9/4/2005
Hexachloroethane	ND	0.50		mg/Kg	1	9/4/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Isophorone	ND	0.20		mg/Kg	1	9/4/2005
2-Methylnaphthalene	36	2.0		mg/Kg	10	9/6/2005
2-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	9/4/2005
Naphthalene	3.8	0.20		mg/Kg	1	9/4/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	9/4/2005
Nitrobenzene	ND	0.20		mg/Kg	1	9/4/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	9/4/2005
Phenanthrene	8.0	2.0		mg/Kg	10	9/6/2005
Phenol	ND	0.20		mg/Kg	1	9/4/2005
Pyrene	0.41	0.20		mg/Kg	1	9/4/2005
Pyridine	ND	0.50		mg/Kg	1	9/4/2005
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
Surr: 2,4,6-Tribromophenol	60.1	35.5-141		%REC	1	9/4/2005
Surr: 2-Fluorobiphenyl	79.0	30.4-128		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-6-83005

Lab Order: 0508346

Collection Date: 8/30/2005 8:10:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-06

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	66.9	28.1-129		%REC	1	9/4/2005
Surr: 4-Terphenyl-d14	82.2	34.6-151		%REC	1	9/4/2005
Surr: Nitrobenzene-d5	89.1	26.5-122		%REC	1	9/4/2005
Surr: Phenol-d6	78.4	37.6-118		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab ID: 0508346-07

Client Sample ID: RR-7-83005
Collection Date: 8/30/2005 8:20:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	9000	200		mg/Kg	20	9/3/2005 12:21:25 AM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	9/3/2005 12:21:25 AM
Surr: DNOP	0	60-124	S	%REC	20	9/3/2005 12:21:25 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: BDH
Benzene	ND	0.050		mg/Kg	1	9/4/2005
Toluene	ND	0.050		mg/Kg	1	9/4/2005
Ethylbenzene	ND	0.050		mg/Kg	1	9/4/2005
Xylenes, Total	2.9	0.050		mg/Kg	1	9/4/2005
Surr: 4-Bromofluorobenzene	103	72.9-143		%REC	1	9/4/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	2.6	2.0		mg/Kg	10	9/4/2005
Acenaphthylene	ND	2.0		mg/Kg	10	9/4/2005
Aniline	ND	2.0		mg/Kg	10	9/4/2005
Anthracene	ND	2.0		mg/Kg	10	9/4/2005
Azobenzene	ND	2.0		mg/Kg	10	9/4/2005
Benz(a)anthracene	ND	2.5		mg/Kg	10	9/4/2005
Benzidine	ND	2.0		mg/Kg	10	9/4/2005
Benzo(a)pyrene	ND	2.0		mg/Kg	10	9/4/2005
Benzo(b)fluoranthene	ND	2.0		mg/Kg	10	9/4/2005
Benzo(g,h,i)perylene	ND	3.0		mg/Kg	10	9/4/2005
Benzo(k)fluoranthene	ND	5.0		mg/Kg	10	9/4/2005
Benzoic acid	ND	5.0		mg/Kg	10	9/4/2005
Benzyl alcohol	ND	5.0		mg/Kg	10	9/4/2005
Bis(2-chloroethoxy)methane	ND	5.0		mg/Kg	10	9/4/2005
Bis(2-chloroethyl)ether	ND	2.5		mg/Kg	10	9/4/2005
Bis(2-chloroisopropyl)ether	ND	5.0		mg/Kg	10	9/4/2005
Bis(2-ethylhexyl)phthalate	ND	2.0		mg/Kg	10	9/4/2005
4-Bromophenyl phenyl ether	ND	2.5		mg/Kg	10	9/4/2005
Butyl benzyl phthalate	ND	2.0		mg/Kg	10	9/4/2005
Carbazole	ND	2.0		mg/Kg	10	9/4/2005
4-Chloro-3-methylphenol	ND	2.0		mg/Kg	10	9/4/2005
4-Chloroaniline	ND	2.0		mg/Kg	10	9/4/2005
2-Chloronaphthalene	ND	2.0		mg/Kg	10	9/4/2005
2-Chlorophenol	ND	2.0		mg/Kg	10	9/4/2005
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	10	9/4/2005
Chrysene	ND	2.0		mg/Kg	10	9/4/2005
Di-n-butyl phthalate	ND	2.5		mg/Kg	10	9/4/2005
Di-n-octyl phthalate	ND	5.0		mg/Kg	10	9/4/2005
Dibenz(a,h)anthracene	ND	2.5		mg/Kg	10	9/4/2005
Dibenzofuran	ND	5.0		mg/Kg	10	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab ID: 0508346-07

Client Sample ID: RR-7-83005
Collection Date: 8/30/2005 8:20:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dichlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
1,3-Dichlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
1,4-Dichlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
3,3'-Dichlorobenzidine	ND	2.0		mg/Kg	10	9/4/2005
Diethyl phthalate	ND	2.0		mg/Kg	10	9/4/2005
Dimethyl phthalate	ND	2.0		mg/Kg	10	9/4/2005
2,4-Dichlorophenol	ND	2.0		mg/Kg	10	9/4/2005
2,4-Dimethylphenol	ND	2.0		mg/Kg	10	9/4/2005
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	10	9/4/2005
2,4-Dinitrophenol	ND	5.0		mg/Kg	10	9/4/2005
2,4-Dinitrotoluene	ND	2.0		mg/Kg	10	9/4/2005
2,6-Dinitrotoluene	ND	2.0		mg/Kg	10	9/4/2005
Fluoranthene	ND	2.0		mg/Kg	10	9/4/2005
Fluorene	ND	2.0		mg/Kg	10	9/4/2005
Hexachlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
Hexachlorobutadiene	ND	2.0		mg/Kg	10	9/4/2005
Hexachlorocyclopentadiene	ND	2.5		mg/Kg	10	9/4/2005
Hexachloroethane	ND	5.0		mg/Kg	10	9/4/2005
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	10	9/4/2005
Isophorone	ND	2.0		mg/Kg	10	9/4/2005
2-Methylnaphthalene	39	2.0		mg/Kg	10	9/4/2005
2-Methylphenol	ND	2.0		mg/Kg	10	9/4/2005
3+4-Methylphenol	ND	2.0		mg/Kg	10	9/4/2005
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	10	9/4/2005
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	10	9/4/2005
Naphthalene	5.0	2.0		mg/Kg	10	9/4/2005
2-Nitroaniline	ND	5.0		mg/Kg	10	9/4/2005
3-Nitroaniline	ND	5.0		mg/Kg	10	9/4/2005
4-Nitroaniline	ND	2.5		mg/Kg	10	9/4/2005
Nitrobenzene	ND	2.0		mg/Kg	10	9/4/2005
2-Nitrophenol	ND	2.0		mg/Kg	10	9/4/2005
4-Nitrophenol	ND	2.0		mg/Kg	10	9/4/2005
Pentachlorophenol	ND	5.0		mg/Kg	10	9/4/2005
Phenanthrene	10	2.0		mg/Kg	10	9/4/2005
Phenol	ND	2.0		mg/Kg	10	9/4/2005
Pyrene	ND	2.0		mg/Kg	10	9/4/2005
Pyridine	ND	5.0		mg/Kg	10	9/4/2005
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	10	9/4/2005
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	10	9/4/2005
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	10	9/4/2005
Surr: 2,4,6-Tribromophenol	115	35.5-141		%REC	10	9/4/2005
Surr: 2-Fluorobiphenyl	105	30.4-128		%REC	10	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-7-83005

Lab Order: 0508346

Collection Date: 8/30/2005 8:20:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-07

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	68.5	28.1-129		%REC	10	9/4/2005
Surr: 4-Terphenyl-d14	80.8	34.6-151		%REC	10	9/4/2005
Surr: Nitrobenzene-d5	125	26.5-122	S	%REC	10	9/4/2005
Surr: Phenol-d6	74.8	37.6-118		%REC	10	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab ID: 0508346-08

Client Sample ID: RR-8-83005
Collection Date: 8/30/2005 8:30:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/2/2005 6:12:34 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/2/2005 6:12:34 AM
Surr. DNOP	81.0	60-124		%REC	1	9/2/2005 6:12:34 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: BDH
Benzene	ND	0.050		mg/Kg	1	9/4/2005
Toluene	ND	0.050		mg/Kg	1	9/4/2005
Ethylbenzene	ND	0.050		mg/Kg	1	9/4/2005
Xylenes, Total	ND	0.050		mg/Kg	1	9/4/2005
Surr. 4-Bromofluorobenzene	106	72.9-143		%REC	1	9/4/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	0.20		mg/Kg	1	9/4/2005
Acenaphthylene	ND	0.20		mg/Kg	1	9/4/2005
Aniline	ND	0.20		mg/Kg	1	9/4/2005
Anthracene	ND	0.20		mg/Kg	1	9/4/2005
Azobenzene	ND	0.20		mg/Kg	1	9/4/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Benzidine	ND	0.20		mg/Kg	1	9/4/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	9/4/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	9/4/2005
Benzoic acid	ND	0.50		mg/Kg	1	9/4/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	9/4/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	9/4/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	9/4/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Carbazole	ND	0.20		mg/Kg	1	9/4/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	9/4/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	9/4/2005
Chrysene	ND	0.20		mg/Kg	1	9/4/2005
Di-n-butyl phthalate	ND	0.25		mg/Kg	1	9/4/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	9/4/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Dibenzofuran	ND	0.50		mg/Kg	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab ID: 0508346-08

Client Sample ID: RR-8-83005
Collection Date: 8/30/2005 8:30:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	9/4/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	9/4/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
Fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Fluorene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	9/4/2005
Hexachloroethane	ND	0.50		mg/Kg	1	9/4/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Isophorone	ND	0.20		mg/Kg	1	9/4/2005
2-Methylnaphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	9/4/2005
Naphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	9/4/2005
Nitrobenzene	ND	0.20		mg/Kg	1	9/4/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	9/4/2005
Phenanthrene	ND	0.20		mg/Kg	1	9/4/2005
Phenol	ND	0.20		mg/Kg	1	9/4/2005
Pyrene	ND	0.20		mg/Kg	1	9/4/2005
Pyridine	ND	0.50		mg/Kg	1	9/4/2005
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
Surr: 2,4,6-Tribromophenol	89.7	35.5-141		%REC	1	9/4/2005
Surr: 2-Fluorobiphenyl	67.9	30.4-128		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-8-83005

Lab Order: 0508346

Collection Date: 8/30/2005 8:30:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-08

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	60.4	28.1-129		%REC	1	9/4/2005
Surr: 4-Terphenyl-d14	87.3	34.6-151		%REC	1	9/4/2005
Surr: Nitrobenzene-d5	61.8	26.5-122		%REC	1	9/4/2005
Surr: Phenol-d6	64.5	37.6-118		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab ID: 0508346-09

Client Sample ID: RR-9-83005
Collection Date: 8/30/2005 8:40:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/2/2005 6:45:22 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/2/2005 6:45:22 AM
Surr: DNOP	96.7	60-124		%REC	1	9/2/2005 6:45:22 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: BDH
Benzene	ND	0.050		mg/Kg	1	9/4/2005
Toluene	ND	0.050		mg/Kg	1	9/4/2005
Ethylbenzene	ND	0.050		mg/Kg	1	9/4/2005
Xylenes, Total	ND	0.050		mg/Kg	1	9/4/2005
Surr: 4-Bromofluorobenzene	115	72.9-143		%REC	1	9/4/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	0.20		mg/Kg	1	9/4/2005
Acenaphthylene	ND	0.20		mg/Kg	1	9/4/2005
Aniline	ND	0.20		mg/Kg	1	9/4/2005
Anthracene	ND	0.20		mg/Kg	1	9/4/2005
Azobenzene	ND	0.20		mg/Kg	1	9/4/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Benzidine	ND	0.20		mg/Kg	1	9/4/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	9/4/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	9/4/2005
Benzoic acid	ND	0.50		mg/Kg	1	9/4/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	9/4/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	9/4/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	9/4/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Carbazole	ND	0.20		mg/Kg	1	9/4/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	9/4/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	9/4/2005
Chrysene	ND	0.20		mg/Kg	1	9/4/2005
Di-n-butyl phthalate	ND	0.25		mg/Kg	1	9/4/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	9/4/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Dibenzofuran	ND	0.50		mg/Kg	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-9-83005

Lab Order: 0508346

Collection Date: 8/30/2005 8:40:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-09

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	9/4/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	9/4/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
Fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Fluorene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	9/4/2005
Hexachloroethane	ND	0.50		mg/Kg	1	9/4/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Isophorone	ND	0.20		mg/Kg	1	9/4/2005
2-Methylnaphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	9/4/2005
Naphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	9/4/2005
Nitrobenzene	ND	0.20		mg/Kg	1	9/4/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	9/4/2005
Phenanthrene	ND	0.20		mg/Kg	1	9/4/2005
Phenol	ND	0.20		mg/Kg	1	9/4/2005
Pyrene	ND	0.20		mg/Kg	1	9/4/2005
Pyridine	ND	0.50		mg/Kg	1	9/4/2005
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
Surr: 2,4,6-Tribromophenol	88.3	35.5-141		%REC	1	9/4/2005
Surr: 2-Fluorobiphenyl	75.4	30.4-128		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-9-83005

Lab Order: 0508346

Collection Date: 8/30/2005 8:40:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-09

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	67.7	28.1-129		%REC	1	9/4/2005
Surr: 4-Terphenyl-d14	86.0	34.6-151		%REC	1	9/4/2005
Surr: Nitrobenzene-d5	72.5	26.5-122		%REC	1	9/4/2005
Surr: Phenol-d6	74.3	37.6-118		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab ID: 0508346-10

Client Sample ID: RR-10-83005
Collection Date: 8/30/2005 9:00:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	9/2/2005 7:18:10 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	9/2/2005 7:18:10 AM
Surr: DNOP	97.5	60-124		%REC	1	9/2/2005 7:18:10 AM
EPA METHOD 8260B: VOLATILES SHORT LIST						Analyst: BDH
Benzene	ND	0.050		mg/Kg	1	9/4/2005
Toluene	ND	0.050		mg/Kg	1	9/4/2005
Ethylbenzene	ND	0.050		mg/Kg	1	9/4/2005
Xylenes, Total	ND	0.050		mg/Kg	1	9/4/2005
Surr: 4-Bromofluorobenzene	94.9	72.9-143		%REC	1	9/4/2005
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	0.20		mg/Kg	1	9/4/2005
Acenaphthylene	ND	0.20		mg/Kg	1	9/4/2005
Aniline	ND	0.20		mg/Kg	1	9/4/2005
Anthracene	ND	0.20		mg/Kg	1	9/4/2005
Azobenzene	ND	0.20		mg/Kg	1	9/4/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Benzidine	ND	0.20		mg/Kg	1	9/4/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	9/4/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	9/4/2005
Benzolc acid	ND	0.50		mg/Kg	1	9/4/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	9/4/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	9/4/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	9/4/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	9/4/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Carbazole	ND	0.20		mg/Kg	1	9/4/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	9/4/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	9/4/2005
Chrysene	ND	0.20		mg/Kg	1	9/4/2005
Di-n-butyl phthalate	ND	0.25		mg/Kg	1	9/4/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	9/4/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	9/4/2005
Dibenzofuran	ND	0.50		mg/Kg	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05
Lab ID: 0508346-10

Client Sample ID: RR-10-83005
Collection Date: 8/30/2005 9:00:00 AM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	9/4/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	9/4/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	9/4/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	9/4/2005
Fluoranthene	ND	0.20		mg/Kg	1	9/4/2005
Fluorene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	9/4/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	9/4/2005
Hexachloroethane	ND	0.50		mg/Kg	1	9/4/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	9/4/2005
Isophorone	ND	0.20		mg/Kg	1	9/4/2005
2-Methylnaphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	9/4/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	9/4/2005
Naphthalene	ND	0.20		mg/Kg	1	9/4/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	9/4/2005
Nitrobenzene	ND	0.20		mg/Kg	1	9/4/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	9/4/2005
Phenanthrene	ND	0.20		mg/Kg	1	9/4/2005
Phenol	ND	0.20		mg/Kg	1	9/4/2005
Pyrene	ND	0.20		mg/Kg	1	9/4/2005
Pyridine	ND	0.50		mg/Kg	1	9/4/2005
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	9/4/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	9/4/2005
Surr: 2,4,6-Tribromophenol	81.3	35.5-141		%REC	1	9/4/2005
Surr: 2-Fluorobiphenyl	66.1	30.4-128		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT: Giant Refining Co

Client Sample ID: RR-10-83005

Lab Order: 0508346

Collection Date: 8/30/2005 9:00:00 AM

Project: RR Rock Lagoon Add. Exc. 8-30-05

Lab ID: 0508346-10

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Surr: 2-Fluorophenol	53.5	28.1-129		%REC	1	9/4/2005
Surr: 4-Terphenyl-d14	85.5	34.6-151		%REC	1	9/4/2005
Surr: Nitrobenzene-d5	61.6	26.5-122		%REC	1	9/4/2005
Surr: Phenol-d6	62.7	37.6-118		%REC	1	9/4/2005

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: 07-Sep-05

CLIENT:

Giant Refining Co

Work Order:

0508346

Project:

RR Rock Lagoon Add. Exc. 8-30-05

QC SUMMARY REPORT

Method Blank

Sample ID	MB-8649	Batch ID: 8649	Test Code: SW8015	Units: mg/Kg	Analysis Date	9/1/2005 9:27:29 PM	Prep Date	8/31/2005				
Client ID:		Run ID:	FID(17A) 2_050901A		SeqNo:	395109						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		ND	10									
Motor Oil Range Organics (MRO)		ND	50									
Surr: DNOP		9.957	0	10	0	99.6	60	124	0			

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co
 Work Order: 0508346
 Project: RR Rock Lagoon Add. Exc. 8-30-05

Sample ID	MB-8646	Batch ID: 8646	Test Code: SW8270C	Units: mg/Kg	Analysis Date	9/4/2005	Prep Date	8/31/2005			
Client ID:			Run ID:	ELMQ_050904A	SeqNo:	395725					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.2									
Acenaphthylene	ND	0.2									
Aniline	ND	0.2									
Anthracene	ND	0.2									
Azobenzene	ND	0.2									
Benz(a)anthracene	ND	0.25									
Benzidine	ND	0.2									
Benzo(a)pyrene	ND	0.2									
Benzo(b)fluoranthene	ND	0.2									
Benzo(g,h,i)perylene	ND	0.3									
Benzo(k)fluoranthene	ND	0.5									
Benzofuran	ND	0.5									
Benzyl alcohol	ND	0.5									
Bis(2-chloroethoxy)methane	ND	0.5									
Bis(2-chloroethyl)ether	ND	0.25									
Bis(2-chloroisopropyl)ether	ND	0.5									
Bis(2-ethylhexyl)phthalate	0.04733	0.2									
4-Bromophenyl phenyl ether	ND	0.25									
Butyl benzyl phthalate	ND	0.2									
Carbazole	ND	0.2									
4-Chloro-3-methylphenol	ND	0.2									
4-Chloroaniline	ND	0.2									
2-Chloronaphthalene	ND	0.2									
2-Chlorophenol	ND	0.2									
4-Chlorophenyl phenyl ether	ND	0.2									
Chrysene	ND	0.2									
Di-n-butyl phthalate	1.756	0.25									
Di-n-octyl phthalate	ND	0.5									

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: 0508346

Project: RR Rock Lagoon Add. Exc. 8-30-05

Dibenz(a,h)anthracene	ND	0.25
Dibenzofuran	ND	0.5
1,2-Dichlorobenzene	ND	0.2
1,3-Dichlorobenzene	ND	0.2
1,4-Dichlorobenzene	ND	0.2
3,3'-Dichlorobenzidine	ND	0.2
Diethyl phthalate	ND	0.2
Dimethyl phthalate	ND	0.2
2,4-Dichlorophenol	ND	0.2
2,4-Dimethylphenol	ND	0.2
4,6-Dinitro-2-methylphenol	ND	0.5
2,4-Dinitrophenol	ND	0.5
2,4-Dinitrotoluene	ND	0.2
2,6-Dinitrotoluene	ND	0.2
Fluoranthene	ND	0.2
Fluorene	ND	0.2
Hexachlorobenzene	ND	0.2
Hexachlorobutadiene	ND	0.2
Hexachlorocyclopentadiene	ND	0.25
Hexachloroethane	ND	0.5
Indeno(1,2,3-cd)pyrene	ND	0.2
Isophorone	ND	0.2
2-Methylnaphthalene	ND	0.2
2-Methylphenol	ND	0.2
3+4-Methylphenol	ND	0.2
N-Nitrosodi-n-propylamine	ND	0.2
N-Nitrosodiphenylamine	ND	0.2
Naphthalene	ND	0.2
2-Nitroaniline	ND	0.5
3-Nitroaniline	ND	0.5
4-Nitroaniline	ND	0.25
Nitrobenzene	ND	0.2
2-Nitrophenol	ND	0.2

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

Project: RR Rock Lagoon Add. Exc. 8-30-05

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: 07-Sep-05

QC SUMMARY REPORT

Method Blank

CLIENT: Giant Refining Co
Work Order: 0508346
Project: RR Rock Lagoon Add. Exc. 8-30-05

Sample ID	mb-8648	Batch ID: 8648	Test Code: SW8260B	Units: mg/Kg	Analysis Date 9/3/2005	Prep Date 8/31/2005					
Client ID:		Run ID: THOR_050903A	PQL	SPK value	SPK Ref Val	SeqNo: 395596					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.05	0	0	0	0	0	0	0		
Toluene	ND	0.05	0	0	0	0	0	0	0		
Ethylbenzene	ND	0.05	0	0	0	0	0	0	0		
Xylenes, Total	ND	0.05	0	0	0	0	0	0	0		
Surr: 4-Bromofluorobenzene	0.5104	0	0.5	0	102	72.9	143	0			
Surr: Dibromofluoromethane	0.4749	0	0.5	0	95.0	85.2	118	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

Hall Environmental Analysis Laboratory

Date: 07-Sep-05

CLIENT: Giant Refining Co
 Work Order: 0508346
 Project: RR Rock Lagoon Add. Exc. 8-30-05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID	LCS-8649	Batch ID: 8649	Test Code: SW8015	Units: mg/Kg	Analysis Date	9/1/2005 10:00:21 PM	Prep Date	8/31/2005			
Client ID:		Run ID: FID(17A) 2_050901A			SeqNo:	395110					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45.26	10	50	0	90.5	67.4	117	0			

Sample ID	LCSD-8649	Batch ID: 8649	Test Code: SW8015	Units: mg/Kg	Analysis Date	9/1/2005 11:05:57 PM	Prep Date	8/31/2005			
Client ID:		Run ID: FID(17A) 2_050901A			SeqNo:	395112					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	49.38	10	50	0	98.8	67.4	117	45.26	8.70	17.4	

Sample ID	Ics-8648	Batch ID: 8648	Test Code: SW8260B	Units: mg/Kg	Analysis Date	9/3/2005	Prep Date	8/31/2005			
Client ID:		Run ID: THOR_050903A			SeqNo:	395601					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.8733	0.05	1	0	87.3	78	126	0			
Toluene	1.016	0.05	1	0	102	79.4	117	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: 0508346

Project: RR Rock Lagoon Add. Exc. 8-30-05

Sample ID	LCS-8646	Batch ID: 8646	Test Code: SW8270C	Units: mg/Kg	Analysis Date	9/4/2005	Prep Date	8/31/2005			
Client ID:			Run ID: ELMO_050904A		SeqNo:	395726					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.264	0.2	1.67	0	75.7	24	125	0			
4-Chloro-3-methylphenol	2.484	0.2	3.33	0	74.6	14.6	154	0			
2-Chlorophenol	2.206	0.2	3.33	0	66.2	13.3	149	0			
1,4-Dichlorobenzene	1.053	0.2	1.67	0	63.1	23.6	118	0			
2,4-Dinitrotoluene	1.257	0.2	1.67	0	75.2	28	136	0			
N-Nitrosodi-n-propylamine	1.099	0.2	1.67	0	65.8	28	114	0			
4-Nitrophenol	2.786	0.2	3.33	0	83.7	13.1	150	0			
Pentachlorophenol	2.67	0.5	3.33	0	80.2	20.1	139	0			
Phenol	2.236	0.2	3.33	0	67.2	17.3	141	0			
Pyrene	1.306	0.2	1.67	0	78.2	29	131	0			
1,2,4-Trichlorobenzene	1.096	0.2	1.67	0	65.6	17.9	126	0			

Sample ID	LCSD-8646	Batch ID: 8646	Test Code: SW8270C	Units: mg/Kg	Analysis Date	9/4/2005	Prep Date	8/31/2005			
Client ID:			Run ID: ELMO_050904A		SeqNo:	395728					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.397	0.2	1.67	0	83.7	24	125	1.264	10.0	25	
4-Chloro-3-methylphenol	2.881	0.2	3.33	0	86.5	14.6	154	2.484	14.8	25	
2-Chlorophenol	2.495	0.2	3.33	0	74.9	13.3	149	2.206	12.3	25	
1,4-Dichlorobenzene	1.155	0.2	1.67	0	69.2	23.6	118	1.053	9.21	25	
2,4-Dinitrotoluene	1.389	0.2	1.67	0	83.2	28	136	1.257	10.0	25	
N-Nitrosodi-n-propylamine	1.241	0.2	1.67	0	74.3	28	114	1.099	12.2	25	
4-Nitrophenol	3.195	0.2	3.33	0	96.0	13.1	150	2.786	13.7	25	
Pentachlorophenol	2.888	0.5	3.33	0	86.7	20.1	139	2.67	7.85	25	
Phenol	2.534	0.2	3.33	0	76.1	17.3	141	2.236	12.5	25	
Pyrene	1.411	0.2	1.67	0	84.5	29	131	1.306	7.73	25	
1,2,4-Trichlorobenzene	1.22	0.2	1.67	0	73.1	17.9	126	1.096	10.7	25	

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:

8/31/2005

Work Order Number 0508346

Received by AT

Checklist completed by

Signature

Date

8/31/05

Matrix

Carrier name Client drop-off

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

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 _____

Other:

QA/QC Package: ☐ Level 4 ☐ Std ☐

Other:

Project Name: RR Rock Lagoon

Client: Grant Refining

Project #:

Address: Box 3 Box 7

Calligraphy No 87391

Project Manager:

Sampler:

Phone #: 505 722-3033

Sample Temperature:

Fax #: 505 733 0210

Thomas G. Smith

Sampler: Steve Schmidt

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, NO₃, NO₂, PO₄, SO₄)
8081 Pesticides / PCB's (8082)
8260B (VOA)
8270 (Semi-VOA)
8021-BTEX
Air Bubbles or Headspace (Y or N)

**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)

Date: 8/31/0

Date: 3/1/05 Time: 0855

Relinquished By: (Signature)
Heaven

Received By: (Signature)

8/31/65
0855

Remarks:

PUSH



COVER LETTER

September 02, 2005

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

RE: RR Rack Lagoon Concrete Pipe TCLP

Order No.: 0508273

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 1 sample on 8/24/2005 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: 02-Sep-05

CLIENT: Giant Refining Co
Lab Order: 0508273
Project: RR Rack Lagoon Concrete Pipe TCLP
Lab ID: 0508273-01

Client Sample ID: Concrete Pipe
Collection Date: 8/22/2005 2:00:00 PM
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
VOLATILES, TCLP LEACHED						Analyst: KTM
Benzene	ND	0.50		mg/L	1	8/29/2005
2-Butanone	ND	200		mg/L	1	8/29/2005
Carbon Tetrachloride	ND	0.50		mg/L	1	8/29/2005
Chlorobenzene	ND	100		mg/L	1	8/29/2005
Chloroform	ND	6.0		mg/L	1	8/29/2005
1,4-Dichlorobenzene	ND	7.5		mg/L	1	8/29/2005
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	8/29/2005
1,1-Dichloroethene	ND	0.70		mg/L	1	8/29/2005
Hexachlorobutadiene	ND	0.50		mg/L	1	8/29/2005
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	8/29/2005
Trichloroethene (TCE)	ND	0.50		mg/L	1	8/29/2005
Vinyl chloride	ND	0.20		mg/L	1	8/29/2005
Surr: 1,2-Dichloroethane-d4	95.2	75.8-124		%REC	1	8/29/2005
Surr: 4-Bromofluorobenzene	106	84.5-121		%REC	1	8/29/2005
Surr: Dibromofluoromethane	97.2	79.9-120		%REC	1	8/29/2005
Surr: Toluene-d8	94.8	83.1-121		%REC	1	8/29/2005
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	9/1/2005
EPA METHOD 6010C: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	9/2/2005 10:01:03 AM
Barium	ND	100		mg/L	1	9/2/2005 10:01:03 AM
Cadmium	ND	1.0		mg/L	1	9/2/2005 10:01:03 AM
Chromium	ND	5.0		mg/L	1	9/2/2005 10:01:03 AM
Lead	ND	5.0		mg/L	1	9/2/2005 10:01:03 AM
Selenium	ND	1.0		mg/L	1	9/2/2005 11:36:33 AM
Silver	ND	5.0		mg/L	1	9/2/2005 10:01:03 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: 02-Sep-05

CLIENT: Giant Refining Co
 Work Order: 0508273
 Project: RR Rack Lagoon Concrete Pipe TCLP

QC SUMMARY REPORT
 Method Blank

Sample ID	MB-8623	Batch ID: 8623	Test Code: SW8260B	Units: mg/L	Analysis Date	8/29/2005	Prep Date	8/25/2005			
Client ID:		Run ID:	NEPTUNE_050829A	SeqNo:	393367						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.5									
2-Butanone	ND	200									
Carbon Tetrachloride	ND	0.5									
Chlorobenzene	ND	100									
Chloroform	ND	6									
1,4-Dichlorobenzene	ND	7.5									
1,2-Dichloroethane (EDC)	ND	0.5									
1,1-Dichloroethene	ND	0.7									
Hexachlorobutadiene	ND	0.5									
Tetrachloroethene (PCE)	ND	0.7									
Trichloroethene (TCE)	ND	0.5									
Vinyl chloride	ND	0.2									
Surr: 1,2-Dichloroethane-d4	0.00894	0	0.01	0	89.4	75.8	124	0			
Surr: 4-Bromofluorobenzene	0.0105	0	0.01	0	105	84.5	121	0			
Surr: Dibromofluoromethane	0.009402	0	0.01	0	94.0	79.9	120	0			
Surr: Toluene-d8	0.00993	0	0.01	0	99.3	83.1	121	0			

Sample ID	MB-8666	Batch ID: 8666	Test Code: SW7470	Units: mg/L	Analysis Date	9/1/2005	Prep Date	9/1/2005			
Client ID:		Run ID:	MI-LA254_050901A	SeqNo:	394830						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.02									

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: 0508273
 Project: RR Rack Lagoon Concrete Pipe TCLP

Sample ID MB-8663	Batch ID: 8663	Test Code: SW1311/6010	Units: mg/L	Analysis Date 9/2/2005 9:41:04 AM	Prep Date 9/1/2005						
Client ID:	Run ID: ICP_050902B	SeqNo: 394972									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	5									
Barium	ND	100									
Cadmium	ND	1									
Chromium	ND	5									
Lead	ND	5									
Silver	ND	5									

Sample ID MB-8663	Batch ID: 8663	Test Code: SW1311/6010		Units: mg/L	Analysis Date 9/2/2005 11:23:01 AM		Prep Date 9/1/2005				
Client ID:	Run ID: ICP_050902B	SeqNo: 395130									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	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

Hall Environmental Analysis Laboratory

Date: 02-Sep-05

CLIENT: Giant Refining Co
 Work Order: 0508273
 Project: RR Rack Lagoon Concrete Pipe TCLP

QC SUMMARY REPORT

Sample Duplicate

Sample ID	0508273-01B DUP	Batch ID	8666	Test Code	SW7470	Units	mg/L	Analysis Date	9/1/2005	Prep Date	9/1/2005
Client ID	Concrete Pipe	Run ID	MI-LA254_050901A					SeqNo:	394833		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Mercury		ND	0.02	0	0	0	0	0	0	0	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

Date: 02-Sep-05

CLIENT: Giant Refining Co
Work Order: 0508273
Project: RR Rack Lagoon Concrete Pipe TCLP

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID	0508273-01B MS	Batch ID: 8666	Test Code: SW7470	Units: mg/L	Analysis Date	9/1/2005	Prep Date	9/1/2005
Client ID:	Concrete Pipe	Run ID:	MI-LA254_050901A		SeqNo:	394834		
Analyte		Result	PQL	SPK value	%REC	LowLimit	HighLimit	RPD Ref Val
Mercury		0.004774	0.002	0.005	95.5	75	125	0
					%RPD	RPDLimit		Qual
Sample ID	0508273-01B MSD	Batch ID: 8666	Test Code: SW7470	Units: mg/L	Analysis Date	9/1/2005	Prep Date	9/1/2005
Client ID:	Concrete Pipe	Run ID:	MI-LA254_050901A		SeqNo:	394835		
Analyte		Result	PQL	SPK value	%REC	LowLimit	HighLimit	RPD Ref Val
Mercury		0.004905	0.002	0.005	98.1	75	125	0.004774
					%RPD	RPDLimit		Qual
					2.71	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

Date: 02-Sep-05

QC SUMMARY REPORT

Laboratory Control Spike - generic

CLIENT: Giant Refining Co

Work Order: 0508273

Project: RR Rack Lagoon Concrete Pipe TCLP

Sample ID	LCS-8666	Batch ID: 8666	Test Code: SW7470	Units: mg/L	Analysis Date	9/1/2005	Prep Date	9/1/2005				
Client ID:		Run ID:	MI-LA254_050901A		SeqNo:	394831						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		0.004336	0.002	0.005	0	86.7	80	120	0			

Sample ID	LCSD-8666	Batch ID: 8666	Test Code: SW7470	Units: mg/L	Analysis Date	9/1/2005	Prep Date	9/1/2005				
Client ID:		Run ID:	MI-LA254_050901A		SeqNo:	394836						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		0.004353	0.002	0.005	0	87.1	80	120	0.004336	0.380	20	

6 / 08

Sample ID	LCS-8663	Batch ID: 8663	Test Code: SW1311/6010	Units: mg/L	Analysis Date	9/2/2005 9:44:10 AM	Prep Date	9/1/2005				
Client ID:		Run ID:	ICP_050902B		SeqNo:	394973						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	0.5852	0.2	0.5	0	117	80	120	0				
Barium	0.4917	0.2	0.5	0	98.3	80	120	0				
Cadmium	0.5218	0.2	0.5	0	104	80	120	0				
Chromium	0.4953	0.2	0.5	0	99.1	80	120	0				
Lead	0.5058	0.2	0.5	0	101	80	120	0				
Silver	0.5281	0.2	0.5	0	105	80	120	0				

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

1

CLIENT: Giant Refining Co
Work Order: 0508273
Project: RR Rack Lagoon Concrete Pipe TCLP

QC SUMMARY REPORT
 Laboratory Control Spike Duplicate

Sample ID	LCSD-8663	Batch ID: 8663	Test Code: SW1311/6010	Units: mg/L	Analysis Date	9/2/2005 9:48:26 AM	Prep Date	9/1/2005			
Client ID:			Run ID:	ICP_050902B	SeqNo:	394974					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5508	0.2	0.5	0	110	80	120	0.5852	6.04	20	
Barium	0.4784	0.2	0.5	0	95.7	80	120	0.4917	2.75	20	
Cadmium	0.4979	0.2	0.5	0	99.6	80	120	0.5218	4.70	20	
Chromium	0.4728	0.2	0.5	0	94.6	80	120	0.4953	4.66	20	
Lead	0.4835	0.2	0.5	0	96.7	80	120	0.5058	4.50	20	
Silver	0.5127	0.2	0.5	0	103	80	120	0.5261	2.57	20	

Sample ID	LCS-8663	Batch ID: 8663	Test Code: SW1311/6010	Units: mg/L	Analysis Date	9/2/2005 11:25:32 AM	Prep Date	9/1/2005			
Client ID:			Run ID: ICP_050902B		SeqNo:	395131					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.4209	0.2	0.5	0	84.2	80	120	0			

Sample ID	LCSD-8663	Batch ID: 8663	Test Code: SW1311/6010		Units: mg/L	Analysis Date		9/2/2005 11:31:06 AM	Prep Date		
Client ID:			Run ID:	ICP_050902B		SeqNo:	395133				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.4242	0.2	0.5	0	84.8	80	120	0.4209	0.762	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:

8/24/2005

Work Order Number 0508273

Received by AT

Checklist completed by

Signature

Date

Matrix

Carrier name Client drop-off

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

Container/Temp Blank temperature?

6°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____



COVER LETTER

August 31, 2005

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

RE: RR Rock Lagoon NW Add. Excav.

Order No.: 0508272

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 4 samples on 8/24/2005 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: 31-Aug-05

CLIENT: Giant Refining Co
Lab Order: 0508272
Project: RR Rock Lagoon NW Add. Excav.
Lab ID: 0508272-01

Client Sample ID: North Wall
Collection Date: 8/22/2005 1:00:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/29/2005 8:05:54 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/29/2005 8:05:54 AM
Surr: DNOP	86.2	60-124		%REC	1	8/29/2005 8:05:54 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/30/2005 6:08:35 PM
Surr: BFB	102	83.1-124		%REC	1	8/30/2005 6:08:35 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/30/2005 6:08:35 PM
Benzene	ND	0.025		mg/Kg	1	8/30/2005 6:08:35 PM
Toluene	ND	0.025		mg/Kg	1	8/30/2005 6:08:35 PM
Ethylbenzene	ND	0.025		mg/Kg	1	8/30/2005 6:08:35 PM
Xylenes, Total	ND	0.025		mg/Kg	1	8/30/2005 6:08:35 PM
Surr: 4-Bromofluorobenzene	99.0	87.5-115		%REC	1	8/30/2005 6:08:35 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	0.20		mg/Kg	1	8/25/2005
Acenaphthylene	ND	0.20		mg/Kg	1	8/25/2005
Aniline	ND	0.20		mg/Kg	1	8/25/2005
Anthracene	ND	0.20		mg/Kg	1	8/25/2005
Azobenzene	ND	0.20		mg/Kg	1	8/25/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	8/25/2005
Benzidine	ND	0.20		mg/Kg	1	8/25/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	8/25/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	8/25/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	8/25/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	8/25/2005
Benzoic acid	ND	0.50		mg/Kg	1	8/25/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	8/25/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	8/25/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	8/25/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	8/25/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	8/25/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	8/25/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	8/25/2005
Carbazole	ND	0.20		mg/Kg	1	8/25/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	8/25/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	8/25/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	8/25/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	8/25/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	8/25/2005

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: 31-Aug-05

CLIENT: Giant Refining Co
Lab Order: 0508272
Project: RR Rock Lagoon NW Add. Excav.
Lab ID: 0508272-01

Client Sample ID: North Wall
Collection Date: 8/22/2005 1:00:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Chrysene	ND	0.20		mg/Kg	1	8/25/2005
Di-n-butyl phthalate	ND	0.25		mg/Kg	1	8/25/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	8/25/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	8/25/2005
Dibenzofuran	ND	0.50		mg/Kg	1	8/25/2005
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	8/25/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	8/25/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	8/25/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	8/25/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	8/25/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	8/25/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	8/25/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	8/25/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	8/25/2005
Fluoranthene	ND	0.20		mg/Kg	1	8/25/2005
Fluorene	ND	0.20		mg/Kg	1	8/25/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	8/25/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	8/25/2005
Hexachloroethane	ND	0.50		mg/Kg	1	8/25/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	8/25/2005
Isophorone	ND	0.20		mg/Kg	1	8/25/2005
2-Methylnaphthalene	ND	0.20		mg/Kg	1	8/25/2005
2-Methylphenol	ND	0.20		mg/Kg	1	8/25/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	8/25/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	8/25/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	8/25/2005
Naphthalene	ND	0.20		mg/Kg	1	8/25/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	8/25/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	8/25/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	8/25/2005
Nitrobenzene	ND	0.20		mg/Kg	1	8/25/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	8/25/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	8/25/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	8/25/2005
Phenanthrene	ND	0.20		mg/Kg	1	8/25/2005
Phenol	ND	0.20		mg/Kg	1	8/25/2005
Pyrene	ND	0.20		mg/Kg	1	8/25/2005
Pyridine	ND	0.50		mg/Kg	1	8/25/2005

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: 31-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: North Wall

Lab Order: 0508272

Collection Date: 8/22/2005 1:00:00 PM

Project: RR Rock Lagoon NW Add. Excav.

Lab ID: 0508272-01

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	8/25/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	8/25/2005
Surr: 2,4,6-Tribromophenol	92.9	35.5-141		%REC	1	8/25/2005
Surr: 2-Fluorobiphenyl	65.6	30.4-128		%REC	1	8/25/2005
Surr: 2-Fluorophenol	60.0	28.1-129		%REC	1	8/25/2005
Surr: 4-Terphenyl-d14	90.6	34.6-151		%REC	1	8/25/2005
Surr: Nitrobenzene-d5	64.4	26.5-122		%REC	1	8/25/2005
Surr: Phenol-d6	67.5	37.6-118		%REC	1	8/25/2005

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: 31-Aug-05

CLIENT: Giant Refining Co
Lab Order: 0508272
Project: RR Rock Lagoon NW Add. Excav.
Lab ID: 0508272-02

Client Sample ID: North BTM
Collection Date: 8/22/2005 1:15:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	41	10		mg/Kg	1	8/29/2005 8:38:42 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/29/2005 8:38:42 AM
Surr: DNOP	72.4	60-124		%REC	1	8/29/2005 8:38:42 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/30/2005 6:40:19 PM
Surr: BFB	108	83.1-124		%REC	1	8/30/2005 6:40:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/30/2005 6:40:19 PM
Benzene	ND	0.025		mg/Kg	1	8/30/2005 6:40:19 PM
Toluene	ND	0.025		mg/Kg	1	8/30/2005 6:40:19 PM
Ethylbenzene	ND	0.025		mg/Kg	1	8/30/2005 6:40:19 PM
Xylenes, Total	ND	0.025		mg/Kg	1	8/30/2005 6:40:19 PM
Surr: 4-Bromofluorobenzene	102	87.5-115		%REC	1	8/30/2005 6:40:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	0.20		mg/Kg	1	8/25/2005
Acenaphthylene	ND	0.20		mg/Kg	1	8/25/2005
Aniline	ND	0.20		mg/Kg	1	8/25/2005
Anthracene	ND	0.20		mg/Kg	1	8/25/2005
Azobenzene	ND	0.20		mg/Kg	1	8/25/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	8/25/2005
Benzdine	ND	0.20		mg/Kg	1	8/25/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	8/25/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	8/25/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	8/25/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	8/25/2005
Benzoic acid	ND	0.50		mg/Kg	1	8/25/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	8/25/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	8/25/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	8/25/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	8/25/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	8/25/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	8/25/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	8/25/2005
Carbazole	ND	0.20		mg/Kg	1	8/25/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	8/25/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	8/25/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	8/25/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	8/25/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	8/25/2005

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: 31-Aug-05

CLIENT: Giant Refining Co
Lab Order: 0508272
Project: RR Rock Lagoon NW Add. Excav.
Lab ID: 0508272-02

Client Sample ID: North BTM
Collection Date: 8/22/2005 1:15:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Chrysene	ND	0.20		mg/Kg	1	8/25/2005
Di-n-butyl phthalate	0.37	0.25		mg/Kg	1	8/25/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	8/25/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	8/25/2005
Dibenzofuran	ND	0.50		mg/Kg	1	8/25/2005
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	8/25/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	8/25/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	8/25/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	8/25/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	8/25/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	8/25/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	8/25/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	8/25/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	8/25/2005
Fluoranthene	ND	0.20		mg/Kg	1	8/25/2005
Fluorene	ND	0.20		mg/Kg	1	8/25/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	8/25/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	8/25/2005
Hexachloroethane	ND	0.50		mg/Kg	1	8/25/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	8/25/2005
Isophorone	ND	0.20		mg/Kg	1	8/25/2005
2-Methylnaphthalene	ND	0.20		mg/Kg	1	8/25/2005
2-Methylphenol	ND	0.20		mg/Kg	1	8/25/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	8/25/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	8/25/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	8/25/2005
Naphthalene	ND	0.20		mg/Kg	1	8/25/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	8/25/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	8/25/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	8/25/2005
Nitrobenzene	ND	0.20		mg/Kg	1	8/25/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	8/25/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	8/25/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	8/25/2005
Phenanthrene	ND	0.20		mg/Kg	1	8/25/2005
Phenol	ND	0.20		mg/Kg	1	8/25/2005
Pyrene	ND	0.20		mg/Kg	1	8/25/2005
Pyridine	ND	0.50		mg/Kg	1	8/25/2005

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: 31-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: North BTM

Lab Order: 0508272

Collection Date: 8/22/2005 1:15:00 PM

Project: RR Rock Lagoon NW Add. Excav.

Lab ID: 0508272-02

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	8/25/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	8/25/2005
Surr: 2,4,6-Tribromophenol	103	35.5-141		%REC	1	8/25/2005
Surr: 2-Fluorobiphenyl	70.4	30.4-128		%REC	1	8/25/2005
Surr: 2-Fluorophenol	66.5	28.1-129		%REC	1	8/25/2005
Surr: 4-Terphenyl-d14	92.6	34.6-151		%REC	1	8/25/2005
Surr: Nitrobenzene-d5	60.5	26.5-122		%REC	1	8/25/2005
Surr: Phenol-d6	66.1	37.6-118		%REC	1	8/25/2005

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: 31-Aug-05

CLIENT: Giant Refining Co
Lab Order: 0508272
Project: RR Rock Lagoon NW Add. Excav.
Lab ID: 0508272-03

Client Sample ID: South Wall
Collection Date: 8/22/2005 1:30:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/29/2005 9:11:30 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/29/2005 9:11:30 AM
Surr: DNOP	70.1	60-124		%REC	1	8/29/2005 9:11:30 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/30/2005 7:43:24 PM
Surr: BFB	97.7	83.1-124		%REC	1	8/30/2005 7:43:24 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/30/2005 7:43:24 PM
Benzene	ND	0.025		mg/Kg	1	8/30/2005 7:43:24 PM
Toluene	ND	0.025		mg/Kg	1	8/30/2005 7:43:24 PM
Ethylbenzene	ND	0.025		mg/Kg	1	8/30/2005 7:43:24 PM
Xylenes, Total	ND	0.025		mg/Kg	1	8/30/2005 7:43:24 PM
Surr: 4-Bromofluorobenzene	98.9	87.5-115		%REC	1	8/30/2005 7:43:24 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	0.20		mg/Kg	1	8/25/2005
Acenaphthylene	ND	0.20		mg/Kg	1	8/25/2005
Aniline	ND	0.20		mg/Kg	1	8/25/2005
Anthracene	ND	0.20		mg/Kg	1	8/25/2005
Azobenzene	ND	0.20		mg/Kg	1	8/25/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	8/25/2005
Benzidine	ND	0.20		mg/Kg	1	8/25/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	8/25/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	8/25/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	8/25/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	8/25/2005
Benzoic acid	ND	0.50		mg/Kg	1	8/25/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	8/25/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	8/25/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	8/25/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	8/25/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	8/25/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	8/25/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	8/25/2005
Carbazole	ND	0.20		mg/Kg	1	8/25/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	8/25/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	8/25/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	8/25/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	8/25/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	8/25/2005

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: 31-Aug-05

CLIENT: Giant Refining Co
Lab Order: 0508272
Project: RR Rock Lagoon NW Add. Excav.
Lab ID: 0508272-03

Client Sample ID: South Wall
Collection Date: 8/22/2005 1:30:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Chrysene	ND	0.20		mg/Kg	1	8/25/2005
Di-n-butyl phthalate	0.25	0.25		mg/Kg	1	8/25/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	8/25/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	8/25/2005
Dibenzofuran	ND	0.50		mg/Kg	1	8/25/2005
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	8/25/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	8/25/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	8/25/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	8/25/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	8/25/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	8/25/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	8/25/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	8/25/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	8/25/2005
Fluoranthene	ND	0.20		mg/Kg	1	8/25/2005
Fluorene	ND	0.20		mg/Kg	1	8/25/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	8/25/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	8/25/2005
Hexachloroethane	ND	0.50		mg/Kg	1	8/25/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	8/25/2005
Isophorone	ND	0.20		mg/Kg	1	8/25/2005
2-Methylnaphthalene	ND	0.20		mg/Kg	1	8/25/2005
2-Methylphenol	ND	0.20		mg/Kg	1	8/25/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	8/25/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	8/25/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	8/25/2005
Naphthalene	ND	0.20		mg/Kg	1	8/25/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	8/25/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	8/25/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	8/25/2005
Nitrobenzene	ND	0.20		mg/Kg	1	8/25/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	8/25/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	8/25/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	8/25/2005
Phenanthrene	ND	0.20		mg/Kg	1	8/25/2005
Phenol	ND	0.20		mg/Kg	1	8/25/2005
Pyrene	ND	0.20		mg/Kg	1	8/25/2005
Pyridine	ND	0.50		mg/Kg	1	8/25/2005

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: 31-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: South Wall

Lab Order: 0508272

Collection Date: 8/22/2005 1:30:00 PM

Project: RR Rock Lagoon NW Add. Excav.

Lab ID: 0508272-03

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	8/25/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	8/25/2005
Surr: 2,4,6-Tribromophenol	96.6	35.5-141		%REC	1	8/25/2005
Surr: 2-Fluorobiphenyl	63.1	30.4-128		%REC	1	8/25/2005
Surr: 2-Fluorophenol	63.9	28.1-129		%REC	1	8/25/2005
Surr: 4-Terphenyl-d14	92.8	34.6-151		%REC	1	8/25/2005
Surr: Nitrobenzene-d5	65.8	26.5-122		%REC	1	8/25/2005
Surr: Phenol-d6	66.8	37.6-118		%REC	1	8/25/2005

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: 31-Aug-05

CLIENT: Giant Refining Co
 Lab Order: 0508272
 Project: RR Rock Lagoon NW Add. Excav.
 Lab ID: 0508272-04

Client Sample ID: South BTM
 Collection Date: 8/22/2005 1:45:00 PM
 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	8/29/2005 10:17:43 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/29/2005 10:17:43 AM
Surr: DNOP	66.9	60-124		%REC	1	8/29/2005 10:17:43 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/30/2005 8:14:49 PM
Surr: BFB	104	83.1-124		%REC	1	8/30/2005 8:14:49 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/30/2005 8:14:49 PM
Benzene	ND	0.025		mg/Kg	1	8/30/2005 8:14:49 PM
Toluene	ND	0.025		mg/Kg	1	8/30/2005 8:14:49 PM
Ethylbenzene	ND	0.025		mg/Kg	1	8/30/2005 8:14:49 PM
Xylenes, Total	ND	0.025		mg/Kg	1	8/30/2005 8:14:49 PM
Surr: 4-Bromofluorobenzene	101	87.5-115		%REC	1	8/30/2005 8:14:49 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	0.20		mg/Kg	1	8/25/2005
Acenaphthylene	ND	0.20		mg/Kg	1	8/25/2005
Aniline	ND	0.20		mg/Kg	1	8/25/2005
Anthracene	ND	0.20		mg/Kg	1	8/25/2005
Azobenzene	ND	0.20		mg/Kg	1	8/25/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	8/25/2005
Benzidine	ND	0.20		mg/Kg	1	8/25/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	8/25/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	8/25/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	8/25/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	8/25/2005
Benzoic acid	ND	0.50		mg/Kg	1	8/25/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	8/25/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	8/25/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	8/25/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	8/25/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	8/25/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	8/25/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	8/25/2005
Carbazole	ND	0.20		mg/Kg	1	8/25/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	8/25/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	8/25/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	8/25/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	8/25/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	8/25/2005

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: 31-Aug-05

CLIENT: Giant Refining Co
Lab Order: 0508272
Project: RR Rock Lagoon NW Add. Excav.
Lab ID: 0508272-04

Client Sample ID: South BTM
Collection Date: 8/22/2005 1:45:00 PM
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Chrysene	ND	0.20		mg/Kg	1	8/25/2005
Di-n-butyl phthalate	ND	0.25		mg/Kg	1	8/25/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	8/25/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	8/25/2005
Dibenzofuran	ND	0.50		mg/Kg	1	8/25/2005
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	8/25/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	8/25/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	8/25/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	8/25/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	8/25/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	8/25/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	8/25/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	8/25/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	8/25/2005
Fluoranthene	ND	0.20		mg/Kg	1	8/25/2005
Fluorene	ND	0.20		mg/Kg	1	8/25/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	8/25/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	8/25/2005
Hexachloroethane	ND	0.50		mg/Kg	1	8/25/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	8/25/2005
Isophorone	ND	0.20		mg/Kg	1	8/25/2005
2-Methylnaphthalene	ND	0.20		mg/Kg	1	8/25/2005
2-Methylphenol	ND	0.20		mg/Kg	1	8/25/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	8/25/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	8/25/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	8/25/2005
Naphthalene	ND	0.20		mg/Kg	1	8/25/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	8/25/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	8/25/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	8/25/2005
Nitrobenzene	ND	0.20		mg/Kg	1	8/25/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	8/25/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	8/25/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	8/25/2005
Phenanthrene	ND	0.20		mg/Kg	1	8/25/2005
Phenol	ND	0.20		mg/Kg	1	8/25/2005
Pyrene	ND	0.20		mg/Kg	1	8/25/2005
Pyridine	ND	0.50		mg/Kg	1	8/25/2005

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: 31-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: South BTM

Lab Order: 0508272

Collection Date: 8/22/2005 1:45:00 PM

Project: RR Rock Lagoon NW Add. Excav.

Lab ID: 0508272-04

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	8/25/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	8/25/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	8/25/2005
Surr: 2,4,6-Tribromophenol	58.6	35.5-141		%REC	1	8/25/2005
Surr: 2-Fluorobiphenyl	36.3	30.4-128		%REC	1	8/25/2005
Surr: 2-Fluorophenol	39.3	28.1-129		%REC	1	8/25/2005
Surr: 4-Terphenyl-d14	77.3	34.6-151		%REC	1	8/25/2005
Surr: Nitrobenzene-d5	37.2	26.5-122		%REC	1	8/25/2005
Surr: Phenol-d6	38.6	37.6-118		%REC	1	8/25/2005

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: 31-Aug-05

QC SUMMARY REPORT
Method Blank

CLIENT: Giant Refining Co
 Work Order: 0508272
 Project: RR Rock Lagoon NW Add. Excav.

Sample ID	MB-8603	Batch ID: 8603	Test Code: SW8015	Units: mg/Kg	Analysis Date 8/25/2005 4:13:11 PM	Prep Date 8/24/2005
Client ID:			Run ID: FID(17A) 2_050824A		SeqNo: 392317	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND	10				
Motor Oil Range Organics (MRO)	ND	50				
Surr: DNOP	8.098	0	10	0	81.0	60 124 0

Sample ID	mb-8607	Batch ID: 8607	Test Code: SW8015	Units: mg/Kg	Analysis Date 8/30/2005 4:33:28 PM	Prep Date 8/24/2005
Client ID:			Run ID: PIDFID_050830A		SeqNo: 393964	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Gasoline Range Organics (GRO)	ND	5				
Surr: BFB	1012	0	1000	0	101	83.1 124 0

Sample ID	mb-8607	Batch ID: 8607	Test Code: SW8021	Units: mg/Kg	Analysis Date 8/30/2005 4:33:28 PM	Prep Date 8/24/2005
Client ID:			Run ID: PIDFID_050830A		SeqNo: 393927	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Methyl tert-butyl ether (MTBE)	ND	0.1				
Benzene	ND	0.025				
Toluene	ND	0.025				
Ethylbenzene	ND	0.025				
Xylenes, Total	ND	0.025				
Surr: 4-Bromofluorobenzene	0.9898	0	1	0	99.0	87.5 115 0

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

CLIENT: Giant Refining Co
Work Order: 0508272
Project: RR Rock Lagoon NW Add. Excav.
QC SUMMARY REPORT
 Method Blank

Sample ID MB-8613	Batch ID: 8613	Test Code: SW8270C	Unlis: mg/Kg	Analysis Date 8/25/2005	Prep Date 8/24/2005
Client ID:		Run ID: ELMO_050825A		SeqNo: 392429	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Acenaphthene	ND	0.2			
Acenaphthylene	ND	0.2			
Aniline	ND	0.2			
Anthracene	ND	0.2			
Azobenzene	ND	0.2			
Benz(a)anthracene	ND	0.25			
Benzidine	ND	0.2			
Benzo(a)pyrene	ND	0.2			
Benzo(b)fluoranthene	ND	0.2			
Benzo(g,h,i)perylene	ND	0.3			
Benzo(k)fluoranthene	ND	0.5			
Benzoic acid	ND	0.5			
Benzyl alcohol	ND	0.5			
Bis(2-chloroethoxy)methane	ND	0.5			
Bis(2-chloroethyl)ether	ND	0.25			
Bis(2-chloroisopropyl)ether	ND	0.5			
Bis(2-ethylhexyl)phthalate	0.07633	0.2			
4-Bromophenyl phenyl ether	ND	0.25			
Butyl benzyl phthalate	ND	0.2			
Carbazole	ND	0.2			
4-Chloro-3-methylphenol	ND	0.2			
4-Chloroaniline	ND	0.2			
2-Chloronaphthalene	ND	0.2			
2-Chlorophenol	ND	0.2			
4-Chlorophenyl phenyl ether	ND	0.2			
Chrysene	ND	0.2			
Di-n-butyl phthalate	0.1017	0.25			
Di-n-octyl phthalate	ND	0.5			

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: 0508272
 Project: RR Rock Lagoon NW Add. Excav.

Dibenz(a,h)anthracene	ND	0.25
Dibenzofuran	ND	0.5
1,2-Dichlorobenzene	ND	0.2
1,3-Dichlorobenzene	ND	0.2
1,4-Dichlorobenzene	ND	0.2
3,3'-Dichlorobenzidine	ND	0.2
Diethyl phthalate	ND	0.2
Dimethyl phthalate	ND	0.2
2,4-Dichlorophenol	ND	0.2
2,4-Dimethylphenol	ND	0.2
4,6-Dinitro-2-methylphenol	ND	0.5
2,4-Dinitrophenol	ND	0.5
2,4-Dinitrotoluene	ND	0.2
2,6-Dinitrotoluene	ND	0.2
Fluoranthene	ND	0.2
Fluorene	ND	0.2
Hexachlorobenzene	ND	0.2
Hexachlorobutadiene	ND	0.2
Hexachlorocyclopentadiene	ND	0.25
Hexachloroethane	ND	0.5
Indeno(1,2,3-cd)pyrene	ND	0.2
Isophorone	ND	0.2
2-Methylnaphthalene	ND	0.2
2-Methylphenol	ND	0.2
3+4-Methylphenol	ND	0.2
N-Nitrosodi-n-propylamine	ND	0.2
N-Nitrosodiphenylamine	ND	0.2
Naphthalene	ND	0.2
2-Nitroaniline	ND	0.5
3-Nitroaniline	ND	0.5
4-Nitroaniline	ND	0.25
Nitrobenzene	ND	0.2
2-Nitrophenol	ND	0.2

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

Method Blank

CLIENT: Giant Refining Co

Work Order: 0508272

Project: RR Rock Lagoon NW Add. Excav.

Chemical Name	Concentration (mg/L)	Detection Limit (mg/L)
4-Nitrophenol	ND	0.2
Pentachlorophenol	ND	0.5
Phenanthrene	ND	0.2
Phenol	ND	0.2
Pyrene	ND	0.2
Pyridine	ND	0.5
1,2,4-Trichlorobenzene	ND	0.2
2,4,5-Trichlorophenol	ND	0.2
2,4,6-Trichlorophenol	ND	0.2
Surr: 2,4,6-Tribromophenol	3.006	0
Surr: 2-Fluorobiphenyl	1.251	0
Surr: 2-Fluorophenol	2.666	0
Surr: 4-Terphenyl-d14	1.586	0
Surr: Nitrobenzene-d5	1.45	0
Surr: Phenol-d6	2.784	0
	3.33	0
	90.3	35.5
	141	141
	3.33	0
	1.67	0
	74.9	30.4
	128	128
	3.33	0
	80.7	28.1
	129	129
	3.33	0
	1.67	0
	95.0	34.6
	151	151
	3.33	0
	1.67	0
	86.8	26.5
	122	122
	3.33	0
	83.6	37.6
	118	118

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

Date: 31-Aug-05

CLIENT: Giant Refining Co
 Work Order: 0508272
 Project: RR Rock Lagoon NW Add. Excav.

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID	0508272-01a ms	Batch ID: 8607	Test Code: SW8015		Units: mg/Kg		Analysis Date		8/30/2005 8:46:18 PM		Prep Date		8/24/2005	
Client ID:	North Wall	Run ID:	PIDFID_050830A				SeqNo:		393971					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual			
Gasoline Range Organics (GRO)	25.26	5	25	0	101	84	120	0						
Surr: BFB	1065	0	1000	0	106	83.1	124	0						

Sample ID	0508272-01a msd	Batch ID: 8607	Test Code: SW8015	Units: mg/Kg	Analysis Date	8/30/2005 9:17:21 PM	Prep Date	8/24/2005			
Client ID:	North Wall	Run ID:	PIDFID_050830A		SeqNo:	393972					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23.88	5	25	0	95.5	84	120	25.26	5.62	11.6	
Surr: BFB	1096	0	1000	0	110	83.1	124	1065	2.85	0	

Sample ID	0508272-01a.ms	Batch ID: 8607	Test Code: SW8021		Units: mg/Kg		Analysis Date		8/30/2005 8:46:18 PM		Prep Date		8/24/2005	
Client ID:	North Wall	Run ID:	PIDFID_050830A				SeqNo:		393939					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual			
Methyl tert-butyl ether (MTBE)	1.746	0.1	2	0	87.3	65	132	0						
Benzene	0.4063	0.025	0.42	0	96.7	85.6	116	0						
Toluene	2.051	0.025	1.9	0	108	82.4	120	0						
Ethylbenzene	0.4099	0.025	0.41	0	100	86.4	111	0						
Xylenes, Total	2.026	0.025	1.9	0	107	78.4	125	0						
Surr: 4-Bromofluorobenzene	1.062	0	1	0	106	87.5	115	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:

0508272

Project:

RR Rock Lagoon NW Add. Excav.

QC SUMMARY REPORT

Sample Matrix Spike Duplicate

Sample ID	0508272-01a msd	Batch ID: 8607	Test Code: SW8021		Units: mg/Kg		Analysis Date 8/30/2005 9:17:21 PM		Prep Date 8/24/2005		
Client ID:	North Wall	Run ID:	PIDFID_050830A	SeqNo:	393940						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.697	0.1	2	0	84.8	65	132	1.746	2.86	28	
Benzene	0.4188	0.025	0.42	0	99.7	85.6	116	0.4063	3.03	27	
Toluene	2.091	0.025	1.9	0	110	82.4	120	2.051	1.94	19	
Ethylbenzene	0.4074	0.025	0.41	0	99.4	86.4	111	0.4099	0.622	10	
Xylenes, Total	2.044	0.025	1.9	0	108	78.4	125	2.026	0.923	13	
Surr: 4-Bromofluorobenzene	1.053	0	1	0	105	87.5	115	1.062	0.816	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
 2

Hall Environmental Analysis Laboratory

Date: 31-Aug-05

CLIENT: Giant Refining Co
 Work Order: 0508272
 Project: RR Rock Lagoon NW Add. Excav.

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID	LCS-8603	Batch ID	8603	Test Code	SW8015	Units	mg/Kg	Analysis Date	8/25/2005 5:19:21 PM	Prep Date	8/24/2005
Client ID:		Run ID:	FID(17A) 2_050824A					SeqNo:	392318		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Diesel Range Organics (DRO)		43.03	10	50	0	86.1	67.4	117	0		

Sample ID	LCSD-8603	Batch ID	8603	Test Code	SW8015	Units	mg/Kg	Analysis Date	8/26/2005 7:29:18 AM	Prep Date	8/24/2005
Client ID:		Run ID:	FID(17A) 2_050824A					SeqNo:	392319		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Diesel Range Organics (DRO)		38.09	10	50	0	76.2	67.4	117	43.03	12.2	17.4

Sample ID	Ics-8607	Batch ID	8607	Test Code	SW8015	Units	mg/Kg	Analysis Date	8/30/2005 5:05:02 PM	Prep Date	8/24/2005
Client ID:		Run ID:	PIDFID_050830A					SeqNo:	393965		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Gasoline Range Organics (GRO)		26.86	5	25	0	107	84	120	0		

Sample ID	Ics-8607	Batch ID	8607	Test Code	SW8021	Units	mg/Kg	Analysis Date	8/30/2005 5:05:02 PM	Prep Date	8/24/2005
Client ID:		Run ID:	PIDFID_050830A					SeqNo:	393929		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit
Methyl tert-butyl ether (MTBE)		1.737	0.1	2	0	86.8	65	132	0		
Benzene		0.4379	0.025	0.42	0	104	85.6	116	0		
Toluene		2.211	0.025	1.9	0	116	82.4	120	0		
Ethylbenzene		0.43	0.025	0.41	0	105	86.4	111	0		
Xylenes, Total		2.147	0.025	1.9	0	113	78.4	125	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: 0508272
Project: RR Rock Lagoon NW Add. Excav.

QC SUMMARY REPORT
 Laboratory Control Spike - generic

Sample ID	LCS-8613	Batch ID: 8613	Test Code: SW8270C	Units: mg/Kg	Analysis Date 8/25/2005		Prep Date 8/24/2005				
Client ID:	Run ID:	ELMO_050825A	SeqNo:	392430							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.268	0.2	1.67	0	75.9	24	125	0			
4-Chloro-3-methylphenol	2.687	0.2	3.33	0	80.7	14.6	154	0			
2-Chlorophenol	2.195	0.2	3.33	0	65.9	13.3	149	0			
1,4-Dichlorobenzene	0.987	0.2	1.67	0	59.1	23.6	118	0			
2,4-Dinitrotoluene	1.288	0.2	1.67	0	77.1	28	136	0			
N-Nitrosodi-n-propylamine	1.043	0.2	1.67	0	62.5	28	114	0			
4-Nitrophenol	2.444	0.2	3.33	0	73.4	13.1	150	0			
Pentachlorophenol	3.074	0.5	3.33	0	92.3	20.1	139	0			
Phenol	2.247	0.2	3.33	0	67.5	17.3	141	0			
Pyrene	1.315	0.2	1.67	0	78.7	29	131	0			
1,2,4-Trichlorobenzene	1.15	0.2	1.67	0	68.8	17.9	126	0			

Sample ID	LCSD-8613	Batch ID: 8613	Test Code: SW8270C	Units: mg/Kg	Analysis Date	8/25/2005	Prep Date	8/24/2005			
Client ID:			Run ID:	ELMQ_050825A	SeqNo:	392431					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.272	0.2	1.67	0	76.2	24	125	1.268	0.341	25	
4-Chloro-3-methylphenol	2.474	0.2	3.33	0	74.3	14.6	154	2.687	8.28	25	
2-Chlorophenol	2.253	0.2	3.33	0	67.7	13.3	149	2.195	2.61	25	
1,4-Dichlorobenzene	0.922	0.2	1.67	0	55.2	23.6	118	0.987	6.81	25	
2,4-Dinitrotoluene	1.237	0.2	1.67	0	74.1	28	136	1.288	4.07	25	
N-Nitrosodi-n-propylamine	1.011	0.2	1.67	0	60.5	28	114	1.043	3.15	25	
4-Nitrophenol	2.316	0.2	3.33	0	69.6	13.1	150	2.444	5.36	25	
Pentachlorophenol	2.941	0.5	3.33	0	88.3	20.1	139	3.074	4.44	25	
Phenol	2.271	0.2	3.33	0	68.2	17.3	141	2.247	1.08	25	
Pyrene	1.243	0.2	1.67	0	74.4	29	131	1.315	5.63	25	
1,2,4-Trichlorobenzene	1.08	0.2	1.67	0	64.7	17.9	126	1.15	6.28	25	

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:

8/24/2005

Work Order Number 0508272

Received by AT

Checklist completed by

Signature

Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>	Not Shipped <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>	
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>	
Container/Temp Blank temperature?	6°	4° C ± 2 Acceptable If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____



COVER LETTER

August 26, 2005

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

RE: R.R. Rack Lagoon Additional SE Wall Exc

Order No.: 0508234

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 4 samples on 8/19/2005 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,

A handwritten signature in black ink, appearing to read "Andy Freeman".

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager



Hall Environmental Analysis Laboratory

Date: 26-Aug-05

CLIENT: Giant Refining Co

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab Order: 0508234

CASE NARRATIVE

Analytical Comments for METHOD 8015DRO_S, SAMPLE 0508234-01B: DNOP not recovered due to dilution Analytical Comments for METHOD 8015DRO_S, SAMPLE 0508234-02B: DNOP not recovered due to dilution Analytical Comments for METHOD 8015DRO_S, SAMPLE 0508234-03B: DNOP not recovered due to dilution

Hall Environmental Analysis Laboratory

Date: 26-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: North Wall

Lab Order: 0508234

Collection Date: 8/19/2005 10:00:00 AM

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID: 0508234-01

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	1500	1000		mg/Kg	100	8/21/2005 6:45:24 PM
Motor Oil Range Organics (MRO)	ND	5000		mg/Kg	100	8/21/2005 6:45:24 PM
Surr: DNOP	0	60-124	S	%REC	100	8/21/2005 6:45:24 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	120	100		mg/Kg	20	8/23/2005 11:21:34 PM
Surr: BFB	106	83.1-124		%REC	20	8/23/2005 11:21:34 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.0		mg/Kg	20	8/23/2005 11:21:34 PM
Benzene	0.70	0.50		mg/Kg	20	8/23/2005 11:21:34 PM
Toluene	ND	0.50		mg/Kg	20	8/23/2005 11:21:34 PM
Ethylbenzene	3.4	0.50		mg/Kg	20	8/23/2005 11:21:34 PM
Xylenes, Total	6.5	0.50		mg/Kg	20	8/23/2005 11:21:34 PM
Surr: 4-Bromofluorobenzene	109	87.5-115		%REC	20	8/23/2005 11:21:34 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	0.65	0.20		mg/Kg	1	8/23/2005
Acenaphthylene	ND	0.20		mg/Kg	1	8/23/2005
Aniline	ND	0.20		mg/Kg	1	8/23/2005
Anthracene	ND	0.20		mg/Kg	1	8/23/2005
Azobenzene	ND	0.20		mg/Kg	1	8/23/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	8/23/2005
Benzidine	ND	0.20		mg/Kg	1	8/23/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	8/23/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	8/23/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	8/23/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	8/23/2005
Benzoic acid	ND	0.50		mg/Kg	1	8/23/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	8/23/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	8/23/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	8/23/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	8/23/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	8/23/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	8/23/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	8/23/2005
Carbazole	ND	0.20		mg/Kg	1	8/23/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	8/23/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	8/23/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	8/23/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	8/23/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	8/23/2005

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: 26-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: North Wall

Lab Order: 0508234

Collection Date: 8/19/2005 10:00:00 AM

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID: 0508234-01

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Chrysene	ND	0.20		mg/Kg	1	8/23/2005
Di-n-butyl phthalate	ND	0.25		mg/Kg	1	8/23/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	8/23/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	8/23/2005
Dibenzofuran	ND	0.50		mg/Kg	1	8/23/2005
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	8/23/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	8/23/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	8/23/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	8/23/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	8/23/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	8/23/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	8/23/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	8/23/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	8/23/2005
Fluoranthene	ND	0.20		mg/Kg	1	8/23/2005
Fluorene	1.5	0.20		mg/Kg	1	8/23/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	8/23/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	8/23/2005
Hexachloroethane	ND	0.50		mg/Kg	1	8/23/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	8/23/2005
Isophorone	ND	0.20		mg/Kg	1	8/23/2005
2-Methylnaphthalene	9.8	2.0		mg/Kg	10	8/23/2005
2-Methylphenol	ND	0.20		mg/Kg	1	8/23/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	8/23/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	8/23/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	8/23/2005
Naphthalene	3.1	0.20		mg/Kg	1	8/23/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	8/23/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	8/23/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	8/23/2005
Nitrobenzene	ND	0.20		mg/Kg	1	8/23/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	8/23/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	8/23/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	8/23/2005
Phenanthrene	2.9	0.20		mg/Kg	1	8/23/2005
Phenol	ND	0.20		mg/Kg	1	8/23/2005
Pyrene	ND	0.20		mg/Kg	1	8/23/2005
Pyridine	ND	0.50		mg/Kg	1	8/23/2005

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: 26-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: North Wall

Lab Order: 0508234

Collection Date: 8/19/2005 10:00:00 AM

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID: 0508234-01

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	8/23/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	8/23/2005
Surr: 2,4,6-Tribromophenol	110	35.5-141		%REC	1	8/23/2005
Surr: 2-Fluorobiphenyl	107	30.4-128		%REC	1	8/23/2005
Surr: 2-Fluorophenol	62.9	28.1-129		%REC	1	8/23/2005
Surr: 4-Terphenyl-d14	80.8	34.6-151		%REC	1	8/23/2005
Surr: Nitrobenzene-d5	73.9	26.5-122		%REC	1	8/23/2005
Surr: Phenol-d6	72.8	37.6-118		%REC	1	8/23/2005

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: 26-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: South Wall

Lab Order: 0508234

Collection Date: 8/19/2005 10:30:00 AM

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID: 0508234-02

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	3800	1000		mg/Kg	100	8/21/2005 7:16:33 PM
Motor Oil Range Organics (MRO)	ND	5000		mg/Kg	100	8/21/2005 7:16:33 PM
Surr: DNOP	0	60-124	S	%REC	100	8/21/2005 7:16:33 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	8/23/2005 11:52:19 PM
Surr: BFB	98.4	83.1-124		%REC	50	8/23/2005 11:52:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	8/23/2005 11:52:19 PM
Benzene	ND	1.3		mg/Kg	50	8/23/2005 11:52:19 PM
Toluene	ND	1.3		mg/Kg	50	8/23/2005 11:52:19 PM
Ethylbenzene	4.5	1.3		mg/Kg	50	8/23/2005 11:52:19 PM
Xylenes, Total	15	1.3		mg/Kg	50	8/23/2005 11:52:19 PM
Surr: 4-Bromofluorobenzene	105	87.5-115		%REC	50	8/23/2005 11:52:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	2.4	2.0		mg/Kg	10	8/23/2005
Acenaphthylene	ND	2.0		mg/Kg	10	8/23/2005
Aniline	ND	2.0		mg/Kg	10	8/23/2005
Anthracene	ND	2.0		mg/Kg	10	8/23/2005
Azobenzene	ND	2.0		mg/Kg	10	8/23/2005
Benz(a)anthracene	ND	2.5		mg/Kg	10	8/23/2005
Benzidine	ND	2.0		mg/Kg	10	8/23/2005
Benzo(a)pyrene	ND	2.0		mg/Kg	10	8/23/2005
Benzo(b)fluoranthene	ND	2.0		mg/Kg	10	8/23/2005
Benzo(g,h,i)perylene	ND	3.0		mg/Kg	10	8/23/2005
Benzo(k)fluoranthene	ND	5.0		mg/Kg	10	8/23/2005
Benzoic acid	ND	5.0		mg/Kg	10	8/23/2005
Benzyl alcohol	ND	5.0		mg/Kg	10	8/23/2005
Bis(2-chloroethoxy)methane	ND	5.0		mg/Kg	10	8/23/2005
Bis(2-chloroethyl)ether	ND	2.5		mg/Kg	10	8/23/2005
Bis(2-chloroisopropyl)ether	ND	5.0		mg/Kg	10	8/23/2005
Bis(2-ethylhexyl)phthalate	ND	2.0		mg/Kg	10	8/23/2005
4-Bromophenyl phenyl ether	ND	2.5		mg/Kg	10	8/23/2005
Butyl benzyl phthalate	ND	2.0		mg/Kg	10	8/23/2005
Carbazole	ND	2.0		mg/Kg	10	8/23/2005
4-Chloro-3-methylphenol	ND	2.0		mg/Kg	10	8/23/2005
4-Chloroaniline	ND	2.0		mg/Kg	10	8/23/2005
2-Chloronaphthalene	ND	2.0		mg/Kg	10	8/23/2005
2-Chlorophenol	ND	2.0		mg/Kg	10	8/23/2005
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	10	8/23/2005

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: 26-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: South Wall

Lab Order: 0508234

Collection Date: 8/19/2005 10:30:00 AM

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID: 0508234-02

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Chrysene	ND	2.0		mg/Kg	10	8/23/2005
Di-n-butyl phthalate	ND	2.5		mg/Kg	10	8/23/2005
Di-n-octyl phthalate	ND	5.0		mg/Kg	10	8/23/2005
Dibenz(a,h)anthracene	ND	2.5		mg/Kg	10	8/23/2005
Dibenzofuran	ND	5.0		mg/Kg	10	8/23/2005
1,2-Dichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
1,3-Dichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
1,4-Dichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
3,3'-Dichlorobenzidine	ND	2.0		mg/Kg	10	8/23/2005
Diethyl phthalate	ND	2.0		mg/Kg	10	8/23/2005
Dimethyl phthalate	ND	2.0		mg/Kg	10	8/23/2005
2,4-Dichlorophenol	ND	2.0		mg/Kg	10	8/23/2005
2,4-Dimethylphenol	ND	2.0		mg/Kg	10	8/23/2005
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	10	8/23/2005
2,4-Dinitrophenol	ND	5.0		mg/Kg	10	8/23/2005
2,4-Dinitrotoluene	ND	2.0		mg/Kg	10	8/23/2005
2,6-Dinitrotoluene	ND	2.0		mg/Kg	10	8/23/2005
Fluoranthene	ND	2.0		mg/Kg	10	8/23/2005
Fluorene	5.1	2.0		mg/Kg	10	8/23/2005
Hexachlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
Hexachlorobutadiene	ND	2.0		mg/Kg	10	8/23/2005
Hexachlorocyclopentadiene	ND	2.5		mg/Kg	10	8/23/2005
Hexachloroethane	ND	5.0		mg/Kg	10	8/23/2005
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	10	8/23/2005
Isophorone	ND	2.0		mg/Kg	10	8/23/2005
2-Methylnaphthalene	49	4.0		mg/Kg	20	8/25/2005
2-Methylphenol	ND	2.0		mg/Kg	10	8/23/2005
3+4-Methylphenol	ND	2.0		mg/Kg	10	8/23/2005
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	10	8/23/2005
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	10	8/23/2005
Naphthalene	11	2.0		mg/Kg	10	8/23/2005
2-Nitroaniline	ND	5.0		mg/Kg	10	8/23/2005
3-Nitroaniline	ND	5.0		mg/Kg	10	8/23/2005
4-Nitroaniline	ND	2.5		mg/Kg	10	8/23/2005
Nitrobenzene	ND	2.0		mg/Kg	10	8/23/2005
2-Nitrophenol	ND	2.0		mg/Kg	10	8/23/2005
4-Nitrophenol	ND	2.0		mg/Kg	10	8/23/2005
Pentachlorophenol	ND	5.0		mg/Kg	10	8/23/2005
Phenanthrene	9.8	2.0		mg/Kg	10	8/23/2005
Phenol	ND	2.0		mg/Kg	10	8/23/2005
Pyrene	ND	2.0		mg/Kg	10	8/23/2005
Pyridine	ND	5.0		mg/Kg	10	8/23/2005

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: 26-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: South Wall

Lab Order: 0508234

Collection Date: 8/19/2005 10:30:00 AM

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID: 0508234-02

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	10	8/23/2005
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	10	8/23/2005
Surr: 2,4,6-Tribromophenol	109	35.5-141		%REC	10	8/23/2005
Surr: 2-Fluorobiphenyl	73.7	30.4-128		%REC	10	8/23/2005
Surr: 2-Fluorophenol	63.2	28.1-129		%REC	10	8/23/2005
Surr: 4-Terphenyl-d14	56.9	34.6-151		%REC	10	8/23/2005
Surr: Nitrobenzene-d5	111	26.5-122		%REC	10	8/23/2005
Surr: Phenol-d6	53.4	37.6-118		%REC	10	8/23/2005

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: 26-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: North BTM.

Lab Order: 0508234

Collection Date: 8/19/2005 10:15:00 AM

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID: 0508234-03

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	7000	200		mg/Kg	20	8/21/2005 9:52:45 AM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	8/21/2005 9:52:45 AM
Surr: DNOP	0	60-124	S	%REC	20	8/21/2005 9:52:45 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	8/24/2005 12:23:04 AM
Surr: BFB	101	83.1-124		%REC	50	8/24/2005 12:23:04 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	8/24/2005 12:23:04 AM
Benzene	ND	1.3		mg/Kg	50	8/24/2005 12:23:04 AM
Toluene	ND	1.3		mg/Kg	50	8/24/2005 12:23:04 AM
Ethylbenzene	ND	1.3		mg/Kg	50	8/24/2005 12:23:04 AM
Xylenes, Total	11	1.3		mg/Kg	50	8/24/2005 12:23:04 AM
Surr: 4-Bromofluorobenzene	105	87.5-115		%REC	50	8/24/2005 12:23:04 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	2.1	2.0		mg/Kg	10	8/23/2005
Acenaphthylene	ND	2.0		mg/Kg	10	8/23/2005
Aniline	ND	2.0		mg/Kg	10	8/23/2005
Anthracene	ND	2.0		mg/Kg	10	8/23/2005
Azobenzene	ND	2.0		mg/Kg	10	8/23/2005
Benz(a)anthracene	ND	2.5		mg/Kg	10	8/23/2005
Benzidine	ND	2.0		mg/Kg	10	8/23/2005
Benzo(a)pyrene	ND	2.0		mg/Kg	10	8/23/2005
Benzo(b)fluoranthene	ND	2.0		mg/Kg	10	8/23/2005
Benzo(g,h,i)perylene	ND	3.0		mg/Kg	10	8/23/2005
Benzo(k)fluoranthene	ND	5.0		mg/Kg	10	8/23/2005
Benzoic acid	ND	5.0		mg/Kg	10	8/23/2005
Benzyl alcohol	ND	5.0		mg/Kg	10	8/23/2005
Bis(2-chloroethoxy)methane	ND	5.0		mg/Kg	10	8/23/2005
Bis(2-chloroethyl)ether	ND	2.5		mg/Kg	10	8/23/2005
Bis(2-chloroisopropyl)ether	ND	5.0		mg/Kg	10	8/23/2005
Bis(2-ethylhexyl)phthalate	ND	2.0		mg/Kg	10	8/23/2005
4-Bromophenyl phenyl ether	ND	2.5		mg/Kg	10	8/23/2005
Butyl benzyl phthalate	ND	2.0		mg/Kg	10	8/23/2005
Carbazole	ND	2.0		mg/Kg	10	8/23/2005
4-Chloro-3-methylphenol	ND	2.0		mg/Kg	10	8/23/2005
4-Chloroaniline	ND	2.0		mg/Kg	10	8/23/2005
2-Chloronaphthalene	ND	2.0		mg/Kg	10	8/23/2005
2-Chlorophenol	ND	2.0		mg/Kg	10	8/23/2005
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	10	8/23/2005

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: 26-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: North BTM.

Lab Order: 0508234

Collection Date: 8/19/2005 10:15:00 AM

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID: 0508234-03

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Chrysene	ND	2.0		mg/Kg	10	8/23/2005
Di-n-butyl phthalate	ND	2.5		mg/Kg	10	8/23/2005
Di-n-octyl phthalate	ND	5.0		mg/Kg	10	8/23/2005
Dibenz(a,h)anthracene	ND	2.5		mg/Kg	10	8/23/2005
Dibenzofuran	ND	5.0		mg/Kg	10	8/23/2005
1,2-Dichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
1,3-Dichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
1,4-Dichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
3,3'-Dichlorobenzidine	ND	2.0		mg/Kg	10	8/23/2005
Diethyl phthalate	ND	2.0		mg/Kg	10	8/23/2005
Dimethyl phthalate	ND	2.0		mg/Kg	10	8/23/2005
2,4-Dichlorophenol	ND	2.0		mg/Kg	10	8/23/2005
2,4-Dimethylphenol	ND	2.0		mg/Kg	10	8/23/2005
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	10	8/23/2005
2,4-Dinitrophenol	ND	5.0		mg/Kg	10	8/23/2005
2,4-Dinitrotoluene	ND	2.0		mg/Kg	10	8/23/2005
2,6-Dinitrotoluene	ND	2.0		mg/Kg	10	8/23/2005
Fluoranthene	ND	2.0		mg/Kg	10	8/23/2005
Fluorene	4.3	2.0		mg/Kg	10	8/23/2005
Hexachlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
Hexachlorobutadiene	ND	2.0		mg/Kg	10	8/23/2005
Hexachlorocyclopentadiene	ND	2.5		mg/Kg	10	8/23/2005
Hexachloroethane	ND	5.0		mg/Kg	10	8/23/2005
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	10	8/23/2005
Isophorone	ND	2.0		mg/Kg	10	8/23/2005
2-Methylnaphthalene	34	2.0		mg/Kg	10	8/23/2005
2-Methylphenol	ND	2.0		mg/Kg	10	8/23/2005
3+4-Methylphenol	ND	2.0		mg/Kg	10	8/23/2005
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	10	8/23/2005
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	10	8/23/2005
Naphthalene	8.2	2.0		mg/Kg	10	8/23/2005
2-Nitroaniline	ND	5.0		mg/Kg	10	8/23/2005
3-Nitroaniline	ND	5.0		mg/Kg	10	8/23/2005
4-Nitroaniline	ND	2.5		mg/Kg	10	8/23/2005
Nitrobenzene	ND	2.0		mg/Kg	10	8/23/2005
2-Nitrophenol	ND	2.0		mg/Kg	10	8/23/2005
4-Nitrophenol	ND	2.0		mg/Kg	10	8/23/2005
Pentachlorophenol	ND	5.0		mg/Kg	10	8/23/2005
Phenanthrene	8.1	2.0		mg/Kg	10	8/23/2005
Phenol	ND	2.0		mg/Kg	10	8/23/2005
Pyrene	ND	2.0		mg/Kg	10	8/23/2005
Pyridine	ND	5.0		mg/Kg	10	8/23/2005

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: 26-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: North BTM.

Lab Order: 0508234

Collection Date: 8/19/2005 10:15:00 AM

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID: 0508234-03

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	10	8/23/2005
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	10	8/23/2005
Surr: 2,4,6-Tribromophenol	110	35.5-141		%REC	10	8/23/2005
Surr: 2-Fluorobiphenyl	69.1	30.4-128		%REC	10	8/23/2005
Surr: 2-Fluorophenol	57.2	28.1-129		%REC	10	8/23/2005
Surr: 4-Terphenyl-d14	54.7	34.6-151		%REC	10	8/23/2005
Surr: Nitrobenzene-d5	80.2	26.5-122		%REC	10	8/23/2005
Surr: Phenol-d6	51.7	37.6-118		%REC	10	8/23/2005

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: 26-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: South BTM.

Lab Order: 0508234

Collection Date: 8/19/2005 10:45:00 AM

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID: 0508234-04

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	15	10		mg/Kg	1	8/21/2005 10:25:32 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/21/2005 10:25:32 AM
Surr: DNOP	117	60-124		%REC	1	8/21/2005 10:25:32 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/24/2005 12:53:57 AM
Surr: BFB	98.0	83.1-124		%REC	1	8/24/2005 12:53:57 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/24/2005 12:53:57 AM
Benzene	ND	0.025		mg/Kg	1	8/24/2005 12:53:57 AM
Toluene	ND	0.025		mg/Kg	1	8/24/2005 12:53:57 AM
Ethylbenzene	ND	0.025		mg/Kg	1	8/24/2005 12:53:57 AM
Xylenes, Total	0.036	0.025		mg/Kg	1	8/24/2005 12:53:57 AM
Surr: 4-Bromofluorobenzene	104	87.5-115		%REC	1	8/24/2005 12:53:57 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	0.20		mg/Kg	1	8/23/2005
Acenaphthylene	ND	0.20		mg/Kg	1	8/23/2005
Aniline	ND	0.20		mg/Kg	1	8/23/2005
Anthracene	ND	0.20		mg/Kg	1	8/23/2005
Azobenzene	ND	0.20		mg/Kg	1	8/23/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	8/23/2005
Benzidine	ND	0.20		mg/Kg	1	8/23/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	8/23/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	8/23/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	8/23/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	8/23/2005
Benzoic acid	ND	0.50		mg/Kg	1	8/23/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	8/23/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	8/23/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	8/23/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	8/23/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	8/23/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	8/23/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	8/23/2005
Carbazole	ND	0.20		mg/Kg	1	8/23/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	8/23/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	8/23/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	8/23/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	8/23/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	8/23/2005

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: 26-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: South BTM.

Lab Order: 0508234

Collection Date: 8/19/2005 10:45:00 AM

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID: 0508234-04

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Chrysene	ND	0.20		mg/Kg	1	8/23/2005
Di-n-butyl phthalate	ND	0.25		mg/Kg	1	8/23/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	8/23/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	8/23/2005
Dibenzofuran	ND	0.50		mg/Kg	1	8/23/2005
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	8/23/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	8/23/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	8/23/2005
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	8/23/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	8/23/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	8/23/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	8/23/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	8/23/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	8/23/2005
Fluoranthene	ND	0.20		mg/Kg	1	8/23/2005
Fluorene	ND	0.20		mg/Kg	1	8/23/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	8/23/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	8/23/2005
Hexachloroethane	ND	0.50		mg/Kg	1	8/23/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	8/23/2005
Isophorone	ND	0.20		mg/Kg	1	8/23/2005
2-Methylnaphthalene	ND	0.20		mg/Kg	1	8/23/2005
2-Methylphenol	ND	0.20		mg/Kg	1	8/23/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	8/23/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	8/23/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	8/23/2005
Naphthalene	ND	0.20		mg/Kg	1	8/23/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	8/23/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	8/23/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	8/23/2005
Nitrobenzene	ND	0.20		mg/Kg	1	8/23/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	8/23/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	8/23/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	8/23/2005
Phenanthrene	ND	0.20		mg/Kg	1	8/23/2005
Phenol	ND	0.20		mg/Kg	1	8/23/2005
Pyrene	ND	0.20		mg/Kg	1	8/23/2005
Pyridine	ND	0.50		mg/Kg	1	8/23/2005

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: 26-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: South BTM.

Lab Order: 0508234

Collection Date: 8/19/2005 10:45:00 AM

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID: 0508234-04

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	8/23/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	8/23/2005
Surr: 2,4,6-Tribromophenol	93.6	35.5-141		%REC	1	8/23/2005
Surr: 2-Fluorobiphenyl	63.9	30.4-128		%REC	1	8/23/2005
Surr: 2-Fluorophenol	62.7	28.1-129		%REC	1	8/23/2005
Surr: 4-Terphenyl-d14	82.0	34.6-151		%REC	1	8/23/2005
Surr: Nitrobenzene-d5	66.7	26.5-122		%REC	1	8/23/2005
Surr: Phenol-d6	67.9	37.6-118		%REC	1	8/23/2005

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: 26-Aug-05

CLIENT: Giant Refining Co
 Work Order: 0508234
 Project: R.R. Rack Lagoon Additional SE Wall Excavati

QC SUMMARY REPORT

Method Blank

Sample ID	MB-8573	Batch ID	8573	Test Code	SW8015	Units	mg/Kg	Analysis Date	8/21/2005 1:58:54 AM	Prep Date	8/19/2005
Client ID:				Run ID:	FID(17A) 2_050820A			SeqNo:	390355		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	10.5	0	10	0	105	60	124	0			

Sample ID	mb-8571	Batch ID	8571	Test Code	SW8015	Units	mg/Kg	Analysis Date	8/22/2005 6:42:39 PM	Prep Date	8/19/2005
Client ID:				Run ID:	PIDFID_050822A			SeqNo:	391043		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5									
Surr: BFB	914.7	0	1000	0	91.5	83.1	124	0			

Sample ID	mb-8571	Batch ID	8571	Test Code	SW8021	Units	mg/Kg	Analysis Date	8/22/2005 6:42:39 PM	Prep Date	8/19/2005
Client ID:				Run ID:	PIDFID_050822A			SeqNo:	391004		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.1									J
Benzene	0.01303	0.025									J
Toluene	0.01188	0.025									J
Ethylbenzene	0.01603	0.025									J
Xylenes, Total	0.02385	0.025									J
Surr: 4-Bromofluorobenzene	0.9884	0	1	0	98.8	87.5	115	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

Method Blank

CLIENT: Giant Refining Co

Work Order: 0508234

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Sample ID	MB-8570	Batch ID: 8570	Test Code: SW8270C	Units: mg/Kg	Analysis Date 8/22/2005	Prep Date 8/19/2005
Client ID:			Run ID: ELMO_050822A		SeqNo: 391145	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Acenaphthene	ND	0.2				
Acenaphthylene	ND	0.2				
Aniline	ND	0.2				
Anthracene	ND	0.2				
Azobenzene	ND	0.2				
Benz(a)anthracene	ND	0.25				
Benzidine	ND	0.2				
Benzo(a)pyrene	ND	0.2				
Benzo(b)fluoranthene	ND	0.2				
Benzo(g,h,i)perylene	0.02967	0.3				
Benzo(k)fluoranthene	ND	0.5				
Benzoic acid	ND	0.5				
Benzyl alcohol	ND	0.5				
Bis(2-chloroethoxy)methane	ND	0.5				
Bis(2-chloroethyl)ether	ND	0.25				
Bis(2-chloroisopropyl)ether	ND	0.5				
Bis(2-ethylhexyl)phthalate	0.06733	0.2				
4-Bromophenyl phenyl ether	ND	0.25				
Butyl benzyl phthalate	ND	0.2				
Carbazole	ND	0.2				
4-Chloro-3-methylphenol	ND	0.2				
4-Chloroaniline	ND	0.2				
2-Chloronaphthalene	ND	0.2				
2-Chlorophenol	ND	0.2				
4-Chlorophenyl phenyl ether	ND	0.2				
Chrysene	ND	0.2				
Di-n-butyl phthalate	0.257	0.25				
Di-n-octyl phthalate	ND	0.5				

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: 0508234
Project: R.R. Rack Lagoon Additional SE Wall Excavati

Dibenz(a,h)anthracene	ND	0.25
Dibenzofuran	ND	0.5
1,2-Dichlorobenzene	ND	0.2
1,3-Dichlorobenzene	ND	0.2
1,4-Dichlorobenzene	ND	0.2
3,3'-Dichlorobenzidine	ND	0.2
Diethyl phthalate	ND	0.2
Dimethyl phthalate	ND	0.2
2,4-Dichlorophenol	ND	0.2
2,4-Dimethylphenol	ND	0.2
4,6-Dinitro-2-methylphenol	ND	0.5
2,4-Dinitrophenol	ND	0.5
2,4-Dinitrotoluene	ND	0.2
2,6-Dinitrotoluene	ND	0.2
Fluoranthene	ND	0.2
Fluorene	ND	0.2
Hexachlorobenzene	ND	0.2
Hexachlorobutadiene	ND	0.2
Hexachlorocyclopentadiene	ND	0.25
Hexachloroethane	ND	0.5
Indeno(1,2,3-cd)pyrene	ND	0.2
Isophorone	ND	0.2
2-Methylnaphthalene	ND	0.2
2-Methylphenol	ND	0.2
3+4-Methylphenol	ND	0.2
N-Nitrosodi-n-propylamine	ND	0.2
N-Nitrosodiphenylamine	ND	0.2
Naphthalene	ND	0.2
2-Nitroaniline	ND	0.5
3-Nitroaniline	ND	0.5
4-Nitroaniline	ND	0.25
Nitrobenzene	ND	0.2
2-Nitrophenol	ND	0.2

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: 0508234

Protect: R.R. Rack Lagoon Additional SE Wall Excavati

Compound	Concentration (ppm)	Retention Time (min)	Peak Area	Peak Height	Peak Width (min)	Peak Shape	Peak Type	Peak Label
4-Nitrophenol	0.2	ND						
Pentachlorophenol	0.5	ND						
Phenanthrene	0.2	ND						
Phenol	0.2	ND						
Pyrene	0.2	ND						
Pyridine	0.5	ND						
1,2,4-Trichlorobenzene	0.2	ND						
2,4,5-Trichlorophenol	0.2	ND						
2,4,6-Trichlorophenol	0.2	ND						
Surr: 2,4,6-Tribromophenol	0	2,838	3.33	85.2	35.5	141	0	
Surr: 2-Fluorobiphenyl	0	1,208	1.67	72.4	30.4	128	0	
Surr: 2-Fluorophenol	0	2,164	3.33	65.0	28.1	129	0	
Surr: 4-Terphenyl-d14	0	1,483	1.67	88.8	34.6	151	0	
Surr: Nitrobenzene-d5	0	1,198	1.67	71.7	26.5	122	0	
Surr: Phenol-d6	0	2,348	3.33	70.5	37.6	118	0	

B - Analyte detected in the associated Method Blank

3

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

Hall Environmental Analysis Laboratory

Date: 26-Aug-05

CLIENT: Giant Refining Co

Work Order: 0508234

Project: R.R. Rack Lagoon Additional SE Wall Excavati

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID	LCS-8573	Batch ID: 8573	Test Code: SW8015	Units: mg/Kg	Analysis Date	8/21/2005 2:31:43 AM	Prep Date	8/19/2005				
Client ID:		Run ID:	FID(17A) 2_050820A		SeqNo:	390356						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		53.51	10	50	0	107	67.4	117	0			
Sample ID	LCSD-8573	Batch ID: 8573	Test Code: SW8015	Units: mg/Kg	Analysis Date	8/21/2005 3:04:32 AM	Prep Date	8/19/2005				
Client ID:		Run ID:	FID(17A) 2_050820A		SeqNo:	390357						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		58.49	10	50	0	117	67.4	117	53.51	8.89	17.4	
Sample ID	Ics-8571	Batch ID: 8571	Test Code: SW8015	Units: mg/Kg	Analysis Date	8/22/2005 7:45:44 PM	Prep Date	8/19/2005				
Client ID:		Run ID:	PIDFID_050822A		SeqNo:	391059						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		24.66	5	25	0	98.6	84	120	0			
Sample ID	GRO Ics 2.5ug	Batch ID: 8571	Test Code: SW8015	Units: mg/Kg	Analysis Date	8/23/2005 12:52:35 PM	Prep Date					
Client ID:		Run ID:	PIDFID_050823A		SeqNo:	391457						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		22.13	5	25	0.0156	88.5	84	120	0			
Sample ID	GRO Ics 2.5ug	Batch ID: 8571	Test Code: SW8015	Units: mg/Kg	Analysis Date	8/24/2005 4:49:06 PM	Prep Date					
Client ID:		Run ID:	PIDFID_050824A		SeqNo:	392009						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		22.35	5	25	0.0214	89.3	84	120	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: 0508234
 Project: R.R. Rack Lagoon Additional SE Wall Excavati

Sample ID	Ics-8571	Batch ID: 8571	Test Code: SW8021	Units: mg/Kg	Analysis Date	8/22/2005 7:45:44 PM	Prep Date	8/19/2005				
Client ID:		Run ID:	PIDFID_050822A		SeqNo:	391005						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)		2.093	0.1	2	0	105	65	132	0			
Benzene		0.4507	0.025	0.42	0.01303	104	85.6	116	0			
Toluene		2.111	0.025	2	0.01188	105	82.4	120	0			
Ethylbenzene		0.4324	0.025	0.41	0.01603	102	86.4	111	0			
Xylenes, Total		2.185	0.025	2	0.02385	108	78.4	125	0			

Sample ID	BTEX Ics 100ng	Batch ID: 8571	Test Code: SW8021		Units: mg/Kg	Analysis Date 8/23/2005 1:55:24 PM		Prep Date			
Client ID:		Run ID:	PIDFID_050823A			SeqNo: 391323					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.9565	0.1	1	0	95.6	65	132	0			
Benzene	1.04	0.025	1	0	104	85.6	116	0			
Toluene	1.027	0.025	1	0	103	82.4	120	0			
Ethylbenzene	1.036	0.025	1	0	104	86.4	111	0			
Xylenes, Total	2.1	0.025	2	0	105	78.4	125	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: 0508234

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Sample ID	LCS-8570	Batch ID: 8570	Test Code: SW8270C	Units: mg/Kg	Analysis Date	8/22/2005	Prep Date	8/19/2005			
Client ID:		Run ID:	ELMO_050822A		SeqNo:	391146					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.344	0.2	1.67	0	80.5	24	125	0			
4-Chloro-3-methylphenol	2.653	0.2	3.33	0	79.7	14.6	154	0			
2-Chlorophenol	2.177	0.2	3.33	0	65.4	13.3	149	0			
1,4-Dichlorobenzene	0.9777	0.2	1.67	0	58.5	23.6	118	0			
2,4-Dinitrotoluene	1.402	0.2	1.67	0	83.9	28	136	0			
N-Nitrosodi-n-propylamine	1.068	0.2	1.67	0	64.0	28	114	0			
4-Nitrophenol	2.711	0.2	3.33	0	81.4	13.1	150	0			
Pentachlorophenol	2.921	0.5	3.33	0	87.7	20.1	139	0			
Phenol	2.213	0.2	3.33	0	66.4	17.3	141	0			
Pyrene	1.288	0.2	1.67	0	77.1	29	131	0			
1,2,4-Trichlorobenzene	1.109	0.2	1.67	0	66.4	17.9	126	0			

Sample ID	LCSD-8570	Batch ID: 8570	Test Code: SW8270C	Units: mg/Kg	Analysis Date	8/22/2005	Prep Date	8/19/2005			
Client ID:		Run ID:	ELMQ_050822A		SeqNo:	391147					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.298	0.2	1.67	0	77.7	24	125	1.344	3.48	25	
4-Chloro-3-methylphenol	2.848	0.2	3.33	0	85.5	14.6	154	2.653	7.08	25	
2-Chlorophenol	2.318	0.2	3.33	0	69.6	13.3	149	2.177	6.29	25	
1,4-Dichlorobenzene	0.9963	0.2	1.67	0	59.7	23.6	118	0.9777	1.89	25	
2,4-Dinitrotoluene	1.337	0.2	1.67	0	80.1	28	136	1.402	4.70	25	
N-Nitrosodi-n-propylamine	1.11	0.2	1.67	0	66.5	28	114	1.068	3.83	25	
4-Nitrophenol	2.786	0.2	3.33	0	83.7	13.1	150	2.711	2.73	25	
Pentachlorophenol	3.056	0.5	3.33	0	91.8	20.1	139	2.921	4.53	25	
Phenol	2.304	0.2	3.33	0	69.2	17.3	141	2.213	4.06	25	
Pyrene	1.384	0.2	1.67	0	82.9	29	131	1.288	7.21	25	
1,2,4-Trichlorobenzene	1.145	0.2	1.67	0	68.5	17.9	126	1.109	3.17	25	

Qualifiers: ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

8/19/2005

Work Order Number 0508234

Received by AMF

Checklist completed by

B. Schleppe
Signature

8-19-05
Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/> Not Shipped <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Water - VOA vials have zero headspace?	No VOA vials submitted <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Container/Temp Blank temperature?	6°	4° C ± 2 Acceptable If given sufficient time to cool.	

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

Client: Giant Refining
Company - Linize
Address: Route 3 Box 7
Gallup, NM 87301

Project Name: RR Back Trench
SE Wall Excavation

Project Manager: *Steve Morris*
 Sampler: *Steve Morris*
 Sample Temperature:

Phone #: 5057223833
Fax #: 5057220210

Number/Volume	Preservative		HEAL No. 0508234
	HgCl ₂	HNO ₃	

Date	Time	Matrix	Sample I.D. No.
9/65	1000	Soil	North Wall
"	1030	"	South Wall
"	1015	"	North Etern-
"	1045	"	South STM.

Date:	Time:	Relinquished By: (Signature)
12-05-1335		<i>[Signature]</i>
Date:	Time:	Relinquished By: (Signature)

Received By: (Signature) 3/14/05 13:55
Received By: (Signature)

Rush! ASAP!

Std ☐ Level 4 ☐ GA/ GC Package.

4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4
www.hallenvironmental.com

ANALYSIS REQUEST

[illegible]

Remarks:

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT: Giant Refining Co Client Sample ID: North Wall
Lab Order: 0508234 Tag Number:
Project: R.R. Rack Lagoon Additional SE Wall Excavati Collection Date: 8/19/2005 10:00:00 AM
Lab ID: 0508234-01A Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	120	100		mg/Kg	20	8/23/2005 11:21:34 PM
Surr: BFB	106	83.1-124		%REC	20	8/23/2005 11:21:34 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.0		mg/Kg	20	8/23/2005 11:21:34 PM
Benzene	0.70	0.50		mg/Kg	20	8/23/2005 11:21:34 PM
Toluene	ND	0.50		mg/Kg	20	8/23/2005 11:21:34 PM
Ethylbenzene	3.4	0.50		mg/Kg	20	8/23/2005 11:21:34 PM
Xylenes, Total	6.5	0.50		mg/Kg	20	8/23/2005 11:21:34 PM
Surr: 4-Bromofluorobenzene	109	87.5-115		%REC	20	8/23/2005 11:21:34 PM

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

: Sp : Recovery outside acceptance limits
I RF outside acceptance limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT: Giant Refining Co **Client Sample ID:** North Wall
Lab Order: 0508234 **Tag Number:**
Project: R.R. Rack Lagoon Additional SE Wall Excavati **Collection Date:** 8/19/2005 10:00:00 AM
Lab ID: 0508234-01B **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	1500	1000		mg/Kg	100	8/21/2005 6:45:24 PM
Motor Oil Range Organics (MRO)	ND	5000		mg/Kg	100	8/21/2005 6:45:24 PM
Surr: DNOP	0	60-124	S	%REC	100	8/21/2005 6:45:24 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	0.65	0.20		mg/Kg	1	8/23/2005
Acenaphthylene	ND	0.20		mg/Kg	1	8/23/2005
Aniline	ND	0.20		mg/Kg	1	8/23/2005
Anthracene	ND	0.20		mg/Kg	1	8/23/2005
Azobenzene	ND	0.20		mg/Kg	1	8/23/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	8/23/2005
Benztidine	ND	0.20		mg/Kg	1	8/23/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	8/23/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	8/23/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	8/23/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	8/23/2005
Benzoic acid	ND	0.50		mg/Kg	1	8/23/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	8/23/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	8/23/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	8/23/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	8/23/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	8/23/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	8/23/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	8/23/2005
Carbazole	ND	0.20		mg/Kg	1	8/23/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	8/23/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	8/23/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	8/23/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	8/23/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	8/23/2005
Chrysene	ND	0.20		mg/Kg	1	8/23/2005
Di-n-butyl phthalate	ND	0.25		mg/Kg	1	8/23/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	8/23/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	8/23/2005
Dibenzofuran	ND	0.50		mg/Kg	1	8/23/2005
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	8/23/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	8/23/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	8/23/2005

Qualifiers: ND - Not Detected Reporting Limit

J - Analyte detected below quantitation limit

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spill Recovery outside accepted recovery limits

I - RF outside accepted recovery limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT: Giant Refining Co **Client Sample ID:** North Wall
Lab Order: 0508234 **Tag Number:**
Project: R.R. Rack Lagoon Additional SE Wall Excavati **Collection Date:** 8/19/2005 10:00:00 AM
Lab ID: 0508234-01B **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	8/23/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	8/23/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	8/23/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	8/23/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	8/23/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	8/23/2005
Fluoranthene	ND	0.20		mg/Kg	1	8/23/2005
Fluorene	1.5	0.20		mg/Kg	1	8/23/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	8/23/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	8/23/2005
Hexachloroethane	ND	0.50		mg/Kg	1	8/23/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	8/23/2005
Isophorone	ND	0.20		mg/Kg	1	8/23/2005
2-Methylnaphthalene	9.8	2.0		mg/Kg	10	8/23/2005
2-Methylphenol	ND	0.20		mg/Kg	1	8/23/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	8/23/2005
N-Nitrosodi-n-propylamine	0.27	0.20		mg/Kg	1	8/23/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	8/23/2005
Naphthalene	3.1	0.20		mg/Kg	1	8/23/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	8/23/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	8/23/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	8/23/2005
Nitrobenzene	ND	0.20		mg/Kg	1	8/23/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	8/23/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	8/23/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	8/23/2005
Phenanthrene	2.9	0.20		mg/Kg	1	8/23/2005
Phenol	ND	0.20		mg/Kg	1	8/23/2005
Pyrene	ND	0.20		mg/Kg	1	8/23/2005
Pyridine	ND	0.50		mg/Kg	1	8/23/2005
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	8/23/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	8/23/2005
Surr: 2,4,6-Tribromophenol	110	35.5-141		%REC	1	8/23/2005
Surr: 2-Fluorobiphenyl	107	30.4-128		%REC	1	8/23/2005
Surr: 2-Fluorophenol	62.9	28.1-129		%REC	1	8/23/2005
Surr: 4-Terphenyl-d14	80.8	34.6-151		%REC	1	8/23/2005
Surr: Nitrobenzene-d5	73.9	26.5-122		%REC	1	8/23/2005
Surr: Phenol-d6	72.8	37.6-118		%REC	1	8/23/2005

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

S - Spill Recovery outside accepted recovery limits
 I - RF outside accepted recovery limits
 E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT:	Giant Refining Co	Client Sample ID:	South Wall
Lab Order:	0508234	Tag Number:	
Project:	R.R. Rack Lagoon Additional SE Wall Excavati	Collection Date:	8/19/2005 10:30:00 AM
Lab ID:	0508234-02A	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	8/23/2005 11:52:19 PM
Surr: BFB	98.4	83.1-124		%REC	50	8/23/2005 11:52:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	8/23/2005 11:52:19 PM
Benzene	ND	1.3		mg/Kg	50	8/23/2005 11:52:19 PM
Toluene	ND	1.3		mg/Kg	50	8/23/2005 11:52:19 PM
Ethylbenzene	4.5	1.3		mg/Kg	50	8/23/2005 11:52:19 PM
Xylenes, Total	15	1.3		mg/Kg	50	8/23/2005 11:52:19 PM
Surr: 4-Bromofluorobenzene	105	87.5-115		%REC	50	8/23/2005 11:52:19 PM

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

S - Spill: Recovery outside acceptable limits
I - RF outside acceptable limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: South Wall

Lab Order: 0508234

Tag Number:

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Collection Date: 8/19/2005 10:30:00 AM

Lab ID: 0508234-02B

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	3800	1000		mg/Kg	100	8/21/2005 7:16:33 PM
Motor Oil Range Organics (MRO)	ND	5000		mg/Kg	100	8/21/2005 7:16:33 PM
Surr. DNOP	0	60-124	S	%REC	100	8/21/2005 7:16:33 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	2.4	2.0		mg/Kg	10	8/23/2005
Acenaphthylene	ND	2.0		mg/Kg	10	8/23/2005
Aniline	ND	2.0		mg/Kg	10	8/23/2005
Anthracene	ND	2.0		mg/Kg	10	8/23/2005
Azobenzene	ND	2.0		mg/Kg	10	8/23/2005
Benz(a)anthracene	ND	2.5		mg/Kg	10	8/23/2005
Benzidine	ND	2.0		mg/Kg	10	8/23/2005
Benzo(a)pyrene	ND	2.0		mg/Kg	10	8/23/2005
Benzo(b)fluoranthene	ND	2.0		mg/Kg	10	8/23/2005
Benzo(g,h,i)perylene	ND	3.0		mg/Kg	10	8/23/2005
Benzo(k)fluoranthene	ND	5.0		mg/Kg	10	8/23/2005
Benzoic acid	ND	5.0		mg/Kg	10	8/23/2005
Benzyl alcohol	ND	5.0		mg/Kg	10	8/23/2005
Bis(2-chloroethoxy)methane	ND	5.0		mg/Kg	10	8/23/2005
Bis(2-chloroethyl)ether	ND	2.5		mg/Kg	10	8/23/2005
Bis(2-chloroisopropyl)ether	ND	5.0		mg/Kg	10	8/23/2005
Bis(2-ethylhexyl)phthalate	ND	2.0		mg/Kg	10	8/23/2005
4-Bromophenyl phenyl ether	ND	2.5		mg/Kg	10	8/23/2005
Butyl benzyl phthalate	ND	2.0		mg/Kg	10	8/23/2005
Carbazole	ND	2.0		mg/Kg	10	8/23/2005
4-Chloro-3-methylphenol	ND	2.0		mg/Kg	10	8/23/2005
4-Chloroaniline	ND	2.0		mg/Kg	10	8/23/2005
2-Chloronaphthalene	ND	2.0		mg/Kg	10	8/23/2005
2-Chlorophenol	ND	2.0		mg/Kg	10	8/23/2005
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	10	8/23/2005
Chrysene	ND	2.0		mg/Kg	10	8/23/2005
Di-n-butyl phthalate	ND	2.5		mg/Kg	10	8/23/2005
Di-n-octyl phthalate	ND	5.0		mg/Kg	10	8/23/2005
Dibenz(a,h)anthracene	ND	2.5		mg/Kg	10	8/23/2005
Dibenzofuran	ND	5.0		mg/Kg	10	8/23/2005
1,2-Dichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
1,3-Dichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
1,4-Dichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
3,3'-Dichlorobenzidine	ND	2.0		mg/Kg	10	8/23/2005
Diethyl phthalate	ND	2.0		mg/Kg	10	8/23/2005
Dimethyl phthalate	ND	2.0		mg/Kg	10	8/23/2005

Qualifiers: ND - Not Detected to Reporting Limit

: Sp : Recovery outside acceptance limits

J - Analyte detected below quantitation limit

I RF outside reported acceptance limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT: Giant Refining Co Client Sample ID: South Wall
 Lab Order: 0508234 Tag Number:
 Project: R.R. Rack Lagoon Additional SE Wall Excavati Collection Date: 8/19/2005 10:30:00 AM
 Lab ID: 0508234-02B Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
2,4-Dichlorophenol	ND	2.0		mg/Kg	10	8/23/2005
2,4-Dimethylphenol	ND	2.0		mg/Kg	10	8/23/2005
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	10	8/23/2005
2,4-Dinitrophenol	ND	5.0		mg/Kg	10	8/23/2005
2,4-Dinitrotoluene	ND	2.0		mg/Kg	10	8/23/2005
2,6-Dinitrotoluene	ND	2.0		mg/Kg	10	8/23/2005
Fluoranthene	ND	2.0		mg/Kg	10	8/23/2005
Fluorene	5.1	2.0		mg/Kg	10	8/23/2005
Hexachlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
Hexachlorobutadiene	ND	2.0		mg/Kg	10	8/23/2005
Hexachlorocyclopentadiene	ND	2.5		mg/Kg	10	8/23/2005
Hexachloroethane	ND	5.0		mg/Kg	10	8/23/2005
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	10	8/23/2005
Isophorone	ND	2.0		mg/Kg	10	8/23/2005
2-Methylphenol	ND	2.0		mg/Kg	10	8/23/2005
3+4-Methylphenol	ND	2.0		mg/Kg	10	8/23/2005
N-Nitrosodi-n-propylamine	2.2	2.0		mg/Kg	10	8/23/2005
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	10	8/23/2005
Naphthalene	11	2.0		mg/Kg	10	8/23/2005
2-Nitroaniline	ND	5.0		mg/Kg	10	8/23/2005
3-Nitroaniline	ND	5.0		mg/Kg	10	8/23/2005
4-Nitroaniline	ND	2.5		mg/Kg	10	8/23/2005
Nitrobenzene	ND	2.0		mg/Kg	10	8/23/2005
2-Nitrophenol	ND	2.0		mg/Kg	10	8/23/2005
4-Nitrophenol	ND	2.0		mg/Kg	10	8/23/2005
Pentachlorophenol	ND	5.0		mg/Kg	10	8/23/2005
Phenanthrene	9.8	2.0		mg/Kg	10	8/23/2005
Phenol	ND	2.0		mg/Kg	10	8/23/2005
Pyrene	ND	2.0		mg/Kg	10	8/23/2005
Pyridine	ND	5.0		mg/Kg	10	8/23/2005
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	10	8/23/2005
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	10	8/23/2005
Surr: 2,4,6-Tribromophenol	109	35.5-141		%REC	10	8/23/2005
Surr: 2-Fluorobiphenyl	73.7	30.4-128		%REC	10	8/23/2005
Surr: 2-Fluorophenol	63.2	28.1-129		%REC	10	8/23/2005
Surr: 4-Terphenyl-d14	56.9	34.6-151		%REC	10	8/23/2005
Surr: Nitrobenzene-d5	111	26.5-122		%REC	10	8/23/2005
Surr: Phenol-d6	53.4	37.6-118		%REC	10	8/23/2005

Qualifiers: ND - Not Detected at Reporting Limit S - Spike Recovery outside acceptable limits
 J - Analyte detected below quantitation limit I - RF outside reported 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: 24-Aug-05

CLIENT:	Giant Refining Co	Client Sample ID:	North BTM.
Lab Order:	0508234	Tag Number:	
Project:	R.R. Rack Lagoon Additional SE Wall Excavati	Collection Date:	8/19/2005 10:15:00 AM
Lab ID:	0508234-03A	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	8/24/2005 12:23:04 AM
Surr: BFB	101	83.1-124		%REC	50	8/24/2005 12:23:04 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	8/24/2005 12:23:04 AM
Benzene	ND	1.3		mg/Kg	50	8/24/2005 12:23:04 AM
Toluene	ND	1.3		mg/Kg	50	8/24/2005 12:23:04 AM
Ethylbenzene	ND	1.3		mg/Kg	50	8/24/2005 12:23:04 AM
Xylenes, Total	11	1.3		mg/Kg	50	8/24/2005 12:23:04 AM
Surr: 4-Bromofluorobenzene	105	87.5-115		%REC	50	8/24/2005 12:23:04 AM

Qualifiers:

ND - Not Detected at Reporting Limit

J - Analyte detected below quantitation limit

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

z - Spike Recovery outside acceptable limits

1 - RF outside accepted limits

E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT: Giant Refining Co Client Sample ID: North BTM.
 Lab Order: 0508234 Tag Number:
 Project: R.R. Rack Lagoon Additional SE Wall Excavati Collection Date: 8/19/2005 10:15:00 AM
 Lab ID: 0508234-03B Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	7000	200		mg/Kg	20	8/21/2005 9:52:45 AM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	8/21/2005 9:52:45 AM
Surr: DNOP	0	60-124	S	%REC	20	8/21/2005 9:52:45 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	2.1	2.0		mg/Kg	10	8/23/2005
Acenaphthylene	ND	2.0		mg/Kg	10	8/23/2005
Aniline	ND	2.0		mg/Kg	10	8/23/2005
Anthracene	ND	2.0		mg/Kg	10	8/23/2005
Azobenzene	ND	2.0		mg/Kg	10	8/23/2005
Benz(a)anthracene	ND	2.5		mg/Kg	10	8/23/2005
Benzidine	ND	2.0		mg/Kg	10	8/23/2005
Benzo(a)pyrene	ND	2.0		mg/Kg	10	8/23/2005
Benzo(b)fluoranthene	ND	2.0		mg/Kg	10	8/23/2005
Benzo(g,h,i)perylene	ND	3.0		mg/Kg	10	8/23/2005
Benzo(k)fluoranthene	ND	5.0		mg/Kg	10	8/23/2005
Benzoic acid	ND	5.0		mg/Kg	10	8/23/2005
Benzyl alcohol	ND	5.0		mg/Kg	10	8/23/2005
Bis(2-chloroethoxy)methane	ND	5.0		mg/Kg	10	8/23/2005
Bis(2-chloroethyl)ether	ND	2.5		mg/Kg	10	8/23/2005
Bis(2-chloroisopropyl)ether	ND	5.0		mg/Kg	10	8/23/2005
Bis(2-ethylhexyl)phthalate	ND	2.0		mg/Kg	10	8/23/2005
4-Bromophenyl phenyl ether	ND	2.5		mg/Kg	10	8/23/2005
Butyl benzyl phthalate	ND	2.0		mg/Kg	10	8/23/2005
Carbazole	ND	2.0		mg/Kg	10	8/23/2005
4-Chloro-3-methylphenol	ND	2.0		mg/Kg	10	8/23/2005
4-Chloroaniline	ND	2.0		mg/Kg	10	8/23/2005
2-Chloronaphthalene	ND	2.0		mg/Kg	10	8/23/2005
2-Chlorophenol	ND	2.0		mg/Kg	10	8/23/2005
4-Chlorophenyl phenyl ether	ND	2.0		mg/Kg	10	8/23/2005
Chrysene	ND	2.0		mg/Kg	10	8/23/2005
Di-n-butyl phthalate	ND	2.5		mg/Kg	10	8/23/2005
Di-n-octyl phthalate	ND	5.0		mg/Kg	10	8/23/2005
Dibenz(a,h)anthracene	ND	2.5		mg/Kg	10	8/23/2005
Dibenzofuran	ND	5.0		mg/Kg	10	8/23/2005
1,2-Dichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
1,3-Dichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
1,4-Dichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
3,3'-Dichlorobenzidine	ND	2.0		mg/Kg	10	8/23/2005
Diethyl phthalate	ND	2.0		mg/Kg	10	8/23/2005
Dimethyl phthalate	ND	2.0		mg/Kg	10	8/23/2005

Qualifiers: ND - Not Detected at Reporting Limit : Sp - Result 'cry outside' accepted over limits
 J - Analyte detected below reporting limit : RF - outside reported over limits
 B - Analyte detected in the associated Method Blank E - Value above quantitation range
 * - Value exceeds Maximum Contaminant Level

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT: Giant Refining Co

Client Sample ID: North BTM.

Lab Order: 0508234

Tag Number:

Project: R.R. Rack Lagoon Additional SE Wall Excavati

Collection Date: 8/19/2005 10:15:00 AM

Lab ID: 0508234-03B

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
2,4-Dichlorophenol	ND	2.0		mg/Kg	10	8/23/2005
2,4-Dimethylphenol	ND	2.0		mg/Kg	10	8/23/2005
4,6-Dinitro-2-methylphenol	ND	5.0		mg/Kg	10	8/23/2005
2,4-Dinitrophenol	ND	5.0		mg/Kg	10	8/23/2005
2,4-Dinitrotoluene	ND	2.0		mg/Kg	10	8/23/2005
2,6-Dinitrotoluene	ND	2.0		mg/Kg	10	8/23/2005
Fluoranthene	ND	2.0		mg/Kg	10	8/23/2005
Fluorene	4.3	2.0		mg/Kg	10	8/23/2005
Hexachlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
Hexachlorobutadiene	ND	2.0		mg/Kg	10	8/23/2005
Hexachlorocyclopentadiene	ND	2.5		mg/Kg	10	8/23/2005
Hexachloroethane	ND	5.0		mg/Kg	10	8/23/2005
Indeno(1,2,3-cd)pyrene	ND	2.0		mg/Kg	10	8/23/2005
Isophorone	ND	2.0		mg/Kg	10	8/23/2005
2-Methylnaphthalene	34	2.0		mg/Kg	10	8/23/2005
2-Methylphenol	ND	2.0		mg/Kg	10	8/23/2005
3+4-Methylphenol	ND	2.0		mg/Kg	10	8/23/2005
N-Nitrosodi-n-propylamine	ND	2.0		mg/Kg	10	8/23/2005
N-Nitrosodiphenylamine	ND	2.0		mg/Kg	10	8/23/2005
Naphthalene	8.2	2.0		mg/Kg	10	8/23/2005
2-Nitroaniline	ND	5.0		mg/Kg	10	8/23/2005
3-Nitroaniline	ND	5.0		mg/Kg	10	8/23/2005
4-Nitroaniline	ND	2.5		mg/Kg	10	8/23/2005
Nitrobenzene	ND	2.0		mg/Kg	10	8/23/2005
2-Nitrophenol	ND	2.0		mg/Kg	10	8/23/2005
4-Nitrophenol	ND	2.0		mg/Kg	10	8/23/2005
Pentachlorophenol	ND	5.0		mg/Kg	10	8/23/2005
Phenanthrene	8.1	2.0		mg/Kg	10	8/23/2005
Phenol	ND	2.0		mg/Kg	10	8/23/2005
Pyrene	ND	2.0		mg/Kg	10	8/23/2005
Pyridine	ND	5.0		mg/Kg	10	8/23/2005
1,2,4-Trichlorobenzene	ND	2.0		mg/Kg	10	8/23/2005
2,4,5-Trichlorophenol	ND	2.0		mg/Kg	10	8/23/2005
2,4,6-Trichlorophenol	ND	2.0		mg/Kg	10	8/23/2005
Surr: 2,4,6-Tribromophenol	110	35.5-141		%REC	10	8/23/2005
Surr: 2-Fluorobiphenyl	69.1	30.4-128		%REC	10	8/23/2005
Surr: 2-Fluorophenol	57.2	28.1-129		%REC	10	8/23/2005
Surr: 4-Terphenyl-d14	54.7	34.6-151		%REC	10	8/23/2005
Surr: Nitrobenzene-d5	80.2	26.5-122		%REC	10	8/23/2005
Surr: Phenol-d6	51.7	37.6-118		%REC	10	8/23/2005

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

: Sp : Rec : Very outside acceptance limits
I RF outside acceptance limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT:	Giant Refining Co	Client Sample ID:	South BTM.
Lab Order:	0508234	Tag Number:	
Project:	R.R. Rack Lagoon Additional SE Wall Excavati	Collection Date:	8/19/2005 10:45:00 AM
Lab ID:	0508234-04A	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	8/24/2005 12:53:57 AM
Surr: BFB	98.0	83.1-124		%REC	1	8/24/2005 12:53:57 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	8/24/2005 12:53:57 AM
Benzene	ND	0.025		mg/Kg	1	8/24/2005 12:53:57 AM
Toluene	ND	0.025		mg/Kg	1	8/24/2005 12:53:57 AM
Ethylbenzene	ND	0.025		mg/Kg	1	8/24/2005 12:53:57 AM
Xylenes, Total	0.036	0.025		mg/Kg	1	8/24/2005 12:53:57 AM
Surr: 4-Bromofluorobenzene	104	87.5-115		%REC	1	8/24/2005 12:53:57 AM

Qualifiers:	ND - Not Detected at Reporting Limit	: Sp - Result very outside accepted reporting limits
	J - Analyte detected below quantitation limit	I - Result outside accepted reporting limits
	B - Analyte detected in the associated Method Blank	E - Value above quantitation range
	* - Value exceeds Maximum Contaminant Level	

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT: Giant Refining Co Client Sample ID: South BTM.
 Lab Order: 0508234 Tag Number:
 Project: R.R. Rack Lagoon Additional SE Wall Excavati Collection Date: 8/19/2005 10:45:00 AM
 Lab ID: 0508234-04B Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	15	10		mg/Kg	1	8/21/2005 10:25:32 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	8/21/2005 10:25:32 AM
Surr: DNOP	117	60-124		%REC	1	8/21/2005 10:25:32 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	0.20		mg/Kg	1	8/23/2005
Acenaphthylene	ND	0.20		mg/Kg	1	8/23/2005
Aniline	ND	0.20		mg/Kg	1	8/23/2005
Anthracene	ND	0.20		mg/Kg	1	8/23/2005
Azobenzene	ND	0.20		mg/Kg	1	8/23/2005
Benz(a)anthracene	ND	0.25		mg/Kg	1	8/23/2005
Benzidine	ND	0.20		mg/Kg	1	8/23/2005
Benzo(a)pyrene	ND	0.20		mg/Kg	1	8/23/2005
Benzo(b)fluoranthene	ND	0.20		mg/Kg	1	8/23/2005
Benzo(g,h,i)perylene	ND	0.30		mg/Kg	1	8/23/2005
Benzo(k)fluoranthene	ND	0.50		mg/Kg	1	8/23/2005
Benzoic acid	ND	0.50		mg/Kg	1	8/23/2005
Benzyl alcohol	ND	0.50		mg/Kg	1	8/23/2005
Bis(2-chloroethoxy)methane	ND	0.50		mg/Kg	1	8/23/2005
Bis(2-chloroethyl)ether	ND	0.25		mg/Kg	1	8/23/2005
Bis(2-chloroisopropyl)ether	ND	0.50		mg/Kg	1	8/23/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	8/23/2005
4-Bromophenyl phenyl ether	ND	0.25		mg/Kg	1	8/23/2005
Butyl benzyl phthalate	ND	0.20		mg/Kg	1	8/23/2005
Carbazole	ND	0.20		mg/Kg	1	8/23/2005
4-Chloro-3-methylphenol	ND	0.20		mg/Kg	1	8/23/2005
4-Chloroaniline	ND	0.20		mg/Kg	1	8/23/2005
2-Chloronaphthalene	ND	0.20		mg/Kg	1	8/23/2005
2-Chlorophenol	ND	0.20		mg/Kg	1	8/23/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	8/23/2005
Chrysene	ND	0.20		mg/Kg	1	8/23/2005
Di-n-butyl phthalate	ND	0.25		mg/Kg	1	8/23/2005
Di-n-octyl phthalate	ND	0.50		mg/Kg	1	8/23/2005
Dibenz(a,h)anthracene	ND	0.25		mg/Kg	1	8/23/2005
Dibenzofuran	ND	0.50		mg/Kg	1	8/23/2005
1,2-Dichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
1,3-Dichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
1,4-Dichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
3,3'-Dichlorobenzidine	ND	0.20		mg/Kg	1	8/23/2005
Diethyl phthalate	ND	0.20		mg/Kg	1	8/23/2005
Dimethyl phthalate	ND	0.20		mg/Kg	1	8/23/2005

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

: Sp : Rec 'very outside' accept 'true' limits
 I RF outside 'expected' 'over' limits
 E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 24-Aug-05

CLIENT: Giant Refining Co Client Sample ID: South BTM.
 Lab Order: 0508234 Tag Number:
 Project: R.R. Rack Lagoon Additional SE Wall Excavati Collection Date: 8/19/2005 10:45:00 AM
 Lab ID: 0508234-04B Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
2,4-Dichlorophenol	ND	0.20		mg/Kg	1	8/23/2005
2,4-Dimethylphenol	ND	0.20		mg/Kg	1	8/23/2005
4,6-Dinitro-2-methylphenol	ND	0.50		mg/Kg	1	8/23/2005
2,4-Dinitrophenol	ND	0.50		mg/Kg	1	8/23/2005
2,4-Dinitrotoluene	ND	0.20		mg/Kg	1	8/23/2005
2,6-Dinitrotoluene	ND	0.20		mg/Kg	1	8/23/2005
Fluoranthene	ND	0.20		mg/Kg	1	8/23/2005
Fluorene	ND	0.20		mg/Kg	1	8/23/2005
Hexachlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
Hexachlorobutadiene	ND	0.20		mg/Kg	1	8/23/2005
Hexachlorocyclopentadiene	ND	0.25		mg/Kg	1	8/23/2005
Hexachloroethane	ND	0.50		mg/Kg	1	8/23/2005
Indeno(1,2,3-cd)pyrene	ND	0.20		mg/Kg	1	8/23/2005
Isophorone	ND	0.20		mg/Kg	1	8/23/2005
2-Methylnaphthalene	ND	0.20		mg/Kg	1	8/23/2005
2-Methylphenol	ND	0.20		mg/Kg	1	8/23/2005
3+4-Methylphenol	ND	0.20		mg/Kg	1	8/23/2005
N-Nitrosodi-n-propylamine	ND	0.20		mg/Kg	1	8/23/2005
N-Nitrosodiphenylamine	ND	0.20		mg/Kg	1	8/23/2005
Naphthalene	ND	0.20		mg/Kg	1	8/23/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	8/23/2005
3-Nitroaniline	ND	0.50		mg/Kg	1	8/23/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	8/23/2005
Nitrobenzene	ND	0.20		mg/Kg	1	8/23/2005
2-Nitrophenol	ND	0.20		mg/Kg	1	8/23/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	8/23/2005
Pentachlorophenol	ND	0.50		mg/Kg	1	8/23/2005
Phenanthrene	ND	0.20		mg/Kg	1	8/23/2005
Phenol	ND	0.20		mg/Kg	1	8/23/2005
Pyrene	ND	0.20		mg/Kg	1	8/23/2005
Pyridine	ND	0.50		mg/Kg	1	8/23/2005
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg	1	8/23/2005
2,4,5-Trichlorophenol	ND	0.20		mg/Kg	1	8/23/2005
2,4,6-Trichlorophenol	ND	0.20		mg/Kg	1	8/23/2005
Surr: 2,4,6-Tribromophenol	93.6	35.5-141		%REC	1	8/23/2005
Surr: 2-Fluorobiphenyl	63.9	30.4-128		%REC	1	8/23/2005
Surr: 2-Fluorophenol	62.7	28.1-129		%REC	1	8/23/2005
Surr: 4-Terphenyl-d14	82.0	34.6-151		%REC	1	8/23/2005
Surr: Nitrobenzene-d5	66.7	26.5-122		%REC	1	8/23/2005
Surr: Phenol-d6	67.9	37.6-118		%REC	1	8/23/2005

Qualifiers: ND - Not Detected (within Reporting Limit) : Sp - Recovery outside acceptable limits
 J - Analyte detected below quantitation limit I - RF outside acceptable limits
 B - Analyte detected in the associated Method Blank E - Value above quantitation range
 * - Value exceeds Maximum Contaminant Level



COVER LETTER

December 13, 2004

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

RE: Railroad Rack Lagoon SWMU

Order No.: 0411234

Dear Steve Morris:


Hall Environmental Analysis Laboratory received 1 sample on 11/22/2004 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: 13-Dec-04

CLIENT: Giant Refining Co
Project: Railroad Rack Lagoon SWMU
Lab Order: 0411234

CASE NARRATIVE

Analytical Comments for METHOD 801SDRO_S, SAMPLE 0411234-01A: Surrogate not recovered due to dilution.

Hall Environmental Analysis Laboratory

Date: 13-Dec-04

CLIENT: Giant Refining Co

Client Sample ID: RR-E-1 Wall S

Lab Order: 0411234

Collection Date: 11/20/2004 11:00:00 AM

Project: Railroad Rack Lagoon SWMU

Lab ID: 0411234-01

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: MAP
Fluoride	ND	3.0		mg/Kg	10	12/2/2004 2:40:18 PM
Chloride	57	3.0		mg/Kg	10	12/2/2004 2:40:18 PM
Nitrogen, Nitrate (As N)	ND	3.0		mg/Kg	10	12/2/2004 2:40:18 PM
Sulfate	ND	15		mg/Kg	10	12/2/2004 2:40:18 PM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	12/2/2004 2:40:18 PM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	12/2/2004 2:40:18 PM
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	6300	200		mg/Kg	20	12/8/2004 2:16:56 PM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	12/8/2004 2:16:56 PM
Surr: DNOP	0	60-124	S	%REC	20	12/8/2004 2:16:56 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.0		mg/Kg	20	11/24/2004 2:38:06 AM
Benzene	0.57	0.50		mg/Kg	20	11/24/2004 2:38:06 AM
Toluene	0.86	0.50		mg/Kg	20	11/24/2004 2:38:06 AM
Ethylbenzene	14	0.50		mg/Kg	20	11/24/2004 2:38:06 AM
Xylenes, Total	88	0.50		mg/Kg	20	11/24/2004 2:38:06 AM
Surr: 4-Bromofluorobenzene	103	74-118		%REC	20	11/24/2004 2:38:06 AM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	ND	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						Analyst: CMC
Arsenic	ND	5.0		mg/Kg	2	11/24/2004 2:22:50 PM
Barium	250	1.0		mg/Kg	10	11/24/2004 5:10:10 PM
Cadmium	ND	0.20		mg/Kg	2	11/24/2004 2:22:50 PM
Calcium	28000	130		mg/Kg	5	11/24/2004 2:26:51 PM
Chromium	4.5	0.60		mg/Kg	2	11/24/2004 2:22:50 PM
Lead	7.7	0.50		mg/Kg	2	11/24/2004 2:22:50 PM
Magnesium	4200	50		mg/Kg	2	11/24/2004 2:22:50 PM
Potassium	690	100		mg/Kg	2	11/24/2004 2:22:50 PM
Selenium	ND	5.0		mg/Kg	2	11/24/2004 2:22:50 PM
Silver	ND	0.50		mg/Kg	2	11/24/2004 2:22:50 PM
Sodium	720	50		mg/Kg	2	11/24/2004 2:22:50 PM
EPA METHOD 150.1: PH						Analyst: CMC
pH	8.88	0.010		pH Units	1	12/1/2004

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



COVER LETTER

December 03, 2004

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

RE: Railroad Rack Lagoon SWMU

Order No.: 0411218

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 13 samples on 11/19/2004 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-Dec-04

CLIENT: Giant Refining Co
Project: Railroad Rack Lagoon SWMU
Lab Order: 0411218

CASE NARRATIVE

Analytical Comments for METHOD 300_S, SAMPLE 0411218-09A MS: Unable to recover o-PO4-P due to possible matrix interference. IN12-04070 Analytical Comments for METHOD 300_S, SAMPLE 0411218-09A MSD: Unable to recover o-PO4-P due to possible matrix interference. IN12-04070

Hall Environmental Analysis Laboratory

Date: 03-Dec-04

CLIENT: Giant Refining Co **Client Sample ID:** RR-N-1
Lab Order: 0411218 **Collection Date:** 11/18/2004 8:00:00 AM
Project: Railroad Rack Lagoon SWMU
Lab ID: 0411218-01 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS Analyst: MAP						
Fluoride	18	3.0		mg/Kg	10	11/30/2004 11:48:28 AM
Chloride	320	3.0		mg/Kg	10	11/30/2004 11:48:28 AM
Nitrogen, Nitrate (As N)	4.9	3.0		mg/Kg	10	11/30/2004 11:48:28 AM
Sulfate	680	15		mg/Kg	10	11/30/2004 11:48:28 AM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	11/30/2004 11:48:28 AM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	11/30/2004 11:48:28 AM
EPA METHOD 8015B: DIESEL RANGE Analyst: JMP						
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/23/2004 12:13:36 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/23/2004 12:13:36 PM
Surr: DNOP	78.7	60-124		%REC	1	11/23/2004 12:13:36 PM
EPA METHOD 8021B: VOLATILES Analyst: NSB						
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	11/23/2004 3:37:35 PM
Benzene	ND	0.025		mg/Kg	1	11/23/2004 3:37:35 PM
Toluene	ND	0.025		mg/Kg	1	11/23/2004 3:37:35 PM
Ethylbenzene	ND	0.025		mg/Kg	1	11/23/2004 3:37:35 PM
Xylenes, Total	ND	0.025		mg/Kg	1	11/23/2004 3:37:35 PM
Surr: 4-Bromofluorobenzene	99.8	74-118		%REC	1	11/23/2004 3:37:35 PM
EPA METHOD 7471: MERCURY Analyst: CMC						
Mercury	ND	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS Analyst: CMC						
Arsenic	ND	2.5		mg/Kg	1	11/23/2004 12:16:56 PM
Barium	250	0.99		mg/Kg	10	11/24/2004 4:28:22 PM
Cadmium	ND	0.10		mg/Kg	1	11/23/2004 12:16:56 PM
Calcium	18000	130		mg/Kg	5	11/23/2004 4:51:19 PM
Chromium	7.0	0.30		mg/Kg	1	11/23/2004 12:16:56 PM
Lead	14	0.25		mg/Kg	1	11/23/2004 12:16:56 PM
Magnesium	5200	25		mg/Kg	1	11/23/2004 12:16:56 PM
Potassium	2100	50		mg/Kg	1	11/23/2004 12:16:56 PM
Selenium	ND	2.5		mg/Kg	1	11/23/2004 12:16:56 PM
Silver	ND	0.25		mg/Kg	1	11/23/2004 12:16:56 PM
Sodium	2000	25		mg/Kg	1	11/23/2004 12:16:56 PM
EPA METHOD 150.1: PH Analyst: CMC						
pH	8.25	0.010		pH Units	1	12/1/2004

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 2 / 23

Hall Environmental Analysis Laboratory

Date: 03-Dec-04

CLIENT: Giant Refining Co

Client Sample ID: RR-E-1

Lab Order: 0411218

Collection Date: 11/18/2004 8:15:00 AM

Project: Railroad Rack Lagoon SWMU

Lab ID: 0411218-02

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: MAP
Fluoride	6.1	3.0		mg/Kg	10	11/30/2004 12:05:17 PM
Chloride	54	3.0		mg/Kg	10	11/30/2004 12:05:17 PM
Nitrogen, Nitrate (As N)	ND	3.0		mg/Kg	10	11/30/2004 12:05:17 PM
Sulfate	74	15		mg/Kg	10	11/30/2004 12:05:17 PM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	11/30/2004 12:05:17 PM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	11/30/2004 12:05:17 PM
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	81	10		mg/Kg	1	11/22/2004 8:26:19 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/22/2004 8:26:19 PM
Surr: DNOP	71.3	60-124		%REC	1	11/22/2004 8:26:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.20		mg/Kg	2	11/23/2004 4:07:37 PM
Benzene	ND	0.050		mg/Kg	2	11/23/2004 4:07:37 PM
Toluene	ND	0.050		mg/Kg	2	11/23/2004 4:07:37 PM
Ethylbenzene	ND	0.050		mg/Kg	2	11/23/2004 4:07:37 PM
Xylenes, Total	ND	0.050		mg/Kg	2	11/23/2004 4:07:37 PM
Surr: 4-Bromofluorobenzene	103	74-118		%REC	2	11/23/2004 4:07:37 PM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	ND	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						Analyst: CMC
Arsenic	ND	2.5		mg/Kg	1	11/23/2004 12:20:55 PM
Barium	290	0.96		mg/Kg	10	11/24/2004 4:32:37 PM
Cadmium	ND	0.10		mg/Kg	1	11/23/2004 12:20:55 PM
Calcium	16000	130		mg/Kg	5	11/23/2004 4:55:16 PM
Chromium	5.8	0.30		mg/Kg	1	11/23/2004 12:20:55 PM
Lead	5.7	0.25		mg/Kg	1	11/23/2004 12:20:55 PM
Magnesium	4600	25		mg/Kg	1	11/23/2004 12:20:55 PM
Potassium	1300	50		mg/Kg	1	11/23/2004 12:20:55 PM
Selenium	ND	2.5		mg/Kg	1	11/23/2004 12:20:55 PM
Silver	ND	0.25		mg/Kg	1	11/23/2004 12:20:55 PM
Sodium	1300	25		mg/Kg	1	11/23/2004 12:20:55 PM
EPA METHOD 150.1: PH						Analyst: CMC
pH	9.23	0.010		pH Units	1	12/1/2004

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 3 / 23

Hall Environmental Analysis Laboratory

Date: 03-Dec-04

CLIENT:	Giant Refining Co	Client Sample ID:	RR-S-1
Lab Order:	0411218	Collection Date:	11/18/2004 8:30:00 AM
Project:	Railroad Rack Lagoon SWMU		
Lab ID:	0411218-03	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						
						Analyst: MAP
Fluoride	4.6	3.0		mg/Kg	10	11/30/2004 12:22:06 PM
Chloride	27	3.0		mg/Kg	10	11/30/2004 12:22:06 PM
Nitrogen, Nitrate (As N)	ND	3.0		mg/Kg	10	11/30/2004 12:22:06 PM
Sulfate	28	15		mg/Kg	10	11/30/2004 12:22:06 PM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	11/30/2004 12:22:06 PM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	11/30/2004 12:22:06 PM
EPA METHOD 8015B: DIESEL RANGE						
						Analyst: JMP
Diesel Range Organics (DRO)	31	10		mg/Kg	1	11/22/2004 8:57:58 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/22/2004 8:57:58 PM
Surr: DNOP	94.8	60-124		%REC	1	11/22/2004 8:57:58 PM
EPA METHOD 8021B: VOLATILES						
						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	11/23/2004 4:37:38 PM
Benzene	ND	0.025		mg/Kg	1	11/23/2004 4:37:38 PM
Toluene	ND	0.025		mg/Kg	1	11/23/2004 4:37:38 PM
Ethylbenzene	ND	0.025		mg/Kg	1	11/23/2004 4:37:38 PM
Xylenes, Total	0.082	0.025		mg/Kg	1	11/23/2004 4:37:38 PM
Surr: 4-Bromofluorobenzene	104	74-118		%REC	1	11/23/2004 4:37:38 PM
EPA METHOD 7471: MERCURY						
						Analyst: CMC
Mercury	ND	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						
						Analyst: CMC
Arsenic	ND	2.5		mg/Kg	1	11/23/2004 12:29:00 PM
Barium	300	0.96		mg/Kg	10	11/24/2004 4:34:44 PM
Cadmium	ND	0.10		mg/Kg	1	11/23/2004 12:29:00 PM
Calcium	17000	250		mg/Kg	10	11/23/2004 5:02:14 PM
Chromium	5.6	0.30		mg/Kg	1	11/23/2004 12:29:00 PM
Lead	5.1	0.25		mg/Kg	1	11/23/2004 12:29:00 PM
Magnesium	4400	25		mg/Kg	1	11/23/2004 12:29:00 PM
Potassium	1400	50		mg/Kg	1	11/23/2004 12:29:00 PM
Selenium	ND	2.5		mg/Kg	1	11/23/2004 12:29:00 PM
Silver	ND	0.25		mg/Kg	1	11/23/2004 12:29:00 PM
Sodium	870	25		mg/Kg	1	11/23/2004 12:29:00 PM
EPA METHOD 150.1: PH						
						Analyst: CMC
pH	9.05	0.010		pH Units	1	12/1/2004

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-Dec-04

CLIENT: Giant Refining Co

Client Sample ID: RR-W-1

Lab Order: 0411218

Collection Date: 11/18/2004 8:45:00 AM

Project: Railroad Rack Lagoon SWMU

Lab ID: 0411218-04

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: MAP
Fluoride	4.6	3.0		mg/Kg	10	11/30/2004 12:38:53 PM
Chloride	37	3.0		mg/Kg	10	11/30/2004 12:38:53 PM
Nitrogen, Nitrate (As N)	ND	3.0		mg/Kg	10	11/30/2004 12:38:53 PM
Sulfate	ND	15		mg/Kg	10	11/30/2004 12:38:53 PM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	11/30/2004 12:38:53 PM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	11/30/2004 12:38:53 PM
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	12	10		mg/Kg	1	11/22/2004 9:29:35 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/22/2004 9:29:35 PM
Surr: DNOP	95.9	60-124		%REC	1	11/22/2004 9:29:35 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	11/23/2004 5:07:40 PM
Benzene	ND	0.025		mg/Kg	1	11/23/2004 5:07:40 PM
Toluene	ND	0.025		mg/Kg	1	11/23/2004 5:07:40 PM
Ethylbenzene	ND	0.025		mg/Kg	1	11/23/2004 5:07:40 PM
Xylenes, Total	ND	0.025		mg/Kg	1	11/23/2004 5:07:40 PM
Surr: 4-Bromofluorobenzene	103	74-118		%REC	1	11/23/2004 5:07:40 PM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	ND	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						Analyst: CMC
Arsenic	ND	5.0		mg/Kg	2	11/24/2004 2:11:48 PM
Barium	310	0.99		mg/Kg	10	11/24/2004 4:41:39 PM
Cadmium	ND	0.20		mg/Kg	2	11/24/2004 2:11:48 PM
Calcium	16000	50		mg/Kg	2	11/24/2004 2:11:48 PM
Chromium	7.0	0.60		mg/Kg	2	11/24/2004 2:11:48 PM
Lead	7.8	0.50		mg/Kg	2	11/24/2004 2:11:48 PM
Magnesium	4800	50		mg/Kg	2	11/24/2004 2:11:48 PM
Potassium	1300	100		mg/Kg	2	11/24/2004 2:11:48 PM
Selenium	ND	5.0		mg/Kg	2	11/24/2004 2:11:48 PM
Silver	ND	0.50		mg/Kg	2	11/24/2004 2:11:48 PM
Sodium	1300	50		mg/Kg	2	11/24/2004 2:11:48 PM
EPA METHOD 150.1: PH						Analyst: CMC
pH	9.13	0.010		pH Units	1	12/1/2004

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 5 / 23

Hall Environmental Analysis Laboratory

Date: 03-Dec-04

CLIENT: Giant Refining Co

Client Sample ID: RR-N-1-Wall

Lab Order: 0411218

Collection Date: 11/18/2004 9:00:00 AM

Project: Railroad Rack Lagoon SWMU

Lab ID: 0411218-05

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: MAP
Fluoride	3.4	3.0		mg/Kg	10	11/30/2004 12:55:42 PM
Chloride	300	3.0		mg/Kg	10	11/30/2004 12:55:42 PM
Nitrogen, Nitrate (As N)	ND	3.0		mg/Kg	10	11/30/2004 12:55:42 PM
Sulfate	610	15		mg/Kg	10	11/30/2004 12:55:42 PM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	11/30/2004 12:55:42 PM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	11/30/2004 12:55:42 PM
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/22/2004 10:01:18 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/22/2004 10:01:18 PM
Surr: DNOP	97.8	60-124		%REC	1	11/22/2004 10:01:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	11/23/2004 5:37:45 PM
Benzene	ND	0.025		mg/Kg	1	11/23/2004 5:37:45 PM
Toluene	ND	0.025		mg/Kg	1	11/23/2004 5:37:45 PM
Ethylbenzene	ND	0.025		mg/Kg	1	11/23/2004 5:37:45 PM
Xylenes, Total	ND	0.025		mg/Kg	1	11/23/2004 5:37:45 PM
Surr: 4-Bromofluorobenzene	100	74-118		%REC	1	11/23/2004 5:37:45 PM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	ND	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						Analyst: CMC
Arsenic	ND	2.5		mg/Kg	1	11/23/2004 12:40:59 PM
Barium	280	1.0		mg/Kg	10	11/24/2004 4:43:49 PM
Cadmium	ND	0.10		mg/Kg	1	11/23/2004 12:40:59 PM
Calcium	18000	250		mg/Kg	10	11/23/2004 5:18:23 PM
Chromium	7.6	0.30		mg/Kg	1	11/23/2004 12:40:59 PM
Lead	5.3	0.25		mg/Kg	1	11/23/2004 12:40:59 PM
Magnesium	5800	25		mg/Kg	1	11/23/2004 12:40:59 PM
Potassium	2700	50		mg/Kg	1	11/23/2004 12:40:59 PM
Selenium	ND	2.5		mg/Kg	1	11/23/2004 12:40:59 PM
Silver	ND	0.25		mg/Kg	1	11/23/2004 12:40:59 PM
Sodium	1500	25		mg/Kg	1	11/23/2004 12:40:59 PM
EPA METHOD 150.1: PH						Analyst: CMC
pH	8.37	0.010		pH Units	1	12/1/2004

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-Dec-04

CLIENT: Giant Refining Co

Client Sample ID: RR-S-I-Wall

Lab Order: 0411218

Collection Date: 11/18/2004 9:15:00 AM

Project: Railroad Rack Lagoon SWMU

Lab ID: 0411218-06

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						
						Analyst: MAP
Fluoride	4.7	3.0		mg/Kg	10	11/30/2004 1:12:30 PM
Chloride	76	3.0		mg/Kg	10	11/30/2004 1:12:30 PM
Nitrogen, Nitrate (As N)	ND	3.0		mg/Kg	10	11/30/2004 1:12:30 PM
Sulfate	380	15		mg/Kg	10	11/30/2004 1:12:30 PM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	11/30/2004 1:12:30 PM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	11/30/2004 1:12:30 PM
EPA METHOD 8015B: DIESEL RANGE						
						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/22/2004 10:34:12 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/22/2004 10:34:12 PM
Surr: DNOP	81.5	60-124		%REC	1	11/22/2004 10:34:12 PM
EPA METHOD 8021B: VOLATILES						
						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	11/23/2004 6:07:55 PM
Benzene	ND	0.025		mg/Kg	1	11/23/2004 6:07:55 PM
Toluene	ND	0.025		mg/Kg	1	11/23/2004 6:07:55 PM
Ethylbenzene	ND	0.025		mg/Kg	1	11/23/2004 6:07:55 PM
Xylenes, Total	ND	0.025		mg/Kg	1	11/23/2004 6:07:55 PM
Surr: 4-Bromofluorobenzene	104	74-118		%REC	1	11/23/2004 6:07:55 PM
EPA METHOD 7471: MERCURY						
						Analyst: CMC
Mercury	ND	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						
						Analyst: CMC
Arsenic	ND	2.5		mg/Kg	1	11/23/2004 12:49:06 PM
Barium	300	0.97		mg/Kg	10	11/24/2004 4:45:57 PM
Cadmium	ND	0.10		mg/Kg	1	11/23/2004 12:49:06 PM
Calcium	17000	250		mg/Kg	10	11/23/2004 5:21:12 PM
Chromium	6.9	0.30		mg/Kg	1	11/23/2004 12:49:06 PM
Lead	5.9	0.25		mg/Kg	1	11/23/2004 12:49:06 PM
Magnesium	5400	25		mg/Kg	1	11/23/2004 12:49:06 PM
Potassium	2000	50		mg/Kg	1	11/23/2004 12:49:06 PM
Selenium	ND	2.5		mg/Kg	1	11/23/2004 12:49:06 PM
Silver	ND	0.25		mg/Kg	1	11/23/2004 12:49:06 PM
Sodium	1000	25		mg/Kg	1	11/23/2004 12:49:06 PM
EPA METHOD 150.1: PH						
						Analyst: CMC
pH	8.55	0.010		pH Units	1	12/1/2004

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 7 / 23

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Hall Environmental Analysis Laboratory

Date: 03-Dec-04

CLIENT: Giant Refining Co **Client Sample ID:** RR-E-1-Wall N
Lab Order: 0411218 **Collection Date:** 11/18/2004 9:30:00 AM
Project: Railroad Rack Lagoon SWMU
Lab ID: 0411218-07 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: MAP
Fluoride	36	3.0		mg/Kg	10	11/30/2004 2:02:56 PM
Chloride	76	3.0		mg/Kg	10	11/30/2004 2:02:56 PM
Nitrogen, Nitrate (As N)	6.6	3.0		mg/Kg	10	11/30/2004 2:02:56 PM
Sulfate	270	15		mg/Kg	10	11/30/2004 2:02:56 PM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	11/30/2004 2:02:56 PM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	11/30/2004 2:02:56 PM
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	150	10		mg/Kg	1	11/23/2004 12:46:34 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/23/2004 12:46:34 PM
Surr: DNOP	110	60-124		%REC	1	11/23/2004 12:46:34 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	11/23/2004 6:37:48 PM
Benzene	ND	0.025		mg/Kg	1	11/23/2004 6:37:48 PM
Toluene	ND	0.025		mg/Kg	1	11/23/2004 6:37:48 PM
Ethylbenzene	ND	0.025		mg/Kg	1	11/23/2004 6:37:48 PM
Xylenes, Total	ND	0.025		mg/Kg	1	11/23/2004 6:37:48 PM
Surr: 4-Bromofluorobenzene	99.7	74-118		%REC	1	11/23/2004 6:37:48 PM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	ND	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						Analyst: CMC
Arsenic	ND	2.5		mg/Kg	1	11/23/2004 3:28:41 PM
Barium	260	0.96		mg/Kg	10	11/24/2004 4:48:09 PM
Cadmium	ND	0.10		mg/Kg	1	11/23/2004 3:28:41 PM
Calcium	15000	130		mg/Kg	5	11/23/2004 5:24:02 PM
Chromium	6.3	0.30		mg/Kg	1	11/23/2004 3:28:41 PM
Lead	6.2	0.25		mg/Kg	1	11/23/2004 3:28:41 PM
Magnesium	4600	25		mg/Kg	1	11/23/2004 3:28:41 PM
Potassium	1700	50		mg/Kg	1	11/23/2004 3:28:41 PM
Selenium	ND	2.5		mg/Kg	1	11/23/2004 3:28:41 PM
Silver	ND	0.25		mg/Kg	1	11/23/2004 3:28:41 PM
Sodium	1200	25		mg/Kg	1	11/23/2004 3:28:41 PM
EPA METHOD 150.1: PH						Analyst: CMC
pH	8.58	0.010		pH Units	1	12/1/2004

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-Dec-04

CLIENT: Giant Refining Co

Client Sample ID: RR-W-1-Wall N

Lab Order: 0411218

Collection Date: 11/18/2004 10:45:00 AM

Project: Railroad Rack Lagoon SWMU

Lab ID: 0411218-09

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: MAP
Fluoride	14	1.5		mg/Kg	5	11/30/2004 2:19:45 PM
Chloride	290	1.5		mg/Kg	5	11/30/2004 2:19:45 PM
Nitrogen, Nitrate (As N)	4.3	1.5		mg/Kg	5	11/30/2004 2:19:45 PM
Sulfate	860	7.5		mg/Kg	5	11/30/2004 2:19:45 PM
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	11/30/2004 2:19:45 PM
Phosphorus, Orthophosphate (As P)	ND	7.5		mg/Kg	5	11/30/2004 2:19:45 PM
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	450	10		mg/Kg	1	11/23/2004 1:18:13 PM
Motor Oil Range Organics (MRO)	140	50		mg/Kg	1	11/23/2004 1:18:13 PM
Surr: DNOP	87.4	60-124		%REC	1	11/23/2004 1:18:13 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	11/23/2004 7:07:39 PM
Benzene	ND	0.025		mg/Kg	1	11/23/2004 7:07:39 PM
Toluene	ND	0.025		mg/Kg	1	11/23/2004 7:07:39 PM
Ethylbenzene	ND	0.025		mg/Kg	1	11/23/2004 7:07:39 PM
Xylenes, Total	ND	0.025		mg/Kg	1	11/23/2004 7:07:39 PM
Surr: 4-Bromofluorobenzene	101	74-118		%REC	1	11/23/2004 7:07:39 PM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	0.037	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						Analyst: CMC
Arsenic	ND	2.5		mg/Kg	1	11/23/2004 3:32:35 PM
Barium	460	1.0		mg/Kg	10	11/24/2004 4:50:16 PM
Cadmium	ND	0.10		mg/Kg	1	11/23/2004 3:32:35 PM
Calcium	32000	250		mg/Kg	10	11/23/2004 5:27:54 PM
Chromium	27	0.30		mg/Kg	1	11/23/2004 3:32:35 PM
Lead	11	0.25		mg/Kg	1	11/23/2004 3:32:35 PM
Magnesium	4300	25		mg/Kg	1	11/23/2004 3:32:35 PM
Potassium	1200	50		mg/Kg	1	11/23/2004 3:32:35 PM
Selenium	ND	2.5		mg/Kg	1	11/23/2004 3:32:35 PM
Silver	ND	0.25		mg/Kg	1	11/23/2004 3:32:35 PM
Sodium	1100	25		mg/Kg	1	11/23/2004 3:32:35 PM
EPA METHOD 150.1: PH						Analyst: CMC
pH	8.21	0.010		pH Units	1	12/1/2004

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 9/23

Hall Environmental Analysis Laboratory

Date: 03-Dec-04

CLIENT: Giant Refining Co **Client Sample ID:** RR-W-1-Wall S
Lab Order: 0411218 **Collection Date:** 11/18/2004 11:00:00 AM
Project: Railroad Rack Lagoon SWMU
Lab ID: 0411218-10 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: MAP
Fluoride	7.9	3.0		mg/Kg	10	11/30/2004 4:00:30 PM
Chloride	33	3.0		mg/Kg	10	11/30/2004 4:00:30 PM
Nitrogen, Nitrate (As N)	ND	3.0		mg/Kg	10	11/30/2004 4:00:30 PM
Sulfate	39	15		mg/Kg	10	11/30/2004 4:00:30 PM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	11/30/2004 4:00:30 PM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	11/30/2004 4:00:30 PM
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	310	10		mg/Kg	1	11/23/2004 6:44:57 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/23/2004 6:44:57 AM
Surr: DNOP	111	60-124		%REC	1	11/23/2004 6:44:57 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	10	11/23/2004 7:37:29 PM
Benzene	ND	0.25		mg/Kg	10	11/23/2004 7:37:29 PM
Toluene	ND	0.25		mg/Kg	10	11/23/2004 7:37:29 PM
Ethylbenzene	ND	0.25		mg/Kg	10	11/23/2004 7:37:29 PM
Xylenes, Total	ND	0.25		mg/Kg	10	11/23/2004 7:37:29 PM
Surr: 4-Bromofluorobenzene	104	74-118		%REC	10	11/23/2004 7:37:29 PM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	ND	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						Analyst: CMC
Arsenic	ND	2.5		mg/Kg	1	11/23/2004 3:40:28 PM
Barium	320	0.96		mg/Kg	10	11/24/2004 4:52:24 PM
Cadmium	ND	0.10		mg/Kg	1	11/23/2004 3:40:28 PM
Calcium	17000	250		mg/Kg	10	11/23/2004 5:30:43 PM
Chromium	3.1	0.30		mg/Kg	1	11/23/2004 3:40:28 PM
Lead	2.9	0.25		mg/Kg	1	11/23/2004 3:40:28 PM
Magnesium	4200	25		mg/Kg	1	11/23/2004 3:40:28 PM
Potassium	1000	50		mg/Kg	1	11/23/2004 3:40:28 PM
Selenium	ND	2.5		mg/Kg	1	11/23/2004 3:40:28 PM
Silver	ND	0.25		mg/Kg	1	11/23/2004 3:40:28 PM
Sodium	920	25		mg/Kg	1	11/23/2004 3:40:28 PM
EPA METHOD 150.1: PH						Analyst: CMC
pH	8.89	0.010		pH Units	1	12/1/2004

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-Dec-04

CLIENT: Giant Refining Co Client Sample ID: RR-B-1
 Lab Order: 0411218 Collection Date: 11/18/2004 11:30:00 AM
 Project: Railroad Rack Lagoon SWMU
 Lab ID: 0411218-11 Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS Analyst: MAP						
Fluoride	4.5	3.0		mg/Kg	10	11/30/2004 4:17:19 PM
Chloride	34	3.0		mg/Kg	10	11/30/2004 4:17:19 PM
Nitrogen, Nitrate (As N)	ND	3.0		mg/Kg	10	11/30/2004 4:17:19 PM
Sulfate	ND	15		mg/Kg	10	11/30/2004 4:17:19 PM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	11/30/2004 4:17:19 PM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	11/30/2004 4:17:19 PM
EPA METHOD 8015B: DIESEL RANGE Analyst: JMP						
Diesel Range Organics (DRO)	99	10		mg/Kg	1	11/23/2004 7:18:07 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/23/2004 7:18:07 AM
Surr: DNOP	89.5	60-124		%REC	1	11/23/2004 7:18:07 AM
EPA METHOD 8021B: VOLATILES Analyst: NSB						
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	5	11/23/2004 8:07:19 PM
Benzene	ND	0.13		mg/Kg	5	11/23/2004 8:07:19 PM
Toluene	ND	0.13		mg/Kg	5	11/23/2004 8:07:19 PM
Ethylbenzene	ND	0.13		mg/Kg	5	11/23/2004 8:07:19 PM
Xylenes, Total	0.52	0.13		mg/Kg	5	11/23/2004 8:07:19 PM
Surr: 4-Bromofluorobenzene	103	74-118		%REC	5	11/23/2004 8:07:19 PM
EPA METHOD 7471: MERCURY Analyst: CMC						
Mercury	ND	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS Analyst: CMC						
Arsenic	ND	2.5		mg/Kg	1	11/23/2004 3:44:35 PM
Barium	260	1.0		mg/Kg	10	11/24/2004 4:54:36 PM
Cadmium	ND	0.10		mg/Kg	1	11/23/2004 3:44:35 PM
Calcium	15000	130		mg/Kg	5	11/23/2004 5:33:33 PM
Chromium	5.9	0.30		mg/Kg	1	11/23/2004 3:44:35 PM
Lead	5.6	0.25		mg/Kg	1	11/23/2004 3:44:35 PM
Magnesium	4600	25		mg/Kg	1	11/23/2004 3:44:35 PM
Potassium	1300	50		mg/Kg	1	11/23/2004 3:44:35 PM
Selenium	ND	2.5		mg/Kg	1	11/23/2004 3:44:35 PM
Silver	ND	0.25		mg/Kg	1	11/23/2004 3:44:35 PM
Sodium	1400	25		mg/Kg	1	11/23/2004 3:44:35 PM
EPA METHOD 150.1: PH Analyst: CMC						
pH	9.06	0.010		pH Units	1	12/1/2004

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-Dec-04

CLIENT: Giant Refining Co **Client Sample ID:** RR-B-2
Lab Order: 0411218 **Collection Date:** 11/18/2004 12:30:00 PM
Project: Railroad Rack Lagoon SWMU
Lab ID: 0411218-12 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: MAP
Fluoride	7.5	3.0		mg/Kg	10	11/30/2004 4:34:08 PM
Chloride	17	3.0		mg/Kg	10	11/30/2004 4:34:08 PM
Nitrogen, Nitrate (As N)	ND	3.0		mg/Kg	10	11/30/2004 4:34:08 PM
Sulfate	680	15		mg/Kg	10	11/30/2004 4:34:08 PM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	11/30/2004 4:34:08 PM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	11/30/2004 4:34:08 PM
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/23/2004 7:49:46 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/23/2004 7:49:46 AM
Surr: DNOP	88.7	60-124		%REC	1	11/23/2004 7:49:46 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	11/24/2004 11:49:10 PM
Benzene	ND	0.025		mg/Kg	1	11/24/2004 11:49:10 PM
Toluene	ND	0.025		mg/Kg	1	11/24/2004 11:49:10 PM
Ethylbenzene	ND	0.025		mg/Kg	1	11/24/2004 11:49:10 PM
Xylenes, Total	ND	0.025		mg/Kg	1	11/24/2004 11:49:10 PM
Surr: 4-Bromofluorobenzene	102	74-118		%REC	1	11/24/2004 11:49:10 PM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	ND	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						Analyst: CMC
Arsenic	ND	2.5		mg/Kg	1	11/23/2004 3:56:24 PM
Barium	320	0.97		mg/Kg	10	11/24/2004 4:56:47 PM
Cadmium	ND	0.10		mg/Kg	1	11/23/2004 3:56:24 PM
Calcium	17000	250		mg/Kg	10	11/23/2004 5:37:24 PM
Chromium	5.1	0.30		mg/Kg	1	11/23/2004 3:56:24 PM
Lead	5.1	0.25		mg/Kg	1	11/23/2004 3:56:24 PM
Magnesium	4200	25		mg/Kg	1	11/23/2004 3:56:24 PM
Potassium	1000	50		mg/Kg	1	11/23/2004 3:56:24 PM
Selenium	ND	2.5		mg/Kg	1	11/23/2004 3:56:24 PM
Silver	ND	0.25		mg/Kg	1	11/23/2004 3:56:24 PM
Sodium	1300	25		mg/Kg	1	11/23/2004 3:56:24 PM
EPA METHOD 150.1: PH						Analyst: CMC
pH	8.75	0.010		pH Units	1	12/1/2004

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-Dec-04

CLIENT: Giant Refining Co

Client Sample ID: RR-BP-1

Lab Order: 0411218

Collection Date: 11/18/2004 1:00:00 PM

Project: Railroad Rack Lagoon SWMU

Lab ID: 0411218-13

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: MAP
Fluoride	5.4	3.0		mg/Kg	10	11/30/2004 5:24:33 PM
Chloride	60	3.0		mg/Kg	10	11/30/2004 5:24:33 PM
Nitrogen, Nitrate (As N)	ND	3.0		mg/Kg	10	11/30/2004 5:24:33 PM
Sulfate	ND	15		mg/Kg	10	11/30/2004 5:24:33 PM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	11/30/2004 5:24:33 PM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	11/30/2004 5:24:33 PM
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	3600	100		mg/Kg	10	11/23/2004 11:40:40 AM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	11/23/2004 11:40:40 AM
Surr: DNOP	83.2	60-124		%REC	10	11/23/2004 11:40:40 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	11/23/2004 9:36:56 PM
Benzene	2.5	1.3		mg/Kg	50	11/23/2004 9:36:56 PM
Toluene	27	1.3		mg/Kg	50	11/23/2004 9:36:56 PM
Ethylbenzene	17	1.3		mg/Kg	50	11/23/2004 9:36:56 PM
Xylenes, Total	110	1.3		mg/Kg	50	11/23/2004 9:36:56 PM
Surr: 4-Bromofluorobenzene	113	74-118		%REC	50	11/23/2004 9:36:56 PM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	0.082	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						Analyst: CMC
Arsenic	ND	2.5		mg/Kg	1	11/23/2004 4:13:16 PM
Barium	240	0.99		mg/Kg	10	11/24/2004 5:01:04 PM
Cadmium	0.10	0.10		mg/Kg	1	11/23/2004 4:13:16 PM
Calcium	16000	130		mg/Kg	5	11/23/2004 5:40:11 PM
Chromium	5.5	0.30		mg/Kg	1	11/23/2004 4:13:16 PM
Lead	12	0.25		mg/Kg	1	11/23/2004 4:13:16 PM
Magnesium	3300	25		mg/Kg	1	11/23/2004 4:13:16 PM
Potassium	1000	50		mg/Kg	1	11/23/2004 4:13:16 PM
Selenium	ND	2.5		mg/Kg	1	11/23/2004 4:13:16 PM
Silver	ND	0.25		mg/Kg	1	11/23/2004 4:13:16 PM
Sodium	590	25		mg/Kg	1	11/23/2004 4:13:16 PM
EPA METHOD 150.1: PH						Analyst: CMC
pH	8.25	0.010		pH Units	1	12/1/2004

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 13/23

Hall Environmental Analysis Laboratory

Date: 03-Dec-04

CLIENT: Giant Refining Co

Client Sample ID: RR-BP-2

Lab Order: 0411218

Collection Date: 11/18/2004 1:30:00 PM

Project: Railroad Rack Lagoon SWMU

Lab ID: 0411218-14

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: MAP
Fluoride	8.1	3.0		mg/Kg	10	11/30/2004 5:41:22 PM
Chloride	59	3.0		mg/Kg	10	11/30/2004 5:41:22 PM
Nitrogen, Nitrate (As N)	ND	3.0		mg/Kg	10	11/30/2004 5:41:22 PM
Sulfate	24	15		mg/Kg	10	11/30/2004 5:41:22 PM
Nitrogen, Nitrite (As N)	ND	3.0		mg/Kg	10	11/30/2004 5:41:22 PM
Phosphorus, Orthophosphate (As P)	ND	15		mg/Kg	10	11/30/2004 5:41:22 PM
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	2700	100		mg/Kg	10	11/29/2004 8:50:00 PM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	11/29/2004 8:50:00 PM
Surr: DNOP	78.9	60-124		%REC	10	11/29/2004 8:50:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	11/23/2004 10:07:11 PM
Benzene	2.2	1.3		mg/Kg	50	11/23/2004 10:07:11 PM
Toluene	25	1.3		mg/Kg	50	11/23/2004 10:07:11 PM
Ethylbenzene	15	1.3		mg/Kg	50	11/23/2004 10:07:11 PM
Xylenes, Total	100	1.3		mg/Kg	50	11/23/2004 10:07:11 PM
Surr: 4-Bromofluorobenzene	113	74-118		%REC	50	11/23/2004 10:07:11 PM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	ND	0.033		mg/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						Analyst: NMO
Arsenic	ND	2.5		mg/Kg	1	11/30/2004 2:20:51 PM
Barium	170	0.99		mg/Kg	10	11/24/2004 5:03:13 PM
Cadmium	ND	0.10		mg/Kg	1	11/23/2004 4:17:13 PM
Calcium	13000	130		mg/Kg	5	11/23/2004 5:46:03 PM
Chromium	4.4	0.30		mg/Kg	1	11/23/2004 4:17:13 PM
Lead	7.4	0.25		mg/Kg	1	11/23/2004 4:17:13 PM
Magnesium	3000	25		mg/Kg	1	11/23/2004 4:17:13 PM
Potassium	940	50		mg/Kg	1	11/23/2004 4:17:13 PM
Selenium	ND	2.5		mg/Kg	1	11/23/2004 4:17:13 PM
Silver	ND	0.25		mg/Kg	1	11/23/2004 4:17:13 PM
Sodium	570	25		mg/Kg	1	11/23/2004 4:17:13 PM
EPA METHOD 150.1: PH						Analyst: CMC
pH	8.51	0.010		pH Units	1	12/1/2004

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-Dec-04

CLIENT: Giant Refining Co
 Work Order: 0411218
 Project: Railroad Rack Lagoon SWMU

QC SUMMARY REPORT
Method Blank

Sample ID MB-6967	Batch ID: 6967	Test Code: E300	Units: mg/Kg	Analysis Date 11/30/2004 10:41:18 A	Prep Date 11/30/2004						
Client ID:		Run ID: LC_041130A		SeqNo: 323552							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.3									
Chloride	ND	0.3									
Nitrogen, Nitrate (As N)	ND	0.3									
Sulfate	ND	1.5									
Nitrogen, Nitrite (As N)	ND	0.3									
Phosphorus, Orthophosphate (As P)	ND	1.5									

Sample ID	MB-6969	Batch ID: 6969	Test Code: E300	Units: mg/Kg	Analysis Date	11/30/2004 3:26:53 PM	Prep Date	11/30/2004		
Client ID:			Run ID: LC_041130A		SeqNo:	323569				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.3								
Chloride	ND	0.3								
Nitrogen, Nitrate (As N)	ND	0.3								
Sulfate	ND	1.5								
Nitrogen, Nitrite (As N)	ND	0.3								
Phosphorus, Orthophosphate (As P)	ND	1.5								

Sample ID	MB-6944	Batch ID: 6944	Test Code: SW8015	Units: mg/Kg	Analysis Date	11/22/2004 5:41:51 PM	Prep Date	11/22/2004			
Client ID:		Run ID: FID(17A) 2_041122A			SeqNo:	322601					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									
Surr: DNOP	8.438	0	10	0	84.4	60	124	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: 0411218
Project: Railroad Rack Lagoon SWMU

QC SUMMARY REPORT
 Method Blank

Sample ID	MB-6930	Batch ID:	6930	Test Code:	SW8021	Units:	mg/Kg	Analysis Date	11/23/2004 12:37:21 P	Prep Date	11/19/2004	
Client ID:		Run ID:	PIDFID_041123A					SeqNo:	322790			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)		ND	0.1									
Benzene		ND	0.025									
Toluene		ND	0.025									
Ethylbenzene		ND	0.025									
Xylenes, Total		ND	0.025									
Surr: 4-Bromofluorobenzene		0.9942	0	1	0	99.4	74	118	0			

Sample ID	MB-6972	Batch ID:	6972	Test Code:	SW7471	Units:	mg/Kg	Analysis Date	11/30/2004	Prep Date	11/30/2004	
Client ID:		Run ID:	MI-LA254_041130A					SeqNo:	323375			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		ND	0.033									

Sample ID	MB-6954	Batch ID:	6954	Test Code:	SW6010A	Units:	mg/Kg	Analysis Date	11/23/2004 11:10:00 A	Prep Date	11/22/2004	
Client ID:		Run ID:	ICP_041123A					SeqNo:	322690			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic		ND	2.5									J
Cadmium		0.05491	0.1									J
Calcium		12.41	25									
Chromium		ND	0.3									
Lead		ND	0.25									
Magnesium		ND	25									
Potassium		ND	50									
Selenium		ND	2.5									
Silver		ND	0.25									

Qualifiers: ND - Not Detected at the Reporting Limit
 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: 0411218
Project: Railroad Rack Lagoon SWMU

QC SUMMARY REPORT
 Method Blank

Sample ID MB-6954	Batch ID: 6954	Test Code: SW6010A	Units: mg/Kg	Analysis Date 11/24/2004 4:05:08 PM	Prep Date 11/22/2004						
Client ID:		Run ID: ICP_041124A		SeqNo: 323121							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND		0.1								

Sample ID MB-6954	Batch ID: 6954	Test Code: SW6010A	Units: mg/Kg	Analysis Date 11/24/2004 2:15:41 PM	Prep Date 11/22/2004						
Client ID:		Run ID: ICP_041123B		SeqNo: 323162							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium	ND		25								

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

Date: 03-Dec-04

CLIENT: Giant Refining Co
 Work Order: 0411218
 Project: Railroad Rack Lagoon SWMU

QC SUMMARY REPORT

Sample Duplicate

Sample ID	0411218-09A DUP	Batch ID	6967	Test Code	E300	Units	mg/Kg	Analysis Date	11/30/2004 2:36:34 PM	Prep Date	11/30/2004
Client ID	RR-W-1-Wall N	Run ID	LC_041130A	PQL	1.5	SPK value	0	SeqNo	323566		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	13.08	1.5	0	0	0	0	0	14.15	7.88	20	
Chloride	289.5	1.5	0	0	0	0	0	291.3	0.625	20	
Nitrogen, Nitrate (As N)	3.285	1.5	0	0	0	0	0	4.337	27.8	20	R
Sulfate	859	7.5	0	0	0	0	0	863.5	0.516	20	
Nitrogen, Nitrite (As N)	ND	1.5	0	0	0	0	0	0	0	20	
Phosphorus, Orthophosphate (As P)	ND	7.5	0	0	0	0	0	0	0	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

Date: 03-Dec-04

CLIENT: Giant Refining Co
 Work Order: 0411218
 Project: Railroad Rack Lagoon SWMU

QC SUMMARY REPORT
 Laboratory Control Spike - generic

Sample ID	LCS-6967	Batch ID: 6967	Test Code: E300	Units: mg/Kg	Analysis Date	11/30/2004 10:58:07 A	Prep Date	11/30/2004			
Client ID:		Run ID: LC_041130A			SeqNo:	323553					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	1.372	0.3	1.5	0	91.5	90	110	0			
Chloride	15.84	0.3	15	0	106	90	110	0			
Nitrogen, Nitrate (As N)	7.983	0.3	7.5	0	106	90	110	0			
Sulfate	32.25	1.5	30	0	108	90	110	0			
Nitrogen, Nitrite (As N)	2.984	0.3	3	0	99.5	90	110	0			
Phosphorus, Orthophosphate (As P)	14.85	1.5	15	0	99.0	90	110	0			

Sample ID	LCS-6969	Batch ID: 6969	Test Code: E300	Units: mg/kg	Analysis Date	11/30/2004 3:43:42 PM	Prep Date	11/30/2004			
Client ID:		Run ID: LC_041130A			SeqNo:	323570					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	1.397	0.3	1.5	0	93.2	90	110	0			
Chloride	14.95	0.3	15	0	99.7	90	110	0			
Nitrogen, Nitrate (As N)	7.953	0.3	7.5	0	106	90	110	0			
Sulfate	30.98	1.5	30	0	103	90	110	0			
Nitrogen, Nitrite (As N)	2.878	0.3	3	0	95.9	90	110	0			
Phosphorus, Orthophosphate (As P)	15.24	1.5	15	0	102	90	110	0			

Sample ID	LCS-6944	Batch ID: 6944	Test Code: SW8015	Units: mg/Kg	Analysis Date	11/22/2004 6:14:46 PM	Prep Date	11/22/2004			
Client ID:		Run ID: FID(17A) 2_041122A			SeqNo:	322602					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	34.85	10	50	0	69.7	67.4	117	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 Duplicate

CLIENT: Giant Refining Co
 Work Order: 0411218
 Project: Railroad Rack Lagoon SWMU

Sample ID	LCSD-6944	Batch ID: 6944	Test Code: SW8015	Units: mg/Kg	Analysis Date	11/22/2004 6:47:44 PM	Prep Date	11/22/2004				
Client ID:			Run ID: FID(17A) 2_041122A		SeqNo:	322603						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		38.26	10	50	0	76.5	67.4	117	34.85	9.33	17.4	

Sample ID	LCS-6930	Batch ID: 6930	Test Code: SW8021	Units: mg/Kg	Analysis Date	11/23/2004 1:07:20 PM	Prep Date	11/19/2004				
Client ID:			Run ID: PIDFID_041123A		SeqNo:	322792						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene		0.4318	0.025	0.42	0	103	77	122	0			
Toluene		2.009	0.025	1.9	0	106	81	115	0			
Ethylbenzene		0.4138	0.025	0.41	0	101	84	117	0			
Xylenes, Total		1.927	0.025	1.9	0	101	84	116	0			

Sample ID	LCS-6972	Batch ID: 6972	Test Code: SW7471	Units: mg/Kg	Analysis Date	11/30/2004	Prep Date	11/30/2004				
Client ID:			Run ID: MI-LA254_041130A		SeqNo:	323376						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		0.1791	0.033	0.1667	0	107	75	125	0			

Sample ID	LCSD-6972	Batch ID: 6972	Test Code: SW7471	Units: mg/Kg	Analysis Date	11/30/2004	Prep Date	11/30/2004				
Client ID:			Run ID: MI-LA254_041130A		SeqNo:	323394						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		0.1796	0.033	0.1667	0	108	75	125	0.1791	0.242	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

QC SUMMARY REPORT

Laboratory Control Spike - generic

CLIENT: Giant Refining Co
 Work Order: 0411218
 Project: Railroad Rack Lagoon SWMU

Sample ID	LCS-6954	Batch ID: 6954	Test Code: SW6010A	Units: mg/Kg	Analysis Date	11/23/2004 11:22:33 A	Prep Date	11/22/2004			
Client ID:			Run ID: ICP_041123A		SeqNo:	322691					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	26.73	2.5	25	0	107	80	120	0			
Cadmium	25.59	0.1	25	0.05491	102	80	120	0			
Calcium	2311	25	2500	12.41	91.9	80	120	0			
Chromium	25.74	0.3	25	0	103	80	120	0			
Lead	25.63	0.25	25	0	103	80	120	0			
Magnesium	2371	25	2500	0	94.8	80	120	0			
Potassium	2484	50	2500	0	99.4	80	120	0			
Selenium	27.77	2.5	25	0	111	80	120	0			
Silver	25.75	0.25	25	0	103	80	120	0			

Sample ID	LCSD-6954	Batch ID: 6954	Test Code: SW6010A	Units: mg/Kg	Analysis Date	11/23/2004 11:25:36 A	Prep Date	11/22/2004			
Client ID:			Run ID: ICP_041123A		SeqNo:	322692					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	26.84	2.5	25	0	107	80	120	26.73	0.426	20	
Cadmium	25.25	0.1	25	0.05491	101	80	120	25.59	1.33	20	
Calcium	2302	25	2500	12.41	91.6	80	120	2311	0.394	20	
Chromium	25.22	0.3	25	0	101	80	120	25.74	2.02	20	
Lead	25.12	0.25	25	0	100	80	120	25.63	2.00	20	
Magnesium	2348	25	2500	0	93.9	80	120	2371	0.979	20	
Potassium	2450	50	2500	0	98.0	80	120	2484	1.39	20	
Selenium	26.92	2.5	25	0	108	80	120	27.77	3.13	20	
Silver	25.74	0.25	25	0	103	80	120	25.75	0.0495	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

CLIENT: Giant Refining Co
Work Order: 0411218
Project: Railroad Rack Lagoon SWMU

QC SUMMARY REPORT
 Laboratory Control Spike - generic

Sample ID	LCS-6954	Batch ID: 6954	Test Code: SW6010A	Units: mg/Kg	Analysis Date	11/23/2004 11:22:33 A	Prep Date	11/22/2004				
Client ID:			Run ID: ICP_041123B		SeqNo:	322871						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium		2763	25	2500	0	111	80	120	0			

Sample ID	LCSD-6954	Batch ID: 6954	Test Code: SW6010A	Units: mg/Kg	Analysis Date	11/23/2004 11:25:36 A	Prep Date	11/22/2004				
Client ID:			Run ID: ICP_041123B		SeqNo:	322872						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sodium		2726	25	2500	0	109	80	120	2763	1.34	20	

Sample ID	LCS-6954	Batch ID: 6954	Test Code: SW6010A	Units: mg/Kg	Analysis Date	11/24/2004 4:23:50 PM	Prep Date	11/22/2004				
Client ID:			Run ID: ICP_041124A		SeqNo:	323122						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium		24.55	0.1	25	0	98.2	80	120	0			

Sample ID	LCSD-6954	Batch ID: 6954	Test Code: SW6010A	Units: mg/Kg	Analysis Date	11/24/2004 4:26:06 PM	Prep Date	11/22/2004				
Client ID:			Run ID: ICP_041124A		SeqNo:	323123						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium		23.86	0.1	25	0	95.4	80	120	24.55	2.85	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:

Work Order Number 0411218

Received by AT

Checklist completed by

Abonigalis 11/19/07
Signature Date

Matrix

Carrier name Client drop-off

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

Container/Temp Blank temperature?

6°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

Client: Grand Refining Company - Georgia
 Address: Route 3 Box 7
Calhoun, NH 07301

Project Name: Railroad Rock
 Location: Logan SWML

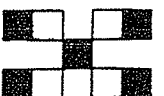
Project #: _____
 Project Manager: Steve Allen

Phone #: 505 722 3833
 Fax #: 505 722 0210

Sampler: Steve Allen
 Samples Col'd: 10 ☐ Yes ☒ No

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative			HEAL No.
					H ₂ O ₂	HCl		
11/18/04	0800	Soil	RR-N-1	2				0411218
"	0815	"	RR-E-1	2				1
"	0830	"	RR-S-1	2				2
"	0845	"	RR-W-1	2				3
"	0900	"	RR-N-1-1-Wall	2				4
"	0915	"	RR-S-1-1-Wall	2				5
"	0930	"	RR-E-1-1-Wall	2				6
"	1030	"	RR-E-1-1-Wall	2				7
"	1045	"	RR-W-1-1-Wall	2				8
"	1100	"	RR-W-1-1-Wall	2				9
"	1130	"	RR-B-1	2				10
"	1230	"	RR-B-2	2				11

Date: 11/19/04 Time: 1340
 Relinquished By: (Signature) Steve Allen
 Received By: (Signature) Steve Allen 1340



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 MOD (Gas/Diesel)	
TPH (Method 418.1)	
Volatile Full List (8021)	8021 B
EDB (Method 504.1)	
EDC (Method 8021)	
8310 (PNA or PAH)	
RCRA 8 Metals	Total
Cations (Na, K, Ca, Mg)	
Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	
8081 Pesticides / PCB's (8082)	
8260 (VOA)	
8270 (Semi-VOA)	
8015 DROXORO	
Soil pH	
Air Bubbles or Headspace (Y or N)	

Remarks:

Can show = Cations, Anions, and Soil pH
 per S.M. date 11-1-04, 11/19/04

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345-3975 Fax 505.345.4107
www.hallenvironmental.com

Project Manager: Steve Morris

Sampler: Steve Morris

Samples Cold? ☒ Yes ☐ No

Samples Cold? ☒ Yes ☐ No

[illegible]

Received By: (Signature)	11/19/01
Received By: (Signature)	1340

[illegible]

Remarks:

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Giant Industries, Inc.	Contact	James Romero
Address	Rt. 3, Box 7	Telephone No.	505-722-0227
Facility Name	Giant Industries, Inc.	Facility Type	Refinery

Surface Owner	Giant Industries, Inc.	Mineral Owner	Giant Industries, Inc.	Lease No.	
---------------	------------------------	---------------	------------------------	-----------	--

LOCATION OF RELEASE

Unit Letter	Section 33	Township 15N	Range 15W	Feet from the	North/South Line	Feet from the	East/West Line	County McKinley
-------------	---------------	-----------------	--------------	---------------	------------------	---------------	----------------	--------------------

Latitude 30° 29' 30" Longitude 108° 24' 40"

NATURE OF RELEASE

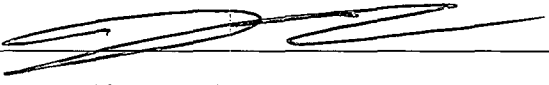
Type of Release	Transmix	Volume of Release	2184 gal	Volume Recovered	1747 gal
Source of Release	Tank 232	Date and Hour of Occurrence	10/17/05 @ 1705 to 1725	Date and Hour of Discover	10/17/05 @ 1730
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Carl Chavez, OCD; Hope Monzeglio , NMED; Denny Foust, OCD		
By Whom?	James Romero	Date and Hour	10/05/05 @ 12:00am	10/18/05 ~ 9:15 am	
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.			

If a Watercourse was Impacted, Describe Fully. **No watercourse was Impacted**

Describe Cause of Problem and Remedial Action Taken: **Between 1705 and 1725 at tank 232 approximately 2,184 gallons of transmix (gasoline/diesel) ran over. At 1730 the release was discovered and remedial actions were taken. The release was contained within secondary containment and did not reach any waterways**

Describe Area Affected and Cleanup Action Taken **Upon discovery personnel took action to stop the release. Also, a vacuum truck was dispatched and approximately 80% (1747gallons) was recovered. Cause(s) of the run over are under investigation at this time.**

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: 		OIL CONSERVATION DIVISION	
Printed Name: JAMES ROMERO		Approved by District Supervisor:	
Title: Environmental Engineer		Approval Date:	Expiration Date:
E-mail Address: Jromero@Giant.com		Conditions of Approval:	Attached <input type="checkbox"/>
Date: Oct 18, 2005 Phone: 505-722-0227			

* Attach Additional Sheets If Necessary

Chavez, Carl J, EMNRD

Subject: Release Notification
Location: Ciniza Refinery

Start: Tue 10/18/2005 9:00 AM
End: Tue 10/18/2005 9:30 AM

Recurrence: (none)

At about 9:15 a.m. James Romero from the Ciniza Refinery called to report a 2184 gallon release from its transmix tank and was contained by secondary containment. About 1,740 gallons has been recovered by vacuum truck thus far. Investigation of the cause is underway. C-141 with date of release and date and time of discovery to follow.

Chavez, Carl J, EMNRD

Subject: Release Notification
Location: Ciniza Refinery

Start: Tue 10/18/2005 9:00 AM
End: Tue 10/18/2005 9:30 AM

Recurrence: (none)

At about 9:15 a.m. James Romero from the Ciniza Refinery called to report a 2184 gallon release from its transmix tank and was contained by secondary containment. About 1,740 gallons has been recovered by vacuum truck thus far. Investigation of the cause is underway. C-141 to follow.



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) 428-2500
Fax (505) 428-2567
www.nmenv.state.nm.us



RON CURRY
SECRETARY

DERRITH WATCHMAN-MOORE
DEPUTY SECRETARY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 17, 2005

Mr. Ed Riege
Environmental Superintendent
Giant Refining Company
Route 3, Box 7
Gallup, New Mexico 87301

RECEIVED
OCT 17 2005
OIL CONSERVATION
DIVISION

SUBJECT: REMEDY COMPLETION REPORT FOR RAILROAD RACK LAGOON
SWMU NO. 8.
GIANT REFINING COMPANY, CINIZA REFINERY
NMED ID # NMD000333211
HWB-GRCC-04-004

Dear Mr. Riege:

The New Mexico Environment Department (NMED) requires Giant Refining Company, Ciniza Refinery (Permittee) to submit a Remedy Completion Report (RCR) for the Railroad Rack Lagoon SWMU No. 8 (SWMU No. 8). The RCR must summarize all closure activities that have occurred to date at SWMU No. 8 and use the guidelines presented in the email sent to the Permittee on November 22, 2004 titled *SWMU 8 Guidelines* and presented as Attachment I. The RCR must also include all analytical data generated during closure.

NMED is providing an excerpt from a permit outlining requirements for an investigation report to be used as guidelines for the RCR and can be found in Attachment II to this letter. NMED recognizes not all sections of Attachment II apply to the RCR but shall be used as general report format guidelines. NMED will assist the Permittee with any questions regarding modification of the report format. The Permittee must also submit a copy of the RCR to the Oil Conservation

Ed Riege
Giant Refining Company Ciniza
October 17, 2005
Page 2

Division (OCD) Santa Fe and Aztec offices attention Wayne Price and Denny Foust,
respectively.

The RCR must be submitted to NMED no later than February 15, 2006. If you have any
questions regarding this letter please call me at (505) 428-2545.

Sincerely,



Hope Monzeglio
Project Leader
Hazardous Waste Bureau

HCM:hcm

cc: *J. Kieling, NMED HWB
*D. Cobrain, NMED HWB
W. Price, OCD
D. Foust, OCD Aztec Office

* denotes electronic version
Reading File and GRCC 2005 File

ATTACHMENT I

November 22, 2004 Email titled *SWMU 8 Guidelines*

Hope Monzeglio

From: David Cobrain [david_cobrain@nmenv.state.nm.us]
Sent: Wednesday, December 08, 2004 2:14 PM
To: 'Wayne Price'; Hope Monzeglio
Subject: FW: SWMU 8 Guidelines

Hope,

Here's the email message you sent to Ed on November 22nd. Wayne has it now too.

Dave

-----Original Message-----

From: Hope Monzeglio [mailto:hope_monzeglio@nmenv.state.nm.us]
Sent: Monday, November 22, 2004 9:41 AM
To: Ed Riege
Cc: David Cobrain
Subject: SWMU 8 Guidelines

Ed

Here are some guidelines for the SWMU 8 report, you will need to elaborate on these points.

The SWMU 8 Railroad Rack Lagoon will be a Voluntary Corrective Measure report.

1. Provide background information about the SWMU; years of operation, the use, and purpose of SWMU. Identify the type of constituents that entered the SWMU (wastewater make up)
 (describe the history and operation of the SWMU)
2. Work performed - address the activities Giant performed for closure. Provide details of the excavation: amount of soil removed, dimensions of the excavation, collection process of confirmation samples (identify the number of samples collected and describe how the samples were collected). You will want to include dates of the excavation, what machinery and instruments were used if any. Include how Giant determined all the contaminated soil was removed (visual, use of instrument?). (Summarize the details of the excavation and how it was performed)
3. Provide the analytical information: what analysis were run on the samples, include the laboratory results, QA/QC reports, compare results with cleanup levels. Based on analytical results what was done with the excavated soil.
4. Conclusion: describe the conclusions, what was concluded upon cleanup, what is the future plan for the site.
5. Provide tables and figures. The analytical data should be provided in a table. A site plan of the SWMU shall be presented. A figure identifying the locations of the confirmation samples should be included. The figures must contain pertinent site features, a north arrow, scale, and an explanation for all abbreviations, symbols, acronyms.

Let me know if you have any questions.

Hope

ATTACHMENT II

Investigation Report Format Excerpt

E.3 INVESTIGATION REPORT

The format listed below fulfills the requirements acceptable to the Secretary for the reporting of site investigations at the Facility. This section provides a general outline for site investigation reports and also lists the minimum requirements for reporting within each subsection when preparing site investigation reports for Facility units. All data, collected during each site investigation event in the reporting period, shall be included in the reports. In general, interpretation of data shall be presented only in the Background, Conclusions and Recommendations sections of the reports. The other text sections of the reports shall be reserved for presentation of facts and data without interpretation or qualifications. The general report outline is provided below.

E.3.a TITLE PAGE

The title page shall include the type of document, the Facility name and SWMU, AOC, and/or unit name(s) and the submittal date. A signature block providing spaces for the name, title and organization of the preparer and the responsible Facility representative shall be provided on the title page.

E.3.b EXECUTIVE SUMMARY

This section shall provide a brief summary of the purpose, scope and results of the investigation conducted at the subject site during the reporting period. The Facility name and SWMU, AOC and/or unit name(s) and location shall be included in the executive summary. In addition, this section shall include a brief summary of conclusions based on the investigation data collected and recommendations for future investigation, monitoring, remedial action or site closure.

E.3.c TABLE OF CONTENTS

The table of contents shall list all text sections and subsections, tables, figures and appendices or attachments included in the report. The corresponding page numbers for the titles of each unit of the report shall be included in the table of contents.

E.3.d INTRODUCTION

This section shall include the Facility name, unit name and location and unit status (active operations, closed, corrective action, etc.). General information on the site usage and status shall be included in this section. A brief description of the purpose of the investigation, the type of site investigation conducted and the type of results presented in the report also shall be provided in this section.

E.3.e BACKGROUND

Relevant background information shall be provided in this section. This section shall briefly summarize historical site uses including the locations of current and former site structures and features (a labeled figure shall be included in the document showing the locations of current and former site structures and features). The locations of subsurface features such as pipelines, underground tanks, utility lines and other subsurface structures shall be included in the background summary and labeled on the site plan. In addition, this section shall include a brief summary of the possible sources, release history, known extent of contamination and the results of previous investigations including references to previous reports. The references to previous reports shall include page, table and figure numbers for referenced information. A site plan, showing relevant investigation locations, and summary data tables shall be included in the Figures and Tables sections of the document, respectively.

E.3.f SCOPE OF SERVICES

This section shall provide a summary listing of all activities actually performed during the investigation event including, but not limited to, background information research, implemented health and safety measures that affected or limited the completion of tasks, drilling, test pit or other excavation methods, well construction methods, field data collection, survey data collection, chemical analytical testing, aquifer testing, remediation system pilot testing, and IDW storage and/or disposal.

E.3.g FIELD INVESTIGATION RESULTS

This section shall provide a summary of the procedures used and the results of all field investigation activities conducted at the site including, but not limited to, the dates that investigation activities were conducted, the type and purpose of field investigation activities performed, field screening measurements, logging and sampling results, pilot test results, construction details and conditions observed. Field observations or conditions that altered the planned work or may have influenced the results of sampling, testing and logging shall be reported in this section. Tables summarizing all pertinent sampling, testing and screening results shall be prepared in a format approved by the Secretary. The tables shall be presented in the Tables section of the reports. At a minimum, the following subsections shall be included, where appropriate.

E.3.g.i Surface Conditions

This subsection shall provide a description of current site topography, features and structures including a description of drainages, vegetation, erosional features and current site uses. In addition, descriptions of features located in surrounding sites that may have an impact on the subject site regarding sediment transport, surface water runoff or contaminant transport shall be included in this subsection.

E.3.g.ii Exploratory Drilling or Excavation Investigations

This subsection shall describe the locations, methods and depths of subsurface explorations including the types of equipment used, the logging procedures and the soil or rock classification system used to describe the observed materials, exploration equipment decontamination procedures and conditions encountered that may have affected or limited the investigation.

A description of the site conditions observed during subsurface investigation activities shall be included in this section including soil horizon and stratigraphic information. Site plans showing the locations of all borings and excavations shall be included in the Figures section of the report. Boring, test pit and excavation logs for all exploratory borings and excavations shall be presented in an Appendix or Attachment to the report.

E.3.g.iii Subsurface Conditions

This subsection shall provide a description of known subsurface lithology and structures based on observations made during the current and previous subsurface investigations and including interpretation of geophysical logs and as-built drawings of man-made structures, if applicable. A description of the known locations of pipelines and utility lines and observed geologic structures shall also be included in this subsection. A site plan showing boring and/or excavation locations and the locations of site above- and below-ground structures shall be included in the Figures section of the report. In addition, cross sections shall be constructed, if appropriate, to provide additional visual presentation of site or regional subsurface conditions.

E.3.g.iv Monitoring Well Construction, Exploratory Boring or Excavation Abandonment

The methods and details of monitoring well construction and the methods used to abandon or backfill exploratory borings and excavations shall be described in this section. The description shall include the dates of well construction, boring abandonment or excavation backfilling. In addition, well construction diagrams shall be included in the Appendix or Attachment with the associated boring logs for monitoring well borings.

E.3.g.v Groundwater Conditions

This subsection shall describe groundwater conditions observed beneath the subject site and relate subsurface groundwater conditions to regional groundwater conditions. A description of the depths to water, aquifer thickness and groundwater flow directions shall be included in this section for each water bearing zone as appropriate to the investigation. Figures showing well locations and the appropriate site, surrounding area and regional groundwater elevations and flow directions for each hydrologic zone shall be included in the Figures section of the report.

E.3.g.vi Surface Water Conditions

This subsection shall describe surface water runoff, drainage, surface water sediment transport and contaminant transport in surface water as suspended load and/or as dissolved phase in surface water via natural and man-made drainages, if applicable. A description of contaminant fate and transport shall be included, if appropriate.

E.3.g.vii Surface Air and Subsurface Vapor Conditions

This subsection shall provide a description of air and vapor monitoring and sampling methods used during the site investigation, if conducted, and provide a description of observations made during the site investigation regarding subsurface flow pathways and the subsurface air flow regime.

E.3.g.viii Materials Testing Results

Materials testing results such as core permeability testing, grain size analysis or other materials testing results shall be reported in this subsection. Sample collection methods, locations and depths also shall be included. Corresponding summary tables shall be included in the Tables section of the report.

E.3.g.ix Pilot Testing Results

Pilot testing is typically conducted after initial subsurface investigations are completed and the need for additional investigation or remediation has been evaluated. Pilot testing, including aquifer testing and remediation system pilot testing shall be addressed through separate work plans and pilot test reports. The format for pilot test work plans and reports shall be approved by the Secretary prior to submittal.

E.3.h REGULATORY CRITERIA

This section shall provide information regarding applicable cleanup standards, screening levels and/or risk-based cleanup goals for each pertinent media at the subject unit. The appropriate cleanup levels for each unit within the subject site shall be included if site-specific levels have been established at separate facility locations. A table summarizing the applicable cleanup standards or inclusion of applicable cleanup standards in the data tables shall be included in the Tables section of the document. Risk-based evaluation procedures, if used to calculate cleanup levels, shall be presented in a separate document. If cleanup levels calculated in a risk evaluation are employed, the risk evaluation document shall be referenced including pertinent page numbers for referenced information.

E.3.i SITE CONTAMINATION

This section shall provide a description of sampling intervals and methods for detection of surface and subsurface contamination in soils, sediments, groundwater, surface water and vapor-phase contamination as appropriate to the scope of the investigation. Factual information only shall be included in this Section. Interpretation of the data shall be reserved for the Summary and Conclusions Section of the reports.

E.3.i.i Soil and Sediment Sampling

This subsection shall briefly describe the dates, locations and methods of sample collection, sampling intervals, methods for sample logging, screening and laboratory sample selection methods including the sample depths for samples submitted for laboratory analyses. A site plan showing the sample locations shall be included in the Figures section of the report.

E.3.i.ii Soil Sample Field Screening Results

This subsection shall describe the field screening methods used during the investigation and the field screening results. Field screening results also shall be presented in summary tables in the Tables section of the document. The limitations of field screening instrumentation and any conditions that influenced the results of field screening shall be discussed in this subsection.

E.3.i.iii Soil Sampling Chemical Analytical Results

This subsection shall briefly summarize the laboratory analyses conducted, the analytical methods and the analytical results and provide a comparison of the data to cleanup standards or established cleanup levels for the site. The laboratory results also shall be presented in summary tables in the Tables section of the document. Field conditions and sample collection methods that could potentially affect the analytical results shall be described in this section. If appropriate, soil analytical data shall be presented with sample locations on a site plan and included in the Figures section of the report.

E.3.i.iv Groundwater Sampling

This subsection shall briefly describe the dates, locations, depths and methods of sample collection and methods for sample logging, screening and laboratory sample selection methods. A map showing the locations of all site and surrounding area well locations shall be included in the Figures section of the report.

E.3.i.v Groundwater General Chemistry

This subsection shall describe the results of measurement of field purging parameters and field analytical measurements. Field parameter measurements and field analytical results also shall be presented in summary tables in the Tables section of the document. The limitations of field measurement instrumentation and any conditions that may have influenced the results of the field measurements shall be discussed in this subsection. If appropriate, relevant water chemistry concentrations shall be presented in data tables or as isoconcentration contours on a site plan included in the Figures section of the report.

E.3.i.vi Groundwater Chemical Analytical Results

This section shall summarize groundwater chemical analytical methods and analytical results, and provide a comparison of the data to the cleanup standards or established cleanup levels for the site. The rationale or purpose for altering or modifying the groundwater sampling program outlined in the site investigation work plan also shall be provided in this section. Field conditions that may have affected the analytical results during sample collection shall be described in this section. Tables summarizing the groundwater laboratory, field and QA/QC chemical analytical data, applicable cleanup levels and modifications to the groundwater sampling program shall be provided in the Tables section of the report. If appropriate, relevant analytical data concentrations shall be presented in data tables or as isoconcentration contours on a site plan included in the Figures section of the report.

E.3.i.vii Air and/or Subsurface Vapor Sampling

This subsection shall briefly describe the dates, locations, depths and methods of sample collection and methods for sample logging and laboratory sample selection methods. A site plan showing the locations of all air sampling locations shall be provided in the Figures section of the report.

E.3.i.viii Air and/or Subsurface Vapor Field Screening Results

This subsection shall describe the field screening methods used for ambient air and/or subsurface vapors during the investigation and the field screening results. Field screening results also shall be presented in summary tables in the Tables section of the document. The locations of ambient air and/or subsurface vapor screening sample collection shall be presented on a site plan included in the Figures section of the report. The limitations of field screening instrumentation and any conditions that influenced the results of field screening shall be discussed in this subsection.

E.3.i.ix Air and/or Subsurface Vapor Laboratory Analytical Results

This section shall list air sampling laboratory analytical methods and analytical results and provide a comparison of the data to emissions standards or established cleanup or emissions levels for the site, if applicable. The rationale or purpose for altering or modifying the air monitoring or sampling program outlined in the site investigation work plan also shall be provided in this section. Field conditions that may have affected the analytical results during sample collection shall be described in this section. Tables summarizing the air sample laboratory, field and QA/QC chemical analytical data, applicable cleanup levels or emissions standards and modifications to the air sampling program shall be provided in the Tables section of the report. If appropriate, relevant concentrations shall be presented in data tables or as isoconcentration contours on a map included in the Figures section of the report.

E.3.j CONCLUSIONS

This section shall provide a brief summary of the investigation activities and a discussion and conclusions with regard to the results of the investigation conducted at the site. In addition, this section shall provide a comparison of the results to applicable cleanup levels and relevant historical investigation results and chemical analytical data. Potential receptors, including groundwater, shall be identified and discussed and the need for further investigation, corrective measures and/or a risk analyses shall be included in this section. An explanation shall be provided with regard to data gaps. If appropriate, a risk analysis may be included as an Appendix in an investigation report; however, the risk analysis shall be presented in the Risk Analysis format included in Appendix E, Section E.5 of this Permit. References to the risk analysis shall be presented only in the Summary and Conclusions section of the Investigation Report.

E.3.k RECOMMENDATIONS

Recommendations and explanations regarding future investigation, monitoring, corrective measures, risk analyses or site closure shall be included in this section. A corresponding schedule for further action regarding the unit also shall be provided.

E.3.1 TABLES

The following summary tables shall be included in each investigation report as appropriate. Data presented in the tables shall include the current data including information on dates of data collection, analytical methods, detection limits and significant data quality exceptions. All data tables shall include only detected analytes and data quality exceptions that could potentially mask detections.

1. Summaries of regulatory criteria, background and/or the applicable cleanup levels (this information may be included in the analytical data tables instead of as separate tables).
2. Summaries of field survey location data. Separate tables shall be prepared for well locations and individual media sampling locations except where the locations are the same for more than one media.
3. Summaries of field screening and field parameter measurements of soil, sediments, groundwater, surface water and/or air quality data.
4. Summaries of soil laboratory analytical data shall include the analytical methods, detection limits and significant data quality exceptions that could influence interpretation of the data.
5. Summaries of groundwater elevation and depth to groundwater data. The table shall include the monitoring well depths and the screened intervals in each well.
6. Summary of groundwater laboratory analytical data. The analytical data tables shall include the analytical methods, detection limits and significant data quality exceptions that could influence interpretation of the data.
7. Summary of surface water laboratory analytical data. The analytical data tables shall include the analytical methods, detection limits and significant data quality exceptions that could influence interpretation of the data.
8. Summary of air sample screening and chemical analytical data. The data tables shall include the screening instruments used, laboratory analytical methods, detection limits and significant data quality exceptions that could influence interpretation of the data.
9. Summary of pilot testing data, if applicable, including units of measurement and types of instruments used to obtain measurements.
10. Summary of materials testing data, if applicable.

E.3.m FIGURES

The following figures shall be included with each investigation report as appropriate. All figures must include a scale and north arrow. An explanation shall be provided on each figure for all abbreviations, symbols, acronyms and qualifiers.

1. Vicinity map showing topography and the general location of the subject site relative to surrounding features or properties.
2. Unit site plan that presents pertinent site features and structures, underground utilities, well locations and remediation system location(s) and details. Off-site well locations and other relevant features shall be included on the site plan if practical. Additional site plans may be required to present the locations of relevant off-site well locations, structures and features.
3. Figure(s) showing boring or excavation locations and sampling locations.
4. Figure(s) presenting soil sample field screening and laboratory analytical data.
5. Figure(s) displaying the locations of all newly installed and existing wells and borings.
6. Figure(s) presenting monitoring well and piezometer locations, groundwater elevation data and indicating groundwater flow direction(s).
7. Figure(s) presenting groundwater laboratory analytical data including past data, if applicable. The chemical analytical data corresponding to each sampling location may be presented in tabular form on the figure or as an isoconcentration map.
8. Figure(s) displaying surface water sample locations and field measurement data including past data, if applicable.
9. Figure(s) presenting surface water laboratory analytical data including past data, if applicable. The laboratory analytical data corresponding to each sampling location may be presented in tabular form on the figure.
10. Figure(s) showing air or subsurface vapor sampling locations and presenting air quality data. The field screening or laboratory analytical data corresponding to each sampling location may be presented in tabular form on the figure or as an isoconcentration map.
11. Figure(s) presenting geologic cross-sections based on outcrop and borehole data.
12. Figure(s) presenting pilot testing locations and data, where applicable, including site plans or graphic data presentation.

E.3.n APPENDICES

Investigation reports shall include the following appendices. Additional appendices may be necessary to present data or documentation not listed below.

E.3.n.i FIELD METHODS

Detailed descriptions of the methods used to acquire field measurements of each media that was surveyed or tested during the investigation shall be included in this section. Methods include, but are not limited to, exploratory drilling or excavation methods, the methods and types of instruments used to obtain field screening, field analytical or field parameter measurements, instrument calibration procedures, sampling methods for each media investigated, decontamination procedures, sample handling procedures, geophysical methods, documentation procedures and field conditions that affected procedural or sample testing results. Methods of measuring and sampling during pilot testing shall be reported in this section, if applicable. Investigation derived waste storage and disposal methods also shall be presented as a subsection of this appendix. Copies of IDW disposal documentation shall be provided in a separate appendix.

E.3.n.ii BORING/TEST PIT LOGS AND WELL CONSTRUCTION DIAGRAMS

Boring logs, test pit or other excavation logs and well construction details shall be presented in this appendix. In addition, a key(s) to symbols and soil or rock classification system shall be included in this section.

E.3.n.iii CHEMICAL ANALYTICAL PROGRAM

Chemical analytical methods, a summary of data quality objectives and data quality review procedures shall be reported in this appendix. A summary of data quality exceptions and their effect on the acceptability of the field and laboratory analytical data with regard to the investigation and the site status shall be included in this appendix along with references to case narratives provided in the laboratory reports.

E.3.n.iv CHEMICAL ANALYTICAL REPORTS

This section shall include all laboratory chemical analytical data generated for the reporting period. The reports must include all chain-of-custody records and QA/QC results provided by the laboratory. The laboratory reports may be provided electronically in a format approved by the Secretary and shall be in the form of a final laboratory report. Laboratory report data tables may be submitted in Microsoft Excel format. Hard (paper) copies of the chain-of-custody forms shall be submitted with the reports regardless of whether the final laboratory report is submitted electronically or in hard copy.

E.3.n.v OTHER APPENDICES

Other appendices containing additional information shall be added as appropriate.

Chavez, Carl J, EMNRD

From: James Romero [jromero@giant.com]
Sent: Thursday, October 13, 2005 12:48 PM
To: James Romero; Chavez, Carl J, EMNRD; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD
Subject: RE: The Following is a summary of week five

From: James Romero
Sent: Thursday, October 13, 2005 11:28 AM
To: James Romero; 'Chavez, Carl J, EMNRD'; 'Monzeglio, Hope, NMENV'; 'Price, Wayne, EMNRD'; 'Foust, Denny, EMNRD'
Cc: Ed Riege; Steve Morris; Ted Gonzales; John Laurent; Ed Rios; Stan Fisher
Subject: The Following is a summary of week five

The Following is a summary of week five:

- 1) Giant initiated our monitoring for GWM-2 and GWM-3 (monthly through 2005) with both wells remaining dry
 - 2) Giant painted stormwater drains green to identify them from process drains
 - 3) Absorbents socks are onsite and will be installed, Moreover, drain covers will be ordered and utilized (i.e., DRAINBLOCKER)
 - 4) Annual groundwater sampling continues on SMW's
 - 5) Continued daily inspections of stormwater separator which continues to be oil free
- Follow-up on OCD/NMED site visit 9-8-05 - Preliminary Lab results (2nd round) have been received (see attached). Final lab analysis should be next week, however, a third grab sample will be taken 10/13/05 and identical analytical's will be ordered
- 6) The primary on the API Separator has been repaired - Inspection and approval of the repairs is currently underway
 - 7) Work on the East bay will follow
 - 8) Continuous pumping of the Secondary (API Separator) using surge pumps is ensuring no liquids are present
 - 9) Our weekly sample from AL2 to EP1 will be taken on Thursday 10/13/0
 - 10) Additional soil samples from past spills will be taken 10/13/05 and analyzed for 8270 full suite
 - 11) The Railroad Rack Lagoon has been fully remediated and backfilled and Giant is awaiting letter from NMED/OCD on Remedy Completion

Hall Environmental Analysis Laboratory

Date: 13-Oct-05

CLIENT: Giant Refining Co
Lab Order: 0510047
Project: Stormwater Separator 10-6-05
Lab ID: 0510047-01

Client Sample ID: SW Sep. Water Out
Collection Date: 10/6/2005 10:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: MAP
Fluoride	2.8	1.0		mg/L	10	10/6/2005
Chloride	400	1.0		mg/L	10	10/6/2005
Nitrogen, Nitrite (As N)	1.9	1.0		mg/L	10	10/6/2005
Nitrogen, Nitrate (As N)	2.8	1.0		mg/L	10	10/6/2005
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	10/6/2005
EPA METHOD 8260B: VOLATILES						Analyst: KTM
Benzene	49	10		µg/L	10	10/8/2005
Toluene	24	10		µg/L	10	10/8/2005
Ethylbenzene	ND	10		µg/L	10	10/8/2005
Methyl tert-butyl ether (MTBE)	21	10		µg/L	10	10/8/2005
1,2,4-Trimethylbenzene	270	10		µg/L	10	10/8/2005
1,3,5-Trimethylbenzene	120	10		µg/L	10	10/8/2005
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	10/8/2005
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	10/8/2005
Naphthalene	110	20		µg/L	10	10/8/2005
1-Methylnaphthalene	250	40		µg/L	10	10/8/2005
2-Methylnaphthalene	270	40		µg/L	10	10/8/2005
Acetone	ND	100		µg/L	10	10/8/2005
Bromobenzene	ND	10		µg/L	10	10/8/2005
Bromochloromethane	ND	10		µg/L	10	10/8/2005
Bromodichloromethane	ND	10		µg/L	10	10/8/2005
Bromoform	ND	10		µg/L	10	10/8/2005
Bromomethane	ND	20		µg/L	10	10/8/2005
2-Butanone	ND	100		µg/L	10	10/8/2005
Carbon disulfide	ND	100		µg/L	10	10/8/2005
Carbon Tetrachloride	ND	20		µg/L	10	10/8/2005
Chlorobenzene	ND	10		µg/L	10	10/8/2005
Chloroethane	ND	20		µg/L	10	10/8/2005
Chloroform	ND	10		µg/L	10	10/8/2005
Chloromethane	ND	10		µg/L	10	10/8/2005
2-Chlorotoluene	ND	10		µg/L	10	10/8/2005
4-Chlorotoluene	ND	10		µg/L	10	10/8/2005
cis-1,2-DCE	ND	10		µg/L	10	10/8/2005
cis-1,3-Dichloropropene	ND	10		µg/L	10	10/8/2005
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	10/8/2005
Dibromochloromethane	ND	10		µg/L	10	10/8/2005
Dibromomethane	ND	20		µg/L	10	10/8/2005
1,2-Dichlorobenzene	ND	10		µg/L	10	10/8/2005
1,3-Dichlorobenzene	ND	10		µg/L	10	10/8/2005
1,4-Dichlorobenzene	ND	10		µg/L	10	10/8/2005

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

S - Spiked Recovery outside acceptance limits
I - RF outside acceptance limits
E - Value above quantitation range

Hall Environmental Analysis Laboratory

Date: 13-Oct-05

CLIENT: Giant Refining Co

Client Sample ID: SW Sep. Water Out

Lab Order: 0510047

Collection Date: 10/6/2005 10:30:00 AM

Project: Stormwater Separator 10-6-05

Lab ID: 0510047-01

Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
Dichlorodifluoromethane	ND	10		µg/L	10	10/8/2005
1,1-Dichloroethane	ND	10		µg/L	10	10/8/2005
1,1-Dichloroethene	ND	10		µg/L	10	10/8/2005
1,2-Dichloropropane	ND	10		µg/L	10	10/8/2005
1,3-Dichloropropane	ND	10		µg/L	10	10/8/2005
2,2-Dichloropropane	ND	10		µg/L	10	10/8/2005
1,1-Dichloropropene	ND	10		µg/L	10	10/8/2005
Hexachlorobutadiene	ND	10		µg/L	10	10/8/2005
2-Hexanone	ND	100		µg/L	10	10/8/2005
Isopropylbenzene	ND	10		µg/L	10	10/8/2005
4-Isopropyltoluene	14	10		µg/L	10	10/8/2005
4-Methyl-2-pentanone	ND	100		µg/L	10	10/8/2005
Methylene Chloride	ND	30		µg/L	10	10/8/2005
n-Butylbenzene	ND	10		µg/L	10	10/8/2005
n-Propylbenzene	ND	10		µg/L	10	10/8/2005
sec-Butylbenzene	ND	10		µg/L	10	10/8/2005
Styrene	ND	10		µg/L	10	10/8/2005
tert-Butylbenzene	ND	10		µg/L	10	10/8/2005
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	10/8/2005
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	10/8/2005
Tetrachloroethane (PCE)	ND	10		µg/L	10	10/8/2005
trans-1,2-DCE	ND	10		µg/L	10	10/8/2005
trans-1,3-Dichloropropene	ND	10		µg/L	10	10/8/2005
1,2,3-Trichlorobenzene	ND	10		µg/L	10	10/8/2005
1,2,4-Trichlorobenzene	ND	10		µg/L	10	10/8/2005
1,1,1-Trichloroethane	ND	10		µg/L	10	10/8/2005
1,1,2-Trichloroethane	ND	10		µg/L	10	10/8/2005
Trichloroethene (TCE)	ND	10		µg/L	10	10/8/2005
Trichlorofluoromethane	ND	10		µg/L	10	10/8/2005
1,2,3-Trichloropropane	ND	20		µg/L	10	10/8/2005
Vinyl chloride	ND	10		µg/L	10	10/8/2005
Xylenes, Total	1200	10		µg/L	10	10/8/2005
Surr: 1,2-Dichloroethane-d4	96.5	69.9-130		%REC	10	10/8/2005
Surr: 4-Bromofluorobenzene	103	71.2-123		%REC	10	10/8/2005
Surr: Dibromofluoromethane	95.3	73.9-134		%REC	10	10/8/2005
Surr: Toluene-d8	96.3	81.9-122		%REC	10	10/8/2005

EPA METHOD 7470: MERCURY

Analyst: CMC

Mercury ND 0.00020 mg/L 1 10/10/2005

Qualifiers: ND - Not Detected Re: Initial Limit : Sp : Re: 'very outside' accept 1 re: ver: limits
 J - Analyte detected below quantitation limit I RF outside accepted: over limits
 B - Analyte detected in the associated Method Blank E - Value above quantitation range
 * - Value exceeds Maximum Contaminant Level

Chavez, Carl J, EMNRD

From: James Romero [jromero@giant.com]
Sent: Wednesday, October 12, 2005 4:13 PM
To: Chavez, Carl J, EMNRD; James Romero
Cc: Ed Riege
Subject: RE: CORRECTIVE ACTION PLAN FOR STORMWATER SEPARATOR

Carl:

Sorry it took so long to get back to your email, its been a hectic day. Anyways, attached is the map which depicts the area to be flushed.

Regarding a written SOP, based on what I know, we have not added anything in writing to operation's SOP's which addresses stormwater other than our Stormwater Plan. This is mainly due to the fact the problem was isolated recently, and discussions are underway to address, not only interim measures, but a long term solution.

I will note management has briefed everyone onsite about the do's and don'ts. Also, they have requested everyone have refresher stormwater training, and that all storm drains be clearly marked.

Let me check with our operations manager, maybe he put something in writing we can forward.

-----Original Message-----

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Wednesday, October 12, 2005 10:06 AM
To: James Romero
Subject: RE: CORRECTIVE ACTION PLAN FOR STORMWATER SEPARATOR

James:

Could you please send me the attached map that I was supposed to receive along with your e-mail. Also, please send the SOPs that Giant developed and are currently being implemented to address the stormwater problem. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/>
(Pollution Prevention Guidance is under "Publications")

From: James Romero [mailto:jromero@giant.com]
Sent: Tuesday, October 11, 2005 4:19 PM
To: James Romero; Chavez, Carl J, EMNRD; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD
Subject: RE: CORRECTIVE ACTION PLAN FOR STORMWATER SEPARATOR

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10/12/2005

-----Original Message-----

From: James Romero

Sent: Tuesday, October 11, 2005 2:47 PM

To: James Romero; 'Chavez, Carl J, EMNRD'; 'Monzeglio, Hope, NMENV'; 'Price, Wayne, EMNRD'; 'Foust, Denny, EMNRD'

Cc: Ed Riege; Steve Morris; Ted Gonzales; John Laurent; Ed Rios; Stan Fisher

Subject: CORRECTIVE ACTION PLAN FOR STORMWATER SEPARATOR

CORRECTIVE ACTION PLAN FOR STORMWATER SEPARATOR

ISSUE: Oil was observed in the stormwater separator (Old API Separator)

CAUSE(s): (1) Personnel washing equipment near the FCC allowing runoff to enter storm drains; (2) Inadequate stormwater training.

INTERIM MEASURES: (1) All equipment washing was ceased; (2) Absorbent socks were ordered and will be installed; (3) Daily inspections of the stormwater separator is being conducted; (4) All stormwater drains will be painted green as to identify them from process drains; and (5) sampling of the effluent from the separator will be conducted until lab results demonstrate no contamination

LONG-TERM MEASURES: (1) Annual stormwater training was given in March 2005. However, a refresher will be given to all employees no later than January 2006. This refresher will reemphasize stormwater requirements and will be geared specifically to the stormwater drains located within the units; (2) the storm drain (see attached map) will be flushed to remove any residual oil. A vacuum truck will be utilized to catch all water from flushing; and (3) a spill kit will be located near the FCC

-----Original Message-----

From: James Romero

Sent: Thursday, October 06, 2005 8:59 AM

To: 'Chavez, Carl J, EMNRD'; James Romero; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD

Cc: Ed Riege; Steve Morris; Ted Gonzales; John Laurent; Ed Rios

Subject: RE: Weekly Reporting (Week Four Clarification)

Good Morning Carl, Giant will develop a detailed response which will clarify the point source (s) responsible for the Old API Separator problem. In our response we'll discuss interim solutions we are undertaking along with alternatives being considered as a long-term remedy. In the immediate future, we have taken the following steps: (1) absorbents will be installed at storm drains near the FCC; (2) discussions on flushing the storm drains is being considered; and (3) new SOP have been put in place to ensure no contaminants are being washed down the storm system. I will note, we are still in the early stages of discussions with our engineers and management to develop a long term solution.

In regards to the storm water basin, Giant will forward photos along with the new storage capacity (by cob Friday 10/6).

-----Original Message-----

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]

Sent: Thursday, October 06, 2005 8:21 AM

To: James Romero; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD

Subject: RE: Weekly Reporting (Week Four)

James:

Good morning. Some items for clarification based on the week four report and other matters are provided below.

Regarding item #2, analyticals from the Old API Separator (identified as "Stormwater Separator Effluent Water" in analytical reports) should consist of: volatiles, total metals, and general chemistry. Clarification of the point source(s) responsible for the Old API Separator problem is requested along with detailed corrective action(s). For example, has discharge from the Fluid Catalytic Cracker Unit into the nearby stormwater drain been corrected? Has there been any corrective measures taken to correct storm drainage, etc. and prevent discharges from reaching the Old API Separator? OCD is concerned about future reoccurrences of discharge problems there.

Regarding item #8, photos of the enlarged stormwater outfall #1 basin is requested along with recalculations of storage volume capacity.

Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM
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Office: (505) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/oecd/>
(Pollution Prevention Guidance is under "Publications")

From: James Romero [<mailto:jromero@giant.com>]
Sent: Thursday, October 06, 2005 7:27 AM
To: Monzeglio, Hope, NMENV; James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

Attached are the lab results discussed

-----Original Message-----

From: Monzeglio, Hope, NMENV [<mailto:hope.monzeglio@state.nm.us>]
Sent: Wednesday, October 05, 2005 4:26 PM
To: James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

I did not receive the attachments.

Hope Monzeglio
Environmental Specialist
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
Santa Fe NM 87505
Phone: (505) 428-2545
Fax: (505) 428-2567
hope.monzeglio@state.nm.us

From: James Romero [<mailto:jromero@giant.com>]

Sent: W 10/5/2005 1:23 PM
To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV;
Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

The Following is a summary of week four

- 1) Oil from our ponds has been removed with Riley completing work on Thursday Sept 29th (see pics from last weeks report titled "update to week three")
- 2) Follow up on OCD/NMED 9/8/05 site visit - Lab results from the old API Separator have been received (see attached lab results). As of 9/9/05, all the oil has been removed from the old API separator and it continues to be oil free. Moreover, due to the fact the above grab sample exceeded NMWQS for some parameters, another grab sample of the effluent will be taken this week and sent for lab analysis which will be forwarded to OCD and NMED. It should be noted the grab sample will be taken from the outlet of the old API separator where it enters Aeration Lagoon #1.
- 3) The Railroad Rack Lagoon has been fully remediated and will be backfilled 10/10/05. A full report with lab analysis and pics will be forward to NMED and OCD via email with regular mail to Wayne and Hope this week.
- 4) A new C 141 spill report was filed this week notifying OCD/NMED of a leak into the secondary of the new API separator. All the liquids from the secondary have been pumped and measures have been taken ensuring the secondary continues to stay dry (i.e., purge pumps). Moreover, work will begin on Monday 10/10/05 to repair the primary with work beginning on the east bay followed by the west bay. This item as been added to the weekly reporting to OCD and NMED and will continue until the problem has been corrected.
- 5) Lab results from AL2 to EP1 (Aug 12, Aug 23, Aug 30, Sept 9, Sept 15, and Sept 21) have been received and will be forward to OCD and NMED this week.
- 6) Our weekly sample from AL2 to EP1 will be taken on Thursday 10/6/05
- 7) Annual ground water sampling is continuing this week on SMW's
- 8) Fuhs was onsite to clean the lower stormwater basin (outfall #1) and also enlarged the basin

-----Original Message-----

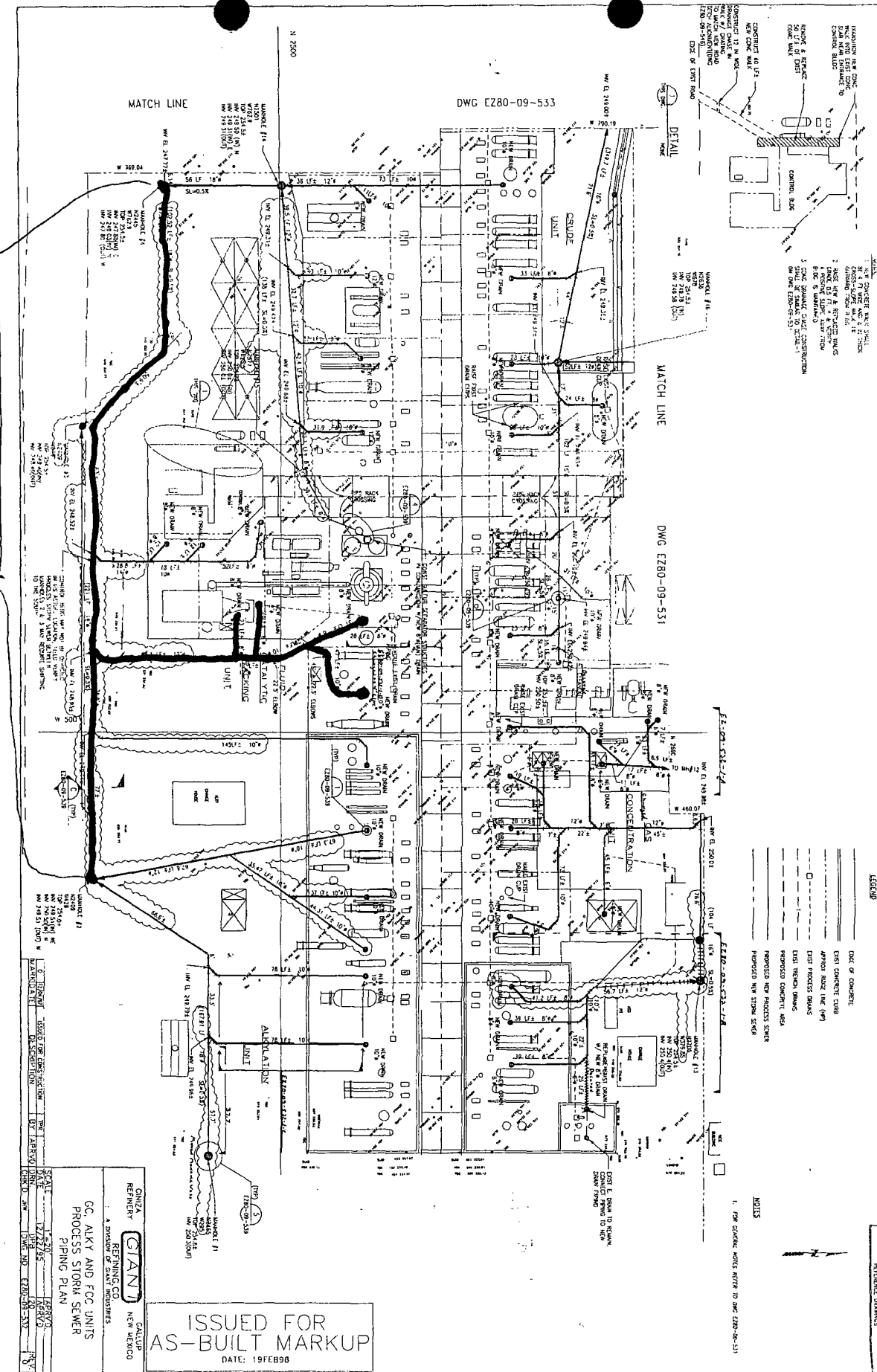
From: James Romero
Sent: Thursday, September 29, 2005 9:31 AM
To: James Romero; 'Price, Wayne, EMNRD';
'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us';
'carlj.chavez@state.nm.us'
Cc: Ed Riege; Steve Morris; Johnny Sanchez;
'carlj.chavez@state.nm.us'
Subject: RE: Weekly Reporting (Update to Week three)

The following is an update to our week three report:

- 1) Oil from our ponds has been removed with only a slight sheen remaining (see attached pics). Riley will continue to vacuum with work expected to be completed later this week early next {pic 45 is pond one/pic 46 is aeration 2}
- 2) Our weekly sample from AL-2 to EP1 will be gathered today

-----Original Message-----

From: James Romero
Sent: Wednesday, September 28, 2005 10:18 AM
To: James Romero; 'Price, Wayne, EMNRD';
'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us';



Chavez, Carl J, EMNRD

From: James Romero [jromero@giant.com]
Sent: Tuesday, October 11, 2005 4:19 PM
To: James Romero; Chavez, Carl J, EMNRD; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD
Subject: RE: CORRECTIVE ACTION PLAN FOR STORMWATER SEPARATOR

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CORRECTIVE ACTION PLAN FOR STORMWATER SEPARATOR

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CAUSE(s): (1) Personnel washing equipment near the FCC allowing runoff to enter storm drains; (2) Inadequate stormwater training.

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Cc: Ed Riege; Steve Morris; Ted Gonzales; John Laurent; Ed Rios
Subject: RE: Weekly Reporting (Week Four Clarification)

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To: James Romero; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD

Subject: RE: Weekly Reporting (Week Four)

James:

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Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/oed/>
(Pollution Prevention Guidance is under "Publications")

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Sent: Thursday, October 06, 2005 7:27 AM

To: Monzeglio, Hope, NMENV; James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD

Cc: Chavez, Carl J, EMNRD

Subject: RE: Weekly Reporting (Week Four)

Attached are the lab results discussed

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From: Monzeglio, Hope, NMENV [mailto:hope.monzeglio@state.nm.us]

Sent: Wednesday, October 05, 2005 4:26 PM

To: James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD

Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD

Subject: RE: Weekly Reporting (Week Four)

I did not receive the attachments.

Hope Monzeglio
Environmental Specialist
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
Santa Fe NM 87505

From: James Romero [jromero@giant.com]
To: James Romero; Chavez, Carl J, EMNRD; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD
Cc:
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Carl J. Chavez, CHMM

New Mexico Energy, Minerals & Natural Resources Dept.
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Santa Fe NM 87505
Phone: (505) 428-2545
Fax: (505)-428-2567
hope.monzeglio@state.nm.us

From: James Romero [mailto:jromero@giant.com]
Sent: Wed 10/5/2005 1:23 PM
To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Foust, Denny, EMNRD; Chavez, C
Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

The Following is a summary of week four

- 1) Oil from our ponds has been removed with Riley completing work on Thursday Sept 29th (see pics from)
- 2) Follow up on OCD/NMED 9/8/05 site visit - Lab results from the old API Separator have been received. oil has been removed from the old API separator and it continues to be oil free. Moreover, due to the fact some parameters, another grab sample of the effluent will be taken this week and sent for lab analysis where it be noted the grab sample will be taken from the outlet of the old API separator where it enters Aeration L
- 3) The Railroad Rack Lagoon has been fully remediated and will be backfilled 10/10/05. A full report will be sent to OCD via email with regular mail to Wayne and Hope this week.
- 4) A new C 141 spill report was filed this week notifying OCD/NMED of a leak into the secondary of the r secondary have been pumped and measures have been taken ensuring the secondary continues to stay on Monday 10/10/05 to repair the primary with work beginning on the east bay followed by the west bay. OCD and NMED and will continue until the problem has been corrected.
- 5) Lab results from AL2 to EP1 (Aug 12, Aug 23, Aug 30, Sept 9, Sept 15, and Sept 21) have been received this week.
- 6) Our weekly sample from AL2 to EP1 will be taken on Thursday 10/6/05
- 7) Annual ground water sampling is continuing this week on SMW's
- 8) Fuhs was onsite to clean the lower stormwater basin (outfall #1) and also enlarged the basin

-----Original Message-----

From: James Romero

Sent: Thursday, September 29, 2005 9:31 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'

Cc: Ed Riege; Steve Morris; Johnny Sanchez; 'carlj.chavez@state.nm.us'

Subject: RE: Weekly Reporting (Update to Week three)

The following is an update to our week three report:

- 1) Oil from our ponds has been removed with only a slight sheen remaining (see attached pics). 1 be completed later this week early next {pic 45 is pond one/pic 46 is aeration 2}
- 2) Our weekly sample from AL-2 to EP1 will be gathered today

-----Original Message-----

From: James Romero

Sent: Wednesday, September 28, 2005 10:18 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@sta

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week Three)

The following is a summary of week three:

- 1) Riley is continuing work on aeration lagoon 1 and 2
 - Between 9/20/05 - 9/26/05 58 trucks of oily wastewater were removed
 - Loads from the 55,000bbl tanks = 5/200bbl loads of sludge removed from tank and rec;
15 truck loads of water removed
- *Estimated time until pond cleanup is completed is next week
- 2) New boom arrived and will be installed at the inlet to pond 2
- 3) Two new dry monitoring wells were installed by Precision Engineering (GWM-2/GWM-3)
- 4) A soil boring was completed for the proposed firewater pond - a sample was sent to Prei
- 5) A soil sample was gathered for OCD and will be held onsite (per discussions with Wayne
- 6) The old API separator continues to be oil free (we are awaiting lab result from previous s
- 7) Railroad Lagoon sampling is complete. All samples came back clean and the area will b
- 8) 2003 OCD Report Response was completed and mailed 9/27
- 9) Elevations for the Boundary wells are completed and included in the 2003 OCD Respon
- 10) Annual Groundwater sampling is underway this week on the OW wells
- 11) " " next week on the SMW wells
- 12) Weekly sampling from aeration 2 into evap pond 1 (AL-2 to EP-1) will be taken 9/29

-----Original Message-----

From: James Romero

Sent: Tuesday, September 20, 2005 10:06 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUS

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week Two)

The following is a summary of week two:

- 1) Riley is continuing work on aeration lagoon 2
 - Between 9/13/05 - 9/19/05 36 trucks of oily wastewater were removed from aera
 - Loads from the 55,000bbl tanks = 7/200bbl loads of sludge removed from tank a
30 truck loads of water removed
- 2) The wastewater line from the Pilot travel center failed causing a spill which was re
from Pilot was diverted into pond 9. The pipe was fixed on 9/16 and flow was returne
again which and repaired on 9/17. Again, flow was diverted into pond 9 until the repa
via telephone 9/19. Moreover, a new valve was installed at the Pilot diversion where
- 3) The new chopper pump should arrive this week, however, a new control valve is r
- 4) Weekly lab results were received for the week of 9/5/05 (sampling date 9/9/05) B
Xylenes Total= 20ppb
- A complete report/lab results will be forward to OCD and NMED. Other weekly sa
- 5) A conference call was held between OCD, NMED, Precision Engineering, and Gi
was and and one boring. A report will be sent to OCD and NMED asking for concun
- 6) Excavation on the RR Lagoon was completed and additional soil samples were ta

-----Original Message-----

From: James Romero
Sent: Thursday, September 15, 2005 1:33 PM
To: 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.
Cc: Ed Riege; Steve Morris; Johnny Sanchez
Subject: RE: Weekly Reporting (Week One)

Wayne, the following is a summary of week one:

- 1) The oil on the old separator was all removed by late Friday (see attached p. the source of the oil was the FCC unit storm drain. We've ordered absorbent
- 2) Between 9/8/05 thru 9/12/05 34 trucks of sludge and 8 trucks of water have. Evaporation pond one has been cleaned (very little oil remaining) and all effor attached pic)
- 3) Samples from the old API and aeration 2 into evap pond 1 have been take
- 4) The diesel spill soil (25 cubic yards) has been moved to the land farm (see
- 5) Water has been removed from the RR Lagoon. Fushe is onsite today exca contamination. Aslo, they will back fill the area near the railroad due to conce
- 6) A hazmat roll off has been ordered to haul all the F037 contaminated soil
- 7) A small spill (20 gallons) occurred 9/14/05 at Marketing tank #4. A formal C
- 8) As of today we have not received lab analysis for our weekly sample (Hop
- 9) Butterfly valves have been installed on both stormwater basins

-----Original Message-----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nm.us]
Sent: Friday, September 09, 2005 1:05 PM
To: James Romero
Subject: RE: Weekly Reporting

We will call you tuesday.

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: James Romero [mailto:jromero@giant.com]
Sent: Fri 9/9/2005 1:07 PM
To: Price, Wayne, EMNRD
Subject: Weekly Reporting

Wayne, Lets plan on me getting our weekly to you every Wednesday.

-----Original Message-----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nm.us]
Sent: Friday, September 09, 2005 11:55 AM
To: James Romero
Subject: RE: Spill Report (daily update for 8/

James, you may back off of the daily report and submit weekly

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: James Romero [mailto:jromero@giant.com]
Sent: Tue 9/6/2005 9:52 AM

To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, N
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for Sept 2,3,4, and 5

I was out of the office on Friday for the holiday weekend. Below activities

- 1) 58 trucks of wastewater/oilywater removed over the weekend
- 2) 400 barrels of slop oil was removed from east tank (55,000 b
- 3) Visual inspections over the weekend were good

-----Original Message-----

From: James Romero
Sent: Thursday, September 01, 2005 3:10 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monze
'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 9/1/05

- 1) Continued to clean ponds
- 2) All equipment and material has been scheduled for 2005
- 3) All new instrumentation has been specified and submitted to purchasing
- 4) All new electrical equipment and materials have requests have been submitted to purchasing
- 5) Maintenance work on API bay east bay is underway
- 6) Visual inspections thru the night were good

-----Original Message-----

From: James Romero
Sent: Wednesday, August 31, 2005 3:04 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope
'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 8/31/05

- 1) Removed 17 trucks of water at the 55,000 barrels
- 2) Utilized a 200 barrel truck (underway) to remove reintroduced
- 3) visual inspections thru the night were good

-----Original Message-----

From: James Romero
Sent: Tuesday, August 30, 2005 3:13 PM
To: James Romero; 'Price, Wayne, EMNRD'
'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for

Daily update for 8/30/05

- 1) New techniques were used today in an effort
- 2) Water is being drained from the water tank system
- 3) The oil tank will be pumped out later this

Process

- 4) Conducted our second weekly grab sample (first sample have not been received)
- 5) visual inspection thru the night were good

-----Original Message-----

From: James Romero
Sent: Monday, August 29, 2005 2:33 PM
To: James Romero; 'Price, Wayne, Ed'; 'hope.monzeglio@state.nm.us'; 'deni@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update)

Daily update for 8/29/05

- 1) Riley is continuing operations to clear
- 2) Water is now being removed from API

As of 28Aug05 61 trucks (60barrels) removed from tanks

- 3) Visual Inspections thru the week

Attached are spreadsheets showing water from tanks to API

-----Original Message-----

From: James Romero
Sent: Tuesday, August 23, 2005 10:00 AM
To: James Romero; 'Price, Wayne, Ed'; 'hope.monzeglio@state.nm.us'; 'deni@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update)

Attached is a spreadsheet showing water from tanks to API. Moreover, all operations to clear are making progress. Continued nighttime hours have not documented.

-----Original Message-----

From: James Romero
Sent: Thursday, August 18, 2005 10:00 AM
To: 'Price, Wayne, Ed'; 'hope.monzeglio@state.nm.us'; 'deni@state.nm.us'
Cc: Ed Riege; Steve Morris
Subject: RE: Spill Report (daily update)

Daily update for 8/18/05

- 1) Riley started operations to clear
- 4000 barrels were removed
- 2) Visual inspections thru the night
- 3) Started release of water
- 4) Completed spill/removal (Friday)

-----Original Message-----

From: Price, Wayne, Ed
[mailto:wayne.p@state.nm.us]
Sent: Thursday, August 18, 2005 10:00 AM
To: James Romero
Cc: Ed Rios; David Sanchez; David

Price, Wayne, EMNRD

From: Monzeglio, Hope, NMENV
To: Chavez, Carl J, EMNRD; James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD
Cc: eriege@giant.com
Subject: RE: Weekly Reporting (Week Four)
Attachments:

Sent: Thu 10/6/2005

To confirm NMED requires that the source of contamination to the Old API Separator be identified and chemical analysis of the Old VOC's, total metals, and SVOC's and general chemistry as indicated by OCD's email.

Please call me with any questions.

Hope

Hope Monzeglio
Environmental Specialist
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
Santa Fe NM 87505
Phone: (505) 428-2545
Fax: (505)-428-2567
hope.monzeglio@state.nm.us

From: Chavez, Carl J, EMNRD
Sent: Thu 10/6/2005 9:20 AM
To: James Romero; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD
Subject: RE: Weekly Reporting (Week Four)

James:

Good morning. Some items for clarification based on the week four report and other matters are provided below.

Regarding item #2, analyticals from the Old API Separator (identified as "Stormwater Separator Effluent Water" in analytical reports: metals, and general chemistry, Clarification of the point source(s) responsible for the Old API Separator problem is requested along example, has discharge from the Fluid Catalytic Cracker Unit into the nearby stormwater drain been corrected? Has there been any correct storm drainage, etc. and prevent discharges from reaching the Old API Separator? OCD is concerned about future reoccurrence.

Regarding item #8, photos of the enlarged stormwater outfall #1 basin is requested along with recalculations of storage volume cap:

Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/>
(Pollution Prevention Guidance is under "Publications")

From: James Romero [<mailto:jromero@giant.com>]
Sent: Thursday, October 06, 2005 7:27 AM
To: Monzeglio, Hope, NMENV; James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

Attached are the lab results discussed

-----Original Message-----

From: Monzeglio, Hope, NMENV [<mailto:hope.monzeglio@state.nm.us>]
Sent: Wednesday, October 05, 2005 4:26 PM

To: James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

I did not receive the attachments.

Hope Monzeglio
Environmental Specialist
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
Santa Fe NM 87505
Phone: (505) 428-2545
Fax: (505)-428-2567
hope.monzeglio@state.nm.us

From: James Romero [mailto:jromero@giant.com]

Sent: Wed 10/5/2005 1:23 PM

To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD

Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD

Subject: RE: Weekly Reporting (Week Four)

The Following is a summary of week four

- 1) Oil from our ponds has been removed with Riley completing work on Thursday Sept 29th (see pics from last weeks report
- 2) Follow up on OCD/NMED 9/8/05 site visit - Lab results from the old API Separator have been received (see attached lab r oil has been removed from the old API separator and it continues to be oil free. Moreover, due to the fact the above grab sar some parameters, another grab sample of the effluent will be taken this week and sent for lab analysis which will be forward be noted the grab sample will be taken from the outlet of the old API separator where it enters Aeration Lagoon #1.
- 3) The Railroad Rack Lagoon has been fully remediated and will be backfilled 10/10/05. A full report with lab analysis and pi OCD via email with regular mail to Wayne and Hope this week.
- 4) A new C 141 spill report was filed this week notifying OCD/NMED of a leak into the secondary of the new API separator. A secondary have been pumped and measures have been taken ensuring the secondary continues to stay dry (i.e., purge pum on Monday 10/10/05 to repair the primary with work beginning on the east bay followed by the west bay. This item as been a OCD and NMED and will continue until the problem has been corrected.
- 5) Lab results from AL2 to EP1 (Aug 12, Aug 23, Aug 30, Sept 9, Sept 15, and Sept 21) have been received and will be forwa week.
- 6) Our weekly sample from AL2 to EP1 will be taken on Thursday 10/6/05
- 7) Annual ground water sampling is continuing this week on SMW's
- 8) Fuhs was onsite to clean the lower stormwater basin (outfall #1) and also enlarged the basin

-----Original Message-----

From: James Romero

Sent: Thursday, September 29, 2005 9:31 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chavez@st

Cc: Ed Riege; Steve Morris; Johnny Sanchez; 'carlj.chavez@state.nm.us'

Subject: RE: Weekly Reporting (Update to Week three)

The following is an update to our week three report:

- 1) Oil from our ponds has been removed with only a slight sheen remaining (see attached pics). Riley will continue to be completed later this week early next {pic 45 is pond one/pic 46 is aeration 2}
- 2) Our weekly sample from AL-2 to EP1 will be gathered today

-----Original Message-----

From: James Romero

Sent: Wednesday, September 28, 2005 10:18 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chav

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week Three)

The following is a summary of week three:

- 1) Riley is continuing work on aeration lagoon 1 and 2

- Between 9/20/05 - 9/26/05 58 trucks of oily wastewater were removed
- Loads from the 55,000bbl tanks = 5/200bbl loads of sludge removed from tank and recycled
15 truck loads of water removed

*Estimated time until pond cleanup is completed is next week

- 2) New boom arrived and will be installed at the inlet to pond 2
- 3) Two new dry monitoring wells were installed by Precision Engineering (GWM-2/GWM-3). Monthly Sampling
- 4) A soil boring was completed for the proposed firewater pond - a sample was sent to Precision for permeability
- 5) A soil sample was gathered for OCD and will be held onsite (per discussions with Wayne)
- 6) The old API separator continues to be oil free (we are awaiting lab result from previous sampling)
- 7) Railroad Lagoon sampling is complete. All samples came back clean and the area will be backfilled next week
- 8) 2003 OCD Report Response was completed and mailed 9/27
- 9) Elevations for the Boundary wells are completed and included in the 2003 OCD Response
- 10) Annual Groundwater sampling is underway this week on the OW wells
- 11) " " next week on the SMW wells
- 12) Weekly sampling from aeration 2 into evap pond 1 (AL-2 to EP-1) will be taken 9/29

-----Original Message-----

From: James Romero

Sent: Tuesday, September 20, 2005 10:06 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'ca

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week Two)

The following is a summary of week two:

- 1) Riley is continuing work on aeration lagoon 2
 - Between 9/13/05 - 9/19/05 36 trucks of oily wastewater were removed from aeration lagoon 2
 - Loads from the 55,000bbl tanks = 7/200bbl loads of sludge removed from tank and returned to process
30 truck loads of water removed
- 2) The wastewater line from the Pilot travel center failed causing a spill which was reported to OCD. Discharge from Pilot was diverted into pond 9. The pipe was fixed on 9/16 and flow was returned to lagoon 1. However, it failed again which was repaired on 9/17. Again, flow was diverted into pond 9 until the repair was made. This was done via telephone 9/19. Moreover, a new valve was installed at the Pilot diversion where flows are diverted into pond 9.
- 3) The new chopper pump should arrive this week, however, a new control valve is needed which could be installed by 9/29.
- 4) Weekly lab results were received for the week of 9/5/05 (sampling date 9/9/05) Benzene=ND, Toluene=ND, Xylenes Total= 20ppb
- 5) A complete report/lab results will be forwarded to OCD and NMED. Other weekly sampling dates are 9/19/05 and 9/26/05.
- 6) A conference call was held between OCD, NMED, Precision Engineering, and Giant to discuss the inspection and one boring. A report will be sent to OCD and NMED asking for concurrence of our plan price.
- 6) Excavation on the RR Lagoon was completed and additional soil samples were taken (lab results expected 9/29/05)

-----Original Message-----

From: James Romero

Sent: Thursday, September 15, 2005 1:33 PM

To: 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chavez

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week One)

Wayne, the following is a summary of week one:

- 1) The oil on the old separator was all removed by late Friday (see attached pic). Our maintenance team identified the source of the oil was the FCC unit storm drain. We've ordered absorbents to place in the storm drain.
- 2) Between 9/8/05 thru 9/12/05 34 trucks of sludge and 8 trucks of water have been removed. Evaporation pond one has been cleaned (very little oil remaining) and all efforts have been moved to pond 2 (see attached pic)
- 3) Samples from the old API and aeration 2 into evap pond 1 have been taken and are at the lab
- 4) The diesel spill soil (25 cubic yards) has been moved to the land farm (see pic)
- 5) Water has been removed from the RR Lagoon. Fushe is onsite today excavating additional soil contamination. Also, they will back fill the area near the railroad due to concerns about stability of the area.
- 6) A hazmat roll off has been ordered to haul all the F037 contaminated soil
- 7) A small spill (20 gallons) occurred 9/14/05 at Marketing tank #4. A formal C-141 was filed on 9/14/05
- 8) As of today we have not received lab analysis for our weekly sample (Hope's weekly sample)
- 9) Butterfly valves have been installed on both stormwater basins

-----Original Message-----

From: Price, Wayne, EMNRD [mailto:wayne.p@state.nm.us]
Sent: Friday, September 09, 2005 1:05 PM
To: James Romero
Subject: RE: Weekly Reporting

We will call you tuesday.

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: James Romero [mailto:jromero@giant.com]
Sent: Fri 9/9/2005 1:07 PM
To: Price, Wayne, EMNRD
Subject: Weekly Reporting

Wayne, Lets plan on me getting our weekly to you every Wednesday.

-----Original Message-----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nm.us]
Sent: Friday, September 09, 2005 11:55 AM
To: James Romero
Subject: RE: Spill Report (daily update for 8/

James, you may back off of the daily report and submit weekly until the emergency

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: James Romero [mailto:jromero@giant.com]
Sent: Tue 9/6/2005 9:52 AM
To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Foust, Denny
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for Sept 2,3,4, and 5

I was out of the office on Friday for the holiday weekend. Below is a summary of the activities

- 1) 58 trucks of wastewater/oilywater removed over the weekend
- 2) 400 barrels of slop oil was removed from east tank (55,000 barrel tank) and reintr
- 3) Visual inspections over the weekend were good

-----Original Message-----

From: James Romero
Sent: Thursday, September 01, 2005 3:10 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 9/1/05

- 1) Continued to clean ponds
- 2) All equipment and material has been scheduled for receipt on or before 2005
- 3) All new instrumentation has been specified and material requests have been submitted to purchasing
- 4) All new electrical equipment and materials have been specified and requests have been submitted to purchasing
- 5) Maintenance work on API bay east bay is underway to repair sludge
- 6) Visual inspections thru the night were good

-----Original Message-----

From: James Romero

Sent: Wednesday, August 31, 2005 3:04 PM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@state.nm.us'

Cc: Steve Morris

Subject: RE: Spill Report (daily update for 8/

Daily update for 8/31/05

- 1) Removed 17 trucks of water at the 55,000 barrel tanks
- 2) Utilized a 200 barrel truck (underway) to remove sludge from other tanks and reintroduced
- 3) visual inspections thru the night were good

-----Original Message-----

From: James Romero

Sent: Tuesday, August 30, 2005 3:13 PM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@state.nm.us'

Cc: Steve Morris

Subject: RE: Spill Report (daily update for 8/

Daily update for 8/30/05

- 1) New techniques were used today in an effort to suck more oil
- 2) Water is being drained from the water tank and is being put back into the system
- 3) The oil tank will be pumped out later this week and oil reintroduction process
- 4) Conducted our second weekly grab sample per NMED (test results first sample have not been received)
- 5) visual inspection thru the night were good

-----Original Message-----

From: James Romero

Sent: Monday, August 29, 2005 2:37 PM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@state.nm.us'

Cc: Steve Morris

Subject: RE: Spill Report (daily update for 8/

Daily update for 8/29/05

- 1) Riley is continuing operations to clean ponds
- 2) Water is now being removed from 55,000 barrel tanks API
- As of 28Aug05 61 trucks (60barrels/each) of water has been removed from tanks
- 3) Visual Inspections thru the weekend and night were good

Attached are spreadsheets showing truck numbers for pumping water from tanks to API

-----Original Message-----

From: James Romero

Sent: Tuesday, August 23, 2005 2:57 PM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@stat

Cc: Steve Morris

Subject: RE: Spill Report (daily update for 8/22/05)

Attached is a spreadsheet showing our daily truck counts. Moreover, all operations to clean the ponds are making progress. Continued visual inspections during nighttime hours have not documented any new spill API.

-----Original Message-----

From: James Romero

Sent: Thursday, August 18, 2005 3:17 PM

To: 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'

Cc: Ed Riege; Steve Morris; James Romero

Subject: RE: Spill Report (daily update for 8/18/05)

Daily update for 8/18/05

- 1) Riley started operations to clean ponds, 4000 barrels were removed today
- 2) Visual inspections thru the night were all good
- 3) Started release of water from lower storage
- 4) Completed spill/remediation plan (should be completed Friday)

-----Original Message-----

From: Price, Wayne, EMNRD

[mailto:wayne.price@state.nm.us]

Sent: Thursday, August 18, 2005 7:17 AM

To: James Romero

Cc: Ed Rios; Ed Riege; Steve Morris; Sanchez; David Kirby

Subject: RE: Spill Report (daily update for 8/17/05)

OCD hereby approves of your request

Please be advised that NMOCD approval of this request does not relieve (Giant) responsibility should their operations adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or environment. In addition, NMOCD approval does not relieve (Giant) responsibility for compliance with other federal, state, or local laws and regulations.

Wayne Price-Senior Environmental Engineer
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: James Romero
[mailto:jromero@giant.com]
Sent: Wed 8/17/2005 12:27 PM
To: Price, Wayne, EMNRD
Cc: Ed Rios; Ed Riege; Steve Morris;
Sanchez; David Kirby
Subject: RE: Spill Report (daily upd
8/17/05)

Wayne, Hope:

Per OCD's condition here is our daily

1) We just received the lab results (via
telephone) on Storm water Outfall #1
Benzene ND
EthylBen ND
Toluene .35ppm
Xylene 2.1ppm

With these test results, and due to the
lower storm water basin is at capacity,
your approval to release water off property.

2) Riley Industrial is onsite and unplugging
process sewer lines to the weir box.

3) The outlet to the upper storm water
has been plugged to contain the spill.

If you have any questions please feel free
call me anytime, James

-----Original Message-----

From: Price, Wayne, EMNRD
[mailto:wayne.price@state.nm.us]
Sent: Tuesday, August 16, 2005 8:01 AM
To: Price, Wayne, EMNRD; James Romero;
Monzeglio, Hope, NMENV;
foust.denny@state.nm.us
Cc: Ed Riege; Steve Morris; Johnny Sanchez;
Ed Rios
Subject: RE: Spill Report

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: Price, Wayne, EMNRD

Sent: Tue 8/16/2005 8:59 AM
To: James Romero; Monzeglio Hope, NMENV;
'foust.denny@state.nm.us'
Cc: Ed Riege; Steve Morris; Johnny Sanchez; Ed Rios
Subject: RE: Spill Report

OCD hereby approves of the emergency actions with the following conditions:

1. All water sales from the pond shall cease, unless approved by OCD.
2. No stormwater shall be released that exceeds the WQ standards.
3. The emergency actions shall be continuous (24 hour) until the problem is corrected.
4. A daily E-mail report shall be submitted until emergency is over.
5. Giant shall isolate the other ponds, if possible during the emergency condition.

Please be advised that NMOCD approval of this plan does not relieve (Giant) of responsibility should the operations fail to adequately investigate and remediate contamination that poses a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve (Giant) of responsibility for compliance with any other federal, state, or local law and/or regulations.

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: 505-476-3462

From: James Romero
[mailto:jromero@giant.com]
Sent: Mon 8/15/2005 5:12 PM
To: Price, Wayne, EMNRD;

Monzeglio, Hope, NMENV;
'foust.denny@state.nm.us'
Cc: Ed Riege; Steve Morris;
Johnny Sanchez; Ed Rios
Subject: Spill Report

Wayne,

As we discussed via telephone today, our API pump motor is working properly (20-30% capacity) which resulted in a reportable discharge into our aeration lagoons. Samples we gathered and lab results were received today on Lagoon 2, and Evap Pond (see below). I will follow up with email with a formal C-141 spill report. Moreover, I will submit pics, lab results, and a site map, etc.

However, as an interim measure and with your approval, we are taking the following actions:

- (1) Vac-trucks will be used to pump and clean out the aeration lagoons/API sump
- (2) Interim emergency storage material within two 55,000 barrel tanks located on western part of the property (map will follow hard copy).
- (3) A chopper pump will be installed and has been ordered (replacement of old API pump)

LAB RESULTS

Lagoon 2	Evap Pond
MTBE	88 ppb
60 ppb	
Benzene	306 ppb
1000 ppb	
Toluene	8.7
76 ppb	
Ethylbenzene	<10.0 ppb
ppb	

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the use.

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Chavez, Carl J, EMNRD

From: James Romero [jromero@giant.com]
Sent: Thursday, October 06, 2005 12:51 PM
To: Chavez, Carl J, EMNRD; James Romero; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD
Cc: Ed Riege
Subject: Pictures of the enlarged stormwater basin/volume

Carl:

Attached are pictures of the lower stormwater basin (outfall #1) which were taken today. As you may recall, during your site visit, it was discussed Giant would clean out the accumulated sediments and at the same time enlarge the capacity of the basin. Unfortunately, we do not have any hard numbers on the previous capacity, however, we estimate the capacity was approximately 3000-4000 barrels. The new enlarged basin is approximately 11,000-12,000 barrels. If you need anymore information, pictures, etc. let me know, we'd be happy to provide it.

-----Original Message-----

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, October 06, 2005 8:21 AM
To: James Romero; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD
Subject: RE: Weekly Reporting (Week Four)

James:

Good morning. Some items for clarification based on the week four report and other matters are provided below.

Regarding item #2, analyticals from the Old API Separator (identified as "Stormwater Separator Effluent Water" in analytical reports) should consist of: volatiles, total metals, and general chemistry. Clarification of the point source(s) responsible for the Old API Separator problem is requested along with detailed corrective action(s). For example, has discharge from the Fluid Catalytic Cracker Unit into the nearby stormwater drain been corrected? Has there been any corrective measures taken to correct storm drainage, etc. and prevent discharges from reaching the Old API Separator? OCD is concerned about future reoccurrences of discharge problems there.

Regarding item #8, photos of the enlarged stormwater outfall #1 basin is requested along with recalculations of storage volume capacity.

Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/oed/>
(Pollution Prevention Guidance is under "Publications")

From: James Romero [mailto:jromero@giant.com]
Sent: Thursday, October 06, 2005 7:27 AM
To: Monzeglio, Hope, NMENV; James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

10/12/2005

Attached are the lab results discussed.

-----Original Message-----

From: Monzeglio, Hope, NMENV [mailto:hope.monzeglio@state.nm.us]
Sent: Wednesday, October 05, 2005 4:26 PM
To: James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

I did not receive the attachments.

Hope Monzeglio
Environmental Specialist
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
Santa Fe NM 87505
Phone: (505) 428-2545
Fax: (505)-428-2567
hope.monzeglio@state.nm.us

From: James Romero [mailto:jromero@giant.com]
Sent: Wed 10/5/2005 1:23 PM
To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

The Following is a summary of week four

- 1) Oil from our ponds has been removed with Riley completing work on Thursday Sept 29th (see pics from last weeks report titled "update to week three")
- 2) Follow up on OCD/NMED 9/8/05 site visit - Lab results from the old API Separator have been received (see attached lab results). As of 9/9/05, all the oil has been removed from the old API separator and it continues to be oil free. Moreover, due to the fact the above grab sample exceeded NMWQS for some parameters, another grab sample of the effluent will be taken this week and sent for lab analysis which will be forwarded to OCD and NMED. It should be noted the grab sample will be taken from the outlet of the old API separator where it enters Aeration Lagoon #1.
- 3) The Railroad Rack Lagoon has been fully remediated and will be backfilled 10/10/05. A full report with lab analysis and pics will be forward to NMED and OCD via email with regular mail to Wayne and Hope this week.
- 4) A new C 141 spill report was filed this week notifying OCD/NMED of a leak into the secondary of the new API separator. All the liquids from the secondary have been pumped and measures have been taken ensuring the secondary continues to stay dry (i.e., purge pumps). Moreover, work will begin on Monday 10/10/05 to repair the primary with work beginning on the east bay followed by the west bay. This item as been added to the weekly reporting to OCD and NMED and will continue until the problem has been corrected.
- 5) Lab results from AL2 to EP1 (Aug 12, Aug 23, Aug 30, Sept 9, Sept 15, and Sept 21) have been received and will be forward to OCD and NMED this week.
- 6) Our weekly sample from AL2 to EP1 will be taken on Thursday 10/6/05
- 7) Annual ground water sampling is continuing this week on SMW's
- 8) Fuhs was onsite to clean the lower stormwater basin (outfall #1) and also enlarged the basin

-----Original Message-----

From: James Romero
Sent: Thursday, September 29, 2005 9:31 AM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chavez@state.nm.us'
Cc: Ed Riege; Steve Morris; Johnny Sanchez; 'carlj.chavez@state.nm.us'
Subject: RE: Weekly Reporting (Update to Week three)

The following is an update to our week three report:

- 1) Oil from our ponds has been removed with only a slight sheen remaining (see attached pics). Riley will continue to vacuum with work expected to be completed later this week early next [pic 45 is pond one/pic 46 is aeration 2]
- 2) Our weekly sample from AL-2 to EP1 will be gathered today

-----Original Message-----

From: James Romero

Sent: Wednesday, September 28, 2005 10:18 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chavez@state.nm.us'

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week Three)

The following is a summary of week three:

- 1) Riley is continuing work on aeration lagoon 1 and 2
 - Between 9/20/05 - 9/26/05 58 trucks of oily wastewater were removed
 - Loads from the 55,000bbl tanks = 5/200bbl loads of sludge removed from tank and recycled
- 15 truck loads of water removed
- *Estimated time until pond cleanup is completed is next week
- 2) New boom arrived and will be installed at the inlet to pond 2
- 3) Two new dry monitoring wells were installed by Precision Engineering (GWM-2/GWM-3). Monthly Sampling will begin October 05
- 4) A soil boring was completed for the proposed firewater pond - a sample was sent to Precision for permeability testing (EM 110-2-1906)
- 5) A soil sample was gathered for OCD and will be held onsite (per discussions with Wayne)
- 6) The old API separator continues to be oil free (we are awaiting lab result from previous sampling)
- 7) Railroad Lagoon sampling is complete. All samples came back clean and the area will be backfilled next week
- 8) 2003 OCD Report Response was completed and mailed 9/27
- 9) Elevations for the Boundary wells are completed and included in the 2003 OCD Response
- 10) Annual Groundwater sampling is underway this week on the OW wells
- 11) " " next week on the SMW wells
- 12) Weekly sampling from aeration 2 into evap pond 1 (AL-2 to EP-1) will be taken 9/29

-----Original Message-----

From: James Romero

Sent: Tuesday, September 20, 2005 10:06 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chavez@state.nm.us'

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week Two)

The following is a summary of week two:

- 1) Riley is continuing work on aeration lagoon 2
 - Between 9/13/05 - 9/19/05 36 trucks of oily wastewater were removed from aeration lagoon 2
 - Loads from the 55,000bbl tanks = 7/200bbl loads of sludge removed from tank and returned to process
- 30 truck loads of water removed
- 2) The wastewater line from the Pilot travel center failed causing a spill which was reported to OCD. During this time, all wastewater from Pilot was diverted into pond 9. The pipe was fixed on 9/16 and flow was returned to lagoon 1. However, on 9/17 the pipe failed again which and repaired on 9/17. Again, flow was diverted into pond 9 until the repair was made. This was reported to OCD

via telephone 9/19. Moreover, a new valve was installed at the Pilot diversion where flows are diverted into pond 9 or aeration lagoon 1.

3) The new chopper pump should arrive this week, however, a new control valve is needed which could delay installation by 4-6 weeks

4) Weekly lab results were received for the week of 9/5/05 (sampling date 9/9/05) Benzene=ND, Toluene=ND, Ethylbenzene=ND, Xylenes Total= 20ppb

A complete report/lab results will be forward to OCD and NMED. Other weekly sampling dates are 9/12/05 and 9/21/05

5) A conference call was held between OCD, NMED, Precision Engineering, and Giant to discuss the installation of two new monitoring wells and one boring. A report will be sent to OCD and NMED asking for concurrence of our plan prior to drilling.

6) Excavation on the RR Lagoon was completed and additional soil samples were taken (lab results expected next week)

-----Original Message-----

From: James Romero

Sent: Thursday, September 15, 2005 1:33 PM

To: 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chavez@state.nm.us'

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week One)

Wayne, the following is a summary of week one:

1) The oil on the old separator was all removed by late Friday (see attached pic). Our maintenance manager is 90% positive that the source of the oil was the FCC unit storm drain. We've ordered absorbents to place in the storm drains

2) Between 9/8/05 thru 9/12/05 34 trucks of sludge and 8 trucks of water have been removed.

Evaporation pond one has been cleaned (very little oil remaining) and all efforts have been moved to aeration pond 2 (see attached pic)

3) Samples from the old API and aeration 2 into evap pond 1 have been taken and are at the lab

4) The diesel spill soil (25 cubic yards) has been moved to the land farm (see pic)

5) Water has been removed from the RR Lagoon. Fushe is onsite today excavating additional soil where sampling showed contamination.

Also, they will back fill the area near the railroad due to concerns about stability of the RR line.

6) A hazmat roll off has been ordered to haul all the F037 contaminated soil

7) A small spill (20 gallons) occurred 9/14/05 at Marketing tank #4. A formal C-141 was filed on 9/15/05

8) As of today we have not received lab analysis for our weekly sample (Hope's weekly sample)

9) Butterfly valves have been installed on both stormwater basins

-----Original Message-----

From: Price, Wayne, EMNRD

[mailto:wayne.price@state.nm.us]

Sent: Friday, September 09, 2005 1:05 PM

To: James Romero

Subject: RE: Weekly Reporting

We will call you tuesday.

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: James Romero [mailto:jromero@giant.com]
Sent: Fri 9/9/2005 1:07 PM
To: Price, Wayne, EMNRD
Subject: Weekly Reporting

Wayne, Lets plan on me getting our weekly to you every Wednesday.

-----Original Message-----

From: Price, Wayne, EMNRD
[mailto:wayne.price@state.nm.us]
Sent: Friday, September 09, 2005 11:55 AM
To: James Romero
Subject: RE: Spill Report (daily update for 8/

James, you may back off of the daily report and submit weekly until the emergency is over.

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: James Romero
[mailto:jromero@giant.com]
Sent: Tue 9/6/2005 9:52 AM
To: James Romero; Price, Wayne, EMNRD;
Monzeglio, Hope, NMENV; Foust, Denny,
EMNRD
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for Sept 2,3,4, and 5

I was out of the office on Friday for the holiday weekend. Below is a summary of the weekend activities

- 1) 58 trucks of wastewater/oilywater removed over the weekend
- 2) 400 barrels of slop oil was removed from east tank (55,000 barrel tank) and reintroduced
- 3) Visual inspections over the weekend were good

-----Original Message-----

From: James Romero
Sent: Thursday, September 01, 2005
3:10 PM
To: James Romero; 'Price, Wayne,
EMNRD'; 'hope.monzeglio@state.nm.us';
'denny.foust@state.nm.us'
Cc: Steve Morris

Subject: RE: Spill Report (daily update for 8/

Daily update for 9/1/05

- 1) Continued to clean ponds
- 2) All equipment and material has been scheduled for receipt on or before 10 September 2005
- 3) All new instrumentation has been specified and material requests have been submitted to purchasing
- 4) All new electrical equipment and materials have been specified and material requests have been submitted to purchasing
- 5) Maintenance work on API bay east bay is underway to repair sludge roller
- 6) Visual inspections thru the night were good

-----Original Message-----

From: James Romero
Sent: Wednesday, August 31, 2005 3:04 PM
To: James Romero; 'Price, Wayne, EMNRD';
'hope.monzeglio@state.nm.us';
'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 8/31/05

- 1) Removed 17 trucks of water at the 55,000 barrel tanks
- 2) Utilized a 200 barrel truck (underway) to remove sludge from other tank, this will be reintroduced
- 3) visual inspections thru the night were good

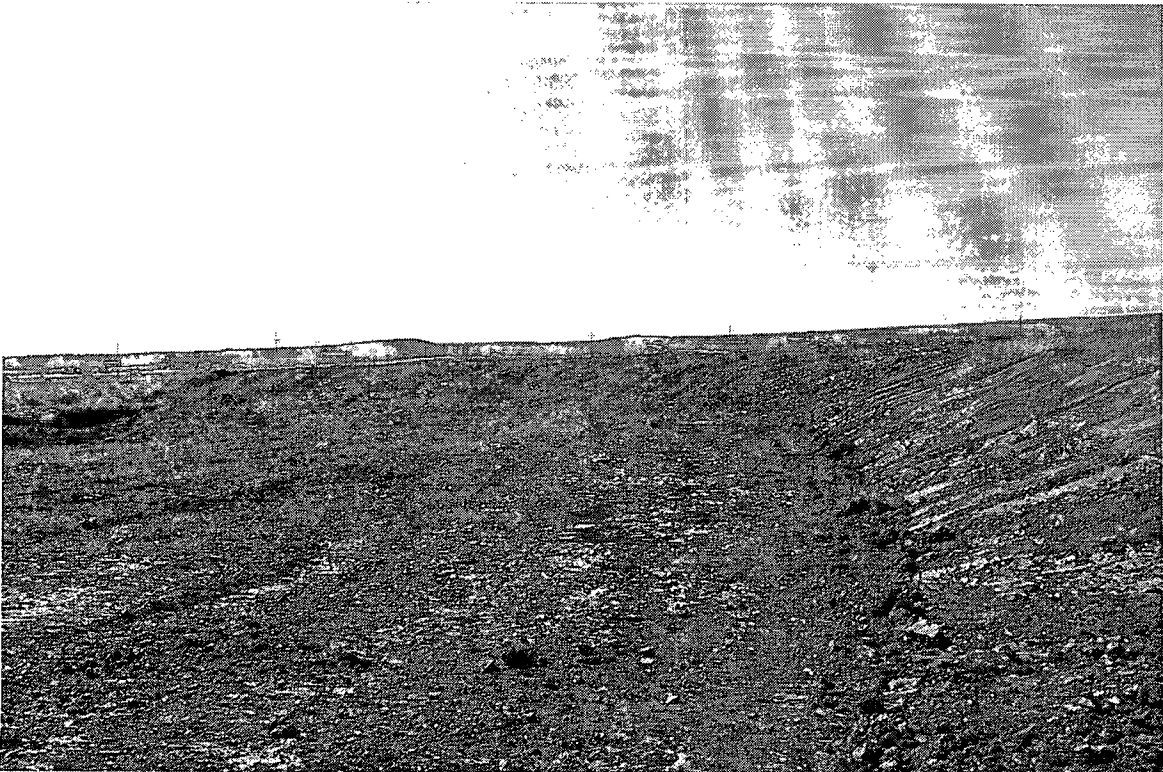
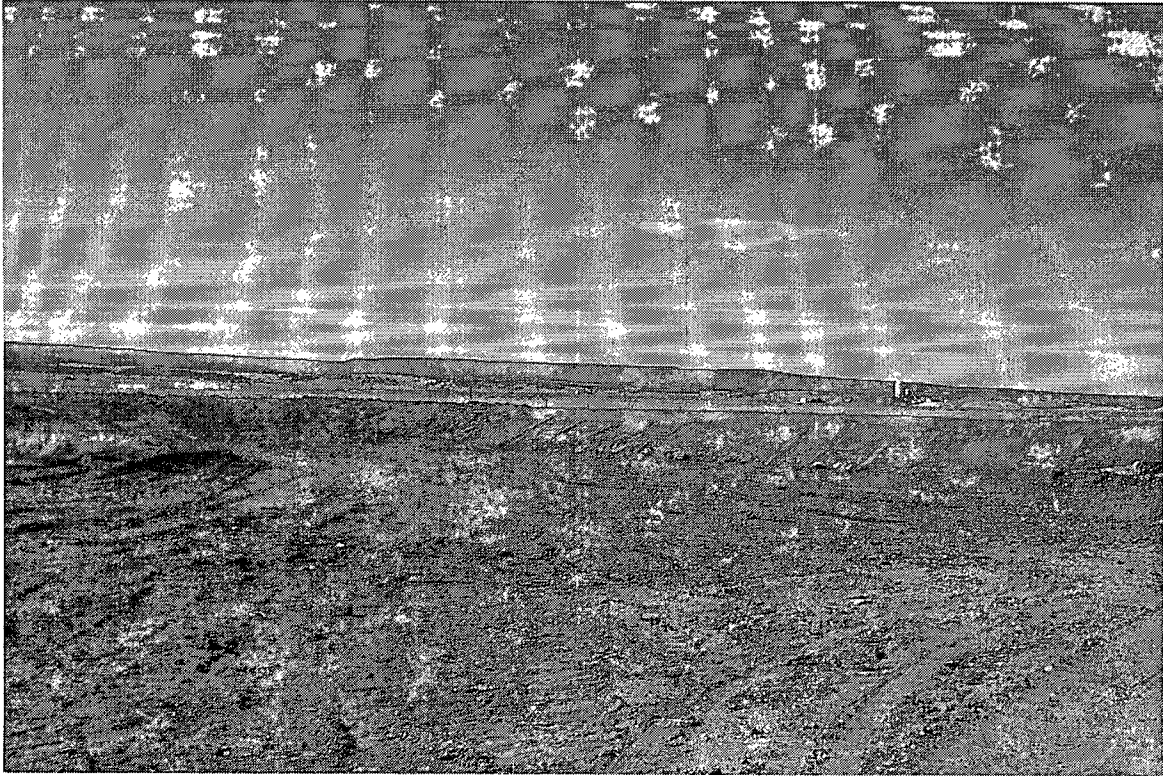
-----Original Message-----

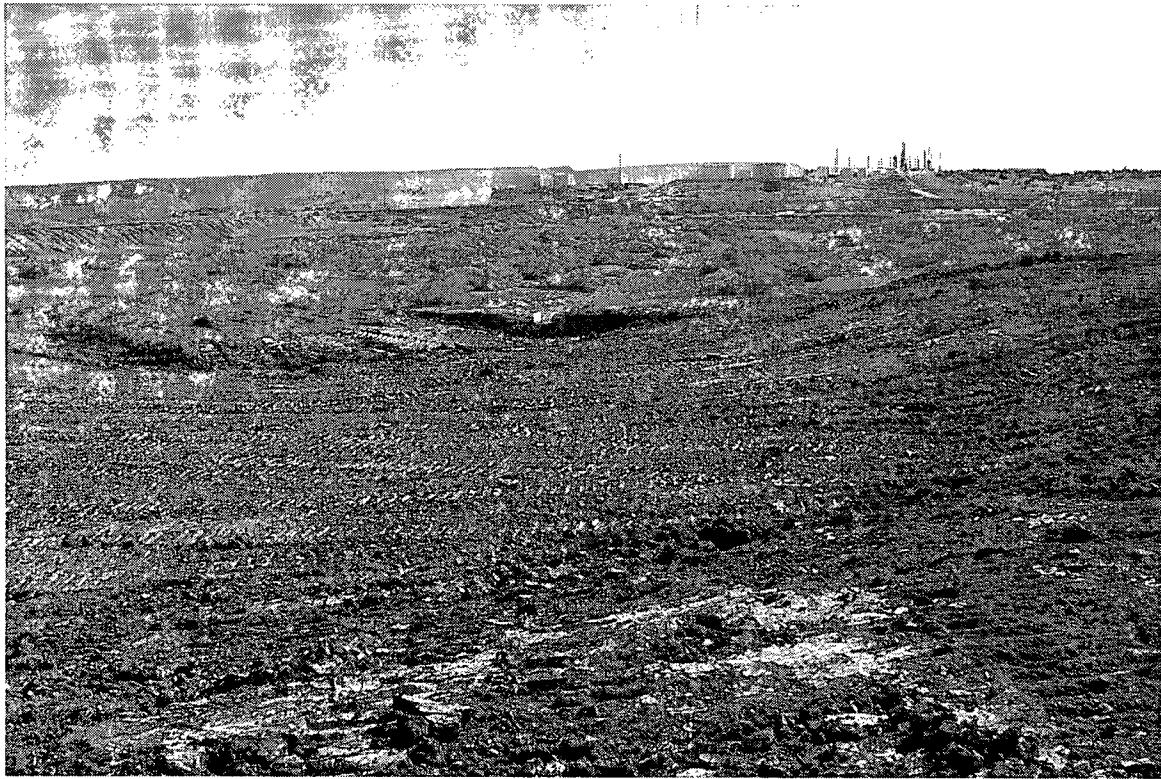
From: James Romero
Sent: Tuesday, August 30, 2005 3:13 PM
To: James Romero; 'Price, Wayne, EMNRD';
'hope.monzeglio@state.nm.us';
'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 8/30/05

Giant Ciniza Refinery

Stormwater Outfall #1 Photos (subsequent to 9/8/05 inspection)





Attached are pictures of the lower stormwater basin (outfall #1) which were taken today. As you may recall, during your site visit, it was discussed Giant would clean out the accumulated

sediments and at the same time enlarge the capacity of the basin. Unfortunately, we do not have any hard numbers on the previous capacity, however, we estimate the capacity was approximately 3000-4000 barrels. The new enlarged basin is approximately 11,000-12,000 barrels. If you need anymore information, pictures, etc. let me know, we'd be happy to provide it.

James Romero (10/6/2005 12:51 p.m.)

From: James Romero [jromero@giant.com]
To: Chavez, Carl J, EMNRD; James Romero; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD
Cc: Ed Riege; Steve Morris; Ted Gonzales; John Laurent; Ed Rios
Subject: RE: Weekly Reporting (Week Four Clarification)
Attachments:

Sent: Thi

Good Morning Carl, Giant will develop a detailed response which will clarify the point source(s) responsible for the Old API Separator solutions we are undertaking along with alternatives being considered as a long-term remedy. In the immediate future, we have tak installed at storm drains near the FCC; (2) discussions on flushing the storm drains is being considered; and (3) new SOP have bee washed down the storm system. I will note, we are still in the early stages of discussions with our engineers and management to de

In regards to the storm water basin, Giant will forward photos along with the new storage capacity (by cob Friday 10/6).

-----Original Message-----

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, October 06, 2005 8:21 AM
To: James Romero; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD
Subject: RE: Weekly Reporting (Week Four)

James:

Good morning. Some items for clarification based on the week four report and other matters are provided below.

Regarding item #2, analyticals from the Old API Separator (identified as "Stormwater Separator Effluent Water" in analytical r metals, and general chemistry, Clarification of the point source(s) responsible for the Old API Separator problem is requestec example, has discharge from the Fluid Catalytic Cracker Unit into the nearby stormwater drain been corrected? Has there be correct storm drainage, etc. and prevent discharges from reaching the Old API Separator? OCD is concerned about future re

Regarding item #8, photos of the enlarged stormwater outfall #1 basin is requested along with recalculations of storage volun

Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/>
(Pollution Prevention Guidance is under "Publications")

From: James Romero [mailto:jromero@giant.com]
Sent: Thursday, October 06, 2005 7:27 AM
To: Monzeglio, Hope, NMENV; James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

Attached are the lab results discussed

-----Original Message-----

From: Monzeglio, Hope, NMENV [mailto:hope.monzeglio@state.nm.us]
Sent: Wednesday, October 05, 2005 4:26 PM
To: James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

I did not receive the attachments.

Hope Monzeglio
Environmental Specialist
New Mexico Environment Department

Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
Santa Fe NM 87505
Phone: (505) 428-2545
Fax: (505) 428-2567
hope.monzeglio@state.nm.us

From: James Romero [mailto:jromero@giant.com]

Sent: Wed 10/5/2005 1:23 PM

To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD

Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD

Subject: RE: Weekly Reporting (Week Four)

The Following is a summary of week four

- 1) Oil from our ponds has been removed with Riley completing work on Thursday Sept 29th (see pics from last weeks
- 2) Follow up on OCD/NMED 9/8/05 site visit - Lab results from the old API Separator have been received (see attache oil has been removed from the old API separator and it continues to be oil free. Moreover, due to the fact the above g some parameters, another grab sample of the effluent will be taken this week and sent for lab analysis which will be fo be noted the grab sample will be taken from the outlet of the old API separator where it enters Aeration Lagoon #1.
- 3) The Railroad Rack Lagoon has been fully remediated and will be backfilled 10/10/05. A full report with lab analysis OCD via email with regular mail to Wayne and Hope this week.
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- 7) Annual ground water sampling is continuing this week on SMW's
- 8) Fuhs was onsite to clean the lower stormwater basin (outfall #1) and also enlarged the basin

-----Original Message-----

From: James Romero

Sent: Thursday, September 29, 2005 9:31 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chav

Cc: Ed Riege; Steve Morris; Johnny Sanchez; 'carlj.chavez@state.nm.us'

Subject: RE: Weekly Reporting (Update to Week three)

The following is an update to our week three report:

- 1) Oil from our ponds has been removed with only a slight sheen remaining (see attached pics). Riley will conti be completed later this week early next {pic 45 is pond one/pic 46 is aeration 2}
- 2) Our weekly sample from AL-2 to EP1 will be gathered today

-----Original Message-----

From: James Romero

Sent: Wednesday, September 28, 2005 10:18 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'ca

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week Three)

The following is a summary of week three:

- 1) Riley is continuing work on aeration lagoon 1 and 2
 - Between 9/20/05 - 9/26/05 58 trucks of oily wastewater were removed
 - Loads from the 55,000bbl tanks = 5/200bbl loads of sludge removed from tank and recycled
 - 15 truck loads of water removed

*Estimated time until pond cleanup is completed is next week
- 2) New boom arrived and will be installed at the inlet to pond 2
- 3) Two new dry monitoring wells were installed by Precision Engineering (GWM-2/GWM-3). Monthly Sa
- 4) A soil boring was completed for the proposed firewater pond - a sample was sent to Precision for pern
- 5) A soil sample was gathered for OCD and will be held onsite (per discussions with Wayne)
- 6) The old API separator continues to be oil free (we are awaiting lab result from previous sampling)

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: James Romero [mailto:jromero@giant.com]
Sent: Fri 9/9/2005 1:07 PM
To: Price, Wayne, EMNRD
Subject: Weekly Reporting

Wayne, Lets plan on me getting our weekly to you every Wednesday.

-----Original Message-----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nm.us]
Sent: Friday, September 09, 2005 11:55 AM
To: James Romero
Subject: RE: Spill Report (daily update for 8/

James, you may back off of the daily report and submit weekly until the eme

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: James Romero [mailto:jromero@giant.com]
Sent: Tue 9/6/2005 9:52 AM
To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Foust,
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for Sept 2,3,4, and 5

I was out of the office on Friday for the holiday weekend. Below is a summar
activities

- 1) 58 trucks of wastewater/oilywater removed over the weekend
- 2) 400 barrels of slop oil was removed from east tank (55,000 barrel tank) and
- 3) Visual inspections over the weekend were good

-----Original Message-----

From: James Romero
Sent: Thursday, September 01, 2005 3:10 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us';
'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 9/1/05

- 1) Continued to clean ponds
- 2) All equipment and material has been scheduled for receipt on 9/1/2005
- 3) All new instrumentation has been specified and material requests submitted to purchasing
- 4) All new electrical equipment and materials have been specified and requests have been submitted to purchasing

- 5) Maintenance work API bay east bay is underway to repair
- 6) Visual inspections thru the night were good

-----Original Message-----

From: James Romero
Sent: Wednesday, August 31, 2005 3:04 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@:
'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 8/31/05

- 1) Removed 17 trucks of water at the 55,000 barrel tanks
- 2) Utilized a 200 barrel truck (underway) to remove sludge from reintroduced
- 3) visual inspections thru the night were good

-----Original Message-----

From: James Romero
Sent: Tuesday, August 30, 2005 3:13 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monze:
'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 8/30/05

- 1) New techniques were used today in an effort to suck n
- 2) Water is being drained from the water tank and is bein system
- 3) The oil tank will be pumped out later this week and oil process
- 4) Conducted our second weekly grab sampled per NME first sample have not been received)
- 5) visual inspection thru the night were good

-----Original Message-----

From: James Romero
Sent: Monday, August 29, 2005 2:37 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@stat
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 8/29/05

- 1) Riley is contuning operations to clean ponds
- 2) Water is now being removed from 55,000 barre API
As of 28Aug05 61 trucks (60barrels/each) of wa from tanks
- 3) Visual Inspections thru the weekend and night \

Attached are spreadsheets showing truck number water from tanks to api

-----Original Message-----

From: James Romero
Sent: Tuesday, August 23, 2005 2:57 PM
To: James Romero; 'Price, Wayne, EMNRD'

hope.monzeglio@state.nm.us'; 'denny.fous

Cc: Steve Morris

Subject: RE: Spill Report (daily update for

Attached is a spreadsheet showing our daily
Moreover, all operations to clean the ponds
making progress. Continued visual inspection
nighttime hours have not documented any
API.

-----Original Message-----

From: James Romero

Sent: Thursday, August 18, 2005 3:

To: 'Price, Wayne, EMNRD'; 'hope.m

Cc: Ed Riege; Steve Morris; James R.

Subject: RE: Spill Report (daily up

Daily update for 8/18/05

- 1) Riley started operations to clean p
- 4000 barrels were removed today
- 2) Visual inspections thru the night w
- 3) Started release of water from lower
- 4) Completed spill/remediation plan (
- Friday)

-----Original Message-----

From: Price, Wayne, EMNRD
[mailto:wayne.price@state.nm

Sent: Thursday, August 18, 2

To: James Romero

Cc: Ed Rios; Ed Riege; Steve
Sanchez; David Kirby

Subject: RE: Spill Report (da
8/17/05)

OCD hereby approves of yo

Please be advised that NMCD
this request does not relieve
responsibility should their c
adequately investigate and
contamination that pose a th
water, surface water, huma
environment. In addition, I
approval does not relieve CD
responsibility for compliance
other federal, state, or local
regulations.

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

From: James Romero
[mailto:jromero@giant.com]

Sent: Wed 8/17/2005 12:27
To: Price, Wayne, EMNRD
Cc: Ed Rios; Ed Riege; Steve Sanchez; David Kirby
Subject: RE: Spill Report (da 8/17/05)

Wayne, Hope:

Per OCD's condition here is o

1) We just received the lab re
telephone) on Storm water Ot

Benzene
EthylBen
Toluene
Xylene

With these tests results, and c
lower storm water basin is at
your approval to release wate

2) Riley Industrial is onsite an
process sewer lines to the we

3) The outlet to the upper stor
has been plugged to contain t

If you have any questions ple:
call me anytime, James

-----Original Message--

From: Price, Wayne, E
[mailto:wayne.price@s
Sent: Tuesday, August
8:01 AM
To: Price, Wayne, EMN
Romero; Monzeglio, Hc
NMENV;
foust.denny@state.nm
Cc: Ed Riege; Steve M
Johnny Sanchez; Ed Ri
Subject: RE: Spill Rep

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

From: Price, Wayne, E
Sent: Tue 8/16/2005 {
To: James Romero; M
Hope, NMENV;
foust.denny@state.nm
Cc: Ed Riege; Steve M
Johnny Sanchez; Ed Ri
Subject: RE: Spill Rep

OCD hereby approves emergency actions with following conditions:

1. All water sales from shall cease, unless approved by OCD.
2. No stormwater shall be released that exceeds standards.
3. The emergency action shall be continuous (24 hour) until the problem is corrected.
4. A daily E-mail report shall be submitted until emergency conditions subside.
5. Giant shall isolate the spill, if possible during emergency condition.

Please be advised that NMOCD approval of this plan does not relieve Giant of responsibility should operations fail to address contamination that poses a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve Giant of responsibility for compliance with any applicable federal, state, or local and/or regulations.

Wayne Price-Senior
Environmental Engr.
Oil Conservation Division
1220 S. Saint Francis
Santa Fe, NM 87505
E-mail
wayne.price@state.nm
Tele: 505-476-3487
Fax: 505-476-3462

From: James Romero
[mailto:jromero@giant]
Sent: Mon 8/15/2005
To: Price, Wayne, EMN
Monzeglio, Hope, NMEI
[mailto:hofoust.denny@state.nm]
Cc: Ed Riege; Steve Miller
Johnny Sanchez; Ed Riege
Subject: Spill Report

Wayne,

As we discussed via tel today, our API pump is not working properly (20-30% capacity). This resulted in a reportable release into our aeration lagoons. Samples were gathered and lab results were received today on Lagoon 2, and Evap (see below). I will follow up with a formal C-141 spill report. Moreover, I will submit lab results, and a site map, etc.

However, as an interim measure and with your approval, I am taking the following actions:

- (1) Vac-trucks will be used to pump and clean out the lagoons/API sump
- (2) Interim emergency storage material within two 55-gallon tanks located on western property (map will follow copy).
- (3) A chopper pump was installed and has been used (replacement of old API pump)

LAB RESULTS

Lagoon 2	Evap
----------	------

MTBE

60 ppb

Benzene	30
---------	----

1000 ppb

Toluene

76 ppb

Ethylbenzene

ppb	<10.0 ppb
-----	-----------

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Price, Wayne, EMNRD

From: James Romero [jromero@giant.com]
To: Chavez, Carl J, EMNRD; James Romero; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD
Cc: Ed Riege
Subject: Pictures of the enlarged stormwater basin/volume
Attachments:  [Picture 056.jpg\(1MB\)](#)  [Picture 057.jpg\(1MB\)](#)  [Picture 059.jpg\(1MB\)](#)  [Picture 060.jpg\(2MB\)](#)

Sent: Thu

Carl:

Attached are pictures of the lower stormwater basin (outfall #1) which were taken today. As you may recall, during your site visit, it accumulated sediments and at the same time enlarge the capacity of the basin. Unfortunately, we do not have any hard numbers on capacity was approximately 3000-4000 barrels. The new enlarged basin is approximately 11,000-12,000 barrels. If you need any more happy to provide it.

-----Original Message-----

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Thursday, October 06, 2005 8:21 AM
To: James Romero; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD
Subject: RE: Weekly Reporting (Week Four)

James:

Good morning. Some items for clarification based on the week four report and other matters are provided below.

Regarding item #2, analyticals from the Old API Separator (identified as "Stormwater Separator Effluent Water" in analytical report), metals, and general chemistry, Clarification of the point source(s) responsible for the Old API Separator problem is requested. For example, has discharge from the Fluid Catalytic Cracker Unit into the nearby stormwater drain been corrected? Has there been correct storm drainage, etc. and prevent discharges from reaching the Old API Separator? OCD is concerned about future releases.

Regarding item #8, photos of the enlarged stormwater outfall #1 basin is requested along with recalculations of storage volume.

Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/ocd/>
(Pollution Prevention Guidance is under "Publications")

From: James Romero [mailto:jromero@giant.com]
Sent: Thursday, October 06, 2005 7:27 AM
To: Monzeglio, Hope, NMENV; James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

Attached are the lab results discussed

-----Original Message-----

From: Monzeglio, Hope, NMENV [mailto:hope.monzeglio@state.nm.us]
Sent: Wednesday, October 05, 2005 4:26 PM
To: James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)

I did not receive the attachments.

Hope Monzeglio

Environmental Specialist
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
Santa Fe NM 87505
Phone: (505) 428-2545
Fax: (505)-428-2567
hope.monzeglio@state.nm.us

From: James Romero [mailto:jromero@giant.com]

Sent: Wed 10/5/2005 1:23 PM

To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD

Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD

Subject: RE: Weekly Reporting (Week Four)

The Following is a summary of week four

- 1) Oil from our ponds has been removed with Riley completing work on Thursday Sept 29th (see pics from last weeks
- 2) Follow up on OCD/NMED 9/8/05 site visit - Lab results from the old API Separator have been received (see attache oil has been removed from the old API separator and it continues to be oil free. Moreover, due to the fact the above g some parameters, another grab sample of the effluent will be taken this week and sent for lab analysis which will be fo be noted the grab sample will be taken from the outlet of the old API separator where it enters Aeration Lagoon #1.
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- 8) Fuhs was onsite to clean the lower stormwater basin (outfall #1) and also enlarged the basin

-----Original Message-----

From: James Romero

Sent: Thursday, September 29, 2005 9:31 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chav

Cc: Ed Riege; Steve Morris; Johnny Sanchez; 'carlj.chavez@state.nm.us'

Subject: RE: Weekly Reporting (Update to Week three)

The following is an update to our week three report:

- 1) Oil from our ponds has been removed with only a slight sheen remaining (see attached pics). Riley will conti be completed later this week early next {pic 45 is pond one/pic 46 is aeration 2}
- 2) Our weekly sample from AL-2 to EP1 will be gathered today

-----Original Message-----

From: James Romero

Sent: Wednesday, September 28, 2005 10:18 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'ca

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week Three)

The following is a summary of week three:

- 1) Riley is continuing work on aeration lagoon 1 and 2
 - Between 9/20/05 - 9/26/05 58 trucks of oily wastewater were removed
 - Loads from the 55,000bbl tanks = 5/200bbl loads of sludge removed from tank and recycled
 - 15 truck loads of water removed
 - *Estimated time until pond cleanup is completed is next week
- 2) New boom arrived and will be installed at the inlet to pond 2
- 3) Two new dry monitoring wells were installed by Precision Engineering (GWM-2/GWM-3). Monthly Sa
- 4) A soil boring was completed for the proposed firewater pond - a sample was sent to Precision for pern

- 5) A soil sample was gathered for OCD and will be held on (per discussions with Wayne)
- 6) The old API separator continues to be oil free (we are awaiting lab result from previous sampling)
- 7) Railroad Lagoon sampling is complete. All samples came back clean and the area will be backfilled next week
- 8) 2003 OCD Report Response was completed and mailed 9/27
- 9) Elevations for the Boundary wells are completed and included in the 2003 OCD Response
- 10) Annual Groundwater sampling is underway this week on the OW wells
- 11) " " next week on the SMW wells
- 12) Weekly sampling from aeration 2 into evap pond 1 (AL-2 to EP-1) will be taken 9/29

-----Original Message-----

From: James Romero

Sent: Tuesday, September 20, 2005 10:06 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week Two)

The following is a summary of week two:

- 1) Riley is continuing work on aeration lagoon 2
 - Between 9/13/05 - 9/19/05 36 trucks of oily wastewater were removed from aeration lagoon 2
 - Loads from the 55,000bbl tanks = 7/200bbl loads of sludge removed from tank and returned to lagoon 2
 - 30 truck loads of water removed
- 2) The wastewater line from the Pilot travel center failed causing a spill which was reported to OCD. The pipe was fixed on 9/16 and flow was returned to lagoon 1 again which was repaired on 9/17. Again, flow was diverted into pond 9 until the repair was made via telephone 9/19. Moreover, a new valve was installed at the Pilot diversion where flows are diverted.
- 3) The new chopper pump should arrive this week, however, a new control valve is needed which will be installed next week.
- 4) Weekly lab results were received for the week of 9/5/05 (sampling date 9/9/05) Benzene=ND, 1,2,4-Trichlorobenzene=ND, Xylenes Total= 20ppb

A complete report/lab results will be forward to OCD and NMED. Other weekly sampling dates

- 5) A conference call was held between OCD, NMED, Precision Engineering, and Giant to discuss the results of the boring. A report will be sent to OCD and NMED asking for concurrence of our plan.
- 6) Excavation on the RR Lagoon was completed and additional soil samples were taken (lab results pending)

-----Original Message-----

From: James Romero

Sent: Thursday, September 15, 2005 1:33 PM

To: 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.romero@state.nm.us'

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week One)

Wayne, the following is a summary of week one:

- 1) The oil on the old separator was all removed by late Friday (see attached pic). Our main source of the oil was the FCC unit storm drain. We've ordered absorbents to place in the drain.
- 2) Between 9/8/05 thru 9/12/05 34 trucks of sludge and 8 trucks of water have been removed from the RR Lagoon. Evaporation pond one has been cleaned (very little oil remaining) and all efforts have been documented (see attached pic)
- 3) Samples from the old API and aeration 2 into evap pond 1 have been taken and are at the lab.
- 4) The diesel spill soil (25 cubic yards) has been moved to the land farm (see pic)
- 5) Water has been removed from the RR Lagoon. Fushe is onsite today excavating additional contamination. Also, they will back fill the area near the railroad due to concerns about stability.
- 6) A hazmat roll off has been ordered to haul all the F037 contaminated soil
- 7) A small spill (20 gallons) occurred 9/14/05 at Marketing tank #4. A formal C-141 was filed.
- 8) As of today we have not received lab analysis for our weekly sample (Hope's weekly sample)
- 9) Butterfly valves have been installed on both stormwater basins

-----Original Message-----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nm.us]

Sent: Friday, September 09, 2005 1:05 PM

To: James Romero

Subject: RE: Weekly Reporting

We will call you tuesday.

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: James Romero [mailto:jromero@giant.com]
Sent: Fri 9/9/2005 1:07 PM
To: Price, Wayne, EMNRD
Subject: Weekly Reporting

Wayne, Lets plan on me getting our weekly to you every Wednesday.

-----Original Message-----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nm.us]
Sent: Friday, September 09, 2005 11:55 AM
To: James Romero
Subject: RE: Spill Report (daily update for 8/

James, you may back off of the daily report and submit weekly until the eme.

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: James Romero [mailto:jromero@giant.com]
Sent: Tue 9/6/2005 9:52 AM
To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Foust,
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for Sept 2,3,4, and 5

I was out of the office on Friday for the holiday weekend. Below is a summar
activities

- 1) 58 trucks of wastewater/oilywater removed over the weekend
- 2) 400 barrels of slop oil was removed from east tank (55,000 barrel tank) and
- 3) Visual inspections over the weekend were good

-----Original Message-----

From: James Romero
Sent: Thursday, September 01, 2005 3:10 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us';
'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 9/1/05

- 1) Continued to clean ponds
- 2) All equipment and material has been scheduled for receipt on 9/1/2005
- 3) All new instrumentation has been specified and material request submitted to purchasing

- 4) All new electrical equipment and materials have been specific requests have been submitted to purchasing
- 5) Maintenance work on API bay east bay is underway to repair
- 6) Visual inspections thru the night were good

-----Original Message-----

From: James Romero
Sent: Wednesday, August 31, 2005 3:04 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/31/05)

Daily update for 8/31/05

- 1) Removed 17 trucks of water at the 55,000 barrel tanks
- 2) Utilized a 200 barrel truck (underway) to remove sludge from reintroduced
- 3) visual inspections thru the night were good

-----Original Message-----

From: James Romero
Sent: Tuesday, August 30, 2005 3:13 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/30/05)

Daily update for 8/30/05

- 1) New techniques were used today in an effort to suck n
- 2) Water is being drained from the water tank and is bein system
- 3) The oil tank will be pumped out later this week and oil process
- 4) Conducted our second weekly grab sampled per NME first sample have not been received)
- 5) visual inspection thru the night were good

-----Original Message-----

From: James Romero
Sent: Monday, August 29, 2005 2:37 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/29/05)

Daily update for 8/29/05

- 1) Riley is contuning operations to clean ponds
- 2) Water is now being removed from 55,000 barre API

As of 28Aug05 61 trucks (60barrels/each) of wa from tanks

- 3) Visual Inspections thru the weekend and night

Attached are spreadsheets showing truck number water from tanks to api

-----Original Message-----

From: James Romero

Sent: Tuesday, August 23, 2005 2:57 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.fous
Cc: Steve Morris
Subject: RE: Spill Report (daily update for

Attached is a spreadsheet showing our daily
Moreover, all operations to clean the ponds
making progress. Continued visual inspection
nighttime hours have not documented any
API.

-----Original Message-----

From: James Romero
Sent: Thursday, August 18, 2005 3:
To: 'Price, Wayne, EMNRD'; 'hope.m
Cc: Ed Riege; Steve Morris; James R
Subject: RE: Spill Report (daily upd

Daily update for 8/18/05

- 1) Riley started operations to clean p
4000 barrels were removed today
 - 2) Visual inspections thru the night w
 - 3) Started release of water from lowe
 - 4) Completed spill/remediation plan (
- Friday)

-----Original Message-----

From: Price, Wayne, EMNRD
[mailto:wayne.price@state.nm
Sent: Thursday, August 18, 2
To: James Romero
Cc: Ed Rios; Ed Riege; Steve
Sanchez; David Kirby
Subject: RE: Spill Report (da
8/17/05)

OCD hereby approves of yo

Please be advised that NMCD
this request does not relieve
responsibility should their c
adequately investigate and
contamination that pose a th
water, surface water, huma
environment. In addition, I
approval does not relieve (C
responsibility for complian
other federal, state, or local
regulations.

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

Price, Wayne, EMNRD

From: James Romero [jromero@giant.com]
To: Monzeglio, Hope, NMENV; Price, Wayne, EMNRD
Cc:
Subject: Old API Grab Sample
Attachments:

Sent: Thu 10/6/2005 7:55 AM

Hope, Wayne:

Giant is preparing to take another grab sample from the old API effluent. We are thinking of running BTEX alone, however, we wanted to ask what NMED/OCD would like to see.

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-----Original Message-----

From: Monzeglio, Hope, NMENV [mailto:hope.monzeglio@state.nm.us]

Sent: Wednesday, October 05, 2005 4:26 PM

To: James Romero; Price, Wayne, EMNRD; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD

Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD

Subject: RE: Weekly Reporting (Week Four)

I did not receive the attachments.

Hope Monzeglio
Environmental Specialist
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
Santa Fe NM 87505
Phone: (505) 428-2545
Fax: (505)-428-2567
hope.monzeglio@state.nm.us

From: James Romero [mailto:jromero@giant.com]

Sent: Wed 10/5/2005 1:23 PM

To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD

Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD

Subject: RE: Weekly Reporting (Week Four)

The Following is a summary of week four

- 1) Oil from our ponds has been removed with Riley completing work on Thursday Sept 29th (see pics from last weeks report titled "update to week three")
- 2) Follow up on OCD/NMED 9/8/05 site visit - Lab results from the old API Separator have been received (see attached lab results). As of 9/9/05, all the oil has been removed from the old API separator and it continues to be oil free. Moreover, due to the fact the above grab sample exceeded NMWQS for some parameters, another grab sample of the effluent will be taken this week and sent for lab analysis which will be forwarded to OCD and NMED. It should be noted the grab sample will be taken from the outlet of the old API separator where it enters Aeration Lagoon #1.
- 3) The Railroad Rack Lagoon has been fully remediated and will be backfilled 10/10/05. A full report with lab analysis and pics will be forward to NMED and OCD via email with regular mail to Wayne and Hope this week.
- 4) A new C 141 spill report was filed this week notifying OCD/NMED of a leak into the secondary of the new API separator. All the liquids from the secondary have been pumped and measures have been taken ensuring the secondary continues to stay dry (i.e., purge pumps). Moreover, work will begin on Monday 10/10/05 to repair the primary with work beginning on the east bay followed by the west bay. This item as been added to the weekly reporting to OCD and NMED and will continue until the problem has been corrected.
- 5) Lab results from AL2 to EP1 (Aug 12, Aug 23, Aug 30, Sept 9, Sept 15, and Sept 21) have been received and will be forward to OCD and NMED this week.
- 6) Our weekly sample from AL2 to EP1 will be taken on Thursday 10/6/05
- 7) Annual ground water sampling is continuing this week on SMW's
- 8) Fuhs was onsite to clean the lower stormwater basin (outfall #1) and also enlarged the basin

-----Original Message-----

From: James Romero

Sent: Thursday, September 29, 2005 9:31 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chavez@state.nm.us'

Cc: Ed Riege; Steve Morris; Johnny Sanchez; 'carlj.chavez@state.nm.us'

Subject: RE: Weekly Reporting (Update to Week three)

The following is an update to our week three report:

- 1) Oil from our ponds has been removed with only a slight sheen remaining (see attached pics). Riley will continue to vacuum with work expected to be completed later this week early next {pic 45 is pond one/pic 46 is aeration 2}
- 2) Our weekly sample from AL-2 to EP1 will be gathered today

From: James Romero [jromero@giant.com]
To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD
Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD
Subject: RE: Weekly Reporting (Week Four)
Attachments:

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- 1) Oil from our ponds has been removed with Riley completing work on Thursday Sept 29th (see pics from last weeks report titled "1)
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Sent: Thursday, September 29, 2005 9:31 AM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chavez@state.nm.us'
Cc: Ed Riege; Steve Morris; Johnny Sanchez; 'carlj.chavez@state.nm.us'
Subject: RE: Weekly Reporting (Update to Week three)

The following is an update to our week three report:

- 1) Oil from our ponds has been removed with only a slight sheen remaining (see attached pics). Riley will continue to vacuur be completed later this week early next {pic 45 is pond one/pic 46 is aeration 2}
- 2) Our weekly sample from AL-2 to EP1 will be gathered today

-----Original Message-----

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Sent: Wednesday, September 28, 2005 10:18 AM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chavez@st'
Cc: Ed Riege; Steve Morris; Johnny Sanchez
Subject: RE: Weekly Reporting (Week Three)

The following is a summary of week three:

- 1) Riley is continuing work on aeration lagoon 1 and 2
 - Between 9/20/05 - 9/26/05 58 trucks of oily wastewater were removed
 - Loads from the 55,000bbl tanks = 5/200bbl loads of sludge removed from tank and recycled
 - 15 truck loads of water removed
- *Estimated time until pond cleanup is completed is next week
- 2) New boom arrived and will be installed at the inlet to pond 2
- 3) Two new dry monitoring wells were installed by Precision Engineering (GWM-2/GWM-3). Monthly Sampling will be
- 4) A soil boring was completed for the proposed firewater pond - a sample was sent to Precision for permeability testir
- 5) A soil sample was gathered for OCD and will be held onsite (per discussions with Wayne)
- 6) The old API separator continues to be oil free (we are awaiting lab result from previous sampling)
- 7) Railroad Lagoon sampling is complete. All samples came back clean and the area will be backfilled next week
- 8) 2003 OCD Report Response was completed and mailed 9/27
- 9) Elevations for the Boundary wells are completed and included in the 2003 OCD Response
- 10) Annual Groundwater sampling is underway this week on the OW wells
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- 12) Weekly sampling from aeration 2 into evap pond 1 (AL-2 to EP-1) will be taken 9/29

-----Original Message-----

From: James Romero

Sent: Tuesday, September 20, 2005 10:06 AM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chav

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week Two)

The following is a summary of week two:

- 1) Riley is continuing work on aeration lagoon 2
 - Between 9/13/05 - 9/19/05 36 trucks of oily wastewater were removed from aeration lagoon 2
 - Loads from the 55,000bbl tanks = 7/200bbl loads of sludge removed from tank and returned to process
 - 30 truck loads of water removed
- 2) The wastewater line from the Pilot travel center failed causing a spill which was reported to OCD. During this from Pilot was diverted into pond 9. The pipe was fixed on 9/16 and flow was returned to lagoon 1. However, or again which and repaired on 9/17. Again, flow was diverted into pond 9 until the repair was made. This was rep via telephone 9/19. Moreover, a new valve was installed at the Pilot diversion where flows are diverted into por
- 3) The new chopper pump should arrive this week, however, a new control valve is needed which could delay it
- 4) Weekly lab results were received for the week of 9/5/05 (sampling date 9/9/05) Benzene=ND, Toluene=ND, Xylenes Total= 20ppb
- A complete report/lab results will be forward to OCD and NMED. Other weekly sampling dates are 9/12/05 a
- 5) A conference call was held between OCD, NMED, Precision Engineering, and Giant to discuss the installatio was and and one boring. A report will be sent to OCD and NMED asking for concurrence of our plan prior to dr
- 6) Excavation on the RR Lagoon was completed and additional soil samples were taken (lab results expected r

-----Original Message-----

From: James Romero

Sent: Thursday, September 15, 2005 1:33 PM

To: 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'DFOUST@state.nm.us'; 'carlj.chavez@state

Cc: Ed Riege; Steve Morris; Johnny Sanchez

Subject: RE: Weekly Reporting (Week One)

Wayne, the following is a summary of week one:

- 1) The oil on the old separator was all removed by late Friday (see attached pic). Our maintenance man the source of the oil was the FCC unit storm drain. We've ordered absorbents to place in the storm drain
- 2) Between 9/8/05 thru 9/12/05 34 trucks of sludge and 8 trucks of water have been removed. Evaporation pond one has been cleaned (very little oil remaining) and all efforts have been moved to aer attached pic)
- 3) Samples from the old API and aeration 2 into evap pond 1 have been taken and are at the lab
- 4) The diesel spill soil (25 cubic yards) has been moved to the land farm (see pic)
- 5) Water has been removed from the RR Lagoon. Fushe is onsite today excavating additional soil where contamination. Also, they will back fill the area near the railroad due to concerns about stability of the Rf
- 6) A hazmat roll off has been ordered to haul all the F037 contaminated soil
- 7) A small spill (20 gallons) occurred 9/14/05 at Marketing tank #4. A formal C-141 was filed on 9/15/05
- 8) As of today we have not received lab analysis for our weekly sample (Hope's weekly sample)
- 9) Butterfly valves have been installed on both stormwater basins

-----Original Message-----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nm.us]

Sent: Friday, September 09, 2005 1:05 PM

To: James Romero

Subject: RE: Weekly Reporting

We will call you tuesday.

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: James Romero [mailto:jromero@giant.com]
Sent: Fri 9/9/2005 1:07 PM
To: Price, Wayne, EMNRD
Subject: Weekly Reporting

Wayne, Lets plan on me getting our weekly to you every Wednesday.

-----Original Message-----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nm.us]
Sent: Friday, September 09, 2005 11:55 AM
To: James Romero
Subject: RE: Spill Report (daily update for 8/

James, you may back off of the daily report and submit weekly until the emergency is over

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: James Romero [mailto:jromero@giant.com]
Sent: Tue 9/6/2005 9:52 AM
To: James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Foust, Denny, EMNF
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for Sept 2,3,4, and 5

I was out of the office on Friday for the holiday weekend. Below is a summary of the week's activities

- 1) 58 trucks of wastewater/oilywater removed over the weekend
- 2) 400 barrels of slop oil was removed from east tank (55,000 barrel tank) and reintroduced
- 3) Visual inspections over the weekend were good

-----Original Message-----

From: James Romero
Sent: Thursday, September 01, 2005 3:10 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 9/1/05

- 1) Continued to clean ponds
- 2) All equipment and material has been scheduled for receipt on or before 10/2005
- 3) All new instrumentation has been specified and material requests have been submitted to purchasing
- 4) All new electrical equipment and materials have been specified and material requests have been submitted to purchasing
- 5) Maintenance work on API bay east bay is underway to repair sludge roller
- 6) Visual inspections thru the night were good

-----Original Message-----

From: James Romero
Sent: Wednesday, August 31, 2005 3:04 PM

To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 8/31/05

- 1) Removed 17 trucks of water at the 55,000 barrel tanks
- 2) Utilized a 200 barrel truck (underway) to remove sludge from other tank, then reintroduced
- 3) visual inspections thru the night were good

-----Original Message-----

From: James Romero
Sent: Tuesday, August 30, 2005 3:13 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 8/30/05

- 1) New techniques were used today in an effort to suck more oil and le
- 2) Water is being drained from the water tank and is being put back into system
- 3) The oil tank will be pumped out later this week and oil reintroduced into process
- 4) Conducted our second weekly grab sample per NMED (tests results first sample have not been received)
- 5) visual inspection thru the night were good

-----Original Message-----

From: James Romero
Sent: Monday, August 29, 2005 2:37 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/

Daily update for 8/29/05

- 1) Riley is continuing operations to clean ponds
- 2) Water is now being removed from 55,000 barrel tanks and sent to API
As of 28Aug05 61 trucks (60barrels/each) of water has been removed from tanks
- 3) Visual Inspections thru the weekend and night were good

Attached are spreadsheets showing truck numbers for pond cleanup and water from tanks to API

-----Original Message-----

From: James Romero
Sent: Tuesday, August 23, 2005 2:57 PM
To: James Romero; 'Price, Wayne, EMNRD'; 'hope.monzeglio@state.nm.us'; 'denny.foust@state.nm.us'
Cc: Steve Morris
Subject: RE: Spill Report (daily update for 8/22/05 and

Attached is a spreadsheet showing our daily truck counts. Moreover, all operations to clean the ponds are moving forward making progress. Continued visual inspections during nighttime hours have not documented any new spills around

-----Original Message-----

From: James Romero
Sent: Thursday, August 18, 2005 3:17 PM
To: 'Price, Wayne, EMNRD'; 'hope.monzeglio@sta
Cc: Ed Riege; Steve Morris; James Romero; Johnr
Subject: RE: Spill Report (daily update for 8/18/05)

Daily update for 8/18/05

- 1) Riley started operations to clean ponds, approx 4000 barrels were removed today
- 2) Visual inspections thru the night were all good
- 3) Started release of water from lower storm water
- 4) Completed spill/remediation plan (should go out Friday)

-----Original Message-----

From: Price, Wayne, EMNRD
[mailto:wayne.price@state.nm.us]
Sent: Thursday, August 18, 2005 7:30 AM
To: James Romero
Cc: Ed Rios; Ed Riege; Steve Morris; Johnn Sanchez; David Kirby
Subject: RE: Spill Report (daily update for 8/17/05)

OCD hereby approves of your request.

Please be advised that NMOCD approval of this request does not relieve (Giant) of responsibility should their operations fail to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, NMOCD approval does not relieve (Giant) of responsibility for compliance with any other federal, state, or local laws and/or regulations.

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: James Romero
[mailto:jromero@giant.com]
Sent: Wed 8/17/2005 12:27 PM
To: Price, Wayne, EMNRD
Cc: Ed Rios; Ed Riege; Steve Morris; Johnn Sanchez; David Kirby
Subject: RE: Spill Report (daily update for 8/17/05)

Wayne, Hope:

Per OCD's condition here is our daily update

1) We just received the lab results (via telephone) on Storm water Outfall #1

Benzene	ND
EthylBen	ND
Toluene	.35ppb
Xylene	2.1ppb

With these test results, and due to the fact the lower storm water basin is at capacity, we'd need your approval to release water off property.

2) Riley Industrial is onsite and unplugging process sewer lines to the weir box.

3) The outlet to the upper storm water basin has been plugged to contain the spill

If you have any questions please feel free to call me anytime, James

-----Original Message-----

From: Price, Wayne, EMNRD
[mailto:wayne.price@state.nm.us]
Sent: Tuesday, August 16, 2005
8:01 AM
To: Price, Wayne, EMNRD; James
Romero; Monzeglio, Hope,
NMENV;
foust.denny@state.nm.us
Cc: Ed Riege; Steve Morris;
Johnny Sanchez; Ed Rios
Subject: RE: Spill Report

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
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From: Price, Wayne, EMNRD
Sent: Tue 8/16/2005 8:59 AM
To: James Romero; Monzeglio,
Hope, NMENV;
'foust.denny@state.nm.us'
Cc: Ed Riege; Steve Morris;
Johnny Sanchez; Ed Rios
Subject: RE: Spill Report

OCD hereby approves of the emergency actions with the following conditions:

1. All water sales from the ponds shall cease, unless approved by OCD.
2. No stormwater shall be

released that exceeds the WQCC standards.

3. The emergency actions shall be continuous (24 hour) until API problem is correct.

4. A daily E-mail report shall be submitted until emergency is over.

5. Giant shall isolate the other ponds, if possible during the emergency condition.

Please be advised that NMOCD approval of this plan does not relieve (Giant) of responsibility should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve (Giant) of responsibility for compliance with any other federal, state, or local laws and/or regulations.

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From: James Romero
[mailto:jromero@giant.com]
Sent: Mon 8/15/2005 5:12 PM
To: Price, Wayne, EMNRD;
Monzeglio, Hope, NMENV;
'foust.denny@state.nm.us'
Cc: Ed Riege; Steve Morris;
Johnny Sanchez; Ed Rios
Subject: Spill Report

Wayne,

As we discussed via telephone today, our API pump motor is not working properly (20-30% capacity) which resulted in a reportable discharge into our

aeration lagoons. Samples were gathered and lab results were received today on Lagoon 2, and Evap Pond 1 (see below). I will follow up this email with a formal C-141 spill report. Moreover, I will submit pics, lab results, and a site map, etc.

However, as an interim measure, and with your approval, we are taking the following actions:

- (1) Vac-trucks will be used to pump and clean out the aeration lagoons/API sump
- (2) Interim emergency storage of material within two 55,000 barrel tanks located on western part of the property (map will follow hard copy).
- (3) A chopper pump will be installed and has been ordered (replacement of old API pump)

LAB RESULTS

Lagoon 2	Evap Pond 1
MTBE	88 ppb
60 ppb	
Benzene	306 ppb
1000 ppb	
Toluene	8.7 ppb
76 ppb	
Ethylbenzene	<2.5
ppb	<10.0 ppb

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