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: End:

Wed 10/19/2005 8:30 AM 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



Date: 19-Oct-05

CLIENT:

Giant Refining Co

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

Lab Order:

Project:

0510048

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

Lab ID:

AL-2 to EP-1 Week of 10-3-05 0510048-01

Matrix: AQUEOUS

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

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

The section of the se

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/∟	1	10/12/2005
2,4-Dinitrophenol	ND	250	μց/∟	1	10/12/2005
2.4-Dinitrotoluene	ND	50	µg/∟	1	10/12/2005
2,6-Dinitrotoluene	ND	50	µg/L	1	10/12/2005
Fluoranthene	ND	50	µg/∟	1	10/12/2005
Fluorene	140	50	µg/∟	1	10/12/2005
Hexachlorobenzene	ND	50	µg/∟	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-Melhylnaphthalene	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-Nitroanifine	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/∟	1	10/12/2005
Surr: 2,4,6-Tribromophenal	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

Qualifiers:

ND - Not Detected at the Reporting Limit

- J Analyte detected below quantitation limits
- B Analyte detected in the associated Method Blank
- R RPD outside accepted recovery limits
- to la b oublet accepted recovery little

S - Spike Recovery outside accepted recovery limits

E - Value above quantitation range

^{* -} Value exceeds Maximum Contaminant Level

Page 2 of 3

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 (ual 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 I	METALS				Analyst: NMC
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: NMC
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 A

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

Giant Refining Co CLIENT:

0510048 Work Order:

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

Project:

Date: 19-0ct-05

QC SUMMARY REPORT

Method Blank

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

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

Qualifiers:

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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Method Blank

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

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Giant Refining Co

0510048

Work Order:

Project:

CLIENT:

Qual

Prep Date 10/10/2005 **%RPD** RPDLimit LowLimit HighLimit RPD Ref Val Analysis Date 10/13/2005 411315 SeqNo: %REC Units: µg/L SPK value SPK Ref Val ELMO_051013A Test Code: SW8270C ם Run 10: Result 999 Batch ID: 8926 Bis(2-chloroethoxy)methane 4-Bromophenyl phenyl ether 4-Chlorophenyl phenyl ether Bis(2-chloroisopropyl)ether Bis(2-ethylhexyl)phthalate 4-Chloro-3-methylphenol Bis(2-chloroethyi)ether Butyl benzyl phthalate Sample ID MB-8926 Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,l)perylene 2-Chloronaphthalene Benz(a)anthracene Acenaphthylene Benzo(a)pyrene 4-Chloroaniline 2-Chlorophenol Acenaphthene Benzyl alcohol Benzoic acid Azobenzene Anthracene Carbazole Client ID: Analyte Aniline

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

Dibenz(a,h)anthracene

Di-n-butyl phthalate Di-n-octyl phthalate

10 10 10 10 10 10 10 10 10 10 10 10 10 1	CLIENT: Grant R	Clant Kenning Co			
De PP-1 Week of 10-3-05 ND 10 ND 10		œ			
ND 10		EP-1 Week of 10-3-05			Method Blank
ND 10 ND 20 ND 20 ND 20 ND 20 ND 10 ND 10 ND 10 ND 20 ND 10	Dibenzofuran	QN	10		
ND 10 ND 15 ND 10	1,2-Dichlorobenzene	QV	10		
ND 10 ND	1,3-Dichlorobenzene	QZ	10		
ND 15 ND 10 ND	1,4-Dichlorobenzene	QN	10		
ND 10 ND	3,3'-Dichlorobenzidine	QV	15		
ND 10 ND 50 ND 10 ND 50 ND 10	Diethyl phthafate	QV	10		
ND 10 ND 50 ND 10	Dimethyl phthalate	Q	10		
ND 10 ND 50 ND 10	2,4-Dichlorophenol	QN	5		
ND 50 ND 10 ND ND 10 ND ND 10 ND ND ND ND ND ND ND N	2,4-Dimethylphenol	QN	10		
ND 50 ND 10 ND 20 ND 10 ND 10 ND 20 ND 10	4,6-Dinitro-2-methylphenal	ON.	50		
ND 10	2,4-Dinitrophenol	QN	50		
ND 10 ND 20 ND 10 ND 50 ND 50 ND 10 ND 50 ND 10 ND	2,4-Dinitrotoluene	ND	10		
ND 10 ND 20 ND 10 ND 10 ND 10 ND 20 ND 10	2,6-Dinitrotoluene	NO	10		
ND 10 10 10 10 10 10 10 1	Fluoranthene	QN	10		
Pare ND 10 ND 10 ND 10 ND 50 ND 50 ND 10 ND 10 ND 50 ND 10 ND 10 ND 10 ND 10 ND 10 ND 10 ND 10 ND 10 ND 15 ND 10 ND 15	Fluorene	ON ON	10		
ene ND 10 ND 10 ND 10 ND 10 ND 10 ND 10 ND 20 ND 10 ND 10 ND 10 ND 50 ND 50 ND 50 ND 10 ND 10 ND 20 ND 10 ND 10 ND 10 ND 20 ND 10 ND 10 ND 10	Hexachlorobenzene	ΩN	10		
ene ND 10 ND 20 ND 10 ND 50 ND 50 ND 50 ND 10 ND 10	Hexachlorobutadiene	ΩN	10		
ND 10 ND 50 ND 50 ND 50 ND 10 ND 50 ND 10 ND 10 ND 10 ND 50 ND 10 ND	Hexachlorocyclopentadiene	ΩN	10		
ND 10 ND 10 ND 10 ND 10 ND 10 ND 20 ND 10 ND 10 ND 10 ND 10 ND 10 ND 50 ND 50 ND 50 ND 10	Hexachloroethane	QN	1		
ND 10 ND 10 ND 15 ND 20 ND 10 ND 10 ND 10 ND 10 ND 10 ND 10 ND 50 ND 50 ND 50 ND 10	Indeno(1,2,3-cd)pyrene	ON	10		
ND 10 ND 20 ND 20 ND 10 ND 10 ND 10 ND 10 ND 10 ND 50 ND 50 ND 50 ND 10	Isaphorane	QN	10		
ND 20 ND 10 ND 10 ND 10 ND 10 ND 50 ND 50 ND 50 ND 10	2-Methylnaphthalene	QZ	10		
ND 20 ND 10 ND 10 ND 10 ND 10 ND 50 ND 50 ND 50 ND 10 ND 15	2-Methylphenal	QN	15		
ND 10 ND 10 ND 10 ND 10 ND 50 ND 50 ND 50 ND 10 ND 15	3+4-Methylphenal	QN	20		
ND 10 ND 10 ND 50 ND 50 ND 20 ND 10 ND 15 ND 15 ND 15 An Detected at the Reporting Limits S - Spike Recovery outside accepted recovery limits	N-Nitrosodi-n-propyłamine	ND	10		
ND 10 ND 50 ND 50 ND 50 ND 70 ND 10 ND 10 ND 15 ND 15 ND 15	N-Nitrosodimethylamine	<u>Q</u>	10		
ND 10 ND 50 ND 50 ND 20 ND 10 ND 15 ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	N-Nitrosodiphenylamine	Q	10		
ND 50 ND 50 ND 20 ND 10 ND 15 ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	Naphthalene	QV	10		
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	2-Nitroaniline	QN	50		
ND 20 ND 10 ND 15 ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	3-NitroanIline	ON ON	50		
ND 10 ND 15 ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	4-Nitroaniline	מס	20		
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	Nitrobenzene	QN	10		
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	2-Nitrophenol	Q	15		
-1		Detected at the Reporting Limit		S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
		1 - Analyte detected below quantitation limits		R - RPD outside accented recovery limits	

CLIENT	CI IRNT. Giant Refining Co				A STATE OF THE PARTY OF THE PAR				CITATA DV DEDODT
Work Order:	0510048							ک ک	Jed Bothow
Project:	AL-2 to EP-1 Week of 10-3-05	10-3-05		,					Melliou Dialik
4-Nitrophenol		ND	50						
Pentachlorophenol		Q	50						
Phenanthrene		2	10						
Phenol		2	10						
Pyrene		N Q	15						
Pyridine		QN.	30						
1,2,4-Trichtorobenzene	rene	QN	10						
2,4,5-Trichlorophenol	jor	QN	유						
2,4,6-Trichlorophenol	lor	QN	15						
Surr: 2,4,6-Tribromophenol	эторнело	139.3	0	200	0	69.7	16.6	150	0
Surr: 2-Fluorobiphenyl	nhenyl	56.6	0	100	0	56.6	19.6	134	0
Surr: 2-Fluorophenol	enol	93.34	0	200	0	46.7	9.54	113	0
Surr: 4-Terphenyl-d14	vi-d14	83.88	0	100	0	83.9	22.7	145	0
Surr: Nitrobenzene-d5	ne-d5	60.54	0	100	0	60.5	14.6	134	0
Surr; Phenol-d6		68.94	0	200	0	34.5	10.7	80.3	0

•	B - Analyte detected in the associated Method Blank	Þ
and the second control of the second control	S - Spike Recovery autside accepted recovery limit	R - RPD outside accepted recovery limits
	ND - Not Detected at the Reporting Limit	J. Analyte detected below quantitation limits

Qualifiers:

Sample ID MB-8925

Cllent ID:

%RPD RPDLimit Qual

%REC LowLimit HighLimit RPD Ref Val

SPK value SPK Ref Val

ם 0.0002

Result 2

Analyte

Run ID: MI-LA254_051010B

Prep Date 10/10/2005

Analysis Date 10/10/2005 409763

Units: mg/L

Test Code: SW7470

Batch ID: 8925

SeqNo:

QC SUMMARY REPORT

Giant Refining Co 0510048 AL-2 to EP-1 Week of 10-3-05

Work Order: CLIENT:

Project:

Method Blank

Sample ID MB	Batch ID: R16994	Test Code:	Test Code: SW6010A	Units: mg/L		Analysis	Date 10/18	Analysis Date 10/18/2005 12:28:27 P	Prep Date	ā	
Client ID:		Run ID:	Run ID: ICP_051018B			SeqNo:	412433	33			
Analyte	Result	Pal		SPK value SPK Ref Val	%REC	LowLimit	HighLimít	%REC LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ON	0.01				 					
Arsenic	QN	0.02									
Berylllum	QX	0.003									
Cadmium	Q	0.002									
Chromium	QN	900.0									
Copper	OZ	0.006									
Lead	ON.	0.005									
Nickel	OZ	0.01									
Selenium	<u> </u>	0.02									
Silver	ON.	0.005									
Thallium	Q.	0.01									
Zinc	2	0.05									

S - Spike Recovery outside accepted recovery limits J - Analyte detected below quantitation limits ND - Not Detected at the Reporting Limit Qualifiers:

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT

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

Giant Refining Co

0510048

CLIENT: Work Order:

Project:

Method Blank

Sample ID MB	Batch ID: R16994	Test Code:	Test Code: SW6010A	Units: mg/L		Analysis	Date 10/1	Analysis Date 10/17/2005 12:58:38 P	Prep Date	
Client ID:		Run ID:	JCP_051018B			SeqNo:	412447	47		
Analyte	Result	Pal	SPK value	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Antimony	. ON	0.01								
Arsenic	2	0.02								
Beryllium	Q	0.003								
Cadmium	2	0.002								
Chramium	2	0.006								
Copper	QZ	0.006								
Lead	Q	0.005								
Nickel	₽ P	0.01								
Selenium	0.01363	0.02								7
Silver	Q	0.005								
Thallium	2	0.01								
Zinc	QN	0.05								

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

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QC SUMMARY REPORT

:

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

Giant Refining Co

0510048

Work Order: CLIENT:

Project:

Method Blank

Client ID: Result PQL SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD Ref Val	Sample ID MB-8942	MB-8942	Batch ID: 8942	Test Code:	Test Code: SW6010A	Units: mg/L		Analysis	Date 10/1	Analysis Date 10/13/2005 9:08:24 AM	Prep Da	Prep Date 10/12/2005	35
Result POL SPK Value SPK Ref Val %REC LowLimit HighLImit RPD Ref Val %RPD ND 0.003	Client ID:			Run ID:	ICP_051013A			SeqNo:		38			
ND 0.01 ND 0.002 ND 0.006 ND 0.006 ND 0.005 ND 0.005 ND 0.005 ND 0.005 ND 0.005 ND 0.005	Analyte		Result	Pal	SPK value	SPK Ref Val	%REC		HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
	Antimony		. DN	0.01					:				
	Arsenic		ON	0.02									
	Beryllium		8	0.003									
	Cadmium		S	0.002									
	Chromium		ON	0.006									
	Copper		QN	0.006									
ON ON ON ON ON	Lead		QN	0.005									
ON ON ON ON	Nickel		Q	0.01									
ON ON ON	Selenium		Q	0.05									
QN QN	Silver		Q	0.005									
QN	Thallium		Q	0.01									
	Zinc		ON	0.05									

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

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Giant Refining Co CLIENT:

0510048 Work Order:

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

Project:

Laboratory Control Spike - generic QC SUMMARY REPORT

Paralyte Paralyte	Sample ID BTEX icv 100ng	Batch ID: R16987	Test Code	Fest Code: SW8021	Units: µg/L		Analysis	Date 10/1	Analysis Date 10/17/2005 2:37:17 PM	Prep Date	<u>o</u>	
Peault Poll SPK value SPK Ref Val %REC LowLinit HighLinit RPD Ref Val %RPD %RPD RPD Linit HighLinit RPD Ref Val %RPD %RPD RPD Linit HighLinit RPD Ref Val %RPD RPD Linit RPD Ref Val	Client ID:		Run ID:	PIDFID_0510	17A		SeqNo:	41227	6/			
t-butyl ether (MTBE) 17.27 2.5 20 0 86.4 64.5 133 0 t-butyl ether (MTBE) 17.27 2.5 20 0 101 88.5 114 0 rene 20.29 0.5 20 0 101 88.5 114 0 rene 20.11 0.5 20 0 101 88.5 114 0 LCS-8926 Baltch ID: 8926 Tast Code: SWBZ70C Unlls: pg/L Analysis Date 101/12/2005 Prep Date 10/10/2005 LCS-8926 Baltch ID: 8926 Tast Code: SWBZ70C Unlls: pg/L Analysis Date 101/12/2005 Prep Date 10/10/2005 LCS-8926 Baltch ID: 8926 Tast Code: SWR Value SPK Ref Val %REC LowIlmil Right Imil RPD Ref Val %RPD Ref Val	Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLímlt	RPD Ref Val	%RPD	RPDLimit	Qual
1992 0.5 20 0.5 101 88.5 114 0 0 1192 1192 0.5 120 0 101 88.5 114 0 0 0 1192 1192 0.5 120 0 101 102 113 0 0 0 0 101 103 113 0 0 0 0 0 0 0 0 0	Methyl tert-butyl ether (MTBE)	17.27	2.5	20	0	86.4	64.5	133	0			
19.92 20.11 0.5 20 101 88.6 113 0 0 0 113 0 0 0 0 0 0 0 0 0	Benzene	20.29	0,5	20	0	101	88.5	114	0			
rolational points 20.11 0.5 20 101 88.5 113 0 rolational points 40.97 0.5 40 102 83.3 114 0 LCS-6926 Batch ID: 6926 Test Code: SWBZ70C LMO_051012A Analysis Points Analysis Point Information of the point Information Information Information Information Information Information Information Information Info	Toluene	19.92	0.5	20	0	98.6	87.2	114	0			
CLGS-8926 Batch ID: 8926 Test Code: SW8270C Units: pg/L Analysis Date 10/12/2005 Prep Date 10/10/2005 Run ID: ELMO_051012A SeqNo: Test Code: SW8270C Units: pg/L Analysis Date 10/12/2005 Prep Date 10/10/2005 Run ID: ELMO_051012A SeqNo: Test Code: SPK Ref Val WREC LowLimit HighLimit RPD Ref Val WREC WREC LowLimit HighLimit RPD Ref Val WREC RPD Limit RPD Ref Val WREC RPD Ref Val WREC RPD Limit RPD Ref Val WREC RPD Ref Val	Ethylbenzene	20.11	0.5	20	0	101	88.6	113	0			
1 LCS-8926 Batch ID: 8926 Test Code: SWB270C Unils: pg/L Analysis pg/L Analysis pate 10/12/2005 Prep Date 10/12/2005 Run ID: Result Run ID: PQL SPK value SPK Ref Val %REC Numbrility III HighLimity RPD Ref Val %RPD Ref Val PPDLimit 3-methylphenol henol 136.9 10 100 0 70.0 11 123 0 RPDLimit 1-methylphenol henol 136.9 10 100 0 70.0 11 123 0 RPDLimit henol robenzene 53.66 10 100 0 68.4 15.4 119 0 RPDLimit noticlene 53.66 10 100 68.4 15.2 12.2 12.2 0 RPDLimit noticlene 72.48 10 100 0 53.7 16.9 10 RPDLimit rich phenol 61.94 10 10 10 10 10 10 10 10 10 10 10 10 10 1	Xylenes, Total	40.97	0.5	40	0	102	83.3	114	0			
Result PQL SPK value SPK Ref Val %REC LowLinit HighLinit RPD Ref Val %REC LowLinit HighLinit RPD Ref Val %RPD RPDL Linit nene 69.98 10 100 0 70.0 11 123 0 RPDL Linit henof henof noberizene 138.9 10 20 20 68.4 15.4 119 0 RPDL Linit roberizene 53.66 10 10 0 59.5 12.2 122 0 0 RPDL Linit	Sample ID LCS-8926	Batch ID: 8926	Test Code	: SW8270C	Units: µg/L		Analysis	5 Date 10/1;	22005	Prep Da	e 10/10/20	35
Heaville of Political Intervention of Egy and phenoid phenoid phenoid phenoid phenoid phenoid phenoid and phenoid phenoid phenoid phenoid and phenoid phenoid phenoid and phenoid pheno	Client ID:		Run ID:	ELMO_05101	2A		SeqNo:		78			
69.98 10 100 0 70.0 11 ohenol 136.9 20 200 0 68.4 15.4 ne 118.9 10 200 0 59.5 12.2 ne 53.66 10 100 0 53.7 16.9 result 10 100 0 61.9 9.93 ylamine 61.94 10 100 0 61.9 9.93 ylamine 85.66 50 200 0 61.9 9.93 118 50 200 0 42.8 -20.5 8 65.76 10 200 0 59.0 -0.355 7.53 7 cene 57.52 10 100 0 57.5 17.4 9	Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPOLimit	Qual
phenol 136.9 20 200 684 15.4 ne 118.9 10 200 0 59.5 12.2 ne 53.66 10 10 0 53.7 16.9 72.48 10 100 0 72.5 13 ylamine 61.94 10 100 0 61.9 9.93 ylamine 85.66 50 200 0 61.9 9.93 ylamine 65.76 10 200 0 62.0 -20.5 6 e5.76 10 200 0 59.0 -0.355 7.53 7 zene 57.52 10 10 69.3 12.6 8	Acenaphthene	69.98	P	100	0	70.0	=	123	0			
he 53.66 10 200 0 59.5 12.2 12.2 12.3 16.9 10 100 0 53.7 16.9 10.3 10.0 100 10 53.7 16.9 10.3 10.0 100 10.0 10.3 1.3 10.3 10.0 10.3 10.0 10.3 10.3	4-Chloro-3-methylphenol	136.9	20	200	0	68.4	15.4	119	0			
ne 53.66 10 100 0 53.7 16.9 72.48 10 100 0 72.5 13 ylamine 61.94 10 100 0 61.9 9.93 118 50 200 0 42.8 -20.5 8 65.76 10 200 0 59.0 -0.355 7.53 7 2ene 57.52 10 10 0 69.3 12.6 8	2-Chlorophenol	118.9	10	200	0	59.5	12.2	122	0			
72.48 10 100 0 72.5 13 ylamine 61.94 10 100 0 61.9 9.93 85.66 50 200 0 42.8 -20.5 8 118 50 200 0 59.0 -0.355 65.76 10 200 0 32.9 7.53 7 sene 57.52 10 10 0 69.3 12.6 sene 57.52 10 10 0 57.5 17.4 8	1,4-Dichlorobenzene	53.66	10	100	0	53.7	16.9	100	0			
ylamine 61.94 10 100 0 61.9 9.93 85.66 50 200 0 42.8 -20.5 8 118 50 200 0 59.0 -0.355 8 65.76 10 200 0 32.9 7.53 7 sene 57.52 10 10 0 69.3 12.6 sene 57.52 10 10 0 57.5 17.4 9	2,4-Dinitrotoluene	72.48	10	100	0	72.5	<u>1</u>	138	0			
85.66 50 200 0 42.8 -20.5 118 50 200 0 59.0 -0.355 65.76 10 200 0 32.9 7.53 2ene 57.52 10 100 0 69.3 12.6 17.4 10 10 0 57.5 17.4	N-Nitrosodi-n-propylamine	61.94	5	100	0	61.9	9,93	122	0			
118 50 200 0 59.0 -0.355 65.76 10 200 0 32.9 7.53 69.34 15 100 0 69.3 12.6 zene 57.52 10 100 0 57.5 17.4	4-Nitrophenol	85.66	50	200	0	45.B	-20.5	87.4	0			
65.76 10 200 0 32.9 7.53 69.34 15 100 · 0 69.3 12.6 ichlorobenzene 57.52 10 100 0 57.5 17.4	Pentachlorophenol	118	20	200	0	59.0	-0.355	114	0			
69.34 15 100 · 0 69.3 12.6 ichlorobenzene 57.52 10 100 0 57.5 17.4 (Phenol	65.76	10	200	0	32.9	7.53	73.1	0			
ichlorobenzene 57.52 10 100 0 57.5 17.4	Pyrene	69.34	15	100	0	69.3	12.6	140	0			
	1,2,4-Trichlorobenzene	57.52	5	100	0	57.5	17.4	98.7	0			

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

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Laboratory Control Spike Duplicate QC SUMMARY REPORT AL-2 to EP-1 Week of 10-3-05 Giant Refining Co 0510048 Work Order: CLIENT:

Project:

Qual Qual Qual ď Prep Date 10/10/2005 Prep Date 10/10/2005 Prep Date 10/10/2005 RPOLIMI **RPDLimit** 28.6 62.1 14.7 30.3 36.3 %RPD RPDLimit 30.5 52.4 a 107 49 16.3 36.4 "RPD %RPD 14.5 11,4 6.27 4.98 17.3 7.16 18.3 8.19 3.35 14.3 0.139 0.791 136.9 118.9 53.66 72.48 85.66 65.76 HighLimit RPD Ref Val 61.94 138 69.34 57.52 LowLimit HighLimit RPD Ref Val LowLimit HighLimit RPD Ref Val 0.005086 Analysis Date 10/12/2005 Analysis Date 10/10/2005 Analysis Date 10/10/2005 410879 409764 409785 87.4 73.1 98.7 119 122 5 138 122 114 140 134 SeqNo: SeqNo: SeqNo: LowLimit 3.55 75.2 15.4 16.9 12.6 7.53 75.2 12.2 5 9.93 12.5 17.4 %REC 63.3 6.09 35.6 54.4 34.0 57.7 102 %REC 61.1 56.4 101 0 0000000 Units: mg/L SPK value SPK Ref Val Units: mg/L ¢ Units: pg/L SPK value SPK Ref Val SPK value SPK Ref Val MI-LA254_051010B MI-LA254_051010B ELMO_051012A 0.005 100 200 200 5 100 100 200 200 200 100 100 0.005 Test Code: SW8270C Test Code: SW7470 Test Code: SW7470 В 20 젙 Pa 0.0002 0.0002 Run ID: Run ID: Run ID: 126.6 Result 56.4 60.94 57.66 71.28 108.7 60.06 Result 0.005086 60.52 89 Result 122,1 0.005046 Batch ID: 8926 Batch ID: 8925 Batch ID: 8925 N-Nitrosodi-n-propylamine 4-Chloro-3-methylphenol Sample ID LCSD-8926 Sample ID LCSD-8925 ,2,4-Trichlorobenzene Sample ID LCS-8925 1,4-Dichlorobenzene Pentachlorophenol 2,4-Dinitratoluene 2-Chlorophenol Acenaphthene 4-Nitrophenol Client ID: Client ID; Client ID: Analyte Mercury Analyte Mercury Analyte Phenol Pyrene

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

C1

Sample Receipt Checklist

Client Name GIANTREFIN				Date and Time	Received:	10	/6/2005
Work Order Number 0510048	\bigcirc			Received by	AT		
Checklist completed by Signature	Ihn		Date	16/6	105		
Matrix	Carrier name	Clien	t drop-off				
Shipping container/cooler in good condition?		Yes	abla	No 🗆	Not Present		
Custody seals intact on shipping container/cooler	?	Yes		No 🗆	Not Present	Not Shipped	abla
Custody seals intact on sample bottles?		Yes		No 🗹	N/A		
Chain of custody present?		Yes	V	No 🗆			
Chain of custody signed when relinquished and r	eceived?	Yes	✓	No 🗆			
Chain of custody agrees with sample labels?		Yes	\checkmark	No 🗆			
Samples in proper container/bottle?	•	Yes	\checkmark	No 🗆			
Sample containers intact?		Yes	V	No 🗆			
Sufficient sample volume for indicated test?		Yes	\checkmark	No 🗆			
All samples received within holding time?		Yes	\checkmark	No 🗆			
Water - VOA vials have zero headspace?	No VOA vials subn	nitted		Yes 🗹	No 🗀		
Water - pH acceptable upon receipt?		Yes	\checkmark	No 🗆	n/a 🗆		
Container/Temp Blank temperature?				4° C ± 2 Accepta If given sufficient			
COMMENTS:							
		==				 	
Client contacted	Date contacted:			Pers	on contacted		
Contacted by:	Regarding					 ·	
Contacted by.	regarding			******		 	
Comments:						 	
						 	
All the state of t							
Corrective Action				7.			
			· ·			 	

	ANALYSIS RECUUEST	(lasaiO\as (lasaiO\as (saoa) a (saoa) a	77.7 71.00°. 10'.1) 10'.1) 10'.1) 10'.1) 10'.1)	+ 38T 108 bor 108 bor 108 bor 100 b	BTEX + M BTEX + M TPH Methr TPH (Meth EDG (Meth B310 (PN) RCRA 8 M B310 (PN) ROB1 Pest 8081 Pest	XXX							Remarks: PUSH	
QA / QC Package: Std □ Level 4 □ Other: Project Name: A L - 2 # E P - 1 Wash of 10 - 3 - 2005	Project #: V	Project Manager:	Sampler: Learn Maria	Sample Temperature:	Number/Volume HgCl ₂ HNO ₃ HEAL No.	1510048-1						J	Alfordation (Signalurer)	Received By: (Signatura) 0/6 05
CHAIN-OF-CUSTODY RECORD Client: Flant Columns Company Course	Address: Route & Box 7		Phone #: 505 722 \$ 833	Fax#: 505 722 0210	Date Time Matrix Sample I.D. No.	10/4/05 1130 H20 AL-2#EP-1							7	Date: Time: Relinquished By: (Signature)

			New	Mexico Propo	esc				-								
NMED Individual Permits	# facilities	Minimum Permit Issuance fee	Maximum Permit Issuance Fee	Permit Issuance Fee Calculation Multipiler	Annual Fee Min	Annual Fee Max	Annual Fee Multiplier	MT App	MT Ani A	AR App	AR Anf	NV App	NV Ani	CO App	CO Ani	WY App	WY Anl
Municipal WWTP - Major (Calculated per MGD rounded to nearest million)	56	\$5,000	\$30,000	\$2,000	\$5,000	\$10,000	\$1,000	4000	2000	2000	5000	5000-4000-10000	4410-44100		7231-29793	100	100
Municipal WWTP - Minor (Calculated per .1 MGD rounded to nearest hundred thousand)	28				\$1,000	\$5,000	\$500	1000	1000**	200-	200*	1000-3000	1102-3307		733-4416	100	1001
Mines, Hard Rock - Major	æ.	\$5,000	\$30,000	27.	\$2,000	\$5.000		4500	3000**	15000	15000 8	15000 6000-10000	6615-44100		1356-11727	1001	100
Mines, Hard Rock - Minor	2	00011\$	55,000		\$160	\$2.00	90								1356-2548		
Mines, Sand and Gravel - Major	0		Ā	NA	1 1	A	Ą	2500	1000-	200*	200*	2000-5000	2205-5512		595-897	100	100
Mines, Sand and Gravel - Minor	3	\$500		WA	\$500	NA	N	450							595-897		
Electric Utilities - Major	2	\$3,000	NA		\$2,000	Ą	A	4500	3000**	5000	5000*	6000-10000	6615-44100		72711	901	100
Electric Utilities - Minor	5	\$2,000	NA	AN	\$1,000	Ą	Ą	2500	10001			2000-2000	2205-5512		1356-3899	001	100
Water Utility- Major/complex (serves 20,000 people or more)	2	000'8\$		NA	\$2,000	NA	A A	7004	450•			500-1000	551-1102		676-976	100	100
Water Utility - minor (serves less than 20,000 people)	4	\$1,000		NA	\$500	N	N A								676-976		
Private Domestic Sewage	16	\$1,500	NA	NA	\$500	A	NA								1247	100	100
Federal (e.g., DOE, DOD) - Major		\$30,000	A A	Ą	\$10,000	AA	ΑN	4000	2000	15000	15000	0000-10000	15000 6000-10000 6615-44100		7231-29793	8	100
Federal (e.g., DOE, DOD) - Minor	2	\$1,500	A N	¥.	\$1,000	Ϋ́	ΑN	1000	1000**	500	200*	2000-2000	2205-5512		733-4416	100	100
Fish Hatchery	7	\$1,500	NA	NA.	\$500	A A	Y Y	300*	250*	2500	2500	750-1500	826-1653		976	100	100
Aquifer Remediation - approved by other bureau	4	\$500	AN	Ž	\$500	Ą	Ϋ́	500*	450	•		2000-10000	2205-44100		2182	100	100
Other	-	005\$		4 2	5500	42	Y Y				•	0000-10000	1000-10000 1102-33075			100	. 100
Totals	Ξ							(* gen permit fee)	it fee) [eas snd .	er MGD)	(* plus fee per MGD) fees incr 5% every yr	every yr				
			ann	anunal revenue													

	(based on current permit universe)	NPDES Proposed Fee Schedule
--	------------------------------------	-----------------------------

_	_	_	_	_													_			_		_			
	Totals	CAFO - < 1000 AUs	CAFO - >=1000 AUs	or more acres disturbed	Stormwater - Industrial other 10	than 10 acres disturbed	Stormwater - Industrial other Less	disturbed	(non-coal) 10 or more acres	Stormwater - Industrial Mining	disturbed	(non-coal) Less than 10 acres	Stormwater - Industrial Mining	acres disturbed	Commercial/Public * 10 or more	Stormwater - Constr	acres disturbed	Commercial/Public * Less than 10	Stormwater - Constr	10 or more acres disturbed	Stormwater - Constr Residential *	Less than 10 acres disturbed	Stormwater - Constr Residential *	General Permits	
"actual brea	2333	31	152	60		400		10			80			200			400			200		800		# facilities	_
kout of resi			_													_									
dential vs co																									
mm/public c																									
instruction s		\$100	\$200	\$500		\$300		\$500			\$300			\$300			\$200			\$200		\$100		Minimum annual fee	
tormwater n		ΝA	NA.	NA		NA		NA			NA			NA			NA			Z.		NA.		Maximum annual Fee	
*actual breakout of residential vs comm/public construction stormwater not available at this time		NA	NA	NA		NA.		NA			NA			NA			NA			NA.		N.		Annual Fee Catculation Multiplier MT App	_
at this time	1	300	450			500					500						450					250			
		250	300	L		650					650						450					Z,		MT Ani	_
_		400	400			200-400		L		1	200-400 200-400						200			_	-	200		AR App A	_
_	_	400	400			200-400					200-400		_				200			_		200		AR Ani N	_
		500-2500	500-2500			200					200						200					200		NV App	
		400 1500-2500 1653-2756	1653-2756			200					200						200					200		NV Ani	
	٠.																								
	1 - 4 qtr duration only	416+ 07/AU	416+ 07/AU			386					258-770						449					113-449			
		100	J 100			100					100						100					100		WY App WY Ani	
		100	100			100					100					_	100		_			100		WY Anl	

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

					_				-	-				-			
				NOI Fee		Maximum	Annual Fee										
EMNRD Permits	# facilities	_	Winimum Maximum NOI fee NOI Fee	Calculation	Calculation Minimum Multiplier annual fee	annuai	annual Calculation Fee Multiplier	MT App	MT Ant	AR App	AR Ani	NV App	NV Ani			WY App	WY Ant
Oil & Gas - Major Ind. Permit	0	\$4,000			\$4,000						٦	5000-10000	6000-10000 6615-44100		11727	100	100
Oil & Gas - Minor Ind. Permit	0	\$1,000			\$1,000			400	350*			2000-5000	2000-5000 2205-5512	13	1356-3899	100	100
Mines, Coal - Major ind. Permit	1	\$5,000	\$30,000	22	\$4,000			4500	3000	15000	15000 k	5000-10000	15000 6000-10000 6615-44100	11	1165-1571	100	100
Mines, Coal - Minor Ind. Permit	7	\$1,000	\$5,000	22	\$1,000			2500	1000**	200	200	2000-5000	200* 2000-5000 2205-5512	11	1165-1571	100	100
Stormwater - Oil & Gas General																	
Permit (Multiplier x number of 10												_					
acre increments disturbed)	22	\$200	\$2,000	\$100		\$200 \$2,000	\$100	200		650 200-400 200-400	200-400	200	200			100	100
Stormwater - Mining (coal)																	
General Permit (Multiplier x		_	-								_						
number of 10 acre increments		_						_				_					
disturbed)	6	\$200	\$2,000	\$100	\$200	\$2,000	\$100							-	924		
Totals	38	-														_	
										-				-		-	
Modification (individual permits only)	(A)	full application fee	ation fee					full fee	ĺ	varies 300-5000	2000			50% of ani fee up to 7062	p to 7062		
Minor amendment (individual permits only	nits only)	150						200		NA				25% of anl fee up to 3337	p to 3337		
Temp permit		150						150-250		200		250					
			l														

Price, Wayne, EMNRD

From:

Chavez, Carl J, EMNRD

To: Cc: Monzeglio, Hope, NMENV Price, Wayne, EMNRD

Subject:

Ciniza Follow-Up & NPDES Inspection- November 05

Attachments:

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.

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

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 HALL5368_000.pdf HALL5470_000.pdf HALL5692_000.pdf HALL5796_000.pdf HALL5839_000.pdf HALL6072_000.pdf (145 KB)

(465 KB)

(416 KB)

(411 KB)

(390 KB)

(445 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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or its affiliates for any loss or damage arising in any way from their use.

SAMPLED EP1 NMAC CLP Region		Aera	tion Lago			nd 1	
SAMPLED EP1 NMAC Region		mg/L				TCLP	EPA
Benzene 23-Aug-05 0.083 0.01 0.5 0.5 0.083 0.09-\$ep-05 0.077 21-\$ep-05 0.077 21-\$ep-05 0.056 0.076 23-Aug-05 0.076 23-Aug-05 0.44 0.75 0.09-\$ep-05 0.13 21-\$ep-05 0.13 21-\$ep-05 0.096 0.09-\$ep-05 0.096 0.09-\$ep-05 0.096 0.09-\$ep-05 0.096 0.09-\$ep-05 0.053 0.0					NMAC	<u>.</u>	Region 6
Benzene 30-Aug-05 0.083 0.01 0.5							
Benzene 09-Sep-05 ND 0.01 0.5 15-Sep-05 0.077 21-Sep-05 0.8 29-Sep-05 0.056 09-Aug-05 0.076 23-Aug-05 ND 0.75 15-Sep-05 0.13 21-Sep-05 0.13 21-Sep-05 0.096 09-Aug-05 ND 23-Aug-05 ND 23-Aug-05 ND 23-Aug-05 ND 23-Aug-05 ND 23-Aug-05 ND 30-Aug-05 0.053 09-Sep-05 0.016 21-Sep-05 0.018 09-Aug-05 0.044 09-Aug-05 0.044						ye. eliper	
15-Sep-05 0.077 21-Sep-05 0.8 29-Sep-05 0.056 09-Aug-05 0.076 23-Aug-05 ND 30-Aug-05 0.13 21-Sep-05 0.13 21-Sep-05 0.096 09-Aug-05 ND 23-Aug-05 ND 23-Aug-05 ND 23-Aug-05 ND 23-Aug-05 ND 30-Aug-05 ND 30-Aug-05 0.053 09-Sep-05 ND 15-Sep-05 0.016 21-Sep-05 0.016 21-Sep-05 0.018 09-Aug-05 0.044 09-Aug-05						*	* 4
21-Sep-05 0.8 29-Sep-05 0.056		Benzene			0.01 ⊨	0.5	
29-Sep-05 0.056					,		
Toluene Toluen							
Toluene 23-Aug-05 ND 30-Aug-05 0.44 09-Sep-05 ND 15-Sep-05 0.13 21-Sep-05 0.096 09-Aug-05 ND 23-Aug-05 ND 30-Aug-05 ND 30-Aug-05 0.053 09-Sep-05 0.016 21-Sep-05 0.016 21-Sep-05 0.018 09-Aug-05 0.044 09-Aug-05 0.044 09-Aug-05 0.044 0.75							
Toluene 30-Aug-05							
15-Sep-05 ND 15-Sep-05 ND 21-Sep-05 2.2 29-Sep-05 0.096					4 7		3, 1
15-Sep-05 ND 15-Sep-05 ND 21-Sep-05 2.2 29-Sep-05 0.096	PA						
09-Aug-05 0.044	3	Toluene			0.75		
09-Aug-05 0.044	1 4				· I		
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09-Aug-05 0.044	De						` '
09-Aug-05 0.044	26						
09-Aug-05 0.044	9						
09-Aug-05 0.044	<u>Q</u>	EthylDon	30-Aug-05		0.75		
09-Aug-05 0.044	A	Cuiyibeii			0.73	·	
09-Aug-05 0.044							
09-Aug-05 0.044	ES						
							٠, "
123-AUG-051 () 035 1			23-Aug-05	0.035			
30-Aug-05 0.38							₹.
Xylene 09-Sep-05 0.02 0.62		Xylene			0.62	; · · ·	*: ** *:
15-Sep-05 0.096		1.,					, , , , , .
21-Sep-05 2						· .	2.50
29-Sep-05 0.12							
09-Aug-05 0.06					7		,
23-Aug-05 0.031) }	
30-Aug-05 not tested						,]
MTBE 09-Sep-05 ND 0.2		MTBE			. .		0.2
15-Sep-05 0.072					1	.,`	
21-Sep-05 0.067					: '		
29-Sep-05 0.19			29-Sep-05] , .		

^{*} 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



Date: 12-Aug-05

CLIENT:

Giant Refining Co

Project:

Evap Pond I & 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.

Date: 12-Aug-05

CLIENT:

Giant Refining Co

Project:

Evap Pond 1 & Lagoon 2 8/2005

Lab Order:

0508109

Lab ID: Client Sample ID: Evap Pond 1

0508109-01

Collection Date: 8/9/2005 1:00:00 PM

Matrix: AOUEOUS

enem campie in. Liup i ona i			17,2141	n.qoz	.000
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

Collection Date: 8/9/2005 1:15:00 PM

Client Sample ID: Lagoon 2

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

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

Date: 12-Aug-05

Hall Environmental Analysis Laboratory

CLIENT: Giant Refining Co Work Order: 0508109

Work Order: 0508109
Project: Evap Pond 1

Evap Pond 1 & Lagoon 2 8/2005

QC SUMMARY REPORT

Method Blank

Sample ID Reagent Blank	Batch ID: R16274	Test Code	Test Code: SW8021	Units: µg/L		Analysis [Analysis Date 8/11/2005 8:37:53 AM	Vi Prep Date	Date	
Cllent ID:		Run 10:	Run ID: PIDFID_050811A	11A		SeqNo:	387374			
Analyte	Result	Pal		SPK value SPK Ref Val	%REC	LowLimit	ē	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	QN	2.5						:		:
Benzene	N	0.5								
Taluene	ON	0.5								
Elhylbenzene	ON	0.5								
Xylenes, Total	QN	0.5								
Surr: 4-Bromofluorobenzene	18.11	0	20	0	90.5	82.2	119 0			

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

Qualifiers:

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

B - Analyte detected in the associated Method Blank

3/5

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Hall Environmental Analysis Laboratory

Giant Refining Co CLIENT:

0508109 Work Order: Evap Pond 1 & Lagoon 2 8/2005

Project:

Date: 12-Aug-05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Qual Qual S S Ŋ S %RPD RPDLimit %RPD RPDLImit 28 27 19 10 10 Prep Date Prep Date 3.06 17.6 2.73 1.72 0.390 Analysis Date 8/12/2005 2:31:50 AM Analysis Date 8/12/2005 3:02:54 AM 000 LowLimit HighLimit RPD Ref Val 0 18.54 18.49 18.43 36.75 LowLimit HighLimit RPD Ref Val 387390 387381 133 114 113 114 113 133 114 SeqNo: SeqNo: 64.5 87.2 88.6 83.3 88.5 64.5 88.5 87.2 88.6 48.2 92.7 92.5 92.2 %REC 90.6 61.0 57.5 90.2 89.7 Units: µg/L 000 00 Units: µg/L 00000 SPK Ref Val SPK value SPK Ref Val PIDFID_050811A PIDFID_050811A SPK value 4 2 2 2 B 8 2 2 8 8 8 8 8 8 Test Code: SW8021 Test Code: SW8021 2.5 0.5 0.5 2.5 0.5 0.5 0.5 절 ם Run ID: Run 10: Result 19.26 18.54 18.49 18.43 36.75 Result 18.04 17.94 18.12 36.6 Batch ID: R16274 Batch ID: R16274 Sample ID BTEX Icsd 100ng Sample ID BTEX Ics 100ng Methyl tert-butyl ether (MTBE) Methyl tert-butyl ether (MTBE) Xylenes, Total Xylenes, Total Ethylbenzene Ethylbenzene Client ID: Benzene Cllent ID: Toluene Benzene Toluene Analyte Analyte

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

Qualifiers:

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

4/5

Sample Receipt Checklist

Client Name GIANTREFIN			Date and Time	Received:		8/1	10/2005
Work Order Number 0508109			Received by	AT			
Checklist completed by Signature	1	Date	8110	105			
Matrix	Carrier name	Client drop-off					
Shipping container/cooler in good condition?		Yes 🗹	No 🗆	Not Present			
Custody seals intact on shipping container/cooler?		Yes 🗌	No 🗆	Not Present		Not Shipped	✓
Custody seals intact on sample bottles?		Yes 🗌	No 🗹	N/A			
Chain of custody present?		Yes 🗹	No 🗆				
Chain of custody signed when relinquished and receiv	ved?	Yes 🗹	No 🗆				
Chain of custody agrees with sample labels?		Yes 🔽	No 🗆				
Samples in proper container/bottle?		Yes 🔽	No 🗆				
Sample containers intact?		Yes 🗹	No 🗆				
Sufficient sample volume for indicated test?		Yes 🗹	No 🗆				
All samples received within holding time?		Yes 🗹	No 🗆				
•	VOA vials subm	itted \square	Yes 🗹	No 🗆			
Water - pH acceptable upon receipt?		Yes 🗆	No 🗀	N/A 🗹			
Container/Temp Blank temperature?			4° C ± 2 Accepta If given sufficient				
COMMENTS:							
							
Client contacted Date	e contacted:		Pers	on contacted		· VV·VVIII v P i i i i i i i i i i i i i i i i i i	
Contacted by: Reg	arding						
Comments:							
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Corrective Action							
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	Date:	0/05 Date:) કે [°]	50/6	Date	Fax #:	Phone #:			9	Address:	N	Client:	CHA	
_	Time:	Time:							1315	1300	Time	505	505			all	Pix	dui	2 2	N-07	
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	Relinquished By: (Signature)	Relinquished By: (Signature)						0	Japon 2	Eapland 1	Sample I.D. No.	7 0210	23833			WM 87301	Jan Do	anipa	elining.	GRAIN-OF-GOSTODY REGORD	
-	Heceny	Receiv									Number/Volume	Sample Temperature: 30	Sampler: R	de	Project Manager:		Project #	S. S	Project Name:	Other:	
	ed By:/tSignatu/e)	Received By: (Signature)	-								Preservative HgCl ₂ HNO ₃	ature: 30	tens of	ters I	er:			N	Evap. 1.		QA/QC Package: Std Level 4
		Day of							-2	1-1018000	HEAL No.		llinia	Sur			93	aug 2005	forms I forms		backage: Level 4 🔲
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	_	Remarks:									BTEX + M	TBE +	- TPH	(Gasoli	ne On	nly)		1.			
	le/						<u> </u>				TPH Metho			Gas/Die	sel)					-	
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	to	13		 							EDB (Meth			**********			.				
	γ,	7									8310 (PN/						ANALYSIS		Albuquerque, New Mexico o Tel. 505.345.3975 — Fax 51 Www. hallenvironmental com	4901 Hawkins NE, Suite D	ZZ
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	00								<u>×</u>		8021	⊅	16%	r +.	177.	BE.			.345.	3 !	
	Per stare - Rish samples 8/11/05 of	. }									· · · · · · · · · · · · · · · · · · ·						,;		Fax 505.345.4107	•	
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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



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

9	* * * * * * * * * * * * * * * * * * * *				title territoria in the con-
Annlyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: NSE
Methyl tert-butyl ether (MTBE)	190	50	µg/L	20	10/3/2005 11:53;34 AN
Benzene	56	10	µg/L	20	10/3/2005 11:53:34 AN
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 AN
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: SEMIVOLATILE	s				Analyst: BL
Acenaphthene	ИD	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	ИD	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-Chiorophenyl 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

Date: 18-Oct-05

CLIENT:

Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order:

0509325

Project:

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

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

Lab ID:

0509325-01

Matrix: AQUEOUS

nalyses	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	μ g/ L	1	10/12/2005
4,6-Dinitro-2-methylphenol	ND	250	μg/L	1	10/12/2005
2.4-Dinitrophenol	ND	250	μ g/ L	1	10/12/2005
2,4-Dinitrotoluene	ND	50	μg/L	1	10/12/2005
2,6-Dinitrololuene	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
Hexachtorocyclopentadiene	ND	50	μg/L	1	10/12/2005
Hexachioroethane	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	П	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
Phenoi	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	μ ց /Լ	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

Date: 18-Oct-05

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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 Un	its	DF	Date Analyzed
Surr: Phenol-d6	36.5	10.7-80.3	%R	EC	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	<i>/</i> 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 RECOVERABLI	E 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	mga	/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	n	5	10/11/2005 9:21:26 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

1 - 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

Giant Refining Co CLIENT:

0509325 Work Order:

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

QC SUMMARY REPORT

Date: 18-0c1-05

Method Blank

Sample ID Reagent Blank 5m Batch ID: R16840	Batch ID: R16840	Test Code	Test Code: SW8021	Units: µg/L		Analysis	Analysis Date 10/3/2005 8:46:25 AM Prep Date	:25 AM	Prep Da	te	
Client ID:		Run (D:	PIDFID_051003A	03A		SeqNo:	406636				
Analyte	Result	PaL		SPK value SPK Ref Val	%REC	LowLimit	%REC LowLimit HighLimit RPD Ref Val	Val	%RPD	%RPD RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	QN	0.5									
Toluene	QN	0.5									
Ethylbenzene	QN	0.5									
Xylenes, Total	QN	0.5									
Surr: 4-Bromofluorobenzene	21.02	0	20	0	105	82.2	119	0			

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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

Qualifiers:

B - Analyte detected in the associated Method Blank

4/15

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

Giant Refining Co

0509325

Work Order:

Project:

CLIENT:

Method Blank

Qual

B - Analyte detected in the associated Method Blank Prep Date 10/3/2005 %RPD RPDLimit LowLimit HighLimit RPD Ref Val Analysis Date 10/12/2005 410869 SeqNo: S - Spike Recovery outside accepted recovery limits %REC SPK value SPK Ref Val Units: µg/L ELMO_051012A Test Code: SW8270C g 10 10 20 10 15 Run ID: ND - Not Detected at the Reporting Limit 9 용 Result Batch ID: 8864 3is(2-chloroethoxy)methane 4-Bromophenyl phenyl ether 4-Chlorophenyl phenyl ether Bis(2-chloroisopropyl)ether Bis(2-ethylhexyl)phthalate 4-Chloro-3-methylphenol Dibenz(a.h)anthracene Bis(2-chloroethyl)ether Butyi benzyi phthalate Sample ID MB-8864 Benzo(b)fluoranthene Benzo(k)fiuoranthene 2-Chloronaphthatene Benza(g,h,i)perylene Di-n-butyl phthalate Di-n-octyl phthalate Benz(a)anthracene Acenaphthylene Benzo(a)pyrene 2-Chlorophenol 4-Chloroaniline Acenaphthene Benzyl alcohol Benzoic acid Azobenzene Qualifiers: Anthracene Carbazole Client ID: Analyte Aniline

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R - RPD outside accepted recovery limits

J - Analyte detected below quantitation limits

Work Order: 0509325			1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
			Method Blank
Dibenzofuran	10		
1,2-Dichlorobenzene ND	10		
1,3-Dichlorobenzene	5		
1,4-Dichlorobenzene	무		
3,3'-Dichlorobenzidine ND	15		
Diethyf phthalate ND	10		
Dimethyl phthalate	우		
2,4-Dichlorophenol	5		
2,4-Dimethylphenol	10		
4,6-Dinitro-2-methylphenal	90		
2,4-Dinitrophenol	20		
Z,4-Dinitrololuene	5		
2,6-Dinitrotoluene	1		
Fluoranthene	5		
Fluorene	5		
Hexachlorobenzene ND	10		
Hexachlorobutadiene	5		
Hexachlorocyclopentadiene ND	t t		
Hexachloroethane	10		
Indeno(1,2,3-cd)pyrene	0		
ND ND	10		
2-Methylnaphthalene ND	5		
2-Methylphenol ND	15		
3+4-Methylphenol ND	20		
N-Nitrospdi-n-propylamine ND	10		
N-Nitrosodimethylamine 5.7	10		7
N-Nitrosodiphenylamlne ND	10		
Naphthalene ND	10		
Z-Nitroaniline ND	50		
3-Nitroaniline ND	50		
4-Nitroanlline	20		
Nitrobenzene	10		
ON:	15		
Qualifiers: ND - Not Detected at the Reporting Limit	: : :	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank

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Giant Refining Co 0509325

CLIENT: Work Order:

Method Blank

Project: AL-2 to	AL-2 to EP-1 Week of 9/26/05									Method Blank	Slank
4-Nitrophenol	g.	50									
Pentachlorophenol	2	50									
Phenanthrene	R	10									
Phenol	QN	5									
Pyrene	Q.	15									
Pyridine	N	30									
1,2,4-Trichlorobenzene	N N	10									
2,4,5-Trichlorophenal	Q	10									
2,4,6-Trichlorophenol	S	15									
Surr: 2,4,6-Tribromophenal	162.5	0	200	0	81.2	16.6	150	0			
Surr: 2-Fluorobiphenyl	62.88	٥	100	0	65.9	19.6	134	0			
Surr: 2-Fluorophenol	103.1	0	200	O	51.6	9.54	113	0			
Surr: 4-Terphenyl-d14	62.84	0	100	0	62.8	22.7	145	0			
Surr: Nitrabenzene-d5	68.04	٥	100	0	68,0	14.6	134	0			
Surr: Phenol-d6	81,2	0	200	0	40.6	10.7	80.3	0			
Sample ID MB-8897	Batch ID: 8897	Test Code: SW7470	: SW7470	Units: mg/L		Analysis	Analysis Date 10/6/2005		Prep Da	Prep Date 10/6/2005	5
Client ID:		Run 10:	MI-LA254_051006A	51006A		SeqNo:	408247				
Analyte	Result	Pal		SPK value SPK Ref Val	%REC	LowLimit	WREC LowLimit HighLimit RPD Ref Val	D Ref Val	%RPD	RPDLimit	Qual

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

Qualifiers:

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Giant Refining Co 0509325

CLIENT: Work Order:

Method Blank

Project: AL-2	AL-2 to EP-1 Week of 9/26/05								Method Blank	Blank
Sample ID MB	Batch ID: R16850	Test Code: SW6010A	SW6010A	Units: mg/L		Analysis	Date 10/4/2	Analysis Date 10/4/2005 9:06:33 AM	Prep Date	
Client ID:		Run ID:	ICP_051004A			SeqNo:	407014			
Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	Ref Val	%RPD RPDLimit	Qual
Antimony	- ON	0.01								
Arsenic	Q	0.02								
Beryllium	QN	0.003								
Cadmium	ON	0.002								
Chromium	QN	0.006								
Copper	QN	900.0								
Lead	QN	0.005								
Nickel	QN	0.01								
Selenium	QN	0.02								
Silver	ΩN	0.005								
Thallium	QZ	0.01			•					
Zinc	Q	0.05								
Sample ID MB-8884	Batch ID: 8884	Test Code: SW6010A	SW6010A	Units: mg/L		Analysis	Date 10/6/2	Analysis Date 10/6/2005 10:00:44 AM	Prep Date 10/5/2005	05
Client ID:		Run ID:	ICP_051006B			SeqNo:	408450			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	Ref Val	%RPD RPDLimit	Ora
Arsenic	QN	0.02	•	:	:					
Beryllium	ON	0.003								
Cadmium	QN	0.005								
Chromium	QN	0.006								
Copper	QN	0.006								
Lead	QN.	0.005								
Nickel	QN	0.01								
Selenium	ON	0.05								
Silver	QN	0.005								
Thallium	QN	0.01								
Zinc	QN	0.05								
Oualifiers:	ND - Not Detected at the Reporting Limit		S - Spi	S - Spike Recovery outside accepted recovery limits	accepted reco	very limits		- Analyte detected in	B - Analyte detected in the associated Method Blank	Blank
	J - Analyte detected below quantitation limits	и	R - RP	RPD outside accepted recovery limits	scovery limits					'n

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CLIENT: Work Order:	Giant Refining Co 0509325							QC SUMMARY REPORT	MAR	Y REPORT	RT
Project:	AL-2 to EP-1 Week of 9/26/05									T POLICE I	
Sample ID MB-8884	84 Batch ID: 8884	Test Code:	SW6010A	Test Code: SW6010A Units: mg/L		Analysis [)ate 10/7/	Analysis Date 10/7/2005 8:25:39 AM	Prep Da	Prep Date 10/5/2005	
Client ID:		Run ID:	ICP_051006B			SeqNo:	408568	æ			
Analyte	Result	Pal	SPK value	8	%REC	LowLimit	HighLimit	%REC LawLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	Q.	0.01	0.01								

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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

Qualifiers:

B - Analyte detected in the associated Method Blank

9/15

Giant Refining Co CLIENT:

0509325 Work Order:

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

Project:

Laboratory Control Spike - generic QC SUMMARY REPORT

Sample ID BTEX Ics 100ng	Batch ID: R16840	Test Code: SW8021	SW8021	Units: pg/L		Analysis	5 Date 10/3/2	Analysis Date 10/3/2005 1:58:23 PM	Prep Date	ē	
Client ID:		Run ID:	PIDFID_051003A	03A		SeqNo:	406644	4			
Analyte	Result	Pal	SPK value	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 Icsd 100ng	Batch ID: R15840	Test Code: SW8021	SW8021	Units: µg/L		Analysis	; Date 10/3/2	Analysis Date 10/3/2005 2:30:36 PM	Prep Date	<u>a</u>	
Client ID:		Run ID:	PIDFID_051003A	03A		SeqNo:	406647				
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	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	9.66	88.5	114	19.89	0.170	27	
Toluene	19.3	0.5	20	0	96.5	87.2	114	19.34	0.176	1 0	
Ethylbenzene	19.33	0.5	20	0	9.96	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	

J - Analyte detected below quantitation limits 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

Laboratory Control Spike - generic

Giant Refining Co 0509325 AL-2 to EP-1 Week of 9/26/05

CLIENT: Work Order:

Project:

Sample ID LCS-8864	Batch ID: 8864	Test Code:	Test Code: SW8270C	Units: pg/L		Analysis	Analysis Date 10/12/2005	2/2005	Prep Da	Prep Date 10/3/2005	τυ
Client ID:		Run ID:	ELMO_051012A	12A		SeqNo:	410870	0			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qua
Acenaphihene	75.04	무	100	0	75.0	=	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	O			
2,4-Dinitrototuene	77.38	10	100	o	77.4	13	138	0			
N-Nitrosodi-n-propylamine	71.46	5	100	Û	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	40	100	0	68.4	17.4	98.7	0			į
Sample ID LCSD-8864	Batch ID: 8864	Test Code:	Test Code: SW8270C	Units: µg/L		Analysis	Analysis Date 10/12/2005	2/2005	Prep Da	Prep Date 10/3/2005	5
Client ID:		Run 10;	ELMO_051012A	12A		SeqNo:	410871	<u>-</u>			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	65,84	10	150	. 0	65.8	1	123	75.04	13.1	30.5	
4-Chloro-3-methylphenat	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	5	100	0	60.3	9.93	122	71.46	16.9	30.3	
4-Nitrophenal	26.08	50	200	0	13.0	12.5	87.4	96,15	0	36.3	7
Pentachlorophenol	46.76	20	200	0	23.4	3.55	114	144.2	0	49	٦
Phenol	64.62	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	
1,2,4-Trichlorobenzene	54.58	10	100	0	54.6	17.4	98.7	68.44	22.5	36.4	
		:	1		:			-			
Qualifiers: NO - Not D	ND - Not Detected at the Reporting Limit		у У р	S - Spike Recovery outside accepted recovery limits	e accepted rec	overy limits		B - Analyte detected in the associated Method Blank	ed in the associ	inted Method I	3lank
J - Analyte	J - Analyte detected below quantitation lim	nits	R - RI	R - RPD outside accepted recovery limits	recovery limit	ri T					~ 1

Giant Refining Co 0509325

Work Order: CLIENT:

Laboratory Control Spike - generic

Project: AL-2 t	AL-2 to EP-1 Week of 9/26/05							Laboratory Control spike - generic	ontrol	ъртке - де	oner
Sample ID LCS-8897	Batch ID: 8897	Test Code: SW7470	SW7470	Units: mg/L		Analysis	Analysis Date 10/6/2005	05	Prep Da	Prep Date 10/6/2005	
Client ID:		Run 1D:	MI-LA254_051006A	1006A		SeqNo:	408248				
Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit R	RPD Ref Val	%RPD	RPOLimit	Qual
Mercury	0.005624	0.0002	0.005	0	112	75.2	134	0			
Sample ID LCSD-8897	Batch ID: 8897	Test Code: SW7470	SW7470	Units: mg/L		Analysis	Analysis Date 10/6/2005	05	Prep Da	Prep Date 10/6/2005	
Client ID:		Run ID:	MI-LA254_051006A	1006A		SeqNo:	408249				
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	PD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005469	0.0002	0.005	Đ	109	75.2	134	0.005624	2.81	0	
Sample ID LCS	Batch ID: R16850	Test Code:	Test Code: SW6010A	Units: mg/L		Analysis	Date 10/4/20	Analysis Date 10/4/2005 9:21:30 AM	Prep Date	ıte	
Client ID:		Run ID:	ICP_051004A			SeqNo:	407017				
Analyte	Result	PQ	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit R	RPD Ref Val	%RPD	RPOLimit	Qual
Antimony	0.4721	0.01	0.5	0	94.4	80	120	0			
Arsenic	0.5112	0.02	0.5	0	102	8	120	0			
Beryllium	0.4925	0.003	0,5	0	98.5	8	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	90	120	0			
Copper	0.4693	0.006	0.5	0	93.9	89	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	0.05	0.5	0	90.1	8	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	٥			
Zinc	0.4944	0.05	0.5	0	98.9	80	120	0			

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

Qualifiers:

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

B - Analyte detected in the associated Method Blank

Laboratory Control Spike Duplicate

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

CLIENT: Work Order:

Sample ID LCSD	Batch ID: R16850	Test Code:	Test Code: SW6010A	Units: mg/L		Analysis	Date 10/4	Analysis Date 10/4/2005 9:23:50 AM	Prep Date	fe	
Client ID:		Run ID:	ICP_051004A			SeqNo:	407018	81			
Analyte	Result	Pal	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	
Benyllium	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	8	120	0.4791	0.454	20	
Chromium	0.4861	0.006	0.5	0	97.2	8	120	0.4837	0.493	20	
Copper	. 0.4747	0.006	0.5	Ö	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	50	
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	8	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	SW6010A	Units: mg/L		Analysis	Date 10/6/	Analysis Date 10/6/2005 10:03:05 AM	Prep Da	Prep Date 10/5/2005	
Client ID:		Run IÖ:	ICP_051006B	_		SeqNo:	408451	51			
Analyte	Result	РФ	SPK value	SPK Ref Val	%REC	LowLimit	HighLímlí	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4875	0.05	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	O			
Chromium	0.4746	0.006	0.5	O	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	8	120	0			
Zinc	0.4615	0.05	0.5	0	92.3	80	120	0			
Qualifiers: ND - No	ND - Not Detected at the Reporting Limit		gs - S	S - Spike Recovery outside accepted recovery limits	accepted rec	overy limits	: 1	B - Analyte detected in the associated Method Blank	n the associa	ited Method B	lank
J - Analy	J - Analyte detected below quantitation limits	nits	R-R	R - RPD outside accepted recovery limits	ecovery limit	(A					ير.

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

Giant Refining Co

0509325

Work Order: CLIENT:

Project:

Laboratory Control Spike Duplicate

Client ID: Anatyte Arsenic	Batch IO: 8884	est Code:	fest Code: SW6010A	Units: mg/L		Analysis	Date 10/6/	Analysis Date 10/6/2005 10:06:23 AM	Prep Da	Prep Date 10/5/2005	
Analyte Arsenic		Run 1D:	ICP_051006B			SeqNo:	408452	52			
Arsenic	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPOLímit	Qual
	0.4937	0.02	0.5	· o	98.7	80	120	0.4875	1.26	20	
Beryllium	0.4927	0.003	0.5	0	98.5	88	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	900.0	0.5	0	94.6	80	120	0.4697	0.698	20	
Lead	0.4616	0.005	0.5	0	92.3	90	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	8	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:	est Code: SW6010A	Units: mg/L		Analysis Date	Date 10/7/	10/7/2005 8:28:07 AM	Prep Da	Prep Date 10/5/2005	
Client ID:		Run ID:	ICP_051006B			SeqNo:	408569	69			
Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLlmit	HighLimit RPD Ref Vat	%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:	Fest Code: SW6010A	Units: mg/L		Analysis	Date 10/7/	Analysis Date 10/7/2005 8:30:35 AM	Prep Da	Prep Date 10/5/2005	
Client ID:		Run ID:	ICP_051006B			SeqNo:	408570	p			
Analyte	Result	PaL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Anlimony	0.4612	0.01	0.5	0	92.2	80	120	0.4601	0.250	20	

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

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

B - Analyte detected in the associated Method Blank

Sample Receipt Checklist

Cheff Name GIMN TREFIN			Date and time	Received.	9/30/2003
Work Order Number 0509325	Λ_{ϵ}		Received by	AT	
Checklist completed by Signature	12	Date	9/3/05		
Matrix	Carrier name	Client drop-o	<u>ff</u>		
Shipping container/cooler in good condition?		Yes 🗹	No 🗆	Not Present	
Custody seals intact on shipping container/cooler?		Yes 🗌	No 🗆	Not Present	Not Shipped
Custody seals intact on sample bottles?		Yes 🗌	No 🗹	N/A	
Chain of custody present?		Yes 🗹	No 🗆		
Chain of custody signed when relinquished and rece	eived?	Yes 🗹	No 🗆		
Chain of custody agrees with sample labels?		Yes 🗹	No 🗀		
Samples in proper container/bottle?		Yes 🗹	No 🗆		
Sample containers intact?		Yes 🗹	No 🗆		
Sufficient sample volume for indicated test?		Yes 🗹	No 🗆		
All samples received within holding time?		Yes 🗹	No 🗆		
Water - VOA vials have zero headspace?	No VOA vials subr	nitted 🗆	Yes 🗹	No 🗆	
Water - pH acceptable upon receipt?		Yes 🗹	No 🗆	N/A	
Container/Temp Blank temperature?		6°	4° C ± 2 Accepta		
COMMENTS:					
Client contacted Da	ate contacted:		Pers	on contacted	
Contacted by:	egarding				
Comments:	and distributions and a second				
					A SAME PARTY OF THE PARTY OF TH
Corrective Action	•				
		,			

HALL ENVIRONMENTAL ANALYSIS LABORATORY 4901 Hawkins NE, Suite D Albuquerque, New Mexico B7109 Tel. 505.345.3975 Fax 505.345.4107 www.hallenvironmental.com	Anions (F, CI, NO ₂ , NO ₂ , PO ₄ , SO ₄) 8081 Pesticides / PCB's (8082) 8250 (Semi-VOA) 8270 (Semi-VOA) PPLMAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	28 X 28 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1/4 4/3/5T
HALL ENVIRO ANALYSIS LA 4901 Hawkins NE, 8 Albuquerque, New N Tel. 505.345.3975 www.hallenvironmen	BTEX + MTBE + TMB's (8021) BTEX + MTBE + TPH (Gasoline Only) TPH Method 8015B (Gas/Diesel) EDB (Method 418.1) EDC (Method 401.1) EDC (Method 401.1) B310 (PNA or PAH) RCRA 8 Metals	EB EI	Georph futtered
Other: Std □ Level 4 □ Other: Project Name: A L-2 A E P-/ Week of 9-26-2∞5 Project #:	Project Manager: Sample: Sample Temperature: Number/Volume HgCl ₂ HNO ₃ HEAL No.	Received By (Signature)	01.80
CHAIN-OF-CUSTODY RECORD Client: Start African Address: P. L. S. C.	Flone #: 505 722 5835 Fax #: 505 722 5835 Date Ime Matrix Sample I.D. No.	9/28/65 (500 Hz O AL-2 IEP-1 Date: Time: Relinquished By: (Bignature) Page 0840 Men Almanished By: (Bignature) Time: Relinquished By: (Bignature)	



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



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

Page 1 of 1



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ENERGY LABS

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque

Report Date: 09/29/05

Project: 0509234

Collection Date: 09/21/05 13:00

Lab ID: B05091570-001

Date Received: 09/23/05

Client Sample ID: AL-2 TO EP-1, 0509234-01D

Matrix: Aqueous

				MO		
Analyses	Result	Units	Qual	RL Q	CL Method	Analysis Date / By
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
Barlum	D.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
Thaillum	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
Đarium	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 DB:05 / klc
Nickel	0.04	mg/L		0.01	E200.8	09/26/05 13:19 / car
Setenium	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	€200.8	09/26/05 13;19 / car
Vanadium	ND	mg/L		0.1	E200.7	09/26/05 17:04 / rlh
Zinc	3.14	mg/L		0.01	E200.7	09/26/05 17:04 / rlh
SEMI-VOLATILE ORGANIC COMP	OUNDS					
1,2,4-Trichlorobenzene	ND	ug/L		100	SW8270C	09/27/05 22:57 / dsπ
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 / dsn
1,4-Dichlorobenzene	ND	ug/L		100	SW8270C	09/27/05 22:57 / dsn
1-Methylnaphthalana	430	υg/L		100	SW8270C	09/27/05 22:57 / dsn
2,4,5-Trichlorophenol	ND	ug/L		100	SW8270C	09/27/05 22:57 / dsn
2,4,6-Trichlorophenol	ND	ug/L		100	SWB270C	09/27/05 22:57 / dsm
2,4-Dichlorophenol	ND	ug/L		100	SW8270C	09/27/05 22:57 / dsn
2,4-Dimethylphenol	218	ug/L		100	SW8270C	09/27/05 22:57 / dan
2,4-Dinitrophenol	ND	ug/L		500	SW8270C	09/27/05 22:57 / dsn
2.4-Dinitrotoluene	ND	ug/L		100	SW8270C	09/27/05 22:57 / dsn
2,6-Dinitrotoluene	ND	ug/L		100	SW8270C	09/27/05 22:57 / dsm

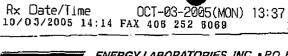
Report

RL - Analyte reporting limit.

Definitions:

QCL - Quality control limit.

MCL - Maximum contaminant level.





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LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque

Report Date: 09/29/05

Project: 0509234

Collection Date: 09/21/05 13:00

Lab ID: B05091570-001

Date Received: 09/23/05

Client Sample ID: AL-2 TO EP-1, 0509234-01D

Matrix: Aqueous

				MO		
Analyses	Result	Units	Qual	RL Q	CL Method	Analysis Date / B
SEMI-VOLATILE ORGANIC COM	POUNDS					
2-Chloronaphthalene	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
2-Chlorophenol	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
2-Methylnaphthalene	608	ug/L		100	SW8270C	09/27/05 22:57 / ds
2-Nitrophenol	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
3.3 -Dichloropenzidine	ND	ug/L		200	SW8270C	09/27/05 22:57 / ds
4,6-Dinitro-Z-methylphenol	ND	ug/L		500	SW8270C	09/27/05 22:57 / ds
4-Bromophenyl phenyl ether	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
4-Chloro-3-methylphenol	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
4-Chlorophenol	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
4-Chilorophenyl phenyl ether	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
4-Nitrophanol	ND	ug/L		500	SW8270C	09/27/05 22:57 / ds
Acenaphthene	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
Acenaphthylene	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
Anthracene	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
Azobenzene	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
Benzidlne	ND	ug/L		200	SW8270C	09/27/05 22:57 / ds
Benzo(a)anthracene	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
Benzo(a)pyrene	ND	ug/L		100	SW8270C	09/27/05 22:57 / d
Benzo(b)fluoranthene	ND	ug/L		100	SW8270C	09/27/05 22:57 / da
Benzo(g,h,i)perylene	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
Benzo(k)fluoranihana	ND	սց/Լ		100	SW8270C	09/27/05 22:57 / d
ois(-2-chloroethoxy)Methane	ND	vg/L		100	SW8270C	09/27/05 22:57 / d
ols(-2-chloroethyi)Ether	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
ois(2-chloroisopropyl)Ether	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
ols(2-ethylhexyl)Phthalate	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
Butylbenzylphthalate	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
Chrysene	11	ug/L	J	100	SW8270C	09/27/05 22:57 / ds
Dibenzo(a,h)anthracene	ND	ug/L	•	100	SW8270C	09/27/05 22:57 / ds
Diethyl phthalate	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
Dimethyl phthalate	ND	սց/Լ		100	SW8270C	
Di-m-bulyl phihalate	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
Di-n-octyl phthalate	ND	ug/L ug/L		100	SW8270C	09/27/05 22:57 / ds
Puoranthene	ND	ug/L		100		09/27/05 22:57 / ds
fluorene	95	-		100	SW8270C	09/27/05 22:57 / ds
łexachlorobanzene	ND 93	ug/L	J	100	SW8270C	09/27/05 22:57 / ds
lexachlorobutadlans		ug/L			SW8270C	09/27/05 22:57 / ds
texactiorocyclopaniadiene	ND	ug/L		100	SW8270C	09/27/05 22:57 / da
texactiorocycupantanians	ND	ug/L		200	SW8270C	09/27/05 22:57 / ds
· · · · · · · · · · · · · · · · · · ·	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
ndeno(1,2,3-cd)pyrene	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
sopharane	ND	ug/L		100	SW8270C	09/27/05 22:57 / ds
n+p-Cresols	95	ug/L	J	100	SW8270C	09/27/05 22:57 / ds

Report

RL - Analyte reporting limit.

Definitions: QCL - Quality control limit. MCL - Maximum contaminant level.

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

the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque

Report Date: 09/29/05

Project: 0509234

Collection Date: 09/21/05 13:00

Date Received: 09/23/05

Lab ID: B05091570-001

Matrix: Aqueous

Client Sample ID: AL-2 TO EP-1, 0509234-01D

	· · · · · · · · · · · · · · · · · · ·			<u></u>	ICL/		
Analyses	Result	Units	Qual	RL (QCL	Method	Analysis Date / By
SEMI-VOLATILE ORGANIC COM	POUNDS						
Naphlhalene	202	ug/L		100		SW8270C	09/27/05 22:57 / dsm
Nitrobanzene	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	υg/L	J	100		5W8270C	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
Phonal	84	ug/L	ز	100		SW8270C	09/27/05 22:57 / dsm
Pyrene	21	ug/L	J	100		SW8270C	09/27/05 22:57 / dsm
Pyridina	ND	ug/L		200		SW8270C	09/27/05 22:57 / dsm
Surr: 2,4,8-Tribromophenol	56.5	%REC			10-123	SW8270C	09/27/05 22:57 / dsm
Sur: 2-Fluoroblphenyl	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	B8.1	%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 Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

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



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QA/QC Summary Report

Client: Hall Environmental-Albuquerque

Report Date: 09/28/05

Project: 0509234

Work Order: B05091570

Analyte	· Result	Units -	RL %RE	C Low Limit	High Limit	RPD ·	RPDLImit	Qual
Method: SW8270C			,				Bat	ich: 1776
Sample ID: MB-17765	Method Blank						09/26	3/05 16:1
1,2,4-Trichlorobenzene	ND	սց/Լ	10					
1,2-Dichlorobenzene	ND	ug/L	10					
1.3-Dichlorobenzene	ND	ug/L	10					
1,4-Dichlorobenzene	ND	ug/L	10					
1-Meihylnaphthalene	ND	ug/L	10					
2,4,5-Trichlorophenol	ND	ug/L	10					
2,4,6-Trichlarophenol	ND	ug/L	10					
2.4-Dichlorophenol	ND	ug/L	10					
2,4-Dimethylphenol	ND	ug/L	10			٠,		
2,4-Dinitrophenol	ND	ug/L	50				•	
2,4-Dinitrotoluene	ND	ug/L	10					
2,6-Dinitrololuene	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'-Dichtorobenzidine	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-Nitrophenot	מא	ug/L	50					
Acenaphthene	ND	ug/L	10					
Acenaphthylene	ND	ug/L	10					
Anthracene	ND	ug/L	10					
Azobenzene	ND	ug/L	1D					
3enzidine	ND	ug/L	20					
Benzo(a)anthracene	ND	ug/L	10					
Зепго(а)ругеле	ND	ug/L	10					
Benzo(b)fluoranthene	ND	ug/L	10					
Benzo(g,h,i)perylene	ND		10					
Benzo(k)fluoranthene	ND	ug/L						
pis(-2-chloroethoxy)Methane		ug/L	10					
ris(-2-chloroethyl)Ether	ND	ug/L	10					
els(2-chloroisopropyl)Ether	, ND	ug/L	10					
ris(2-ethylhexyl)Phthalate	ND	ມg/L	10					
iutylbenzylphthalate	ND	ug/L	10					
hrysene	ND	ug/L	10					
Dibenzo(a,h)anthracene	ND ND	ug/L ug/L	10					

Qualifiers:

RL - Analyte reporting limit.



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ENERGY LABS.

QA/QC Summary Report .

Client: Hall Environmental-Albuquerque

Project: 0509234

Report Date: 09/28/05

Work Order: B05091570

Analyle	Result	Units		RL	%REC	Low Limit	High Limit	RPD.	RPOLimit	Qual
Method: SW8270C							, i		Bato	ch: 1776
Sample ID: MB-17765	Method Blank								09/26	/05 16: 1
Diethyl phthalate	ND	ug/L		10						
Dirnethyl 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	սց/և	•	20						
Hexachloroethane	ND	ug/L		10						
Indeno(1,2,3-cd)pyrene	ND	սց/Լ		10						
Isophorone	ND	ug/L		10						
m+p-Cresols	ND	սց/Լ		10						
Naphthalene	ND	ug/L	٠,	10						
Nitrobenzene	ND	ug/L		10						
n-Nitrosodimethylamine	ND	սց/Լ		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: Temphenyl-d14				10	53.4	33	141			
Sample ID: LCS-17765	Laboratory Cor	ntrol Spik	e						09/28	5/0 5 17:0
1,2,4-Trichiorobenzene	61.5	ug/L		10	61.5	43	82			
1,2-Dichlorobenzane	56.3	ug/L		10	56.3	37	77			
1.3-Dichlorobenzene	52,8	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-Trichtorophenol	61.1	ug/L		10	81.1	47	96			
2,4-Dichlarophenol	60.4	ug/L		10	80.4	40	90			
2,4-Dimethylphenol	62.4	ug/L		10	82.4	28	86			
2,4-Dinitrophenol	27.6	ug/L		50	27.6	10	132			

Qualifiers:

RL - Analyte 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							Bat	ch: 1776
Sample ID: LCS-17765	Laboratory Cor	atrol Spike					09/26	3/05 17:0
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-Nilrophenol	60,2	μg/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-Nitrophenal	23.6	ug/L	50	23.6	10	95		
Acenaphihene	72.4	ug/L	10	72.4	53	101		
Acenaphthylene	68.8	υg/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)Iluoranthene	86.5	ug/L	10	86.6	48	1.18		
bis(-2-chloraethoxy)Methana	65.8	ug/L	10	65.8	45	102		
bis(-2-chloroethyl)Ether	61.6	ug/L	10	61.6	13	122		
bis(2-chlorolsopropyl)Ether	60.9	ug/L	10	60.9	40	91		
bis(2-elhylhexyl)Phthalate	74.1	ug/L	10	74.1	47	128		
Butylbenzylphthalale	86.7	ug/L	10	86.7	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		
Oi-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		
Haxachlorobenzene	76.7	ug/L	10	78.7	49	101		
Hexachlorobutadiene	51.3	ug/L	10	51.3	38	94		
Hexachlorocyclopentadlene	55.2	ug/L	20	55.2	17	93		
Hexachloroethane	48.4	ug/L	10	48.4	34	74		
Indeno(1,2,3-cd)pyrane	0,08	μ <u>σ</u> /L	10	80	43	125		
Isophorone	65.5	μg/L	10	66.6	51	100		
m+p-Cresols	54.5	ug/L	10	54.5	30	130		

Qualifiers:

RL - Analyte 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								Bat	ch: 1776
Sample ID: LCS-17765	Laboratory Co	introl Spike						09/26	1/05 17:0
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-dl-n-propytamine	67.0	ug/L	10	67	30	115			
o-Cresol	58.8	ug/L	10	58.8	30	130			
Pentachlorophenol	57.0	ug/L	50	57	16	117			
Phenanthrena	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	55	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 Co	ntrol Spike						09/26	/05 17:4
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-Nitrophenoi	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 Co.	ntrol 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			
I.4-Dichlarobenzene	52,2	ug/L	10	52.2	38	74			
I-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			
ois(2-ethylhexyl)Phthalate	70.6	ug/L	10	70.6	47	128			

Qualifiers:

RL - Analyte reporting limit.



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QA/QC Summary Report

Client: Hall Environmental-Albuquerque

Report Date: 09/28/05

Project: 0509234

Work Order: B05091570

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLImit	Qual
Method: SW8270C			·····					Bato	h: 17765
Sample ID: SknBNLCS-17765	Laboratory Co	introl 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			
Dimelhyl phihalate	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	25.7	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			
Sum: 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-Dinitrolaluene	49.7	ug/L	10	49.7	24	96			
2-Chlorophenot	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			
Acenaphihene	49.3	ug/L	10	49.3	46	118			
n-Nitroso-di-n-propylamine	49.8	ug/L	10	49.8	41	116			
Pentachlorophanol	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-Tribromophenal			10	65.5	10	123			
Surr: 2-Fluorabiphenyl			10	50	43	116			
Sur: 2-Fluorophenol			10	45.6	21	100			
Surr: Nitrobenzene-d5			10	50.2	35	114			
Surr: Phenol-d5			10	47.6	10	94			
Sunt Terphenyl-d14			10	59.5	33	141			
Sample ID: B05091406-005FMS	Sample Matrix	Spike Duplicate	9					09/26/	05 22:00
1,2,4-Trichlorobenzene	47.8	ug/L	10	47.B	39	98	15	28	
1,4-Dichlorobenzene	43.6	ug/L	10	43.6	36	97	13	28	
2,4-Dinitrataluene	54.9	ug/L	10	54.9	24	96	9.9	38	

Qualifiers:

RL - Analyte reporting limit.



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ENERGY LABS.

QA/QC Summary Report

Client: Hall Environmental-Albuquerque

Report Date: 09/28/05

Project: 0509234

Work Order: B05091570

Analyla	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SWB270C								Bat	ch: 1776
Sample ID: B05091405-005FMS	Sample Matrix	Spike Duplicate						09/26	/05 22:0
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	11B	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	
Sur: 2,4,6-Tribromophenol		-	10	68	10	123			
Surr: 2-Fluorobiphenyl			10	54.8	43	116			
Sun: 2-Fluorophenol			10	43.6	21	100			
Sun: Nitrobenzene-d5			10	54.8	35	114			
Surr: Phenol-d5			10	46.3	10	94			
Surr: Terphenyl-d14			10	60.7	33	141			



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ENERGY LABS.

QA/QC Summary Report

Client: Hall Environmental-Albuquerque

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

Project: 0509234

Analyle	Result	Units	RL	%REC	Low Limit	High Llmit	RPD	RPDLImit	Qual
Method: E200.7								Bat	ch: 17781
	Method Blank							09/26	3/05 15:52
Sample ID: MB-17781	0.002	mg/L	0.0003						
Barlum	ND	mg/L	0.002						
Vanadlum Zinc	ND	mg/L	0.002						
Sample ID: LCS1-17781	Laboratory Cor	ntrol Spike						09/26	5/05 15:59
Barlum	0.0918	mg/L	0.10	89.7	85	115			
Vanadium	0.0928	mg/L	0.10	92.8	85	115			
Zinc	0.0951	mg/L	0.010	95.1	85	1 15			
Sample ID: LCS3-17781	Laboratory Co	ntrol Spike						09/26	5/05 16:03
Barium	0.934	mg/L	0.10	93.2	85	115			
Vanadlum	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 Malrix	Spike						09/20	6/05 16:10
Barlum	0.999	mg/L	0.10	91.1	70	130			
Vanadium	0.944	mg/L	0.10	94.4	70	130			
Zinc	1.05	mg/L	0.010	93	70	130			
Sample ID: B05091309-003AMSD3	Sample Matrix	Spike Duplica	le .						6/05 16:14
Barium	1.04	mg/L	0.10	95.2	70	130	4.0	20	
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: 805091558-001DMS1	Sample Matrix	: Spike						09/2	6/05 16:21
Barlum	0.120	mg/L	0.10	92	70	130			
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 Duplica	te					09/2	6/05 16:24
Barium	0.122	mg/L	0.10	93.6	70	130	1.4	20	
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	



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QA/QC Summary Report

Client: Hall Environmental-Albuquerque

Report Date: 09/29/05

Project: 0509234

Work Order: B05091570

Analyte	Result	Unils	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8				7				Bat	ch: 1777(
Sample ID; MB-17770	Method Blank							09/26	/05 16:26
Antimony	0.0001	mg/L	0.00001						
Arsenic	0.00005	mg/L	0.00004						
Barjum	0.0005	mg/L	0.00003						
Cadmium	ND	mg/L	9.0E-06						
Сорраг	0.0002	mg/L	0.00007						
Lead	0.0001	mg/L	8.0E-06						
Nickel	ND	mg/L	0.00003						
Selecium	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						09/27	7/05 08:0
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			5
Sample ID: B05091570-001CMSD	Sample Matrix	: Spike Dupli	cale					09/2	7/05 08:
Anilmony	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	
Barlum	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	
Selenlum	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.

S - Spike recovery outside of advisory limits.



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ENERGY LABS.

QA/QC Summary Report

Client: Hall Environmental-Albuquerque

Report Date: 09/29/05

Project: 0509234

Work Order: B05091570

Analyte		Result	Unlis	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Oual
Method:	E245.1								Bat	ch: 17798
Sample ID:	MB-17798	Melhod Blank							09/27	705 07:49
Mercury		ND	mg/L	0.00005						
Sample ID:	LFB-17798	Laboratory For	tified Blank						09/27	/05 07:52
Mercury		0.00213	mg/L	0.0010	106	85	115			
Sample ID:	B05091317-001BMS	Sample Malrix	Spike						09/27	/05 07:56
Mercury		0.00199	mg/L	0.0010	99.5	70	130			
Sample ID:	B05091317-D01BMSD	Sample Matrix	Spike Duplicat	9					09/27	/05 07:59
Mercury		0.00209	mg/L	0.0010	104	70	130	4.9	30	
Sample ID:	B05091295-001AM\$	Sample Matrix	Spike						09/27	/05 08:10
Mercury		0.00210	mg/L	0.00020	105	70	130			
Sample ID:	B05091295-001AMSD	Sample Matrix	Splke Duplical	3					09/27	/05 09:11
Mercury		0.00207	mg/L	0.00020	104	70	130	1.4	10	
Sample ID:	B05091357-00BBMS	Sample Matrix	Spike						09/27	/05 10:00
Mercury		0.0020	mg/L	0.0010	98,5	70	130			
Sample ID:	B05091357-008BM\$D	Sample Matrix	Spike Duplicat	3					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
Marcury		0.00198	mg/L	0.00020	99	70	130			
Sample ID:	B05091434-001DMSD	Sample Matrix	Spike Duplicate	3					09/27	/05 12:22
Mercury		0.00196	mg/L	0.00020	98	70	130	0	10	

Giant Refining Co CLIENT:

0509234 Work Order:

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

Project:

Date: 03-Oct-05

3

QC SUMMARY REPORT

Method Blank

Sample ID Reagent Blank 5m Batch ID: R16759	Batch ID: R16759	Test Code	Test Code: SW8021	Units: µg/L		Analysis	Analysis Date 9/23/2005 9:37:19 AM	Prep Date	et	
Client ID:		Run IO:	PIDFID_050923A	23A		SeqNo:	403397			
Analyte	Result	Pal		SPK value SPK Ref Val	%REC	LowLimit	"REC LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	Q	2.5	1	:						
Benzene	QN	0.5								
Toluene	2	0.5								
Ethylbenzene	9	0.5								
1,2,4-Trimethylbenzene	Q	0.5								
1,3,5-Trimethylbenzene	9	0.5								
Xylenes, Total	ON.	0.5								
Surr: 4-Bromofluorobenzene	18.66	0	20	0	93.3	82.2	119 0			

ND - Not Detected at the Reporting Limit Qualifiers:

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

14/16

Giant Refining Co CLIENT:

0509234 Work Order:

Project:

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

Date: 03-0c1-05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID BTEX Ics 100ng	Batch ID: R16759	Test Code	Test Code: SW8021	Units: pg/L		Analysis	Date 9/23	Analysis Date 9/23/2005 10:09:01 PM Prep Date	Prep Da	ate	
Client ID:		Run ID:	PIDFID_050923A	23A		SeqNo:	403402	72			
Analyte	Result	Pol		SPK value SPK Ref Val	%REC	LowLimit	HighLimit	LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	23.97	2.5	20	20 0	120	64.5	133	0			
Benzene	18.83	0.5	20	0	94.1	88.5	114	O			
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	O	94.1	82.8	114	0			
Xylenes, Total	39.79	0.5	40	0	99.5	83.3	114	0			

S - Spike Recovery outside accepted recovery limits

R. RPD outside accepted recovery limits

J - Analyte detected below quantitation limits

ND - Not Detected at the Reporting Limit

Qualifiers:

B - Analyte detected in the associated Method Blank

15/16

Sample Receipt Checklist

Client Name GIANTREFIN			Date and Time	Received:	9/2	21/2005
Work Order Number 0509234			Received by	GLS		
Checklist completed by Signature	Delle	Dale	9/22/0	T		
Matrix	Carrier name	Client drop-o	<u>ff</u>			
Shipping container/cooler in good condition?		Yes 🔽	No 🗆	Not Present		
Custody seals intact on shipping container/coole	er?	Yes 🗌	No 🗆	Not Present	☐ Not Shipped	V
Custody seals intact on sample bottles?		Yes 🗹	No 🗆	N/A		
Chain of custody present?		Yes 🗹	No 🗆			
Chain of custody signed when relinquished and	received?	Yes 🗹	No 🗆			
Chain of custody agrees with sample labels?		Yes 🗹	No 🗆			
Samples in proper container/bottle?		Yes 🗹	No 🗆			
Sample containers intact?		Yes 🗹	No 🗆			
Sufficient sample volume for indicated test?		Yes 🗹	No 🗆			
All samples received within holding time?		Yes 🗹	No 🗆			
Water - VOA vials have zero headspace?	No VOA vials subπ	nitted 🗌	Yes 🗹	No 🗆		
Water - pH acceptable upon receipt?		Yes 🗹	No 🗆	N/A □		
Container/Temp Blank temperature?		3°	4° C ± 2 Accepta	ble		
0.0		0	If given sufficient		0.	
COMMENTS:	zamile	illes	Sulf		\emptyset	
TO 7	Enersy	B1	LL/10	$G \leq$	per: A	MDI
Client contacted	Date contacted:		Pers	on contacted		Y B. S. VIRGITAGE F
Contacted by:	Regarding		. Idal K Var. a		Complements of the control of the co	
Comments:	n k d domini kayan sake sa kakaman ka Tibab masa ka ka ka					
					m andrim and m arganization strages against up ye of a	
		and a companion of the contract of the				
valenda annonen mandella de la companya de la comp	a a construction and the construction of the c	and and behavior as make to the lates of the	n order o o o o o distribution constitutivi distribution success (1880). St. de			
	and makes the second					
Corrective Action						
					17 78 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

HALL ENVIRONMENTAL ANALYSIS LABORATORY 4901 Hawkins NE, Suite D Albuquerque, New Mexico B7109 Tel. 505.345.3975 Fax 505.345.4107 www.hallervironmental.com	10 (Method 504.1) 370 (Method 8021) 370 (PAA or PAH) 371 (PA B Metals 381 Pesticides / PCB's (8082) 3608 (VOA) 3608 (VOA) 370 (Semi-VOA)	2		SHADAY
	EX + MTBE + TMB's (8021) FX + MTBE + TPH (Gasoline Only) H Method 8015B (Gas/Diesel) H (Method 418.1)	T8 3T		Remarks:
OA/OC Package: Std \square Level 4 \square Other: Project Name: $AL-Z$ L $EP-I$ U $2eL_{2}$ $2eL_{3}$ $2eL_{4}$ $2eL_{5}$ $2eL_{5}$	nager:	Hgu, Hinu, OCC9234		Received By: (Signature)
CHAIN-OF-CUSTODY RECORD Client: Frank Chains Address: A frank	Sos 722 3833 Time Matrix Sample I.D. No.	8/21/05 1300 H2 O AL-27 EP-1		9/22/05 0950 Relinquished By: (Signature) Date: Time: Relinquished By: (Signature)



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



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 SI	HORT LIST				Analyst: HLI
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
Surr. 4-Bromofluorobenzene	103	86.1-121	%REC	10	9/20/2005
EPA METHOD 8270C: SEMIVOLATI	ILES				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	· -	1	9/22/2005
1,2-Dichlorobenzene	ND	200		1	9/22/2005
1,3-Dichlorobenzene	ND	200		1	9/22/2005
1,4-Dichlorobenzene	ND	200		1	9/22/2005
3.3'-Dichlorobenzidine	ND	300		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

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

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

Date: 30-Sep-05

CLIENT:

Giant Refining Co

Client Sample ID: AL-2 TO EP-1

Lab Order:

0509182

Project:

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

Lab ID:

0509182-01

Matrix: AQUEOUS

nalyses	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-Dinitrololuene	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		ha\r	1	9/22/2005
Indena(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

^{* -} Value exceeds Maximum Contaminant Level 2/15

E - Value above quantitation range

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 U	nits	DF	Date Analyzed
Surr: Phenol-d6	41.0	10.7-80.3	%l	REC	1	9/22/2005
EPA METHOD 7470: MERCUR'	Y					Analyst: IC
Mercury	0.00062	0.00020	mç	g/L	1	9/28/2005
EPA METHOD 6010B: DISSOL	VED METALS					Analyst: NMO
Antimony	ND	0.010	mg	g/L	1	9/27/2005 3:34:34 PM
Arsenic	ND	0.020	mg	g/L	1	9/27/2005 3:34:34 PM
Beryllium	ND	0.0030	mg	g/L	1	9/27/2005 3:34:34 PM
Cadmium	ND	0.0020	mg	- g/L	1	9/27/2005 3:34:34 PM
Chromium	ND	0.0060	mg	g/L	1	9/27/2005 3:34:34 PM
Copper	ND	0.0060	mg	g/L	1	9/27/2005 3:34:34 PM
Lead	ND	0.0050	m	g/L	1	9/27/2005 3:34:34 PM
Nickel	ND	0.010	m	g/L	1	9/27/2005 3:34:34 PM
Selenium	ND	0.020	me	g/L	1	9/27/2005 3:34:34 PM
Silver	ND	0.0050	me	g/L	1	9/27/2005 3:34:34 PM
Thallium	ND	0.010	m	g/L	1	9/27/2005 3:34:34 PM
Zinc	0.050	0.050	m	g/L	1	9/27/2005 3:34:34 PM
EPA 6010: TOTAL RECOVERA	ABLE METALS					Analyst: NMO
Antimony	ND	0.010	m	g/L	1	9/22/2005 11:25:59 AM
Arsenic	ND	0.020	m	g/L	1	9/22/2005 11:25:59 AM
Beryllium	ND	0.0030	m	g/L	1	9/21/2005 2:49:30 PM
Cadmium	ND	0.0020	m	g/L	1	9/21/2005 2:49:30 PM
Chromium	ND	0.0060	m	g/L	1	9/21/2005 2:49:30 PM
Copper	0.022	0.0060	m	g/L	1	9/21/2005 2:49:30 PM
Lead	ПИ	0.0050	m	g/L	1	9/21/2005 2:49:30 PM
Nickel	0.011	0.010	m	g/L	1	9/21/2005 2:49:30 PM
Selenium	ND	0.050		g/L	1	9/21/2005 2:49:30 PM
Silver	ND	0.0050	m	g/L	1	9/21/2005 2:49:30 PM
Thallium	ND	0.010	m	g/L	1	9/22/2005 11:25:59 AM
Zinc	1.2	0.10		g/L	2	9/21/2005 3:19:36 PM

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

Date: 30-Sep-05

Hall Environmental Analysis Laboratory

CLIENT:

Work Order: Project:

Giant Refining Co 0509182 AL-2 to EP-1 Week of Sept. 12, 2005

QC SUMMARY REPORT

Method Blank

Client ID: Analyte Acenaphthene Acenaphthylene Anthracene Azobenzene Benz(a)anthracene Benz(a)pyrene	Result POL 10 ND	ELMO_050921A SPK value Si	1A		403263				
Re hithylene hithylene ene ene anthracene anthracene hithylene anthracene hithylene	J .	SPK value		SeqNo:					
hthene hthylene hthylene ene can a can a can a can a can a can anthracene anthracene can a			SPK Ref Val	EC LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
hthylene ene zene anthracene s)pyrene									
ene Zene anthracene a)pyrene									
	ND 10								
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Benzoic acid									
Benzyi alcohol									
Bis(2-chloroethoxy)methane									
Bis(2-chloroethy!)ether									
Bis(2-chloraisapropyl)ether	ND 15								
Bis(2-ethylhexyl)phthalate	ND 15								
4-Bromophenyl phenyl ether	ND 10								
Butyl benzyl phthalate	ND 15								
Carbazole									
4-Chlara-3-methylphenal	ND 20								
4-Chloroanillne									
2-Chloronaphthalene									
2-Chiorophenol									
4-Chlorophenyl phenyl ether	ND 15								
Chrysene	ND 15								
Di-n-butyl phthalate	ND 10								
	ND 15								

R - RPD outside accepted recovery limits

J - Analyte detected below quantitation limits

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Method Blank

CLIENT:	Giant Refining Co			
Work Order:	0509182			
Project:	AL-2 to EP-1 Week of Sept. 12, 2005	spt. 12, 2005		
Dibenz(a,h)anthracer	ane	ND	10	
Dibenzofuran		2	10	
1,2-Dichlorobenzene	æ	Q.	10	
1,3-Dichlorobenzene	ø	S	10	
1,4-Dichlorobenzene	ø.	S	10	
3,3'-Dichlorobenzidin	ine	S	15	
Diethyl phthalate		O _N	10	
Oimethyl phthalate		QN QN	10	
2,4-Dichlorophenol		2	10	
2,4-Dimethylphenol		<u>N</u>	10	
4,6-Dinitro-2-methyiphenol	iphenol	<u>Q</u>	50	
2,4-Dinitrophenal		Q.	50	
2,4-Dinitrotoluene		Q.	10	
2,6-Dinitrotaluene		2	10	
Fluoranthene		2	10	
Fluorene		오	10	
Hexachlorobenzene		2	10	
Hexachlorobutadiene	Je	S	10	
Hexachtorocyclopentadiene	ntadiene	Ω	10	
Hexachloroethane		S O	10	
Indeno(1,2,3-cd)pyrene	eue,	Q	10	
Isophorone		Q Q	10	
2-Methylnaphthalene	<u>o</u>	QN Q	10	
2-Methylphenol		Q.	15	
3+4-Methylphenol		Q.	10	
N-Nitrosodi-n-propylamine	lamine	Q	10	
N-Nitrosodímethylamine	míne	9	10	
N-Nitrosodiphenylam	nine	Q	10	
Naphthalene		N Q	10	
2-Nitroaniline		2	50	
3-Nitroanlline		S O	50	
4-Nitroaniline		2	20	

B - Analyte detected in the associated Method Blank

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

Qualifiers:

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	CLIENT:	Giant Re	Giant Refining Co							OCSI	OC STIMMARY REPORT	V REPC	RT
	Work Order:	0509182) } }			
	Project:	AL-2 to]	AL-2 to EP-1 Week of Sept. 12, 2005	2005								Memod Biank	slank
	2-Nitrophenol		QN	15						7 17 17 17 17 17 17 17 17 17 17 17 17 17			
	4-Nitrophenol		N	20									
	Pentachlorophenol		Q	50									
	Phenanthrene		<u>N</u>	5									
	Phenol		ON.	10									
	Pyrene		QN	15									
	Pyridine		ON	30									
	1,2,4-Trichlorobenzene	ene:	S	5									
	2,4,5-Trichlorophenol	<u> </u>	ND	10									
	2,4,6-Trichlorophenol	<u>a</u>	QN	1 5									
	Surr: 2,4,6-Tribromophenol	omaphenol	128	0	200	0	64.0	16.6	150	0			
	Surr: 2-Fluorobiphenyl	henyi	48.56	O	100	0	48.6	19.6	134	0			
	Surr: 2-Fluorophenol	enol	107.5	0	200	0	53.8	9.54	113	0			
	Surr: 4-Terphenyl-d14	/ - d14	98.99	0	100	0	6.99	22.7	145	0			
6	Surr: Nitrobenzene-d5	ne-d5	60.64	O	100	0	9.09	14.6	134	0			
/ 1	Surr: Phenol-d6		60.52	Ö	200	0	30.3	10.7	80.3	0			
5	Sample ID MB-8834	34	Batch ID: 8834	Test Code: SW7470	SW7470	Units: mg/L		Analysis	Analysis Date 9/28/2005	72005	Prep Da	Prep Date 9/28/2005	
	Client ID:			Run ID:	MI-LA254_050928C	0928C		SeqNo:	404921	21			
	Analyte			PaL	SPK value	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	WRPD	RPDLimit	Qual
	Mercury		2	0.0002					i :				

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

Qualifiers:

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Method Blank

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

Giant Refining Co

0509182

Work Order:

Project:

CLIENT:

Qual Qual Prep Date 9/20/2005 %RPD RPDLimit %RPD RPDLimit Prep Date Analysis Date 9/21/2005 2:21:15 PM Analysis Date 9/27/2005 3:18:56 PM LowLimit HighLimit RPD Ref Val LowLimit HighLimit RPD Ref Val 402645 404507 SeqNo: SeqNo: %REC %REC Units: mg/L Units: mg/L SPK value SPK Ref Val SPK value SPK Ref Val ICP_050927C ICP_050921B Test Code: SW6010A Test Code: SW6010A 0.003 0.005 0.006 0.005 0.01 0.01 0.01 0.05 0.002 0.006 0.006 0.005 0.05 PaL 0.003 0.01 Run ID: Run ID: 문 9999999999 Result Result 222222222 Batch ID: R16791 Batch ID: 8790 Sample ID MB-8790 Sample ID MB Chromium Chromium Cadmium Antimony Cadmium Beryllium Selenium Client ID: Beryllium Selenium Client ID: Analyte Thallium Analyte Copper Copper Arsenic Nickel Nickel Silver Silver Lead Lead ZIUC

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

Qualifiers:

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

B - Analyte detected in the associated Method Blank

CLIENT: Work Order: Project:	Giant Refining Co ler: 0509182 AL-2 to EP-1 Week of Sept. 12, 2005	2005						QC SUIMMARY REPORT Method Blank	MAR	Y REPORT Method Blank)RT 3lank
Sample ID MB-8790 Client ID:	7790 Batch ID: 8790	Test Cade: Run ID:	esi Cade: SW6010A tun ID: ICP_050922B	Units: mg/L		Analysis SeqNo:	s Date 9/22/20 402880	Analysis Date 9/22/2005 10:53:46 AM SeqNo: 402880	Prep Da	Prep Date 9/20/2005	
Analyte Antimony Arsenic Thallium	Result 0.01878 ND ND	POL 0.01 0.02 0.01	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Oual
								í			
Qualifiers:	ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits	nits	S - Spil	S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits	accepted reca	wary limits		B - Analyte detected in the associated Method Blank ${\cal S}$	the associa	ıtcd Method B	lank S

Giant Refining Co CLIENT:

0509182 Work Order:

Date: 30-Sep-05

QC SUMMARY REPORT

Method Blank

Project:	AL-2 to EP-1 Week of Sept. 12, 200	, 2005						≥,	Method Blank	lank
		1	o do do de la constante de la	4						
sample ID 5ml rb	Baich IU: K16/16	l est Cade	lest code: SW6Z6UB	Onics: pg/L		Anaiysis	Analysis Date Stzutzuub	rrep Date	_	
Client ID:		Run ID:	Run ID: VAL_050920A	⋖		SeqNo:	401902			
Analyte	Result	Pa	POL SPK value SPK Ref Val	SPK Ref Val	%REC	LowLimit	%REC LowLimit HighLimit RPD Ref Val		%RPD RPDLimit	Qual
Benzene	QN	-								
Toluene	QN	~								
Ethylbenzene	ON	-								
Methyl tert-butyl ether (MTBE)	ier (MTBE) ND	-								
Xylenes, Total	0.282	_								7
Surr: 4-Bromofluorobenzene	probenzene 11.21	0	10	0	112	86.1	121			

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

Qualifiers:

Giant Refining Co CLIENT:

0509182 Work Order:

Project:

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

Date: 30-Sep-05

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID 100ng Ics	Batch ID: R16716	Test Code:	Test Code: SW8260B	Units: µg/L		Analysis	Analysis Date 9/20/2005	/2005	Prep Date	a(e	
Client ID:		Run (D:	VAL_050920A	∢		SeqNo:	401905	90			
Analyte	Result	Pal	SPK value	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Benzene Toluene	19.27		20 20	0	96.4	80	130	0			
Sample ID LCS-8785	Batch ID: 8785	Test Code: SW8270C	SW8270C	Units: µg/L		Analysis	Analysis Date 9/22/2005	/2005	Prep Da	Prep Date 9/19/2005	5
Cilent ID:		Run ID:	ELMO_050921A	21A		SeqNo:	403264	64			
Anafyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPOLimit	Qual
Acenaphthene	71,18	10	100	0	71.2	11	123	0			
O 4-Chloro-3-methylphenol	129.1	20	200	0	64.5	15.4	119	0			
1 2-Chlorophenol	140.3	10	200	0	70.2	12.2	122	0			
ר. 1,4-Dichlorobenzene	66.48	10	100	0	66.5	16.9	100	0			
2,4-Dinitratoluene	80.99	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	20	200	0	31.7	-20.5	87.4	0			
Pentachlorophenol	128.3	50	200	0	64.2	-0.355	114	0			
Phenol	75.38	5	200	0	37.7	7.53	73.1	0			
Pyrene	69.74	51	100	0	69.7	12.6	140	0			
1,2,4-Trichlorobenzene	64.46	9	100	0	64,5	17.4	98.7	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

Giant Refining Co 0509182

CLIENT: Work Order:

Laboratory Control Spike Duplicate

Sample ID LCSD-8785	Batch ID: 8785	Test Code:	Test Code: SW8270C	Units: µg/L		Analysis	Analysis Date 9/22/2005	12005	Prep D	Prep Date 9/19/2005	ro.
Client ID:		Run ID:	ELMO_050921A	11.		SeqNo:	403265	65			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	67.9	5	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	5	200	0	61.8	12.2	122	140.3	12.7	107	
1,4-Dichlorobenzene	57.4	5	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	5	100	0	67.0	9.93	122	65.52	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	5	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	o	52.5	17.4	98.7	64.46	20.4	36.4	
Sample ID LCS-8834	Batch ID; 8834	Test Code: SW7470	SW7470	Units: mg/L		Analysis	Analysis Date 9/28/2005	/2005	Prep D.	Prep Date 9/28/2005	۳
Client ID:		Run ID:	MI-LA254_050928C	0928C		SeqNo:	404922	22			
Analyte	Result	Pol	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004734	0.0002	0.005	o	94.7	75.2	134	0			
Sample ID LCSD-8834	Batch ID: 8834	Test Code: SW7470	SW7470	Units: mg/L		Analysis	Analysis Date 9/28/2005	12005	Prep D	Prep Date 9/28/2005	2
Client ID:		Run ID:	MI-LA254_050928C	09Z8C		SeqNo:	404935	35			
Analyte	Result	Pal	SPK value	SPK Ref Val	"REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004779	0,0002	0.005	0	92.6	75.2	134	0.004734	0.937	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

CLIENT:	Giant Refining Co							OC STIMMADY DEPORT	TAKAD	V DEBC	Tac
Work Order:	0509182							いったい	NET T		141
Project:	AL-2 to EP-1 Week of Sept. 12, 2	2005						Laboratory Control Spike - generic	Control	spike - ge	neric
Sample ID LCS	Batch ID: R16791	Test Code:	Test Code: SW6010A	Units: mg/L		Analysis	Date 9/27/20	Analysis Date 9/27/2005 3:21:59 PM	Prep Date	ite	
Cifent ID:		Run ID:	ICP_050927C	0		SeqNo:	404508				
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	PD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.5461	0.01	0.5	0	109	8	120	0			
Arsenic	0.5781	0.02	0.5	0	116	88	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	900.0	0.5	0	113	88	120	0			
Lead	0.5552	0.005	0.5	0	111	89	120	0			
Nickel	0.5496	0.01	0.5	0	110	8	120	0			
Selenium	0.5345	0.02	0.5	Ö	107	80	120	0			
Silver	0.5539	0.005	0.5	0	111	80	120	0			
Thallium	0.5653	0.01	0.5	D	113	8	120	0			
, Zinc	0.5622	0.05	0.5	0	112	80	120	0			

	And the second s		
Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blan
	J - Analyre detected below quantitation limits	R - RPD outside accepted recovery limits	ε.

Sample ID LCSD Batch ID: R16781 Test Code: SW0010A Unlise: mg/L Analysis Date ST722005 3.28:11 PM Prop Date Prop Date Analysis Analysis Analysis SRF Ral Val %REC LowLmIII HgM-LmI RPDLmII Dust Analysis Analysis RR Ral Val %REC LowLmIII HgM-LmI RPDLmII Dust Analysis Analysis RR Ral Val %REC LowLmIII HgM-LmI RPDLmII Dust Analysis 0.05138 0.01 0.5 0 114 80 120 0.5781 1.08 20 Analysis 0.05138 0.000 0.5 0 111 80 120 0.5781 1.047 20 Analysis 0.05238 0.000 0.5 0 111 80 120 0.5781 1.01 1.02 20 Analysis 0.0538 0.00 0.5 0 111 80 120 0.5781 1.01 1.02 1.02 1.02	CLIENT: Work Order: Project:	Chant Kelming Co 0509182 AL-2 to EP-1 Week of Sept. 12, 2005	2005			!			QC SUMMARY REPORT Laboratory Control Spike Duplicate	IMAK)	r KEPO	cate
No. No. December of the Reporting Line No. Sept. No. No. December of the Reporting Line No. Sept. No. No. December of the Reporting Line No. Sept. No. No. December of the Reporting Line No. No. December of the Reporting Line No. Sept. No. No. December of the Reporting Line No. No. December of the Reporting Line No. No. December of the Reporting Line No. No. December of the Reporting Linit No. No. December of the Reporting Lini	Sample ID LCSD	Batch ID: R16791	Test Code:	SW6010A	Units: mg/L		Analysi	s Date 9/27/7	2005 3:25:13 PM	Prep Da	e	
Pockago	Client ID:		Run 10:	ICP_050927C			SeqNo:		6			
γ γ 0.5459 0.01 0.65 109 119 80 120 0.55 bit 0.447 20 n 0.5439 0.02 0.5 0 113 80 120 0.55 bit 1.08 20 n 0.5637 0.002 0.5 0 113 80 120 0.555 bit 0.349 20 n 0.5637 0.002 0.5 0 111 80 120 0.565 bit 20 n 0.5637 0.006 0.5 0 111 80 120 0.565 bit 20 n 0.5408 0.01 0.5 0 111 80 120 0.546 20 n 0.5380 0.02 0.5 0 112 0.5563 0.13 0 0.5469 0 0.5469 0 0.5469 0 0 0.5469 0 0.5469 0 0 0 0 0 0 0 <	Analyte	Result	PoL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPOLimit	Qual
1,000, 1	Antimony	0.5436	0.01	0.5	0	109	80	120	0.5461	0.447	20	
1.00 0.5657 0.003 0.55 0.5	Arsenic	0.5719	0.02	0.5	0	114	8	120	0.5781	1.08	20	
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Beryllium	0.5637	0.003	0.5	0	113	80	120	0.5656	0.349	20	
1.00 1.00	Cadmium	0.5632	0.002	0.5	0	113	88	120	0.5667	0.616	20	
111 60 120 0.5552 2.01 2.00 2.	Chromium	0.5694	0.006	0.5	0	114	80	120	0.5781	1.52	20	
1,000, 1	Copper	0.5533	0.006	0.5	0	=======================================	80	120	0.5645	2.01	20	
1.00 0.5406 0.01 0.5 0.00 0.5 0.00 0.5 0.00 0.5 0.00 0.5 0.00 0.5 0.00 0.5 0.00 0.5 0.00 0.5 0.00 0.5 0.00 0.5 0.00 0.5 0.00 0.5 0.0 0.0	Lead	0.5559	0.005	0.5	0	11	80	120	0.5552	0.132	20	
Decision	Nickel	0.5406	0.01	0.5	0	108	89	120	0.5496	1.65	20	
10,5381 0,005 0,55 0,00 106 0,0 108 80 120 0,5539 2,88 20 2,555 2,	Selenium	0.5396	0.02	0.5	0	108	88	120	0.5345	0.961	20	
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Silver	0.5381	0.005	0.5	0	108	80	120	0.5539	2.88	20	
Decay Deca	Thallium	0.5581	0.01	0.5	0	112	80	120	0.5653	1.27	20	
D LCS-8790 Baich D: 8790 Test Code: 8W6010A Units: mg/L Analysis Date 9/21/2005 2:24:19 PM Prep Date 9/20/2005 Prep Date 9/2005 Prep Date 9/20/2005 Prep Date 9/20/2005 Prep Date 9/2005 Prep Date 9/20/2005 Prep Date 9/2005 Prep Date 9/20/2005 Prep Date 9/20/2005 Prep Date 9/2005 Prep Date 9/2005 Prep Date 9/20/2005 Prep Date 9/2005	Zinc	0.5552	0.05	0.5	0	111	80	120	0.5622	1.26	20	
Run D: ICP_050921B SeqNo: A 02646	Sample ID LCS-87		Test Code:	SW6010A	Units: mg/L		Analysis		2005 2:24:19 PM	Prep Dat		
Result POL SPK value SPK Ref Val WaREC LowLImit HighLimit RPD Ref Val WaREC RPD Limit RPD Ref Val WaREC RPD Ref Val	Client ID:		Run ID:	ICP_050921B			SeqNo:		σ.			
п 0.5112 0.003 0.5 0 402 80 120 m 0.4939 0.002 0.5 0 98.8 80 120 0.4934 0.006 0.5 0 99.5 80 120 0.4932 0.006 0.5 0 98.6 80 120 0.4797 0.01 0.5 0 95.9 80 120 m 0.487 0.05 0.5 0 95.9 80 120 n 0.487 0.05 0.5 0 99.8 80 120 0.4874 0.05 0.5 0 97.5 80 120 n 0.4874 <	Analyte	Result	PQL	SPK value	SPK Ref Val	"REC	LowLimit		RPD Ref Val	%RPD	RPDLimit	Qual
m 0.4839 0.002 0.5 0 98.8 80 120 0.5 0 0.5 0 0.5 0 120 0.4974 0.006 0.5 0 0.5 0 0.99.5 80 120 0.508 0.006 0.5 0 0.5 0 0.99.5 80 120 0.4932 0.005 0.5 0 0.5 0 98.6 80 120 0.487 0.01 0.5 0 99.8 80 120 0.4889 0.005 0.5 0 99.8 80 120 0.4874 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.5 0.5 0.5 0.5 0.5 0 97.5 80 120 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.	Bervlium	0.5112	0.003	0.5	0	102	80	120	0			
Im 0.4974 0.006 0.5 0 99.5 80 120 0.5088 0.0508 0.5 0 102 80 120 0.5088 0.006 0.5 0 102 80 120 0.4932 0.005 0.5 0 98.6 80 120 0.4797 0.01 0.5 0 95.9 80 120 0.489 0.005 0.5 0 99.8 80 120 0.4889 0.005 0.5 0 99.8 80 120 0.4874 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.5 0 97.5 0 97.5 80 120 0.4874 0.05 0.5 0 97.5 0 97.5 80 120 0.4874 0.05 0.5 0 97.5 0 97.5 80 120 0.4874 0.05 0.5 0 97.5 0 97.5 80 120 0.4874 0.05 0.5 0 97	Cadmium	0,4939	0.002	0.5	0	98.8	80	120	O			
0.5088 0.006 0.5 0 102 80 120 0.4932 0.005 0.5 0 98.6 80 120 0.4932 0.005 0.5 0 98.6 80 120 0.4797 0.01 0.5 0 95.9 80 120 0.4874 0.05 0.5 0 99.8 80 120 0.4874 0.05 0.5 0 99.8 80 120 0.4874 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.05 0.5 0 97.5 80 0.120 0.4874 0.05 0.05 0.5 0 97.5 80 0.120 0.4874 0.05 0.05 0.5 0.5 0 99.8 0.5 0.5 0.5 0 99.8 0.5 0.5 0 99.8 0.5 0.5 0.5 0 99.8 0.5 0 99.8 0.5 0.5 0.5 0.5 0 99.8 0.5 0 99.8 0.5 0.5 0.5 0 99.8 0 90.8 0 90.8 0.5 0 99.8 0.5 0 99.8 0 90.8 0 90.8 0.5 0 99.8 0.5 0 99.8 0 90.8	Chromium	0.4974	0.006	0.5	0	99.5	80	120	0			
0.4932 0.005 0.5 0 98.6 80 120 0.4797 0.01 0.5 0 95.9 80 120 0.487 0.05 0.5 0 99.8 80 120 0.487 0.05 0.5 0 99.8 80 120 0.4874 0.05 0.5 0 99.8 80 120 0.4874 0.05 0.5 0 99.8 80 120 0.4874 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0.5 0 97.5 80 120 0.4874 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.5 0 97.5 80 120 0.4874 0.05 0.5 0 97.5 80 0 97.5 80 0.5 80 0.5 80 0.5 80 0.5 80 0.5 80 0.5 80 0	Copper	0.5088	0.006	0.5	0	102	88	120	0			
flers: ND - Not Detected below quantitation limits N-APD outside accepted recovery limits R-RPD outside accepted recovery limits 80 120 120 0.487 0.05 0.5 0 99.8 80 120 120 0.4874 0.05 0.5 0 97.5 80 120	Lead	0.4932	0.005	0.5	0	98.6	80	120	0			
um 0.487 0.05 0.5 0 97.4 80 120 0.4989 0.005 0.5 0 99.8 80 120 0.4874 0.05 0.5 0 97.5 80 120 120 97.5 80 120 120 120 97.5 80 120 120 97.5 80 120 120 97.5 80 120 120 97.5 80 120 120 97.5 80 120 120 97.5 80 120 120 97.5 80 120 120 97.5 80 120 120 97.5 80 120 120 97.5 80 120 120 97.5 80 120 120 97.5 80 120 120 97.5 80 120 120 97.5	Nickel	0.4797	0.01	0.5	0	95.9	8	120	0			
fiers: ND - Not Detected below quantitation limits 0.055 0.5 0 99.8 80 120 120 0.05 0.05 0 97.5 80 120 120 0.05 0 97.5 80 120 120 0 97.5 80 120 120 0 97.5 80 120 120 0 97.5 80 120 120 0 97.5 80 120 120 0 97.5 80 120 120 0 97.5 80 120 120 0 97.5 80 120 120 0 97.5 80 120 120 0 97.5 80 120 120 0 97.5 80 120 120 0 97.5 80 120 120 0 97.5 80 120 120 <t< td=""><td>Selenium</td><td>0.487</td><td>0.05</td><td>0.5</td><td>0</td><td>97.4</td><td>80</td><td>120</td><td>0</td><td></td><td></td><td></td></t<>	Selenium	0.487	0.05	0.5	0	97.4	80	120	0			
120 0.4874 0.05 0.5 0 97.5 80 120 0.5 ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits J - Analyze detected below quantitation limits R - RPD outside accepted recovery limits	Silver	0.4989	0.005	0.5	0	99.8	8	120	0			
ND - Not Detected at the Reporting Limit S - Spike Recovery autside accepted recovery limits J - Analyse detected below quantitation limits R - RPD autside accepted recovery limits	Zinc	0.4874	0.05	0.5	0	97.5	80	120	O			
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits J - Analyse detected below quantitation limits R - RPD autside accepted recovery limits												
J - Analyte detected below quantitation limits R - RPD autside accepted recovery limits	Ousliffers:	ND - Not Detected at the Reporting Limit		S - Spi	ke Recovery autside	accepted rec	overy limits	:	3 - Analyte detected i	in the associa	ted Method Bla	ank
	,	J - Analyte detected below quantitation lit	ii.	R-RP	D autside accepted	recovery limit			•			7

CLIENT: Giant Refining Co

Work Order: 0509182

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

Project:

QC SUIMMARY REPORT Laboratory Control Spike Duplicate

Sample ID LCSD-8/90	Batch ID: 8790	Test Code	est Code: SW6010A	Units: mg/L		Analysis	Date 9/21/	Analysis Date 9/21/2005 2:27:26 PM	5 5 7	Prep Date 9/20/2005	-
Client ID:		Run ID:	ICP_050921B			SeqNo:	402647	11			
Analyte	Result	Pol	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Oual
Beryllium	0.5118	0.003	0.5	0	102	80	120	0.5112	0.128	20	
Cadmlum	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	0.002	0.5	o	98.5	88	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	8	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	est Code: SW6010A	Units: mg/L		Analysis Date	Date 9/22/:	9/22/2005 10:56:26 AM	Prep Da	Prep Date 9/20/2005	
Client ID:		Run ID:	1CP_050922B	_		SeqNo:	402881	<u>.</u>			
Analyte	Result	PaL	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	8	120	0			8
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	Test Code: SW6010A	Units: mg/L		Analysis	Date 9/22/;	Analysis Date 9/22/2005 10:58:56 AM	Prep Da	Prep Date 9/20/2005	
Client ID:		Run ID:	ICP_050922B	_		SeqNo:	402882	Ŋ			
Analyte	Result	Pol	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	8
Arsenic	0.4943	0.02	0.5	0	98.9	80	120	0.4931	0.254	20	
Theillin	0.4977	0.01	0.5	C	99.5	80	120	0.4937	0.809	- C	

ND - Not Detected at the Reporting Limit
3 - Analyte detected below quantitation limits

Qualifiers:

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Sample Receipt Checklist

Client Name GIANTREFIN			Date and Time	Received:	9/19/2005	
Work Order Number 0509182			Received by	GL5		
Checklist completed by Signature	hlyge:	· Ов	9-19-0	2		
Mətrix	Carrier name	Client drop	o-off			
Shipping container/cooler in good condition?		Yes 🗹	No 🗆	Not Present		
Custody seals intact on shipping container/coole	er?	Yes 🗆	No 🗆	Not Present	☐ Not Shipped ☑	
Custody seals intact on sample bottles?		Yes 🔽	No 🗆	N/A		
Chain of custody present?		Yes 🗹	No 🗀			
Chain of custody signed when relinquished and	received?	Yes 🗹	No 🗆			
Chain of custody agrees with sample labels?		Yes 🗹	No 🗆			
Samples in proper container/bottle?		Yes 🗹	No 🗀			
Sample containers intact?		Yes 🗹	No 🗆			
Sufficient sample volume for indicated test?		Yes 🗹	No 🗆			
All samples received within holding time?		Yes 🔽	No 🗆			
Water - VOA vials have zero headspace?	No VOA vials subm	nitted \square	Yes 🗹	No 🗌		
Water - pH acceptable upon receipt?		Yes 🗹	No 🗆	N/A □		
Container/Temp Blank temperature?		4°	4° C ± 2 Accepta			
COMMENTS:						
Client contacted	Date contacted:		Pers	on contacted		
						-
Contacted by:						-
Comments: Bottles for Lab on 9/19/05 as	total and I	Dissolvail 1 Melals	Metals were	ne bot in Lab	h presered in	
						-
Corrective Action						_
-						

Date: Time: Relinquished By: (Signature) Relinquished By: (Signature) Date: Time: Relinquished By: (Signature)					1/15/05 0700 H20 AL-2 t-EP-1	Date Time Matrix Sample I.D. No.	Fax#: 595 722 02/0	Phone #: 505 722 3833			5 allup, NM 87201	Address: Rute & Box 7	Company lines	Client Shaw Shaw	CHAIN-OF-GUSTODY RECORD	
Received By: (Signature) Received By: (Signature) Received By: (Signature)					1	Number/Volume HgCl ₂ HNO ₃ HEAL No.	Sample Temperature: 4	Sampler: Men Monne	Stew Morie	Project Manager:		Project #: V	Week of 9-12-2005	Project Name: AL-2 & EP-1		QA/QC Package: Std 🗀 Level 4 🗀
Remarks: RUSH SDAY					K X X	BTEX + M BTEX + M TPH Meth TPH (Metl EDB (Met EDC (Met) B310 (PN) RCRA 8 M Anions (F, B081 Pesi B260B (V) B270 (Ser 8021	ITBE + od 80 od 80 hod 41 hod 50 hod 80 A or Pretals Ci, NO ticides DAI mi-VOA B Acta	- TPH 158 (1 18.1) 02.1) 02.1) 02.1) 02.1) 02.1) 0.2) 0.2) 0.2) 0.3) 0.3)	(Gasoli Gas/Die , PO ₄ , S l's (808	ne Or sel) GO ₄) 32)		ANALYSIS HEQUEST		Tel. 505,345,345,345,505,345,4107	ABO1 Hawkins NE, Suite D	HALL ENVIRONMENTAL



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

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
EPA METHOD 8021B; VOLATILES					Analyst: NSE
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	µ g/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: SEMIVOLATILE	S				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 Contominant Level

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

Page 1 of 3

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

nalyses	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	ha/r	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	hâ\r	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	pg/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	μց/∟	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	ПD	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 -1 34	%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

S - Spike Recovery outside accepted recovery limits

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

 \ensuremath{B} - Analyte detected in the associated Method Blank

^{* -} Value exceeds Maximum Contaminant Level

E - Value above quantitation range

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: DISSOLVE	D 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 RECOVERAB	LE METALS					Analyst: NMO
Antimony	ND	0.010		mg/L	1	9/19/2005 10:23:10 AM
Arsenic	DN	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	8	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

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Date: 20-Sep-05

Hall Environmental Analysis Laboratory
CLENT: Giant Refining Co

CLIENT: Giant Re: Work Order: 0509108 Project: AL-2 to I	Giant Refining Co 0509108 AL-2 to EP-1 Week of 9/5/05						QC SUN	QC SUMMARY REPORT Method Blank	RT lank
Sample ID RB-II 5ml	Batch ID: R16692	Test Code:	Code: SW8021	Units: µg/L		Analysis	Analysis Date 9/16/2005 11:46:06 PM	Prep Date	
Client ID:		Run ID:	PIDFID_0509168	168		SeqNo:	401074		
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	%RPD RPOLimit	Qual
Methyl tert-butyl ether (MTBE)	ON (E	2.5							
Benzene	ON.	0.5							
Toluene	QN	0.5							
Ethylbenzene	Q	0.5							
Xylenes, Total	S	0.5							
Surr: 4-Bromofluorobenzene	ле 19.26	0	20	6	96.3	82.2	119 0		
Sample ID Reagent Blank 5m	5m Batch ID: R16698	Test Code:	Code: SW8021	Units: pg/L		Analysis	Analysis Date 9/19/2005 7:56:38 AM	Prep Date	
Clien(1D:		Run-ID:	Run-10:	19A		SeqNo:	401251		
Analyte	Result	PaL	SPK value	SPK value SPK Ref Val	%REC	LowLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLImil	Qual
Methyl tert-butyl eiher (MTBE)	ON (E	2.5							
Benzene	ON.	0.5							
Toluene	ON	0.5							
Ethylbenzene	Q	0.5							
Xylenes, Total	₽ Q	5,0							
Surr: 4-Bromofluorobenzene	ne 19.67	0	20	0	98.4	82.2	119 0		

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

B - Analyte detected in the associated Method Blank

Andrew A. 1777 C.	
CLIENT:	Giant Refining Co OC SUMMARY REPORT
Work Order:	1209108
Project:	AL-2 to EP-1 Week of 9/5/05

Admitycie FRau II D: ELMO_059915A Seeklvis 4907160 MRRD RPD Ref Vai 4007160 CPD RPD Ref Vai 4007160 CPD RPD Ref Vai 4007160 CPD Ref Vai 4007160 A007160	Sample ID MB-8746	Batch ID: 8746	Test Code: SW8270C	SW8270C	Units: µg/L		Analysis	Analysis Date 9/15/2005	5/2005	Prep Da	Prep Date 9/13/2005	
Poll Poll SPK value SPK Ref Val S/Ref Value SPK Ref Val S/Ref Value SPK Ref Va	Cllent ID:		Run ID:	ELMO_05091	5A		SeqNo:		760			
naphthylene ND 10 naphthylene ND 10 racene ND 10 benzene ND 10 charzene ND 10 benzene ND 10 charzene ND 10 sorial-pyrene ND 10 zorial-pyrene ND 15 z-chriorsetry-pyrene ND 10 non-op-arither ND 10 z-chriorsetry-pyrene ND 10 non-op-arither ND 10 non-op-arither	Analyte			SPK value	SPK Ref Val	%REC	LowLimit	HighLímí		%RPD	RPDLimit	Qual
naphthylene ND 10 nnephtrylene ND 10 bnzene ND 10 aracene ND 10 z(a) janthracene ND 10 z(a) cachorachiyalther ND 15 z-chlorochylyalther ND 15 z-chlorochylyalther ND 15 z-chlorochylyalthalate ND 15 acchlorochylyalthalate ND 15 acchlorochylyalthalate ND 10 acchlorochylyalthalate ND 10 acchlorochylyalthalate ND 10	Acenaphthene							:	:			
Ineatment ND 10 Inscrete ND 10 Inscrete and instruction limits N-Strike Recovery outside accepted recovery limits Instruction Instruction Instruction Instruction Instruction	Acenaphthylene	<u>Q</u> V	10									
racene ND 10 benzene ND 10 clash are action of plants action of	Aniline	Q.	10									
Desizene ND 10 Z(a) anthracene ND 15 Z(a) buthracene ND 10 Z(a) (a) (b) control contr	Anthracene	<u>N</u>	5									
Z(a) Panthracene ND 15 Z(a) Panthracene ND 10 Zo(b) Illucranthene ND 10 Zo(b) Illucranthene ND 10 Zo(c) acid ND 10 Zor acid ND 20 Zor horizonthymethane ND 15 Z-chlorosthyllather ND 15 Abroxyl phthalate ND 16 ND 10 20 Jacobeneyl phenyl ether ND 10 Jorophenyl phenyl ether ND 16 Juoryl phthalate ND 16 Juoryl phthalate ND 16 Juoryl phthalate ND 16 Juoryl phthalate ND <	Azobenzene	QN	10									
zo(a) pyrene ND 10 zo(b) llouranthene ND 10 zo(b) llouranthene ND 10 zo(b) llouranthene ND 10 zold sadd ND 20 zyl atchol ND 20 2-chloroethoxy)methane ND 15 2-chloroethoxy)methane ND 15 2-chloroethylylpher ND 15 3-cettylphthalate ND 15 3-cettylphthalate ND 10 3-cettylphthalate ND 10 3-cetylphthalate ND 10 3-copyl phthalate ND 15 3-cetylphthalate ND 15 3-cyll phthalate ND 15 3-cyll phthalate ND	Benz(a)anthracene	ON	15									
20(b)lubranthene ND 10 20(b)lubranthene ND 10 20(b)lubranthene ND 10 20(b)lubranthene ND 50 2-chloroethoxy/methane ND 10 2-chlorosthoxy/pethar ND 15 2-chlorosthoxy/phthalate ND 15 2-chlorosthoxy/phthalate ND 15 2-chlorosthy/pether ND 16 3azole ND 16 oazole ND 10 sazole ND 10 loro-3-methylpherol ND <td>Benzo(a)pyrene</td> <td>QN</td> <td>유</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Benzo(a)pyrene	QN	유									
20(g.h.l)penylane ND 10 20(g.h.l)penylane ND 10 20ic acid ND 50 20ic acid ND 20 22id accorded ND 10 2-chlorosthoxymethane ND 15 2-chlorosthoxymethane ND 15 2-chlorosthyghther ND 15 2-chlorosthyghthalate ND 16 3-chlorinenyl phenyl ether ND 10 3-chlorosthyghthalate ND 20 3-chlorosthyghthalate ND 20 3-chryl phrayl ether ND 20 3-chryl phrayl ether ND 10 3-chryl phrayl ether ND 10 3-chryl phrayl ether ND 15 3-chryl phrayl ether ND 16 3-cryl phrayl ether ND 16 3-cryl phrayl ether ND 15 3-cryl phrayl ether ND 15 3-cryl phrayl ether ND 15 3-cryl phrayl et	Benzo(b)fluoranthene	QN	5									
20(k)fluoranithene ND 10 20fe acid ND 50 2valuation ND 20 2valuation ND 15 2valuation ND 15 2valuation ND 15 2valuation ND 15 2valuation ND 16 2valuation ND 10 anotheryl phenyl ether ND 10 A benzyl phthalate ND 10 ND 10 20 Aloraniline ND 20 Aloraniline ND 10	Benzo(g,h,i)perylene	QN	10									
zole acid ND 50 zył alcchol ND 20 2-chloroethoxy)methane ND 10 2-chloroethyy)ether ND 15 2-chloroethyy)bithealte ND 15 2-chloroethyylothorol ND 16 3-celtyylhothorol ND 10 3-celtyylhothorol ND 10 3-celtyylhothorol ND 20 3-celtyylhothorol ND 20 3-celtyylhothorol ND 20 3-celtyylhothorol ND 10 3-celtyylhothorol ND 10 3-celtyylhothorol ND 10 3-celtyylhothorol ND 10 3-celtyylhothorol ND 15 3-cell yorochenyl othorol ether ND 15 3-cell yorochenyl othorolate ND 10 3-cell yorochenyl othorolate 10 10 3-cell yorochenyl othorolate 10 10 3-cell yorochenyl othorolate 10 10	Benzo(k)fluoranthene	<u>0</u> 2	10									
2yl alcohol ND 20 2-chloroethoxy)methane ND 10 2-chloroethoxy)methane ND 15 2-chloroethy)lether ND 15 2-chlorophenylphther ND 10 anonphenyl phthalate ND 10 omophenyl phthalate ND 10 loro-3-methylphenol ND 20 loro-3-methylphenol ND 20 loro-3-methylphenol ND 10 loro-3-methylphenol ND 20 loro-3-methylphenol ND 10 sene ND 10 loro-3-methylphenol ND 10 sene	Benzoic acid	QN	50									
2-chloroethoxy)methane ND 10 2-chloroethyl)ether ND 15 2-chloroethyl)ether ND 15 2-chlorolisopropylether ND 15 3-chlorolisopropylether ND 10 omophenyl phenyl ether ND 10 oloro-3-methylphenol ND 20 oloro-3-methylphenol ND 20 olorophenyl phenyl ether ND 10 olorophenyl phenyl ether ND 10 olorophenyl phenyl ether ND 16 ocylyl phthalate ND 16 ocylyl phthalate ND 16 ocylyl phthalate ND 15 ocylyl phthalate ND 16 ocylyl phthalate ND 10 ocylyl phthalate ND 16 ocylyl phthalate ND 16 ocylyl phthalate ND 10 ocylyl phthalate ND 16 ocylyl phthalate ND 16 ocylyl	Benzyl atcohol	QN	20									
2-chloroethyl)ether ND 15 2-chlorostopyl)ether ND 15 2-chlorolsopropyl)ether ND 15 2-chlorolsopropyl)ether ND 10 omophenyl phthalate ND 10 obside ND 20 iloro-3-methylphenol ND 20 iloro-3-methylphenol ND 20 iloro-3-methylphenol ND 10 ilorophenol ND 10 ilorophenol ND 10 ilorophenol ND 15 include ND 16 include ND 16 include ND 16 include 10 10 include 10	Bis(2-chloroethoxy)meth		10									
2-chlorolsopropylyether ND 15 2-chlorolsopropylyether ND 15 omophenyl phenyl ether ND 10 d benzyl phthalate ND 10 nazole ND 20 aloro-3-methylphenol ND 10 aloro-3-methylphenol ND 10 alorophenol ND 10 alorophenol ND 15 scane ND 15 buyl phthalate ND 15 bockly phthalate ND 15 cockly phthalate ND 15 nockly phthalate ND 15 nockly phthalate ND 16 nockly phthalate ND 16 nockly phthalate ND 16 nockly phthalate ND 16<	Bis(2-chloroethyl)ether	ΩZ	15									
2-ethylhexyl)phthalate ND 15 omophenyl phthalate ND 10 azole ND 10 nioro-3-methylphenol ND 20 alorophenol ND 20 alorophenol oliorophenol ND 10 alorophenol oliorophenol oliorophenol phthalate ND 15 bottyl phthalate	Bis(2-chloralsapropyl)eth		15									
omophenyl phenyl ether ND 10 d benzyl phthalate ND 15 bazole ND 10 nioro-3-methylphenol ND 20 nioro-3-methylphenol ND 20 niorophenyl phenyl ether ND 10 niorophenyl phenyl ether ND 15 risene ND 15 burlyl phthalate ND 15 cockyl phthalate ND 16 burly phthalate ND 15 cockyl phthalate ND 15 nordyl phthalate ND 15 nordyl phthalate ND 16 nordyl phthalate ND 15 nordyl phthalate ND 15 nordyl phthalate ND 16 nordyl phthalate ND 10 nordyl phthalate ND 15 nordyl phthalate ND 10 nordyl phthalate ND 10 nordyl phthalate ND 10 <td>Bis(2-ethylhexyl)phthalate</td> <td></td> <td>15</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Bis(2-ethylhexyl)phthalate		1 5									
4 benzyl phthalate ND 15 pazole ND 10 aloro-3-methylphenol ND 20 aloroaniline ND 20 aloroaphthalene ND 10 alorophenyl phenyl ether ND 15 ssene ND 15 butyl phthalate ND 10 octyl phthalate ND 15 nz(a-h)anthracene ND 15 nz(a-h)anthracene ND 15 nz(a-h)anthracene ND 15 nz(a-h)anthracene ND 15 Analyte detected at the Reporting Limit Analyte detected below quantitation limits R - RPD outside accepted recovery limits R - RPD outside accepted recovery limits	4-Bromophenyl phenyl et		10									
nazole ND 10 nloro-3-methylphenol ND 20 nloroaniline ND 20 nloroaniline ND 10 nlorophenol ND 15 nlorophenyl phenyl ether ND 15 nsene ND 15 -butyl phthalate ND 10 -octyl phthalate ND 15 nz(a-h)anthracene ND 15 Analyze detected at the Reporting Limit Analyze detected below quantitation limits R - RPD outside accepted recovery limits R - RPD outside accepted recovery limits	Butyl benzyl phthalate	QN	15									
Indroa-3-methylphenol ND 20 Inforoaniline ND 20 Informational phonol ND 10 Informational phonol ND 15 Informational phonol ND 15 Information phonol ND 10 Information phonol ND 10 Information phonol 15 Information phonol 15 Information phonol 10	Carbazole	QN	10									
Incroaniline ND 20 Incromaphthalene ND 10 Incrophenol ND 10 Incrophenol ND 15 Incrophenol ND 15 -butyl phthalate ND 10 -octyl phthalate ND 15 nz(a.h)anthracene ND 10 Inflers: 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	4-Chloro-3-methylphenol	Q	20									
Indrophitalene ND 10 Albrophenol ND 10 Albrophenol ND 15 Albrophenyl phenyl ether ND 15 -butyl phthalate ND 10 -octyl phthalate ND 15 nz(a.h)anthracene ND 10 Analyte detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits	4-Chloroaniline	QN	20									
Identifiers: ND 10 Inlorophenyl phenyl ether ND 15 Insene ND 10 -butyl phthalate ND 10 -octyl phthalate ND 15 Inz(a.h)anthracene ND 10 Inz(a.h)anthracene ND 10 Inflers: 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	2-Chloronaphthalene	ON.	10									
incophenyl phenyl ether ND 15 issene ND 10 -butyl phthalate ND 10 -octyl phthalate ND 15 inz(a-h)anthracene ND 10 inflers: 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	2-Chlorophenol	ON	10									
butyl phthalate ND 10 -octyl phthalate ND 15	4-Chlorophenyl phenyl et		15									
-butyl phthalate ND 10 -octyl phthalate ND 15 -octyl phthalate ND 15 -octyl phthalate ND 16 -octyl phthalate ND 16 -octyl phthalate ND 16 -octyl phthalate ND 15	Chrysene	ON	15									
octyl phthalate ND 15 ND 10 ND 10 ND 10 ND 10 ND 10 ND ND Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits	Di-n-butyl phthatate	QX	10									
Inz(a.h)anthracene ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits	Di-n-octyl phthalate	<u>N</u>	15									
And I have detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits	Dibenz(a.h)anthracene	Q	10									
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits	allfiers:	Not Detected at the Reporting Limit		S - Spí	ke Recovery outside m	ccepted reco	very limits		B - Analyte detected i	in the associa	ated Method B	ank
		nalyte detected below quantitation litr		R - RP	D outside accepted rec	sovery limits						L /1

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Work Order: 0509108 Project: AL-2 to EP-1 Week of 9/5/05 Demonstratement ND 10 1.2-Obtahordenzane ND 10 1.3-Obtahordenzane ND 10 1.4-Obtahordenzane ND 10 1.4-Obtahordenzane ND 10 1.4-Obtahordenzane ND 10 Demy phalaste ND 10 Dnefly phalaste ND 10 Dnefly phalaste ND 10 Dnefly phalaste ND 10 Dnefly phalaste ND 10 2.4-Obtahordense ND 10 2.4-Obtahordense ND 10 2.4-Obtahordense ND 10 1-beachlorodense ND 10 <t< th=""><th>CLIENT:</th><th>Giant Refining Co</th><th></th><th>OC SUMMARY REPORT</th></t<>	CLIENT:	Giant Refining Co		OC SUMMARY REPORT
Project: AL-2 to EP-1 Week of 9/5/03 Debracking ND 10 Debracking ND 10 13-Obtionobenzene ND 10 Der My phinalate ND 10 Achalytephenol ND 10 Achalytephenol ND 10 Achalytephenol ND 10 Achalytephenol ND 10 Heart-horselfondersene ND 10 Heart-horselfondersene ND 10 Heart-horselfondersene ND 10 Heart-horselfondersene ND 10 Achalyte detected ND 10	Work Order:	0509108		
12-Dichocherzene ND 10 10 12-Dichocherzene ND 10 10 12-Dichocherzene ND 10 10 10 10 10 10 10 1	Project:	AL-2 to EP-1 Week of 9/5/05		Method Blan
12-Dichloroberzene ND 10 13-Dichloroberzene ND 10 13-Dichloroberzene ND 10 14-Dichloroberzene ND 10 13-Dichloroberzene ND 10 Diehly pithalate ND 10 Diehly pithalate ND 10 24-Dichlorophenol ND 10 24-Dintrophenol ND 10 24-Dintrophenol ND 10 24-Dintrophenol ND 10 Hexachlorophenol ND 10<	Dibenzofuran	QN	10	
1,3-Dichlorobenzene ND 10 1,4-Dichlorobenzene ND 10 3,3-Dichlorobenzene ND 16 9,3-Dichlorobenzeite ND 10 2,4-Dichlorobenzeite ND 10 2,4-Dintabhate ND 10 2,4-Dintabhylphenol ND 10 2,4-Dintabhylphenol ND 10 2,4-Dintabhylphenol ND 10 2,4-Dintabhylphenol ND 10 Rocardhorobenzene ND 10 Hexachlorobenzene ND 10 Hexachlorophylandene ND 10 N-Mitrosodirenydamine ND 10 N-Mitrosodirenydamine ND 10 N-Mitrosodirenydamine	1,2-Dichlorobenze		10	
14-Dichloobenzane ND 10 3.3-Dichloobenzanine ND 10 Deiny philalate ND 10 Deiny philalate ND 10 2.4-Dichlorophenol ND 10 2.4-Dinathylphenol ND 50 2.4-Dinathylphenol ND 50 2.4-Dinathylphenol ND 10 1-Androblanchene ND 10 1-Androblanchene ND 10 1-Androblanchene ND 10 1-Androblanchene ND 10 2-Andrybhenol ND 10 1-Andrybhenol ND 10 2-Andrybhenol ND 10 1-Andrybhenol ND 10 1-Andrybhenol ND 10 1-Androblanchene ND 10	1,3-Dichlorobenze		10	
sensitione ND 15 alte ND 10 alte ND 10 henol ND 10 henol ND 10 henol ND 10 near ND 10 series ND 10 near ND 10 dopopentadiene ND 10 nD 10 10 nD 10 10 nD 10 10 nD 10 10 nD 50 10 nD 50 10 nD 10	1,4-Dichlorobenze		10	
Dietly phthalate ND 10 Dimetry phthalate ND 10 2.4-Dimetry/phenol ND 10 2.4-Dimetry/phenol ND 10 4.6-Dimitro-2-metry/phenol ND 10 2.4-Dimetrophenol ND 10 2.4-Dimitrophenol ND 10 2.4-Dimitrophenol ND 10 2.4-Dimitrophenol ND 10 2.4-Dimitrophenol ND 10 Hexachorobenzane ND 10 Lesphorone ND 10	3,3'-Dichlorobenz		15	
Dimetry phthalate ND 10 2.4-Dictionophenol ND 10 4.6-Dintro-2-metryphenol ND 10 4.6-Dintrophenol ND 50 2.4-Dintrophenol ND 10 2.4-Dintrophenol ND 10 2.4-Dintropluene ND 10 Fluoranthane ND 10 Hexachioroberzane ND 10 Hexachioropuladiene ND 10 Hexachiorophanialene ND 10 Hexachiorophanialene ND 10 10 Anthyphanialene ND 10 2-Methyphanol ND 10 N-Nitrosodimenyamine ND 10 N-Nitrosodimenyamine ND 10 N-Nitrosodimenyamine ND 10 NND 10 10 4-Nitrosodimenyamine ND 50 ND 50 20 4-Nitrosodiphenol ND 10 2-Nitrophenol ND 10	Diethyl phthalate	QN	10	
2,4-Dichlorophenol ND 10 4,4-Dichlorophenol ND 10 4,4-Dichlorophenol ND 50 2,4-Dinitrophenol ND 50 2,4-Dinitrophenol ND 10 2,4-Dinitrophenol ND 10 2,4-Dinitrophenol ND 10 2,4-Dinitrophenol ND 10 Fluoranthene ND 10 Fluoranthene ND 10 Hexachloroperization ND 10 S-Methylphenol ND 10 2-Methylphenol ND 10 2-Methylphenol ND 10 N-Milrosofin-propylamine ND 10 N-Milrosofine ND 50 3-Micosinine ND	Dimethyl phthalate		10	
2.4-Dinethylphenol ND 10 4.6-Dinitophenol ND 50 2.4-Dinitophenol ND 10 2.4-Dinitophenol ND 10 2.4-Dinitophenol ND 10 2.5-Dinitophenol ND 10 2.6-Dinitophenol ND 10 2.4-Merlyphenol ND 10 2.4-Merlyphenol ND 10 N-Mirosodin-eryamine ND 10 N-Mirosodin-eryamine ND 50 3-Mirosoliine ND 50 3-Mirosoliine ND 50 3-Mirosoliine ND 50	2,4-Dichlorophent		10	
4,6-Dinltrop-and ND 50 2,4-Dinltrophenol ND 50 2,4-Dinltropluene ND 10 2,4-Dinltroloulene ND 10 Fluoranthene ND 10 Fluoranthene ND 10 Hexachlorobladene ND 10 Hexachlorobladene ND 10 Hexachloroputadiene ND 10 Hexachloropydopentadiene ND 10 Hexachloropydopentadiene ND 10 Hexachloropydopentadiene ND 10 Hexachloropydopentadiene ND 10 S-Methylnaphthalene ND 10 2-Methylnaphthalene ND 15 3-4-Methylphanol ND 10 N-Mitrosodinerthylamine ND 10 N-Mitrosodinerthylamine ND 10 A-Mitropalline ND 50 3-Mitroaniline ND 50 4-Mitroaniline ND 10 3-Mitroaniline	2,4-Dimethylphen		10	
2.4-Dinitrophenol ND 50 2.4-Dinitrophenol ND 10 2.4-Dinitrotuene ND 10 Fluoranthene ND 10 Fluoranthene ND 10 Haxachlorobenzene ND 10 Ladethylchandene ND 10 Ladethylchandene ND 10 3+4-Mathylchandene ND 10 A-Mitrosodirethylamine ND 10 N-Mitrosodirethylamine ND 10 N-Mitrosodirethylamine ND 10 N-Mitrosodirethylamine ND 50 3-Mitrosolline ND 50 3-Mitrosolline ND 50 3-Mitrosolline ND 50 3-Mitrosolline ND 10 MD 50 50 3-Mitrosolline ND 10 A-Mitrosolline ND 10 A-Mitrosolline <t< td=""><td>4,6-Dinitro-2-meth</td><td></td><td>50</td><td></td></t<>	4,6-Dinitro-2-meth		50	
2.4-DinItrotoluene ND 10 2.5-DinItrotoluene ND 10 Fluoranthene ND 10 Hexachloroberazene ND 10 Hexachlorobuladiene ND 10 Hexachlorobuladiene ND 10 Hexachlorobuladiene ND 10 Hexachlorockopentadiene ND 10 Indenot (1,2-dd)pyrene ND 10 Indenot (1,2-dd)pyrene ND 10 2-Methylaphenol ND 10 3+4-Methylaphenol ND 10 3-Mitrosodirn-pyropylamine ND 10 N-Nirosodirn-pyropylamine ND 10 N-Nirosodirn-pyropylamine ND 10 N-Nirosodirnethylamine ND 10 N-Nirosodirnethylamine ND 50 3-Nitroaniline ND 50 3-Nitroaniline ND 50 Nitroaniline ND 10 2-Nitrophenol ND 10 2-Nitrophenol ND 15 2-Nitrophenol ND 15 3-Spike Recovery outside accepted recovery limits 5-Spike Recovery outside accepted recovery limits	2,4-Dinitrophenol	N N	50	
2.6-Dinitrololuene ND 10 Liboranthene ND 10 Fluorene ND 10 Hexachlorobarcane ND 10 Hexachlorobladiene ND 10 Indeported ND 10 2-Methylphenol ND 10 2-Methylphenol ND 10 3+4-Methylphenol ND 10 N-Nirosodimethylamine ND 10 A-Nirosodimethylamine ND 10 ND 50 20 A-Nirosodimethylamine ND <th< td=""><td>2,4-Dinitrotoluene</td><td></td><td>10</td><td></td></th<>	2,4-Dinitrotoluene		10	
Fluorenthene ND 10 Fluorenthene ND 10 Hexachlorobenzene ND 10 Hexachlorobiadiene ND 10 Hexachlorobiadiene ND 10 Hexachloropeliadiene ND 10 Hexachloropeliadiene ND 10 Indeno(1,2,3-cd)pyrene ND 10 Indeno(1,2,3-cd)pyrene ND 10 Lexphorone ND 10 Lexphorone ND 10 2-Methylphenol ND 15 3-4-Methylphenol ND 16 N-Nitrosodimethylphenol ND 10 A-Nitrosodi	2,6-DinItrotoluene		10	
Fluorene ND 10 Hexachlorobenzene ND 10 Hexachlorobenzene ND 10 Hexachlorobenzene ND 10 Hexachlorocopdopentadiene ND 10 Hexachlorocopdopentadiene ND 10 Indeno(1,2,3-cd)pyrene ND 10 Sophorone ND 10 2-Methylaphenol ND 10 3+4-Methylaphenol ND 15 3+4-Methylaphenol ND 10 N-Nilrosodinethylamine ND 10 N-Nilrosodiphenylamine ND 10 ND 10 10 N-Nilrosodiphenylamine ND 10 ND 10 10 ND 10 <		QN	10	
Hexachlorobenzene ND 10 Hexachlorobenzene ND 10 Hexachlorocydopentadiene ND 10 Hexachlorocydopentadiene ND 10 Indeno(1,2,3-cd)pyrene ND 10 2-Methylnaphthalene ND 10 2-Methylphenol ND 15 3+4-Methylphenol ND 16 N-Nitrosodin-n-propylamine ND 10 N-Nitrosodinetrylamine ND 50 A-Nitrosodinetrylamine ND 10		QN	40	
Hexachlorobuladlene ND 10 Hexachlorobuladlene ND 10 Hexachlorocklopentadiene ND 10 Hexachlorocklopentadiene ND 10 Indeno(1,2,3-cd)pyrene ND 10 2-Methylaphralene ND 10 2-Methylphenol ND 15 3+4-Methylphenol ND 10 N-Nilrosodimethylamine ND 10 N-Nilrosodiphenylamine ND 10 N-Nitrosodiphenylamine ND 50 4-Nitrosoniline ND 50 4-Nitrosoniline ND 10 A-Nitrosoniline ND 20 4-Nitrosoniline ND 10 A-Nitrosoniline ND 10			10	
Calopentadiene ND 10 name ND 10 Cal)pyrene ND 10 Italene ND 10 ol ND 10 propylamine ND 10 propylamine ND 10 propylamine ND 10 orylamine ND 10 ND 50 ND ND 50 ND ND 50 ND ND 50 ND ND 10			10	
name ND 10 cd/pyrene ND 10 thalene ND 10 of ND 10 propylamine ND 10 arbylamine ND 10 enylamine ND 10 ND 10 ND ND 50 ND ND 50 ND ND 50 ND ND 10 ND ND 50 ND ND 10 ND ND 50 ND ND 10 ND ND 15	Hexachlorocyclop.		10	
AD 10 Italene ND 10 ol ND 10 propylamine ND 10 propylamine ND 10 and sthylamine ND 10 on D 10 ND on D 50 ND ND 50 ND ND 50 ND ND 10 ND ND 15	Hexachloroethane		10	
thalene ND 10 oil ND 15 enol ND 10 propylamine ND 10 enylamine ND 10 ND 10 ND ND 50 ND ND 50 ND ND 10 ND ND 10 ND ND 15 S - Spike Recovery outside accepted recovery limits	Indeno(1,2,3-cd)p		10	
thalene ND 10 ol ND 15 enol ND 10 propylamine ND 10 athylamine ND 10 ND 50 ND ND 50 ND ND 20 ND ND 10 ND ND 15 S - Spike Recovery outside accepted recovery limits	Isophorone	Q.	10	
ol ND 15 enol ND 10 propylamine ND 10 enylamine ND 10 ND 50 ND ND 50 ND ND 20 ND ND 10 ND ND 15 S - Spike Recovery outside accepted recovery limits	2-Methyinaphthale		10	
enol ND 10 propylamine ND 10 sthylamine ND 10 enylamine ND 10 ND 50 ND ND 50 ND ND 20 ND ND 10 ND ND 15 S - Spike Recovery outside accepted recovery limits	2-Methylphenol	QV	15	
propylamine ND 10 enylamine ND 10 enylamine ND 10 ND 50 ND ND 50 ND ND 20 ND ND 10 ND ND 15 ND ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	3+4-Methylphenal		10	
athylamine ND 10 enylamine ND 10 ND 50 ND ND 50 ND ND 20 ND ND 10 ND ND 15 ND ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	N-Nitrasadi-n-prot		10	
enylamine ND 10 ND 50 ND 50 ND 50 ND 20 ND 10 ND 15 ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	N-Nitrosodimethyl		10	
ND 10 ND 50 ND 20 ND 10 ND 15 ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	N-Nitrosodiphenyl		10	
ND 50 ND 20 ND 10 ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	Naphthalene	Q	10	
ND 20 ND 20 ND 10 ND 15 ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	2-Nitroaniline	QN	50	
ND 20 ND 10 ND 15 ND - Spike Recovery outside accepted recovery limits	3-Nitroaniline	QN	50	
ND 10 ND 15 ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	4-Nitroaniline	QZ	20	
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	Nitrobenzene	ON	10	
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	2-Nitrophenal		15	
	Onalifiers:	ND - Not Detected at the Reporting Limit	S - Soike Recovery outside accepted recovery limits	3 - Analyte detected in the associated Method Blank
	,			

							0.0002	Q.	Mercury
%RPD RPDLimit Qual	%REC LowLimit HighLimit RPD Ref Val	HighLimit	LowLimit	%REC	SPK value SPK Ref Val	SPK value	Pat	Result	Analyte
	22	399552	SeqNo:		3913B	MI-LA254_050913B	Run ID:		Client ID:
Prep Date 9/13/2005	2005	Analysis Date 9/13/2005	Analysis		Units: mg/L	SW7470	Test Code: SW7470	Batch ID: 8742	Sample ID MB-8742
	0	80.3	10.7	43.2	0	200	0	86.4	Surr: Phenol-d6
	0	134	14.6	70.1	0	100	o	70.12	Surr: Nitrobenzene-d5
	0	145	22.7	6.77	0	199	0	77.86	Surr: 4-Terphenyl-d14
	0	113	9.54	62.4	o	200	0	124.7	Surr: 2-Fluorophenol
	0	134	19.6	66.5	0	100	0	66.54	Surr: 2-Fluorobiphenyl
	0	150	16.6	69.4	0	200	0	138.8	Surr: 2,4,6-Tribromophenol
							<u>ਨ</u>	Q	2,4,6-Trichlorophenal
							5	ON	2,4,5-Trichlorophenoi
							10	QN	1,2,4-Trichlorobenzene
							30	Q	Pyridine
							15	N	Pyrene
							10	ND	Phenol
							5	ON.	Phenanthrene
							90	QN	Pentachlorophenol
							20	QN	4-Nitrophenol
INICIIIOU DIAIIN								AL-2 to EP-1 Week of 9/5/05	Project: AL-2 to
Mathed Diank								∞	Work Order: 0509108
OC SUMIMARY REPORT								Cerming CO	
TOOGO VOLVE								Giant Refining Co	CLIENT: Giant R

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

Sample ID MB	Batch ID: R16711	Test Code	Test Code: SW6010A	Units: mg/L		Analysis	Date 9/19/	Analysis Date 9/19/2005 3:28:22 PM	Prep Date	ite	
Client ID:		Run ID:	ICP_050919A			SeqNo:	401491	Ξ.			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD	RPDLImit	Qual
Antimony	QN	0.01						:			
Arsenic	ΩN	0.02									
Beryllium	Ŋ	0.003									
Cadmium	QN	0.002									
Chromium	<u>D</u> N	0.006									
Copper	QN	0.006									
Lead	QN	0.005									
Nickel	QN	0.01									
Selenium	QN	0.02									
Silver	QN	0.005									
Thallium	ON	0.01									
Zinc	QN	0.05									
Sample ID MB-8756	Batch ID: 8756	Test Code	Test Code: SW6010A	Units: mg/L		Analysis	Date 9/19/	Analysis Date 9/19/2005 1:46:24 PM	Prep Da	Prep Date 9/15/2005	
Client ID:		Run ID:	ICP_050919B			SeqNo:	401724	4			
Analyte	Result	Pol		SPK value SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD	%RPD RPDLimit	Qual
Zinc		0.05									

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

CLIENT:	Giant Refining Co							QC SUMMARY REPORT	MAR	Y REPO	RT
Work Order:	0509108							,		Method Blank	Mank
Project:	AL-2 to EP-1 Week of 9/5/05									Michiga	Sidilk
Sample ID MB-8756	756 Batch ID: 8756	Test Code	Test Code: SW6010A	Units: mg/L		Analysie	5 Date 9/19/20	Analysis Date 9/19/2005 10:08:18 AM	Prep Da	Prep Date 9/15/2005	
Client ID:		Run ID:	ICP_050919B			SeqNo:	401792				
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	PD Ref Val	%RPD	RPDLimit	Quai
Antimony	0.01014	0.01									
Arsenic	ON	0.02									
Beryllium	ON	0.003									
Cadmium	QN	0.002									
Chromium	ON	0.006									
Copper	0.01422	0.006									
Lead	0.003863	0.005									ص
Nickel	QN	0.01									
Selenium	ON	0.05									
Silver	ON	0.005									
Thallium	ON	0.01									
								<i>i</i>			

B - Analyte detected in the associated Method Blank

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

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

Qualifiers:

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CLIENT: Giant Refining Co

- Date: 20-Sep-05

Hall Environmental Analysis Laboratory

Work Order: 0509108 Project: AL-2 to I	Grant Retining Co 0509108 AL-2 to EP-1 Week of 9/5/05							QC SUMMARY REPORT Laboratory Control Spike - generic	IMAR Control S	Y REPC Spike - ge	ORT neric
Sample ID BTEX Ics 100ng	Batch ID: R16692	Test Code: Run ID:	Code: SW8021 U	Units: µg/L		Analysis SegNo:	Date 9/17/20	Analysis Date 9/17/2005 4:51:23 AM SeaNo: 401076	Prep Date	ate	
Analyte .	Result	g	SPK value	SPK Ref Val	%REC	LawLimit	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 Toluene	20.64 19.66	0.5	20 20	00	103 98.3	88.5	114	၁ဝ			
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:	Code: SW8021	Units: µg/L		Analysis	. Date 9/17/2	Analysis Date 9/17/2005 5:22:28 AM	Prep Date	ite	
Client ID:		Run ID:	PIDFID_050916B	16B		SeqNo:	401078				
Analyte	Result	Pal	SPK value	SPK Ref Val	"REC	LowLimit	HighLimit F	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	
Вепzепе	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	969.0	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:	Code: SW8021	Units: µg/L		Analysis	Date 9/19/20	Analysis Date 9/19/2005 8:41:08 PM	Prep Date	ite	
Client ID:		Run ID:	PIDFID_050919A	19A		SeqNo:	401344				
Analyte	Result	PaL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit F	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	21.75	2.5	20	0	109	64.5	133	0			
Вепгепе	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			
Ethylbenzene	19.87	0.5	20	0	99.4	88.6	113	O			
Xylenes, Total	40.35	0.5	40	٥	101	83.3	114	0			

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

QC SUMMARY REPORT

Laboratory Control Spike - generic

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

Giant Refining Co

CLIENT:

Sample ID LCS-8746	Batch ID: 8746	Test Code: SW8270C	SW8270C	Units: µg/L		Analysis	Analysis Date 9/15/2005	2005	Prep Da	Prep Date 9/13/2005	LΩ
Client ID:		Run ID:	ELMO_050915A	5A		SeqNo:	400761	5 27			
Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	73.54	10	- 100	0	73.5	1	123	. 0			
4-Chloro-3-methylphenol	149.3	20	200	0	74.7	15.4	119	0			
2-Chlorophenol	145.1	10	200	O	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	o	70.7	9.93	122	0			
4-Nitrophenal	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			
Ругеле	74.08	15	100	0	74.1	12.6	140	O			
1,2,4-Trichlorobenzene	63.66	4	100	0	63.7	17.4	98.7	0			
Sample ID LCSD-8746	Batch ID: 8746	Test Code:	SW8270C	Units: pg/L		Analysis Date	Date 9/15/2005	2005	Prep Da	Prep Date 9/13/2005	S
Client ID:		Run (D:	ELMO_050915A	5A		SeqNo:	400762	23			
Analyte	Result	Pal	SPK value	SPK Ref Val	"REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPOLImit	Qual
Acenaphthene	75.62	10	5	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-Chiaraphenol	150.3	10	200	o	75.2	12.2	122	145.1	3.55	107	
1,4-Dichlorobenzene	90:09	10	100	0	66.1	16.9	100	63.92	3.32	62.1	
2,4-Dinitrotaluene	76.42	10	100	O	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	86.68	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	5	5	0	64.0	17.4	98.7	63.66	0.533	36.4	

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

ND - Not Detected at the Reporting Limit J - Analyre detected below quantitation limits

Qualifiers:

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

Laboratory Control Spike - generic

Sample ID LCS-8742	Batch ID: 8742	Test Code	Test Code: SW7470	Units: mg/L		Analysi	Analysis Date 9/13/2005	500	Prep Da	Prep Date 9/13/2005	
Cilent ID:		Run ID:	MI-LA254_050913B	09138		SeqNo:	399553				
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	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	Test Code: SW7470	Units: mg/L		Analysis	Analysis Date 9/13/2005	005	Prep Da	Prep Date 9/13/2005	
Client ID:		Run ID:	MI-LA254_050913B	0913B		SeqNo:	399577				
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	LowLimit HighLimit F	RPD Ref Val	%RPD	RPDLimit	Quaí
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	Test Code: SW6010A	Units: mg/L		Analysis	Date 9/19/2	Analysis Date 9/19/2005 3:32:06 PM	Prep Date	te	
Client ID:		Run ID:	ICP_050919A			SeqNo:	401492				
Analyte	Result	Pal	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			
Arsenic	0.5378	0.05	0.5	0	108	80	120	Q			
Beryllium	0.5245	0.003	0.5	0	105	80	120	0			
Cadmium	0.5256	0.002	0.5	O	105	80	120	0			
Chromium	0.5361	0.006	0.5	a	107	8	120	Û			
Copper	0.5297	900.0	0.5	0	106	80	120	0			
Lead	0.5207	0.005	0.5	0	104	80	120	O			
Nickel	0.5092	0.01	0.5	Ö	102	80	120	O			
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			

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

12/15

,	AL-2 to EP-1 Week of 9/5/05					[Laboratory Control Spike Duplicate	ontrol S	pike Dupl	boratory Control Spike Duplicate
Sample ID LCSD	Batch ID: R16711	Test Code:	Test Code: SW6010A	Units: mg/L		Analysis SegNo:	Date 9/19/20	Analysis Date 9/19/2005 3:34:33 PM SeaNo: 401493	Prep Date	ale.	
Analyte	Result	ם	SPK value	SPK Ref Val	%REC	LowLimit	를	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.5293	0.01	0.5	0	106	88	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	88	120	0.5245	0.104	20	
Cadmium	0.5313	0.002	0.5	Ó	106	80	120	0.5256	1.07	20	
Chromium	0.5403	900'0	0.5	0	108	80	120	0.5361	0.773	20	
Copper	0.537	900.0	0.5	٥	107	88	120	0.5297	1.37	20	
Lead	0.5208	0.005	0.5	0	104	88	120	0.5207	0.0318	20	
Nicket	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:	Fest Code: SW6010A	Units: mg/L		Analysis	Date 9/19/	Analysis Date 9/19/2005 1:48:34 PM	Prep Da	Prep Date 9/15/2005	
Client ID:		Run ID:	ICP_050919B			SeqNo:	401725	25			
Analyte	Result	Pal	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	6 Batch ID: 8756	Test Code:	est Code: SW6010A	Units: mg/L		Analysis	Date 9/19/	4nalysis Date 9/19/2005 1:51:03 PM	Prep Da	Prep Date 9/15/2005	
Client ID:		Run ID:	ICP_050919B			SeqNo:	401726	92			
Analyte	Result	PoP	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	RPOLimit	Qual
Zinc	0.474	0.05	0.5	0	94.8	80	120	0.477	0.633	20	

B - Analyte detected in the associated Method Blank

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

Qualifiers:

	der: 0509108 Lahoratory Control Spike - generic	AL-2 to EP-1 Week of 9/5/05
	Work Order: 0509108	Project: A

Project:

		T1	T Codo: CMC040A	t loite: ma/l		Analysis	Date 9/19/2	Analysis Date 9/19/2005 10:11:23 AM	Prep Da	Prep Date 9/15/2005	
Sample ID LCS-8756	Batch IU: 6756	anno Isa I	2010046						-		
Client ID:		Run ID:	ICP_050919B	_		SedNo:	401793	9			
Analyte	Result	Pol	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	o			œ
Arsenic	0.4947	0.02	0.5	0	98.9	88	120	0			
Et illy Case	0.4986	0.003	0.5	0	2.66	80	120	0			
Cadmina	0,4846	0.002	0.5	0	96.9	98	120	0			
Chromlum	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			ш
lead -	0.4805	0.005	0.5	0.003863	95.3	80	120	O			
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	90	120	0			
Thallium	0.4981	0.01	0.5	0	9.66	80	120	0			
Sample ID LCSD-8756	Batch ID: 8756	Test Code	Test Code: SW6010A	Units: mg/L		Analysis	Date 9/19/	Analysis Date 9/19/2005 10:14:32 AM	Prep Da	Prep Date 9/15/2005	
Client ID:		Run 1D:	ICP_050919B	m		SeqNo:	401794	4			
Analyte	Result	Pal	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	8	120	0.5101	1.21	20	Ф
Arsenic	0.4883	0.02	0.5	0	97.7	80	120	0.4947	1.30	20	
Bervillum	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	ω
Lead	0.4773	0.005	0.5	0.003863	94.7	8	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	Φ	94,4	88	120	0.4626	1.96	20	
Silver	0.4869	0.005	0.5	0	97.4	8	120	0.4906	0.758	20	
Thallium	0.4983	0.01	0.5	O	99.7	80	120	0.4981	0.0539	20	
Oualifiers: ND - N	ND - Not Detected at the Reporting Limit		s - Sp	S - Spike Recovery outside accepted recovery limits	e accepted rec	overy limits		B - Analyte detected in the associated Method Blank	in the associ	iated Method B	lank
	 Analyte detected below quantitation limit 	nits	R-R	R - RPD outside accepted recovery limits	recovery limit	91					٦,
•											

Sample Receipt Checklist

	•							
Client Name GIANTREFIN				Date and Time	Received:		9/1	12/2005
Work Order Number 0509108	_			Received by	AT			
	<i>.),</i>			0/12/0				
Checklist completed by Signature	non	•	Date	9/12/0				
Matrix	Carrier name	Clier	ıt drop-off					
Shipping container/cooler in good condition?		Yes	V	No 🗆	Not Present			
Custody seals intact on shipping container/coole	ı,	Yes		No 🗀	Not Present	☐ Not 9	Shipped	\checkmark
Custody seals intact on sample bottles?		Yes		No 🗹	N/A			
Chain of custody present?		Yes	V	No 🗆				
Chain of custody signed when relinquished and	received?	Yes	V	No 🗆				
Chain of custody agrees with sample labels?		Yes	$ \mathbf{Z} $	No 🗆				
Samples in proper container/bottle?		Yes	\checkmark	No 🗀				
Sample containers intact?		Yes	V	No 🗆				
Sufficient sample volume for indicated test?		Yes	\checkmark	No 🗆				
All samples received within holding time?		Yes	V	No 🗆				
Water - VOA vials have zero headspace?	No VOA vials sub	mitted		Yes 🗹	No 🗆			
Water - pH acceptable upon receipt?		Yes	\checkmark	No 🗆	N/A			
Container/Temp Blank temperature?		,		4° C ± 2 Accepta If given sufficient				
COMMENTS:				ii diveti somoletti	time to cool.			
GOMMENTS.								
						:		
Client contacted	Date contacted: _			Pers	on contacted			
Contacted by:	Regarding							
Comments:								

Corrective Action							••	
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	10	Relinquished By: (Signature)												2AL-2 t EP-1	Sample I.D. No.							***	-amile	Celining	CHAIN-OF-CUSTODY RECORD	
															Number/Volume		Sample Temperature:	Sampler:	A	Project Manager:		Project #:	Week	Project Name:	Other:	
	Received By: (Signature)	Péceived By: (Signature)	<u></u>												H	Preservative	iture:	The forth	as Mo	Τ:		0	of Shept	46-23		QA/QC Package: Std Cl Level 4 Cl
	- C4 C)	9/12/05										-	•	0509108-1	HEAL No.			in the second	MA				54,2005	1-43		
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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



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 S	HORT LIST				Analyst: KTN
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: SEMIVOLAT	ILES				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/ Է	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
Dibenzoluran	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

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

nalyses	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-Methylphenoi	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/ ∟	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-Trichloraphenol	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

- 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

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 C	ual 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 M	ETALS				Analyst: NMC
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
Chromlum	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 N	METALS				Analyst: NMC
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	ИD	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

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

Sample ID: MB-8667 Client ID:	Batch ID: 8667	Test Code: Run ID:	Test Code: SW6010A Run ID: ICP_050907A	Units: mg/L: 17A		Analysis E SeqNo:	ate: 9/7/200 396479	alysis Date: 9/7/2005 3:18:12 РМ эqNo: 396479	Prep Dale: 9/2/2005	: 9/2/20
Analyte	Result	PQL	SPK value	SPK value SPK Ref Val	%REC	LowLimit 1	lighLimit	LowLimit HighLimit RPD Ref Val	%RPD RPDLImit	₹PDLim
Antimony	ON	0.01								:
Arsenic	N	0.02								
Beryllium	ND	0.003								
Cadmium	NO	0.002								
Chromium	ND	0,006								
Copper	ND	0.006								
Lead	ND	0.005								
Nickel	N	0.01								
Selenium	ND	0.05								
Silver	ND	0.005								
Thallium	N D	0.01								
Zinc	ND	0.05								

Qual

1 - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

	396484	SeqNo:	907A	Run ID: ICP_050907/		Client ID:
Prep Date:	Date: 9/7/2005 3:05:39 PM	Analysis	A Units	Test Code: SW6010A Units: mg/L	Batch ID: R16572	Sample ID: MB
Method Blank					AL-2 to EP-1 Week of 8-29-05	Project:
					0508345	Work Order:
QC SUMMARY REPORT	QC SUM				Giant Refining Co	CLIENT:

Selenium Silver Thallium Zinc

Copper Lead Nickel

0.01 0.02 0.003 0.002 0.006 0.006 0.005 0.01 0.02 0.005

Beryllium Cadmlum Chromium

Antimony Arsenic Analyte

PQL

SPK value SPK Ref Val

%REC LowLimit HighLimit RPD Ref Val

%RPD RPDLimit

Qual

	Qualifiers:
J - Analyte detected below quantitation limits	ND - Not Detected at the Reporting Limit
R - RPD outside acce	S - Spike Recovery c

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

							0.0002	ND	Mercury
%RPD RPDLimit Qual	2D Ref Val	HighLimit RPD Ref Val	LowLimit	%REC	SPK value SPK Ref Val	SPK value	PQL	Result	Analyte
		396456	SeqNo:		0907A	MI-LA254_050907A	Run ID:		Client ID:
Prep Date: 9/7/2005	O1	Date: 9/7/2005	Analysis		Units: mg/L	SW7470	Test Code: SW7470	Batch ID: 8699	Sample ID: MB-8699
	0	80.3	10.7	27.0	0	200	0	54.02	Surr: Phenol-d6
	0	134	14.6	69.7	0	100	0	69.66	Surr: Nitrobenzene-d5
	0	145	22.7	72.5	0	100	0	72.48	Surr: 4-Terphenyl-d14
	0	113	9.54	21.4	0	200	0	42.88	Surr: 2-Fluorophenol
	0	134	19.6	67.3	0	100	0	67.28	Surr: 2-Fluoroblphenyl
	0	150	16.6	17.6	0	200	0	35.22	Surr: 2,4,6-Tribromophenol
							15	N	2,4,6-Trichlarophenal
							10	ND	2,4,5-Trichlarophenal
							10	ND	1,2,4-Trichlorobenzene
							30	ND	Pyridine
							15	ND	Pyrene
							10	No	Phenol
							10	ND	Phenanthrene
							50	ND	Pentachlorophenol
							50	dN	4-Nitrophenol
Method Blank								AL-2 to EP-1 Week of 8-29-05	Project: AL-2 to
	, () ()							3.	Work Order: 0508345
OC SUMMARY REPORT								Giant Refining Co	CLIENT: Giant R

J - Analyte detected below quantitation limits

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

		,
Metriod Diank	AL-2 to EP-1 Week of 8-29-05	Project:
Mathed Blank	0508345	Work Order:
OC SUMMARY REPORT	Giant Refining Co	CLIENT:

	D DDD outside assessed recovery limits		tad balance amount that in a limite	A and the detect	
B - Analyte detected in the associated Method Blank	S - Spike Recovery outside accepted recovery limits	: :	ND - Nat Detected at the Reporting Limit	ND - Nat Detecte	Qualifiers:
		ö	Č		z-Nitrophenoi
		i			Nitrobenzene
		20	S 6		4-Nitroaniline
		50	. C		3-Nitroaniline
		50	ND		2-Nitroaniline
		a	S		Naphthalene
		10	N	ylamine	N-Nitrosodiphenylamine
		10	ND	ylamine	N-Nitrosodimethylamine
		ó	8	pylamine	N-Nitrosodi-n-propylamine
		10	N	D.	3+4-Methylphenol
		ជា	ND		2-Methylphenol
		6	ND	ilene	2-Methylnaphthalene
		10	S		Isophorone
		ö	ND	pyrene	Indeno(1,2,3-cd)pyrene
		10	N	e e	Hexachloroethane
		10	ND	pentadiene	Hexachlorocyclopentadiene
		10	ND	lene	Hexachlorobutadiene
		5	N	епе	Hexachlorobenzene
		5	ND		Fluorene
		10	ND		Fluoranthene
		5	ND	Õ	2,6-Dinitrotoluene
		10	ND	Ō	2,4-Dinitrotoluene
		50	N	<u>~</u>	2,4-Dinitrophenol
		50	ND	thylphenol	4,6-Dinitro-2-methylphenol
		10	N	nol	2,4-Dimethylphenol
		10	ND	lor	2,4-Dichlorophenol
		70	ND	ite	Dimethyl phthalate
		6	ND	,,,	Diethyl phthalate
		15	ND	zidine	3,3'-Dichlorobenzidine
		10	ND	zene	1,4-Dichlorobenzene
		10	ND	zene	1,3-Dichlarobenzene
		10	ND	zene	1,2-Dichlorobenzene
		10	ND		Dibenzofuran
Metilod Diank			AL-2 to EP-1 Week of 8-29-05	AL-2 to EP-1	Project:

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

L

CLIENT:	Giant Refining Co	OC STIMMARY REPORT
Work Order: 0508345	0508345	CO POINTIFFEET TOTO ONE
Project:	AL-2 to EP-1 Week of 8-29-05	Method Blank

	Date D. on An	1	Tank Carlos Civigation	11-11		A 11-	Anchel Dein altimat		,	nine i non	
Client ID:		Run ID:	ELMO_050904A	14A		SeqNo:	395739	,		1	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	PD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	10									
Acenaphthylene	N	10									
Aniline	N	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	1 0									
Benzoic acid	S	50									
Benzyl alcohol	ND	20									
Bis(2-chloroethoxy)methane	N	10									
Bis(2-chloroethyl)ether	NO	15									
Bis(2-chioraisopropyl)ether	S	15									
Bis(2-ethylhexyl)phthalate	N	ij									
4-Bromophenyl phenyl ether	N	10									
Butyl benzyl phthalate	N	15									
Carbazole	ND	15									
4-Chloro-3-methylphenol	ND	20									
4-Chloroaniline	ND	20									
2-Chloronaphthalene	N	10									
2-Chlorophenol	N	10									
4-Chlorophenyl phenyl ether	8	15									
Chrysene	ND	ᇙ									
Di-n-butyl phthalate	N	70									
Di-n-octyl phthalate	ND	귫									
Dibenz(a,h)anthracene	N	5									

J - Analyte detected below quantitation limits

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 0508345

Work Order:

QC SUMMARY REPORT

Prep Date:	Analysis Date: 9/2/2005	Units: ug/L	Test Code: SW8260B	Batch ID: R16542	Sample ID: 5mL rb	Sami
Method Blank				AL-2 to EP-1 Week of 8-29-05		Project:
				ידי	Trois Cluci.	17 01

Sample ID: 5mL rb Client ID:	Batch ID: R16542	Test Code: SW8260B Run ID: NEPTUNE	NEPTUNE_050902A	Units: µg/L 50902A		Analysis SeqNo:	Analysis Date: 9/2/2005 SeqNo: 395636	6	Prep Date:	ite:	
Analyte	Result	PQL	SPK value	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	%RPD RPDLimit	Qual
Benzene	ND	_	1	and around the control of the							
Toluene	ND	-									
Ethylbenzene	ND	_									
Xylenes, Total	ND	_									
Surr: 4-Bromofluorobenzene	10.88	0	10	0	109	86.1	121	0			
Sample ID: 5mL rb-b	Batch (D: R16559	Test Code: SW8260B	SW8260B	Units: µg/L		Analysis	Analysis Date: 9/6/2005)05	Prep Date:	te:	
Client ID:		Run ID:	NEPTUNE_050906A	50906A		SeqNo:	395887	7			
Analyte	Result	PQL	SPK value	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	%RPD RPDLimit	Qual
Benzene	ND	_						:			
Toluene	N	_									
Ethylbenzene	N	_									
Xylenes, Total	ND	_									
Surr: 4-Bromofluorobenzene	10.83	0	10	0	108	B6.1	121	0			

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

-	1			:					-		
Client ID: I willy ics	Datci IV. N.10342		Run ID: NEBTINE DEDONA	Olins: pg/c			conzers canzizie: alen	. 6	rrep Date:	16:	
		į				, ,	0000				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.98		20	0	99.9	80	130	0			
Toluene	20.18	-1	20	0	101	77	121	0			
Sample ID: 100ng lcs	Batch ID: R16559	Test Code:	SW8260B	Units: µg/L		Analysis	Date: 9/6/2005	05	Prep Date:	ite:	
Client ID:		Run ID:	NEPTUNE_050906A	A9060		SeqNo:	395888				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.75	_	20	0	98.8	80	130	0			
Toluene	20.72		20	0	104	77	121	0			
Sample ID: LCS-8645	Batch ID: 8645	Test Code: SW8270C	SW8270C	Units: µg/L		Analysis	Date: 9/5/2005	05	Prep Da	Prep Date: 8/31/2005	5
Client ID:		Run ID:	ELMO_050904A	4A		SeqNo:	395740				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	73.26	10	100	0	73.3	3	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	o	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			
Phenal	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			
1,2,4-Trichlorobenzene	61.3	10	100	0	61.3	17.4	98.7	0			

J - Analyte detected below quantitation limits

Project: CLIENT: Work Order: Giant Refining Co 0508345 AL-2 to EP-1 Week of 8-29-05 Laboratory Control Spike Duplicate QC SUMMARY REPORT

Sample ID: LCSD-8645	Batch ID: 8645	Test Code:	Test Code: SW8270C	Units: pa/L		Analysis	Date: 9/5/2005	005	Prep Da	Prep Date: 8/31/2005	
Client ID:		Run ID:	ELMO_050904A)4A		SeqNo:	395741	=			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	75.98	10	100	0	76.0	1	123	73.26	3.65	30.5	
4-Chioro-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-Dinitrotaluene	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	1.84	30.3	
4-Nitrophenol	87.86	50	200	0	43.9	12,5	87.4	88.14	0.318	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	SW7470	Units: mg/L		Analysis	Date: 9/7/2005	005	Prep Da	Prep Date: 9/7/2005	
Client ID:		Run ID:	MI-LA254_050907A	0907A		SeqNo:	396457	7			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005182	0.0002	0.005	0	104	75.2	134	0	:		
Sample ID: LCSD-8699	Batch ID: 8699	Test Code: SW7470	SW7470	Units: mg/L		Analysis	Analysis Date: 9/7/2005	005	Prep Da	Prep Date: 9/7/2005	
Client ID:		Run ID:	MI-LA254_050907A	0907A		SeqNo:	396471				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005394	0.0002	0.005	0	108	75.2	134	0.005182	4.01	0	

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

Project: Work Order: 0508345 AL-2 to EP-1 Week of 8-29-05 Laboratory Control Spike Duplicate

CLIENT:

Giant Refining Co

Sample ID: LCSD	Batch ID: R16572	Test Code: SW6010A	SW6010A	Units: mg/L			5 Date: 9/7/2	ysis Date: 9/7/2005 3:27:33 PM	Prep Date:	ē	
Client ID:		Run ID:	ICP_050907A			SeqNo:	396487	37			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	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	8.28	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	

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

Project: Work Order: CLIENT: 0508345 AL-2 to EP-1 Week of 8-29-05 Giant Refining Co Laboratory Control Spike - generic QC SUMMARY REPORT

Sample ID: LCS Client ID:	Balch ID: R16572	Test Cade: SW6010A Run ID: ICP_0509	SW6010A ICP_050907A	Units: mg/L		Analysis SeqNo:	Date: 9/7/200 396488	sis Date: 9/7/2005 3:30:12 PM lo: 396488	Prep Date:
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LawLimit	HighLimit	HighLimit RPD Ref Val	%RPD RPDLimit Qual
Antimony	0.4598	0.01	0.5	0	92.0	80	120		
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	0.4729	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	

J - Analyte detected below quantilation limits

S - Spike Recovery outside accepted recovery limits

Laboratory Control Spike - generic QC SUMMARY REPORT

CLIENT:
Work Order:
Project:

0508345

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

Giant Refining Co

Sample ID: LCS-8667 Client ID:	Batch ID: 8667	Test Code: Run ID:	Test Code: SW6010A Run ID: ICP_050907A	Units: mg/L		Analysis SeqNo:	Date: 9/7/200 396480	ysis Date: 9/7/2005 3:21:13 PM No: 396480	Prep Da	Prep Date: 9/2/2005	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	RPOLimit	Qual
Anlimony	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	<u>1</u>	80	120	0			
Copper	0.5189	0.006	0.5	0	1 2	80	120	0			
Lead	0.5083	0.005	0.5	0	102	80	120	0			
Nickei	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			

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Laboratory Control Spike Duplicate

Work Order: CLIENT: 0508345 Giant Refining Co Ģ

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

-1 Week of 8-29-05								١.	
Batch ID: 8667	Test Code:	SW6010A	Units: mg/L		Analysis I	Date: 9/7/2)05 3:23:47 PM	Prep Date: 9/2/2005	e: 9/2/2005
			•						
	Run ID:	Run ID: ICP_050907/			SeqNo:	396481	-		
	-1 Week of 8-29-05 Batch ID: 8667	-29-05		-1 Week of 8-29-05 Batch ID: 8667 Test Code: SW6010A Units: mg/L	Test Code: SW6010A	Test Code: SW6010A Units: mg/L	Test Code: SW6010A Units: mg/L	Test Code: SW6010A Units: mg/L Analysis Date: 9/7/200	Test Code: SW6010A Units: mg/L Analysis Date: 9/7/2005 3:23:47 PM

Sample ID: LCSD-8667	Batch ID: 8667	Test Code: SW6010A	SW6010A	Units: mg/L		Analysis	Date: 9/7/2	ysis Date: 9/7/2005 3:23:47 PM	Prep Da	Prep Date: 9/2/2005	
Client ID:		Run ID:	ICP_050907A			SeqNo:	396481	_			
Analyte	Result	PQL	SPK value	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	0.5079	0.01	0.5		102	80	120	0.5224	2.81	20	
Arsenic	0.5145	0.02	0.5	0	103	80	120	0.5295	2.87	20	
3ervllium	0.5182	0.003	0.5	0	<u>1</u> 2	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	
_ead	0.5027	0.005	0.5	0	101	80	120	0.5083	1.11	20	
Vickel	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	88	120	0.5234	0.435	20	
Zinc	0.4922	0.05	0.5	0	98.4	80	120	0.5017	1.92	20	

2										•	93)							
Date:											30/05	Date	Fax #:	Phone #:			9	Addréss:	Small	W. Gient:	CHA	
Time:											1100	Time	50	305			elle	of the state of th	any	(A)	N-OF	
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Relinquished By: (Signature)											AL-22EH	Sample I.D. No.	22 0210	722 3833			M 8730.	8 8x7	1	Climo	CHAIN-OF-COSTODY RECORD	
no											P_])/				RO	
Receiv Receiv												Number/Volume	Sample Temperature:	Sampler:	A.	Project Manager:		Project #:	Week	Project Name:	Other:	
Received By: (Signature))										Preservative HgCl ₂ HNO ₃	ature:	Relie	10 T	er:		•	30	ALL		QA / QC Package: Std Level 4
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Rem												BTEX + N	ATBE -	- TMI	3's (80	21)					L	
Remarks:												BTEX + N	ITBE -	- TPH	(Gasoli	ne Or	nly)				. –	
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Sample Receipt Checklist

Client Name GIANTREFIN			Date and Time	Received:	8/31/2005
Work Order Number 0508345	\wedge		Received by	AT	
Checklist completed by Signature	han	Date	813	1105	
Matrix	Carrier name	Client drop-off			
Shipping container/cooler in good condition?		Yes 🔽	No 🗆	Not Present	
Custody seals intact on shipping container/cooler?		Yes 🗌	No 🗌	Not Present	Not Shipped 🗹
Custody seals intact on sample bottles?		Yes 🗌	No 🗹	N/A	
Chain of custody present?		Yes 🗹	No 🗌		
Chain of custody signed when relinquished and rec	eived?	Yes 🗹	No 🗆		
Chain of custody agrees with sample labels?		Yes 🗹	No 🗆		
Samples in proper container/bottle?		Yes 🗹	No 🗌		
Sample containers intact?		Yes 🗹	No 🗆		
Sufficient sample volume for indicated test?		Yes 🗹	No 🗆		
All samples received within holding time?		Yes 🗹	No 🗆		
Water - VOA vials have zero headspace?	No VOA vials submi	tted 🗌	Yes 🗹	No 🗆	
Water - pH acceptable upon receipt?		Yes 🗹	No 🗆	N/A	
Container/Temp Blank temperature? COMMENTS:		=	4° C ± 2 Accepta If given sufficient		
	ate contacted:		Pers	on contacted	
Contacted by:	egarding				
Comments: Pur Sn to F	1 Cha PL Tota	nge I & l	RCACA USSULVED	8 TO/20	1 Dissolved
4 Prop nam	10 /00	n A	-1 -to	A-2	JAT 9/1/65
Corrective Action					



COVER LETTER

August 31, 2005

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-025

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,

Andy Freeman, Business Manager Nancy McDuffie, Laboratory Manager



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 Q	ual Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES S	HORT LIST				Analyst: BDI
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: SEMIVOLAT	ILES				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/Ľ	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

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

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 L	Inits	DF	Date Analyzed
Dibenzofuran	ND	50	μ	g/L	1	8/29/2005
1,2-Dichlorobenzene	ND	50	μ	g/L	1	8/29/2005
1,3-Dichlorobenzene	ND	50	ц	ıg/L	1	8/29/2005
1,4-Dichlorobenzene	ND	50	μ	ıg/L	1	8/29/2005
3,3'-Dichlorobenzidine	ND	75	μ	ıg/L	1	8/29/2005
Diethyl phthalate	ND	50	μ	ıg/L	1	8/29/2005
Dimethyl phthalate	ND	50	μ	ıg/L	1	8/29/2005
2,4-Dichlorophenol	ND	50	μ	ıg/L	1	8/29/2005
2,4-Dimethylphenol	ND	50	μ	ıg/L	1	8/29/2005
4,6-Dinitro-2-methylphenal	ND	250	μ	ıg/L	1	8/29/2005
2,4-Dinitrophenol	ND	250	μ	ıg/L	1	8/29/2005
2,4-Dinitrotoluene	ND	50	μ	ıg/L	1	8/29/2005
2,6-Dinitrololuene	ND	50	μ	ıg/L	1	8/29/2005
Fluoranthene	ND	50	μ	ıg/L	1	8/29/2005
Fluorene	170	50	ц	ıg/L	1	8/29/2005
Hexachlorobenzene	ND	50	μ	ıg/L	1	8/29/2005
Hexachlorobutadiene	ND	50	μ	ıg/L	1	8/29/2005
Hexachlorocyclopentadiene	ND	50	μ	ıg/L	1	8/29/2005
Hexachloroethane	ND	50	μ	ıg/L	. 1	8/29/2005
Indeno(1,2,3-cd)pyrene	ND	50	μ	ıg/L	1	8/29/2005
Isophorone	ND	50	μ	ıg/L	1	8/29/2005
2-Methylnaphthalene	ND	50	μ	ıg/L	1	8/29/2005
2-Methylphenol	ND	75	μ	ıg/L	1	8/29/2005
3+4-Methylphenol	ND	50	μ	ıg/L	1	8/29/2005
N-Nitrosodi-n-propylamine	ND	50	μ	ıg/L	1	8/29/2005
N-Nitrosodimethylamine	ND	50	μ	ıg/L	1	8/29/2005
N-Nitrosodiphenylamine	ND	50	μ	ıg/L	1	8/29/2005
Naphthalene	ND	50	μ	ıg/L	1	8/29/2005
2-Nitroaniline	ND	250	-	ıg/L	1	8/29/2005
3-Nitroaniline	ND	250	μ	ıg/L	1	8/29/2005
4-Nitroaniline	ND	100	μ	ıg/L	1	8/29/2005
Nitrobenzene	ND	50	μ	ıg/L	1	8/29/2005
2-Nitrophenol	ND	75	μ	ıg/L	1	8/29/2005
4-Nilrophenol	ND	250	μ	Jg/L	1	8/29/2005
Pentachlorophenol	ND	250	•	ıg/L	1	8/29/2005
Phenanthrene	170	50	μ	.g/L	1	8/29/2005
Phenol	ND	50	μ	.g/L	1	8/29/2005
Pyrene	ND	75	F	ıg/L	1	8/29/2005
Pyridine	ND	150	•	ug/L	1	8/29/2005
1,2,4-Trichlorobenzene	ND	50	ŀ	ug/L	1	8/29/2005
2,4,5-Trichlorophenal	ND	50	•	ug/L	1	8/29/2005
2,4,6-Trichlorophenol	ND	75	4	ug/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

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 Qu	al 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
EPA METHOD 6010C: DISSOLVED N	IETALS				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

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Date: 31-,411g-05

Method Blank

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory

Giant Refining Co CLIENT:

0508271 Work Order:

Project:

Aeration Lagoon 2 Outlet to Evap Pond 1

Sample ID 5ml rb	Batch ID: R16479	Test Code:	Test Code: SW8260B	Units: pg/L		Analysis	Analysis Date 8/30/2005	Prep Date	ate	
Cllent ID;		Run ID:	THOR_050830A	PQ.		SeqNo:	393534			
Analyte	Result	Pol	SPK value	SPK value SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	%RPD	RPOLimít	Qual
Benzene	ON		• ·	•						
Toluene	QN	-								
Ethylbenzene	QV	_								
Methyl tert-butyl ether (MTBE)	ON.	-								
1,2,4-Trimethylbenzene	2	-								
1,3,5-Trimethylbenzene	2	-								
Xylenes, Total	2	•								
Surr: 1,2-Dichloroethane-d4	8.834	Ф	유	0	88.3	85.3	113 0			
Surr: 4-Bromofluorobenzene	11.07	O.	10	0	111	86.1	121 0			
Surr: Dibromofluoromethane	8.58	0	10	Đ	82.8	80.4	115 0			
Surr: Toluene-d8	10.79	0	10	0	108	84.7	111 0			

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

Qualifiers:

B - Analyte detected in the associated Method Blank S - Spike Recovery outside accepted recovery limits

Method Blank

Aeration Lagoon 2 Outlet to Evap Pond 1 0508271 Work Order: Project:

CLIENT; Giant Refining Co Giant Refining Co

Sample ID MB-8527	Batch ID: 8627	Test Cade:	Fest Code: SW8270C	Units: µg/L	Anal	Analysis Date 8/29/2005	8/29/2005	Prep D	Prep Date 8/26/2005	ñ
Client ID:		Run 10:	ELMO_050829A	19A	SeqNo:		393749			
Analyte	Result	PaL	SPK value	SPK Ref Val %REC		nt HighL	LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	QX	5								
Acenaphthylene	Q	40								
Aniline	QN	0								
Anthracene	P	10								
Azobenzene	Q	10								
Benz(a)anthracene	2	15								
Benzo(a)pyrene	R	10								
Benzo(b)fluoranthene	Q	10								
Benzo(g,h,i)perylene	2	10								
Benza(k)fluoranthene	Q	5								
Benzoic acid	R	50								
Benzył alcohoł	2	20								
Bis(2-chloroethoxy)methane	2	10								
Bis(2-chloroethyl)ether	Q	15								
Bis(2-chloroisopropyl)ether	Q	15								
Bis(2-ethylhexyl)phthalate	2	15								
4-Bromophenyl phenyl ether	Q	10								
Butyl benzyl phthalate	2	15								
Carbazole	2	5								
4-Chloro-3-methylphenol	2	20								
4-Chloroaniline	2	20								
2-Chloronaphthatene	9	01								
2-Chlorophenol	2	5								
4-Chlorophenyl phenyl ether	2	t								
Chrysene	g	15								
Di-n-butyl phthalate	Q	5								
Di-n-octyl phthalate	S	ਨ								
Dibenz(a,h)anthracene	Q.	5								
Qualifiers: ND - Not Det	ND - Not Detected at the Reporting Limit	•	S - Spi	S - Spike Recovery outside accepted recovery limits	recovery lim	ឡ	B - Analyte detected in the associated Method Blunk	in the associ	ated Method F	1 1 1
	J - Analyte detected helow ovantitation limits	<u>:</u> :	4 8	atimit granner betrane abjects OR B. 8	, ajte	!				4 ,
•		!	:	fix and markers and a	1					N 1

Particularious ND 10 Benzene ND 10 Annotere ND 10 Annotere ND 10 Annotere ND 10 Annotere ND 10 Anthalene ND 10 Annotered ND 10 Annotered ND 10 Annotered ND 10	CLIENT:	Giant Refining Co		OC STIMMARY REPORT
Project: Acration Lagoon 2 Outlet to Evap Pond 1 Defections ND 10 1.5-Dictionberrane ND 10 1.5-Dictionberrance ND 10 1.5-Dictionberrance ND 10 2.4-Dictionberrance ND 10 2.4-Dictionberrance ND 10 2.4-Dictionberrance ND 10 1.4-Dictionberrance ND 10 2.4-Dictionberrance ND 10 1.4-Dictionberrance ND 10 2.4-Dictionberrance ND 10 1-A-Dictionberrance ND 10 1-A-Dictionbera	Work Order:	0508271		The Delivery Transport
Dibenzofuran ND 10 10 12-Dichochenzene ND 10 10 10 12-Dichochenzene ND 10 10 10 10 10 10 10 1	Project:	Aeration Lagoon 2 Outlet to Evap Po	nd 1	Memod Blank
1,2-Dichicobenzene ND 10 1,2-Dichicobenzene ND 10 1,3-Dichicobenzene ND 10 1,4-Dichicobenzene ND 10 1,4-Dichicobenzene ND 10 Dilenty phribaside ND 10 Dilenty phribaside ND 10 2,4-Dichicobene ND 10 Hexachicoberace ND 10 2-Additione ND 10	Dibenzofuran	ND	10	
1.3-Ochtonoberraene ND 10 1.4. Ochtonoberraene ND 10 3.3 - Oldiocoberalene ND 10 3.4 - Oldiocoberalene ND 10 Dientity phthelate ND 10 2.4 - Directorophenol ND 10 2.4 - Directorophenol ND 10 3.5 - Chincolouene ND 10 2.4 - Directorophenol ND 10 3.5 - Chincolouene ND 10 3.6 - Chincolouene ND 10 4.5 - Directorophenol ND 10 A.4 - Directorophenol ND 10 1.5 - Chincolouene ND 10 2.4 - Directorophenol ND 10 1.5 - Chincolouene ND 10 1.6 - Hazachlorophenol ND 10 2.4 - Methylphalmene ND 10	1,2-Dichiorobenze		10	
1,4-Dichlorobenzeine ND 10 Direntity ohtbraide ND 10 Direntity ohtbraide ND 10 Direntity ohtbraide ND 10 2,4-Dichophenol ND 10 2,4-Dichophenol ND 10 4,5-Dichophenol ND 10 2,4-Dichophenol ND 10	1,3-Dichlorobenze		10	
3.3Dichlorobenzilline ND 15 Diletty phthalate ND 10 Dinetty phthalate ND 10 2.4-Direthorophenol ND 10 2.4-Direthorophenol ND 50 2.4-Diretophenol ND 10 2.4-Diretophenol ND 10 2.4-Diretophenol ND 10 2.4-Diretophenol ND 10 1.0-Draintophenol ND	1,4-Dichlorobenze		10	
Deliny phthalate ND 10 Dimethy phthalate ND 10 2.4-Dimethy phtenol ND 10 4.5-Dimethy phenol ND 10 4.5-Dimitor2-methy phenol ND 10 4.5-Divitorbene ND 10 2.4-Divitorbenel ND 10 2.4-Divitorbenel ND 10 Haxachlorobenzene ND 10 Haxachlorobenzene ND 10 Haxachloropelogonaldene ND 10 Sahethylpherol ND 10 <tr< td=""><td>3,3'-Dichlorabenzi</td><td></td><td>15</td><td></td></tr<>	3,3'-Dichlorabenzi		15	
Dimetry pthralate ND 10 2.4-Dictorophenol ND 10 2.4-Dictorophenol ND 50 2.4-Dictorophenol ND 50 2.4-Dictorophenol ND 10 2.4-Dictorophenol ND 10 2.4-Dictorophenol ND 10 2.4-Dictorophenol ND 10 Fluoranthene ND 10 Hexachlorophenoladiene ND 10 Schlerophydhenol ND 10 Anthorophenol ND 10 Anthorophydraphtralene ND 10 Anthorophenol ND 10 Anthorophydraphtra	Diethyi phthaiate	QN	10	
2.4-Dichlorophenol ND 10 2.4-Dichlorophenol ND 10 2.4-Dinitrophenol ND 50 2.4-Dinitrophenol ND 10 Househorbersene ND 10 Hexachlorobersene ND 10 Hexachlorobersene ND 10 Hexachlorobersene ND 10 Hexachloroplatidene ND 10 2-Methylphanelene ND 10 N-Nillcosodinethylamine ND 10 N-Nillcosodinethylamine ND 10 N-Nillcosodinethylamine ND 10 N-Nillcosodinethylami	Dimethyl phthalate		10	
2,4-Dirnethyphenol ND 10 2,4-Dirnethyphenol ND 50 2,4-Dirnethyphenol ND 10 2,4-Dirintrotoluene ND 10 2,4-Dirintrotoluene ND 10 Fluoranthene ND 10 Hexachlorobutadiene ND 10 Hexachloroptutadiene ND 10 NMIncacol ND 10 A-Mitrophenol ND 10 NMIncacol ND 10 NMIncacol ND 10 NMIncacol ND 10 A-Nitrophenol ND 10<	2,4-Dichloropheno		10	
4,6-Dintro-2-methylphenol ND 50 4,6-Dintro-2-methylphenol ND 50 2,4-Dintrolluene ND 10 2,6-Dintrolluene ND 10 Fluoranthene ND 10 Fluoranthene ND 10 Haxachlorobutadlene ND 10 Sphotone ND 10 2-Methylphanol ND 10 N-Milosodlmethylamine	2,4-Dimethylphent		10	
2,4-Dintrophenol ND 50 2,4-Dintrophenol ND 10 2,4-Dintrophenol ND 10 Fluoranthere ND 10 Haxachlorobradlere ND 10 Haxachloroputadlere ND 10 S-Methylopenol ND 10 2-Methylopenol ND 10 3-4-Althylopenol ND 10 N-Mitrosodinethylamine ND 10 N-Mitrosodiphenylamine ND 10 N-Mitropenol ND 20 NItropenol ND 10 A-Mitropenol ND <	4,6-Dinitro-2-meth		90	
2,4-Dinkrotoluene ND 10 2,6-Dinkrotoluene ND 10 2,6-Dinkrotoluene ND 10 Fluorenthene ND 10 Hexachloroberzene ND 10 Hexachlorobutaclene ND 10 Hexachloroputaclene ND 10 Indenot1x.3-acdipyene ND 10 Sophorone ND 10 Localitydenot ND 10 A-Mitrosodimetrydenot ND 10 N-Nitrosodimetrydamine ND 10 N-Nitrosodimetrydamine ND 10 A-Nitrosodimetrydamine ND 50 A-Nitrosodimetrydamine ND 50 A-Nitrosodimetrydamine ND 10 A-Nitrosodimetrydam	2,4-Dinitrophenol	Q	50	
2,6-Dirlivotoluene ND 10 Fluoranthene ND 10 Fluoranthene ND 10 Hexachlorobutadiene ND 10 Hexachlorobutadiene ND 10 Hexachlorobutadiene ND 10 Hexachlorobutadiene ND 10 Hexachloropydentadiene ND 10 Sophorne ND 10 Z-Methylaphenol ND 10 2-Methylaphenol ND 10 3-4-Methylaphenol ND 10 N-Nilrosodimethylamine ND 50 3-viticoaliline ND 50 3-viticoaliline ND 50 3-viticoaliline ND 50 3-viticoaliline N	2,4-Dinitrotoluene		10	
Fluorenthene ND 10 Fluorene ND 10 Haxachlorobarzene ND 10 Haxachlorobardelene ND 10 Hexachlorobardelene ND 10 Hexachloroputadiene ND 10 Hexachloroputadiene ND 10 Indenof12,3-cd/pyrene ND 10 Losphorone ND 10 2-Methylphenol ND 10 3-4-Methylphenol ND 10 3-Mitrosodir-p-propylamine ND 10 N-Nitrosodir-p-propylamine ND 10 N-Nitrosodire-thylamine ND 10 N-Nitrosodire-thylamine ND 10 N-Nitrosodire-thylamine ND 10 N-Nitrosodire-thylamine ND 10 A-Nitrosodire-thylamine ND 10 A-Nitrosodire-thylamine ND 10 A-Nitrosodire-thylamine ND 10 A-Nitrosodire-thylamine ND 10	2,6-Dinitrotaluene		10	
Fluorene ND 10 Hexachlorobrazene ND 10 Hexachlorobutadlene ND 10 Hexachlorobutadlene ND 10 Hexachloroperladiene ND 10 Indeno(1,2,3-cd)pyrene ND 10 Indeno(1,2,3-cd)pyrene ND 10 Sophorone ND 10 2-Metrylphanol ND 10 3-4-Methylphanol ND 10 N-Nitrosodimetrylamine ND 10 A-Nitrosodimetrylamine ND 10 A-Nitrosodimetrylamine ND 10 A-Nitrosodimetrylamine ND 10 A-Nitrosodimetrylamine ND 10 <t< td=""><td>Fluoranthene</td><td>Q</td><td>10</td><td></td></t<>	Fluoranthene	Q	10	
Hexachlorobenzene ND 10 Hexachlorobenzene ND 10 Hexachloroburadiene ND 10 Hexachloroburadiene ND 10 Hexachlorocoburadiene ND 10 Indenof1.23-cdjpyrene ND 10 2-Methylachenel ND 10 2-Methylphenol ND 10 3-4-Amethylphenol ND 10 N-Nitrosodline-hydamine ND 10 N-Nitrosodline-hydamine ND 10 N-Nitrosodliphenylamine ND 10 N-Nitrosodliphenylamine ND 10 N-Nitrosodliphenylamine ND 10 N-Nitrosodliphenylamine ND 10 N-Nitrosodline ND 10 A-Nitrosolline		Q	10	
Hexachlorobuladiene ND 10 Hexachlorobuladiene ND 10 Hexachlorosyclopentadiene ND 10 Indenof 1, 2, 3-cd jbyrene ND 10 Sophorone ND 10 2-Methyliphenol ND 10 3+4-Methyliphenol ND 10 N-Nitrosodi-n-propylamine ND 10 N-Nitrosodiphenylamine ND 10 N-Nitrosodiline ND 50 3-Nitrosomine ND 50 4-Nitrosomine ND 50 3-Nitrosomine ND 10 4-Nitrosomine ND 10 2-Nitrophenol ND 10 2-Nitrophenol <td></td> <td></td> <td>10</td> <td></td>			10	
cachlorocyclopentadiene ND 10 cachlorocyclopentadiene ND 10 and (1,2,3-cd)pyrene ND 10 phorone ND 10 tethylabenol ND 10 Itrapidhenol ND 10 Illrosodinethylamine ND 10 Illrosodipenylamine ND 10 Illrosodipenylamine ND 10 Illrosodipenylamine ND 10 Illrosodipenylamine ND 10 Intraline ND 10 Iltroanlline ND 50 Itroanlline ND 50 Itroanlline ND 50 Itroanline ND 10 Oberizene ND 10 Itrophenol ND 10 Itrophenol ND 10 Introducted at the Reporting Limit 8 - Spike Recovery limits Analyse detected before questioned before questioned percepted recovery limits R - RPD outside accepted recovery limits			10	
cachloroethane ND 10 eno(1,2,3-cd)pyrene ND 10 phorone ND 10 phorone ND 10 lethylaphenol ND 10 Illrosodinephraline ND 10 Illrosodihenylamine ND <td>Hexachlorocyclope</td> <td></td> <td>10</td> <td></td>	Hexachlorocyclope		10	
eno(1,2,3-cd)pyrene ND 10 phorone ND 10 lethylnaphthalene ND 10 lethylphenol ND 15 -Methylphenol ND 10 Iltrosodl-n-propylamine ND 10 Iltrosodlmethylamine ND 10 Iltrosodlphenylamine ND 10 Iltrosodlphenylamine ND 10 Iltrosodline ND 10 Iltrosodline ND 50 Itrosolline ND 50 Itrosolline ND 50 Itrosolline ND 50 Itrosolline ND 20 Oberazene ND 15 Itrophenol ND 15 Ingitiers: ND - Not Detected at the Reporting Limit R - RPD outside accepted recovery limits J - Analyze detected below quantitation limits R - RPD outside accepted recovery limits	Hexachloroethane		10	
ohorone ND 10 lethylabenal ND 10 lethylabenal ND 10 litrosodi-n-propylamine ND 10 litrosodiphenylamine ND 10 hitralene ND 10 hitralene ND 10 hitraline ND 50 itroanlline ND 50 itroanlline ND 50 itroanlline ND 50 itroanlline ND 50 itrophenol ND 10 itrophenol ND 10 itrophenol ND 10 Analyze detected at the Reporting Limits S - Spike Recovery outside accepted recovery limits J - Analyze detected below quantitation limits R - RPD outside accepted recovery limits	Indeno(1,2,3-cd)p)		10	
lethylhaphthalene ND 10 lethylphenol ND 15 -Methylphenol ND 10 -Methylphenol ND 10 Iltrosodl-n-propylamine ND 10 Iltrosodlpenylamine ND 10 hybalene ND 10 hybalene ND 50 Itroanlline ND 50 Itroanlline ND 50 Itroanlline ND 20 oberzene ND 10 Itrophenol ND 10 Analyze detected at the Reporting Limits R - RPD outside accepted recovery limits B national detected at the Reporting Limits R - RPD outside accepted recovery limits	Isophorone	QN	10	
lethylphenal ND 15 HMethylphenal ND 10 Illrosodin-propylamine ND 10 Illrosodiphenylamine ND 10 Illrosodiphenylamine ND 10 Illrosodiphenylamine ND 10 Iltroanlline ND 50 Iltroanlline ND 50 Iltroanlline ND 20 oberizene ND 10 Itrophenal 15 Itrophenal 15 Itrophenal 15 Intilifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits Intilifiers: ND - Analyze detected below quantitation limits R - RPD outside accepted recovery limits	2-Methylnaphthale		10	
Illrosodinethylamine	2-Methylphenol	QN	15	
Illrosodin-propylamine ND 10 Illrosodiphenylamine ND 10 Iltrosodiphenylamine ND 10 Iltrosodiphenylamine ND 10 Iltrosodiphenylamine ND 50 Iltroaniline ND 20 Iltroaniline ND 10 obenzene ND 10 itrophenol ND 15 itrophenol 15 Intilifers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits Intilifers: J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits	3+4-Methylphenal		10	
Illrosodimethylamine ND 10 Illrosodiphenylamine ND 10 Illrosodiphenylamine ND 10 Illrosodiphenylamine ND 50 Illroaniline ND 50 Illroaniline ND 20 Oberizene ND 10 Itrophenol ND 10 Itrophenol ND 15 Itrophenol ND 15 Itrophenol ND 15 Itrophenol ND - Not Detected at the Reporting Limit S - Spirke Recovery outside accepted recovery limits J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits	N-Nitrosodi-n-prop		10	
Altrosodiphenylamine ND 10 Authalene ND 10 Istroanline ND 50 Istroanline ND 20 Oberizene ND 10 Istrophenol ND 15 Istrophenol 15 S- Spirke Recovery outside accepted recovery limits Inalifiers: ND - Not Detected at the Reporting Limit S - Spirke Recovery outside accepted recovery limits Inalifiers: J - Analyze detected below quantitation limits R - RPD outside accepted recovery limits	N-Nitrosodimethyk		10	
Itroanline ND 10 Itroanline ND 50 Itroanline ND 20 oberazene ND 10 itrophenol ND 15 itrophenol 15 itrophenol 15 Inalifiers: ND - Not Detected at the Reporting Limit S - Spirke Recovery outside accepted recovery limits J - Analyze detected below quantitation limits R - RPD outside accepted recovery limits	N-Nitrosodiphenyla		10	
Itroanlline ND 50 Itroanlline ND 50 Itroanlline ND 20 Aberizene ND 10 Itrophenol Itrophenol Initis J - Analyte detected below quantitation limits PO 1 - Analyte detected below quantitation limits	Naphthalene	QN.	10	
Itroparilline ND 20 Itrophenol ND 10 Itrophenol ND 10 Itrophenol ND 15 Itrophenol ND NOI Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyze detected below quantitation limits R - RPD outside accepted recovery limits	2-Nitroanlline	QN	50	
Iltrophlenol ND 10 ND 10 Itrophenol ND 15 Itrophenol ND Not Detected at the Reporting Limit J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits R - RPD outside accepted recovery limits	3-Nitroanlline	Q	50	
itrophenol ND 10 ND 15 Itrophenol ND 15 Initiation ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyze detected below quantitation limits R - RPD outside accepted recovery limits B	4-Nitroaniline	CZ	20	
itrophenol ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - RPD outside accepted recovery limits A - Analyze detected below quantitation limits R - RPD outside accepted recovery limits	Nitrobenzene	QN	10	
Inlifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Spike Recovery outside accepted recovery limits J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits	2-Nitrophenol	<u>0</u>	15	
ND - Not Detected at the Reporting Limits J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits			T. Calle Description of the Control	D Anniet despetation in the second of the second of
R - RPD outside accepted recovery limits	Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spirke 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	£.

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Giant Refining Co

0508271

CLIENT: Work Order:

Project:

Aeration Lagoon 2 Outlet to Evap Pond 1

Method Blank

4-Nitrophenol Pentachlorophenol Phenanthrene Phenol Pyrene	QN	50							
Pentachlorophenol Phenanthrene Phenol Pyrene Pyridine									
Phenanthrene Phenol Pyrene Pyridine	Q	20							
Phenal Pyrene Pyridine	2	10		,					
Pyrene Pyridine	2	10		N N N N	1				
Pyridine	2	15	71110	こうなでのからんら					
	2	(<u>e</u>)							
1,2,4-Trichlorobenzene	S	<u>)</u> 2							
2,4,5-Trichlorophenol	2	10							
2,4,6-Trichlorophenol	ğ	15							
Surr: 2,4,6-Tribromophenol	160.7	ò	200	0	80.4	16.6	150	0	
Surr: 2-Fluorobiphenyl	64.18	0	100	0	64.2	19.6	134	0	
Surr: 2-Fluorophenol	129.9	o	200	O	65.0	9.54	113	0	
Surr: 4-Terphenyl-d14	90.44	0	100	O.	90.4	22.7	145	0	
Surr: Nitrobenzene-d5	77.68	0	100	O	77.77	14.6	134	0	
Surr: Phenol-d6	88.46	0	200	0	44.2	10.7	80.3	0	
Sample ID MB-8650 Batch ID: 8650	8650	Test Code: SW7470	W7470	Units: mg/L		Analysis D	Analysis Date 8/31/2005		Prep Date 8/31/2005
Cilent ID:		Run ID: N	Run ID: MI-LA254_050831A	1831A		SeqNo:	394015		

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

Qual

%RPD RPDLimit

"REC LowLimit HighLimit RPD Ref Val

SPK value SPK Ref Val

PQL 0.0002

Result

Analyte Mercury

Method Blank

Work Order: 0508271 .
Project: Aeration Lagoon 2 Outlet to Evap Pond 1

CLIENT: Giant Refining Co

Sample ID MB	Batch ID; R16494	Test Code: SW6010A	SW6010A Units: mg/L	Anatysi	Analysis Date 8/31/2005 11:59:16 AM	Prep Date	
Client ID:		Run ID:	ICP_050831C	SeqNo:	393997		
Analyte	Result	Pal	SPK value SPK Ref Val	%REC LowLimit	HighLimit RPD Ref Val	%RPD RPDLimit	Qual
Aluminum	0.02866	0.02					
Antimony	QN	0.01					
Arsenic	ON	0.05					
Barium	0.001033	0.02					~
Beryllium	0.0006694	0.003					7
Boron	QN	0.04					
Cadmlum	ON	0.002					
Calcium	0.5903	-					_
Chramium	ON	0.006					
∞ Cobalt	QV	0.006					
Copper 1	QN	0.006					
Iron	0.02793	0.02					
Lead	ON	0.005					
Magnesium	0.1778	-					7
Manganese	0.001599	0.002					7
Molybdenum	0.000748	0.008					7
Nickel	0.001105	0.01					7
Potassium	0.3436	-					_
Selenium	QN	0.02					
Silican	QN	0.8					
Silver	QN	0.005					
Sodium	0.343	-					۰,
Strontium	ON	0.006					
Thallium	Q	0.01					
TI	QN	0.02					
Tltanium	0.0007024	0.005					
Uranium	QN	0.1					
Vanadium	N	0.05					
: : : : : : : : : : : : : : : : : : : :	And the second s						
Qualifiers:	ND - Not Detected at the Reporting Limit		S - Spike Recovery outside accepted recovery limits	e accepted recovery limits	B - Analyte detected in	B - Analyte detected in the associated Method Blank	ank
				•			

R - RPD outside accepted recovery limits

J - Analyte detected below quantitation limits

Method Blank

Work Order: 0508271

Project: Aeration Lagoon 2 Outlet to Evap Pond 1

Giant Refining Co

CLIENT:

Run ID: Result PGL ND 0.02 ND 0.02 ND 0.003 ND 0.003 ND 0.003 ND 0.006	SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Result POL ND 0.02 ND 0.003 ND 0.003 ND 0.003 ND 0.003 ND 0.006 ND 0.007 ND 0.008 ND 0.006	SPK Ref Val	RPDLimit
ON O		
A COO OCCUPAGE OCCUPA		
A CO		
ON O		
00 00 00 00 00 00 00 00 00 00 00 00 00		
00 00 00 00 00 00 00 00 00 00 00 00 00		
ON O		
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0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
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Se 0.001988 ND N		
se 0.001988 ND		
00 00 0.0005273 0.000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		ח
DN ND ND ND ND ND ND ND		
0.0006273 ND ND N		
DN 0.0008273 ND ON ON ON		
0.0006273 ND ND ND ND		
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ON ON O		
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Q.		
QN		

B - Analyte detected in the associated Method Blank

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

Qualifiers:

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Date: 31-Aug-05

	Selenium	Lead	Chromium	/ Cadmium ND	Barium	Arsenic	Analyte Result	Client ID: AL-2 to EP-1	Sample ID 0508271-01D DUP Batch ID: R16494	Mercury 0.001289	Analyte Result	Client ID: AL-2 to EP-1	Sample ID 0508271-01C DUP Batch ID: 8650	Project: Aeration Lagoon 2 Outlet to Evap Pond 1	Work Order: 0508271	CLIENT: Giant Refining Co
0 00%	0.02	0.005			0.02	0.02	PQL	Run ID:	Test Code	0.0002	PQL	Run ID:	Test Code	vap Pond 1		
5	0	0	0	0	0	0	SPK value	ICP_050831C	Test Code: SW6010A	0	SPK value SPK Ref Val	MI-LA254_050831A	Test Code: SW7470			
.	0	0	0	0	0	0	SPK Ref Val		Units: mg/L	0	SPK Ref Val	831A	Units: mg/L			
D :	0	Q	0	0	0	0	%REC			0	%REC					
.	0	0	0	0	0	0	LowLimit	SeqNo:	Analysis	o	LowLimit	SeqNo:	Analysis			
ייב	0	0	0	0	0	0	LowLimit HighLimit RPD Ref Val	394004	Date 8/31/2	0	HighLimit I	394018	Analysis Date 8/31/2005			
> (0	0	0.002768	0	0.1758	0	२PD Ref Val	**	Analysis Date 8/31/2005 12:30:26 PM	0.001294	LowLimit HighLimit RPD Ref Val	3	005		1	OC SUMMARY REPORT
- •	0	0	0	0	0.151	0	%RPD		Prep Date	0.383	%RPD		Prep Da	Sai	2	IMAR
3 0	30	30	30	30	30	30	%RPD RPDLimit	,	ite	20	RPDLimit Qual		Prep Date 8/31/2005	Sample Duplicate		YREP
			<u>د</u>				Qual				Qual		35	HICALE	1	ORT

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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CLIENT: Giant Refining Co Work Order: 0508271

Aeration Lagoon 2 Outlet to Evap Pond 1

Project:

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Sample Matrix Spike

QC SUMMARY REPORT

Sample 10 0508271-01C MS	Batch ID: 8650	Test Code	Fest Code: SW7470	Units: ma/L		Analysis	Analysis Date 8/31/2005	105	Prep Da	Prep Date 8/31/2005	
Client ID: AL-2 to EP-1		Run ID:	MI-LA254_050831A	0831A		SeqNo:	394019		-		
Analyte	Result	Pal		SPK value SPK Ref Val	%REC	LowLimit	%REC LowLimit HighLimit RPD Ref Val	PD Ref Val	%RPD	%RPD RPDLimit	Qual
Mercury	0.005086	0.0002	0.005	0.001294	75.8	75.2	134				
Sample ID 0508271-01C MSD Batch ID: 8650	Batch ID: 8650	Test Cade:	SW7470	est Code: SW7470 Units: mg/L		Analysis	Analysis Date 8/31/2005	105	Prep Da	Prep Date 8/31/2005	
Client ID: AL-2 to EP-1		Run ID:	MI-LA254_050831A	0831A		SeqNo:	394020				
Analyte	Result	Pal	SPK value	SPK value SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	PD Ref Val	%RPD	RPDLImit	Qual
Mercury	0.005127	0.0002	0.005	0.001294	76.7	75.2	134	0.005086	0.790	50	

B - Analyte detected in the associated Method Blank

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

Qualifiers:

R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits

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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

B - Analyte detected in the associated Method Blank

R - RPD outside accepted recovery limits

Hall Environmental Analysis Laboratory
Date: 31-Aug-05

CLIENT: Project: Work Order: 0508271 Giant Refining Co Aeration Lagoon 2 Outlet to Evap Pond 1 Laboratory Control Spike - generic QC SUMMARY REPORT

Sample ID: 100ng lcs	Batch ID: R16479	Test Code: SW8260B	SW8260B	Units: µg/L		Analysis	Date: 8/30/2005	2005	Prep Date:	ite:	
Client ID:		Run ID:	THOR_050830A	0A		SeqNo:	393535	C t			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.58	1	20	0	97.9	80	130	a			
Toluene	19.36	_	20	0	96.8	77	121	0			
Sample ID: 100ng lcsd	Batch ID: R16479	Test Code: SW8260B	SW8260B	Units: µg/L		Analysis	Date: 8/30/2005	2005	Prep Date:	ıte:	
Client ID:		Run ID:	THOR_050830A	0A		SeqNo:	393536	o o			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	%RPD RPDLimit	Qual
Benzene	19.85	_	20	0	99.3	88	130	19.58	1.37	5	
Toluene	17.85	-	20	0	89.3	77	121	19.36	8.07	14	
Sample ID: LCS-8627	Batch ID: 8627	Test Code: SW8270C	SW8270C	Units: µg/L		Analysis	Analysis Date: 8/29/2005	2005	Prep Da	Prep Date: 8/26/2005	5
Client ID:		Run ID:	ELMO_050829A	9A		SeqNo:	393751				
Analyle	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	68,44	10	100	0	68.4	=	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-Dichforobenzene	53.68	10	100	0	53.7	16.9	1 8	0			
2,4-Dinitrotoluene	67.8	10	100	0	67.B	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			

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Aeration Lagoon 2 Outlet to Evap Pond 1

Giant Refining Co

0508271

CLIENT: Work Order:

Project:

Laboratory Control Spike Duplicate

Sample ID: LCSD-8627	Batch ID: 8627	Test Code	Test Code: SW8270C	Units: µg/L		Analysis	Analysis Date: 8/29/2005	2005	Prep Da	Prep Date: 8/26/2005	
Client ID:		Run ID:	ELMO_050829A	79 A		SeqNo:	393753	33			
Analyte	Result	Pol	SPK value	SPK Ref Val	"REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPOLimit	Quai
Acenaphthene	67.48	10	100	· •	67.5	F	123	68.44	1.41	30.5	
4-Chlaro-3-methylphenol	133.1	20	200	0	9.99	15.4	119	135.8	2.01	28.6	
2-Chlorophenal	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	한	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	7.67	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	SW7470	Units: mg/L		Analysis	Analysis Date: 8/31/2005	2005	Prep Da	Prep Date: 8/31/2005	
Cllent ID:		Run ID:	MI-LA254_050831A	0831A		SeqNo:	394016	9			
Analyte	Result	Pal	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			
Sample ID: LCSD-8650	Batch ID: 8650	Test Code: SW7470	SW7470	Units: mg/L		Analysis	Analysis Date: 8/31/2005	2005	Prep Dz	Prep Date: 8/31/2005	
Client ID:		Run ID:	MI-LA254_050831A	0831A		SeqNo:	394021	E			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.00498	0.0002	0.005	0	93.6	75.2	134	0.005142	3.19	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

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CLIENT: Giant Refining Co
Work Order: 0508271

Project:

Aeration Lagoon 2 Outlet to Evap Pond 1

Laboratory Control Spike - generic

سا			•	I amount limit		3	•		
B - Analyte detected in the associated Method Blank	B - Analyte detected in		overy limits	ie accepted rec	S - Spike Recovery outside accepted recovery lim	S - Spi		ND - Not Detected at the Reporting Limit	Qualifiers:
		:	:	:					
	0	¢	0	0	0	5.42	0.8	ND	Silica
	. 0	130	70	98.9	0	100	0	98.85	Yttrium Radial
	. 0	130	70	92.1	0	100	0	92.07	Yttrium
	0	120	80	105	0	0.5	0.05	0.5256	Zinc
	0	120	80	106	0	0.5	0.05	0.5296	Vanadium
	. 0	120	80	103	0.0007024	0.5	0.005	0.5161	Titanium
	0	120	80	108	0	0.5	0.01	0.5378	Thallium
	0	120	80	119	0.343	50.5		60.22	Sodium
	0	120	80	102	0	0.5	0.005	0.5115	Silver
	0	120	80	101	0	2,5	0.8	2.531	Silicon
	¢	120	80	105	0	0.5	0.02	0.5256	Selenium
	O	120	80	106	0.3436	55		58.82	Potassium
	0	120	80	101	0.001105	0.5	0.01	0.5076	Nickel
	0	120	80	106	0.000748	0.5	0.008	0.5323	Molybdenum
	. 0	120	80	98.0	0.001599	0.5	0.002	0.4918	Manganese
	. 0	120	80	110	. 0.1778	50.5	_	55.61	Magnesium
	0	120	80	104	0	0.5	0.005	0.5179	Lead
	c	120	80	109	0	0.5	0.006	0.5458	Copper
		120	80	117	0	0.5	0.006	0.5875	Cobalt
	, ,	120	80	107	0	0.5	0.006	0.5369	Chromium
		120	80	108	0.5903	50.5	_	55.1	Calcium
		120	80	107	0	0.5	0.002	0.5373	Cadmium
) C	120	80	110	0	0.5	0.04	0.5483	Вогол
		120	80	104	0.0006694	0.5	0.003	0.5206	Beryllium
	. 0	120	80	106	0.001033	0.5	0.02	0.5312	Barium
	0	120	80	108	0	0.5	0.02	0.5393	Arsenic
	0	120	80	110	0	0.5	0.01	0.5519	Antimony
%RPD RPDLimit Qual	HighLimit RPD Ref Val	HighLimit	LowLimit	%REC	SPK Ref Val	SPK value	PQL	Result	Analyte
	83	393998	SeqNo:			ICP_050831C	Run ID:		Client ID:
Tieb Cate.	ysis Date: 6/3//2009 (2:02:10 FM	Date: 8/31/2	Analysis		Units: mg/L	SW6010A	Test Code: SW6010A	Batch ID: R16494	Sample ID: LCS

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Laboratory Control Spike Duplicate

Aeration Lagoon 2 Outlet to Evap Pond 1 0508271 Work Order: Project:

Giant Refining Co

CLIENT:

Sample ID: LCSD	Batch ID: R16494	Test Code	est Code: SW6010A	Units: mg/L		Analysis	Date: 8/31/	Analysis Date: 8/31/2005 12:08:55 PM	Prep Date:	:e:	
Ollent ID:		Run ID:	ICP_050831C			SeqNo:	394000	00			
Analyte	Result	Pol	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	0.5194	0.002	0.5	0	104	80	120	0.5373	3.39	20	
Calcium	53.29	-	50.5	0.5903	104	8	120	55.1	3,35	20	
Chromium	0.519	0.006	0.5	0	104	88	120	0.5369	3.40	20	
Cobalt	0.563	0.006	0.5	0	113	88	120	0.5875	4.25	20	
Copper	0.5246	0.006	0.5	0	105	88	120	0.5458	3.96	20	
Lead	0.4988	0.005	0,5	0	93.8	80	120	0.5179	3.74	20	
Magnesium	54.07	-	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	8	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	Ψ-	55	0.3436	103	89	120	58.82	2.97	20	
Sefenium	0.4944	0.02	0.5	0	98.9	80	120	0.5256	6,12	20	
Silicon	2.461	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	-	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	0.5064	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	
r'ttrium Radial	98.78	0	100	0	98'8	70	130	98.85	0.0761	20	
Silica	S	C	5 42	-	_	C	<	c	•	ć	

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

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

61/21 Silica Zinc Thallium Sodium Silver ron Copper Cobalt Vanadium Lead Barium Analyte Potassium Manganese Magnesium Chromium Beryllium Project: Titanium Selenium Nickel Molybdenum Calcium Cadmium Boron Arsenic Antimony Aluminum Client ID: Sample ID: LCS-8633 Aeration Lagoon 2 Outlet to Evap Pond 1 Batch ID: 8633 0.4798 0.4814 0.4783 0.4629 0.4589 0.4815 0.4961 0.4783 0.4481 0.46560.4609 0.5164 0.4721 0.4772 0.5043 0.4744 0.4883 0.4934 0.5101 54.98 54.17 51.53 51.31 Result Run ID: Test Code: SW6010A 0.005 0.005 0.008 0.002 0.005 0.006 0.006 0.006 0.002 0.003 0.05 0.01 0.05 0.05 0.04 0.02 PD 0.01 ICP_050831C SPK value SPK Ref Val 5.0 0.5 0.5 0.5 0.5 0.5 0.5 0.5 5.0 5.0 0.5 Units: mg/L 0.0006273 0.001988 %REC 92.6 95.5 93.1 95.7 91.8 96.3 89.2 103 92.2 99.2 103 94.4 95.4 94.9 108 98.7 103 흐 LowLimit HighLimit RPD Ref Val Analysis Date: 8/31/2005 11:12:29 AM SeqNo: 80 80 80 80 80 80 80 80 80 80 80 80 8 393981 120 120 120 120 120 120 120 120 120 Prep Date: 8/29/2005 %RPD RPDLimit

Qualifiers:

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

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

R - RPD outside accepted recovery limits

CLIENT:

Work Order:

0508271

Giant Refining Co

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QC SUMMARY REPORT Laboratory Control Spike - generic

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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	Test Code: SW6010A	Units: mg/L		Analysis	5 Date: 8/31	Analysis Date: 8/31/2005 11:14:54 AM	Prep D	Prep Date: 8/29/2005	
Client ID:		Run ID:	ICP_050831C			SeqNo:	393982	82			
Analyte	Result	Pol	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aluminum	0.4893	0.02	0.5	0	97.9	8	120	0.4826	1.39	50	
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	8	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	8	120	0.5043	3.33	20	
Cadmium	0,4871	0.002	0.5	0	97.4	88	120	0.4772	2.05	20	
Calcium	57.98	-	50	0	116	80	120	51.31	12.2	20	
Chromium	0.4805	0.006	0.5	0	96.1	89	120	0.4721	1.75	20	
Cobalt	0.5246	0.006	0.5	0	105	8	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	-	20	0	117	80	120	51.53	12.3	20	
Manganese	0.4564	0.002	0.5	0.001988	90.9	8	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	8	120	0.4629	2.91	20	
Silver	0.4872	0.005	0.5	0.0006273	97.3	ස	120	0.4783	1.85	20	
Thallium	0.4944	0.01	0.5	0	98.9	89	120	0.4783	3.32	20	
Titanium	0.4887	0.005	0.5	0	7.76	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	5	

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

Sample Receipt Checklist

Client Name GIANTREFIN			Date and Time	Received:	8/24/2005
Work Order Number 0508271	•		Received by	AT	
Checklist completed by Signature	gre	Date	7-24-0	5	
Matrix	Carrier name	Client drop-c	<u>it</u>		
Shipping container/cooler in good condition?		Yes 🗹	No 🗆	Not Present	
Custody seals intact on shipping container/cooler?	•	Yes 🗌	No 🗌	Not Present	Not Shipped
Custody seals intact on sample bottles?		Yes 🔽	No 🗆	N/A	
Chain of custody present?		Yes 🔽	No 🗆		
Chain of custody signed when relinquished and re	ceived?	Yes 🗹	No 🗆		
Chain of custody agrees with sample labels?		Yes 🗹	No 🗀		
Samples in proper container/bottle?		Yes 🗹	No 🗆		
Sample containers intact?		Yes 🗹	No 🗆		
Sufficient sample volume for indicated test?		Yes 🗹	No 🗆		
All samples received within holding time?		Yes 🗹	No 🗆		
Water - VOA vials have zero headspace?	No VOA vials sub	mitted 🗌	Yes 🗹	No 🗆	
Water - pH acceptable upon receipt?		Yes 🗹	No 🗆	N/A □	
Container/Temp Blank temperature?		6°	4° C ± 2 Accepta		
COMMENTS:					
=======================================	=====				
Client contacted	Date contacted:		Pers	on contacted	
Contacted by:	Regarding				
Comments:					

Corrective Action					
				-	
					/

Date: Time: Relinquished By: (Signature) Date: Time: Relinquished By: (Signature)				8/28/05 1100 1120 AL-2 LEFI	Date Time Matrix Sample I.D. No.	Fax#: 595 722 02/0	Phone #: 505 722 5833			5-2llup, NM 87391	Address: Low 3 & on 7	Company anila	Client: Flant Chining	CHAIN-OF-CUSTODY RECORD	
Réceived By: (Signature)					Number/Volume HgCl ₂ HNO ₃ HEAL No.	Sample Temperature:	Sampler: Ween Allows	Mens Monis	Project Manager:		Project #:	author to East book 1	Project Name: Aeration Lapson 2		QA / QC Package:
Remarks: AUSH				\(\times \)	BTEX + N BTEX + N TPH Meth TPH (Meth EDB (Meth 8310 (PN) RCRA 8 M Anions (F, B081 Pesh 8260B (V) 8270 (Seeh 8270 (Seeh 8270 (Seeh 8270 (Seeh 8270 (Seeh	NTBE + od 80 hod 41 hod 50 hod 80 A or P. etals , CI, NO ticides OA) mi-VO/	- TPH 15B ((18.1) 04.1) 021) AH) 7, NO ₂ 7, PCE	(Gasolin Gas/Dies J-+J) PO ₄ , S B's (808	(2) (2) (3) (3) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4		ANALYSIS REGUEST		Tel. 505.345.875 Fax 505.345.4107	ASO1 Hawkins New Maxing B7100	HALL ENVIRONMENTAL

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 seconday containment for the API is being continously 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 New Mexico Environment Departn 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 Picture 075.jpg (602Picture 076.jpg (839 MB) KB) KB)

The Following is a summary of week six:

1) Annual Groundwater sampling for 2005 has been completed

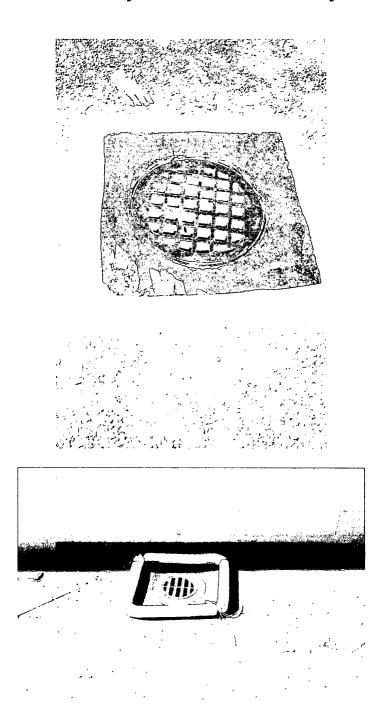
2) Absorbent socks have been put in placed along storm drains (see attached pics of stormwater drains near the FCC)

- 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

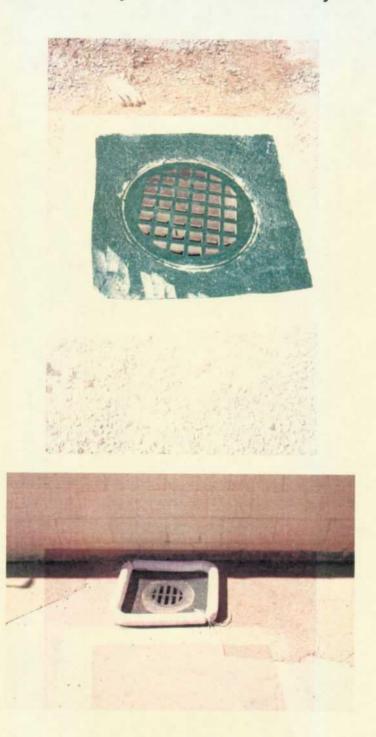
<<Picture 069.jpg>> <<Picture 075.jpg>> <<Picture 076.jpg>>

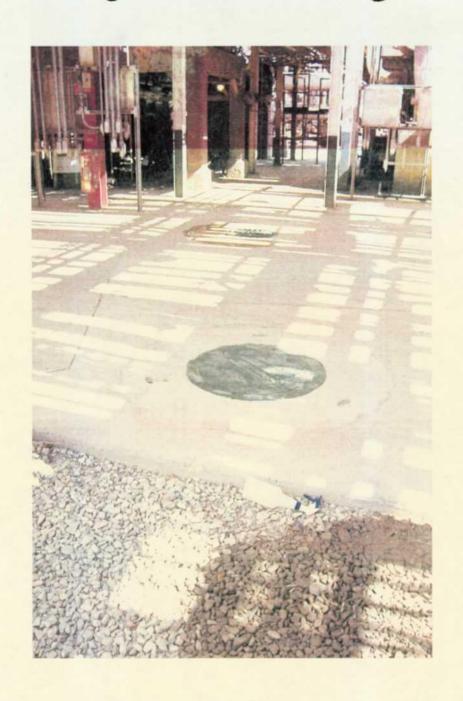
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Photos of Refinery Process Drains discharging to Old API Separator Near Fluid Catalytic Cracker Unit & Refinery Area



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





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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 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 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 an 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 Giants 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 discharges 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

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

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 [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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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



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 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



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



Date: 07-Sep-05

CLIENT:

Giant Relining Co

Project:

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

Lab Order:

0508346

CASE NARRATIVE

[&]quot;S" flags denote that the surrogate was not recoverable due to sample dilution or matrix interferences.

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

Lau ID: 0300340-01		,					
Analyses	Result	PQL	Qual Units	DF	Date Analyzed		
EPA METHOD 8015B: DIESEL RAN	GE 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: SEMIVOLATI	LES				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-chlaroisopropyl)elher	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

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

Page 1 of 30

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-Melhylphenol	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

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

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 Q	ual 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

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
EPA METHOD 8015B: DIESEL RAN	GE 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: SEMIVOLATI	LES					Analyst: BL
Acenaphthene	МD	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 phihalate	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	В	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

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

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

nalyses	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	DN	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

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

Page 5 of 30

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

^{* -} Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

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
EPA METHOD 8015B: DIESEL RANG	GE 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 S	SHORT LIST				Analyst: BDF
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: SEMIVOLATI	LES				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-Chloraphenol	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

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

Date: 07-Sep-05

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

CLIENT: Lab Order: Giant Refining Co

0508346

Client Sample ID: RR-3-83005

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

Project: Lab ID:

0508346-03

Matrix: SOIL

analyses	Result	PQL	Qual	Units	DF	Date Analyzed
1,2-Dichlorobenzene	ND	2.0		тд/Кд	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
Hexachtorocyclopentadiene	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		mġ/Kg	10	9/4/2005
2-Methylnaphthalene	11	2.0		mg/Kg	10	9/4/2005
2-Methylphenol	ND	2.0		mġ/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-Trichlaraphenal	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

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

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

nalyses	Result	PQL Q	ial 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

+ - Value exceeds Maximum Contaminant Level

R - RPD outside accepted recovery limits

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
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS			· · · · · ·		Analyst: SCC
Diesel Range Organics (DRO)	4000	200		mg/Kg	20	9/3/2005 1:59:51 AM
Motor Oil Range Organics (MRO)	ПN	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 S	SHORT LIST					Analyst: BD
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: SEMIVOLATI	LES					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	ПN	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	ПИ	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

- - R RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Page 10 of 30

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
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	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	ИD	2.0	mg/Kg	10	9/4/2005
2,4,5-Trichlorophenol	ИD	2.0	mg/Kg	10	9/4/2005
2,4,6-Trichtorophenol	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

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

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

^{* -} Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

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
EPA METHOD 8015B: DIESEL RAN	GE ORGANICS	 -			Analyst: SC
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 S	SHORT LIST				Analyst: BDI
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: SEMIVOLATI	LES				Analyst: BL
Acenaphthene	0.29	0.20	mg/Kg	1	9/4/2005
Acenaphthylene	ND	0.20	mg/Kg	1	9/4/2005
Anlline	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	ПN	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-Chloronaphthatene	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

Page 13 of 30

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

nalyses	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-Dichtorophenol	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
Hexachiorobenzene	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
Pentachlorophenoi	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	DN	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-Fluorabiphenyl	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

Date: 07-Sep-05

CLIENT:

Giant Refining Co

Client Sample ID: RR-5-83005

Lab Order:

0508346

0508346-05

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

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

Matrix: SOIL

Analyses	Result	PQL Q	ual 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

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

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

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:

Lab ID:

0508346-06

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	GE 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	٥	60-124	s	%REC	20	9/2/2005 11:48:37 PM
EPA METHOD 8260B: VOLATILES S	SHORT LIST					Analyst: BDF
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: SEMIVOLATI	LES					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,l)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	ПN	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

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 Qı	ial 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
Inderno(1,2,3-cd)pyrene	ND	0.20	mg/Kg	1	9/4/2005
Isophorone	МD	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-Methylphenal	ND	0.20	mg/Kg	1	9/4/2005
N-Nitrosodi-n-propylamine	ND	0.20	mg/Kg	1	9/4/2005
N-Ni trosodiphenylamine	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	ИD	0.20	mg/Kg	1	9/4/2005
4-Nitrophenal	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-Trichlarophenal	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

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

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

nalyses	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

- + Value exceeds Maximum Contaminant Level
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range

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
EPA METHOD 8015B: DIESEL RAN	GE 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 S	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: SEMIVOLATI	LES					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	Й	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-chloraethyl)elher	ND	2.5		mg/Kg	10	9/4/2005
Bls(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-Chioronaphthalene	ИD	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

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

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

nalyses	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	3 9	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
Naphihalene	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

- 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

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

nalyses	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	5	%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

Page 21 of 30

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 Q	ual Units	DF	Date Analyzed
EPA METHOD 8015B; DIESEL RANG	GE 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 S	HORT LIST				Analyst: BDF
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-Bromofluarobenzene	106	72.9-143	%REC	1	9/4/2005
EPA METHOD 8270C: SEMIVOLATII	_ES				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

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

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 U	Units	DF	Date Analyzed
1,2-Dichlorobenzene	ND	0.20	r	ng/Kg	1	9/4/2005
1,3-Dichlorobenzene	ND	0.20	n	ng/Kg	1	9/4/2005
1,4-Dichlorobenzene	ND	0.20	г	ng/Kg	1	9/4/2005
3,3*-Dichlorobenzidine	ND	0.20	г	ng/Kg	1	9/4/2005
Diethyl phthalate	ND	0.20	г	ng/Kg	1	9/4/2005
Dimethyl phthalate	ND	0.20	r	ng/Kg	1	9/4/2005
2,4-Dichlorophenol	ND	0.20	r	ng/Kg	1	9/4/2005
2,4-Dimethylphenol	ND	0.20	г	ng/Kg	1	9/4/2005
4,6-Dinitro-2-methylphenol	ND	0.50	r	mg/Kg	1	9/4/2005
2,4-Dinitrophenol	ND	0.50	r	ng/Kg	1	9/4/2005
2,4-Dinitrotaluene	ND	0.20	r	ng/Kg	1	9/4/2005
2,6-Dinitrotoluene	ND	0.20	г	ng/Kg	t	9/4/2005
Fluoranthene	ND	0.20	r	ng/Kg	1	9/4/2005
Fluorene	ND	0.20	Г	ng/Kg	1	9/4/2005
Hexachlorobenzene	ND	0.20	Г	ng/Kg	1	9/4/2005
Hexachlorobutadiene	ND	0.20	ı	mg/Kg	1	9/4/2005
Hexachlorocyclopentadiene	ND	0.25	r	mg/Kg	1	9/4/2005
Hexachloroethane	ND	0.50	ı	mg/Kg	1	9/4/2005
Indeno(1,2,3-cd)pyrene	ND	0.20	ī	mg/Kg	1	9/4/2005
Isophorone	ND	0.20	ı	mg/Kg	1	9/4/2005
2-Methylnaphthalene	ND	0.20	1	mg/Kg	1	9/4/2005
2-Methylphenol	ИD	0.20	1	mg/Kg	1	9/4/2005
3+4-Methylphenol	ND	0.20	ı	mg/Kg	1	9/4/2005
N-Nitrosodi-n-propylamine	ND	0.20	ī	mg/Kg	1	9/4/2005
N-Nitrosodiphenylamine	ND	0.20	ı	mg/Kg	1	9/4/2005
Naphthalene	ND	0.20	ı	mg/Kg	1	9/4/2005
2-Nitroaniline	ND	0.50		mg/Kg	1	9/4/2005
3-Nitroaniline	ND	0.50	ı	mg/Kg	1	9/4/2005
4-Nitroaniline	ND	0.25		mg/Kg	1	9/4/2005
Nitrobenzene	ND	0.20	1	mg/Kg	1	9/4/2005
2-Nitrophenol	ND	0.20	1	mg/Kg	1	9/4/2005
4-Nitrophenol	ND	0.20		mg/Kg	1	9/4/2005
Pentachlorophenol	ND	0.50	1	mg/Kg	1	9/4/2005
Phenanthrene	ND	0.20		mg/Kg	1	9/4/2005
Phenoi	ИD	0.20	1	mg/Kg	1	9/4/2005
Pyrene	ND	0.20	1	mg/Kg	1	9/4/2005
Pyridine	ND	0.50	1	mg/Kg	1	9/4/2005
1,2,4-Trichlorobenzene	ND	0.20	ı	mg/Kg	1	9/4/2005
2,4,5-Trichlorophenol	ND	0.20	1	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

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

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

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

* - Value exceeds Maximum Contaminant Level

e above quantitation range

S - Spike Recovery outside accepted recovery limits

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
EPA METHOD 8015B: DIESEL RANG	GE 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: BDF
Велгеле	ND	0.050	mg/Kg	1	9/4/2005
Toluene	ΝĎ	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
Benzyi alcohol	NĐ	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 elher	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

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

nalyses	Result	PQL	Qual Units	DF	Date Analyzed
1,2-Dichlorobenzene	ND	0.20	mg/Kg	1	9/4/2005
1,3-Dichlorobeлzene	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-Dinitrotaluene	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
Hexachlorobuladiene	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	m g/K g	1	9/4/2005
Isophorone	ND	0.20	m g /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	ПN	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-Trichtorophenol	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

R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

^{* -} Value exceeds Maximum Contaminant Level

E - Value above quantitation range

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

nalyses	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: Phenot-d6	74.3	37.6-118	%REC	1	9/4/2005

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

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
EPA METHOD 8015B: DIESEL RANG	SE 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 S	HORT LIST				Analyst: BDH
Benzene	ND	0.050	mġ/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: SEMIVOLATII	LES				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	j 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	ПИ	0.25	mg/Kg	g 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	g 1	9/4/2005
Dibenzoluran	ND	0.50	mg/Kg	g 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

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
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	ИD	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	DN	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
Pentachiorophenol	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

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

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 Q	ial 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

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Page 30 of 30

Giant Refining Co CLIENT:

0508346 Work Order:

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

Project:

Date: 07-Sep-05

QC SUMMARY REPORT

Method Blank

Sample ID MB-8649	Batch ID: 8649	Test Code: SW8015		Units: mg/Kg		Analysis	Analysis Date 9/1/2005 9:27:29 PM		Prep Date 8/31/2005	35
Client iD:		Run ID:	Run ID: FID(17A) 2_050901A	50901A		SeqNo:	SeqNo: 395109			
Analyte	Result	Pal	PQL SPK value SPK Ref Val	SPK Ref Val	%REC	LowLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD	%RPD RPDLimit Qual	Qual
Diesel Range Organics (DRO)	DN.	10								
Motor Oil Range Organics (MRO)	ON (C	20								
Surr: DNOP	6.957	0	9	0	96.6	99	124 0			

J - Analyte detected below quantitation limits 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

Qualifiers:

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QC SUMMARY REPORT

Method Blank

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

Giant Refining Co

0508346

CLIENT: Work Order:

Project:

Client ID:	Date: 10: 0040	Test Code	est Code: SW8270C	Units: mg/Kg		Analysi	Analysis Date 9/4/2005	/2005	Prep D	Prep Date 8/31/2005	ro.
•		Run ID:	ELMO_050904A	4A		SeqNo:	395725	725			
Analyte	Result	Pal	SPK value	SPK Ref Vai	%REC	LowLimit	HighLimit	LowLimit HighLimit RPD Ref Val	%RPD	RPOLimit	Qual
Acenaphthene	QN	0.2					; ; ;				
Acenaphthylene	QN	0,2									
Aniline	ON	0.2									
Anthracene	ON.	0.2									
Azobenzene	QN	0.2									
Benz(a)anthracene	Q	0.25									
Benzidine	QN	0.2									
Benzo(a)pyrene	Q	0.2									
Benzo(b)fluoranthene	2	0.2									
Benzo(g,h,i)perylene	Q	0.3									
Benzo(k)fluoranthene	Q	0.5									
Benzolc acid	Q	0.5									
Benzył alcohol	Q	0.5									
Bis(2-chloroethoxy)methane	QN	0.5									
Bis(2-chloroethyl)ether	S	0.25									
Bis(2-chloroisoprapyl)ether	Q	0.5									
Bis(2-ethylhexyl)phthalate	0.04733	0.2									ד
4-Bromophenyl phenyl ether	2	0.25									
Butyl benzyl phthalate	9	0.2									
Carbazole	2	0.2									
4-Chloro-3-methylphenol	Q	0.2									
4-Chloroaniline	Q	0.2									
2-Chloronaphthalene	ON	0.2									
2-Chlorophenoi	ON	0.2									
4-Chlorophenyl phenyl ether	S	0.2									
Chrysene	ON	0.2									
Di-n-butyl phthalate	1.756	0.25									
Di-n-octyl phthalate	ΩN	0.5									

B - Analyte detected in the associated Method Blank

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

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Giant Refining Co

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

0508346

Work Order: CLIENT:

Project:

Method Blank

22.5	ιά	2	2	2	2	2	2	2	2	CI CI CI CI CI CI CI CI CI CI CI CI CI C	ID.	2	.2	2	.2	2	2	D.		2	2	73	2	24	2	2	2	ίς.				
						ND 0.2																										
Dibenz(a,h)anthracene	Dibenzofuran	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	3,3'-Dichlarobenzidine	Diethyl phthalate	Dimethyl phthatate	2,4-Dichloraphenol	2,4-Dimethylphenol	4,6-Dinitro-2-methylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachiorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	2-Methylnaphthalene	2-Methylphenol	3+4-Methylphenot	N-Nitrosodi-n-propylamine	N-Nitrosodiphenylamine	Naphthalene	2-Nitroaniline	3-Nitroaniline	4-Nitroaniline	Nitrobenzene	2-Nitrophenal

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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

CLIENT	Giant Refining Co							· ·	
Work Order	0508346								QUESUMIMANI NELONI
Project.	DD Book I speed Add Eve 8-30-05	Fxc 8-30-05							Method Blank
4 4 UJCCE.	יייי איייייייייייייייייייייייייייייייי								
4-Nitrophenal		2	0.2						
Pentachlorophenol	_	9	0.5						
Phenanthrene		Q	0.2						
Phenol		Q	0.2						
Pyrene		Q	0.2						
Pyridine		Q	0.5						
1,2,4-Trichlorobenzene	zene	Q	0.2						
2,4,5-Trichlorophenal	lon!	2	0.2						
2,4,6-Trichlorophenal	nal	ᄝ	0.2						
Surr: 2,4,6-Tribromophenol	omophenol	2.551	0	3.33	0	76.6	35.5	141	0
Surr: 2-Fluorobiphenyl	phenyl	1.208	0	1.67	0	72.3	30.4	128	0
Surr: 2-Fluorophenal	ienal	2.424	0	3.33	0	72.8	28.1	129	0
Surr: 4-Terphenyl-d14	yl-d14	1.411	0	1.67	0	84.5	34.6	151	0
Surr: Nitrobenzene-d5	ane-d5	1.161	0	1.67	o	69.5	26.5	122	0
Surr: Phenol-d6		2.484	0	3.33	0	74.6	37.6	118	0
Oualifiers:	ND - Not Detected at the Reporting Limit	orting Limit		S - Spike Recovery outside accepted recovery limits	very outside ac	cepted recover	ry limits	₩-₩	B - Analyte detected in the associated Method Blank
•	J - Analyte detected below quantitation limits	antitation limits		R - RPD outside accepted recovery limits	e accepted rec	overy limits		:	4

CLIENT: Giant Refining Co

Date: 07-Sep-05

Hall Environmental Analysis Laboratory

Giant Refining Co CLIENT:

0508346 Work Order:

Project:

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

QC SUMMARY REPORT

Method Blank

Sample ID mb-8648	Batch ID: 8648	Test Code:	Test Code: SW8260B	Units: mg/Kg		Analysis	Analysis Date 9/3/2005	005	Prep D	Prep Date 8/31/2005	5
Client ID:		Run (D:	Run ID: THOR_050903A	13.4		SeqNo:	395596	90			
Analyte	Result	PQL		SPK value SPK Ref Val	%REC	LowLimit	HighLimit	LowLimit HighLimit RPD Ref Val	%RPD	%RPD RPDLimit Qual	Qual
Вепzепе	QN	0.05	0	0	0	0	0	0			
Toluene	S	0.05	Φ	0	0	0	0	0			
Ethylbenzene	2	0.05	0	0	0	0	0	0			
Xylenes, Total	2	0.05	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	O	95.0	85.2	118	0			

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

Qualifiers:

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

36/39

Date: 07-Sep-05

Hall Environmental Analysis Laboratory

CLIENT: Giant Refining Co

0508346 Work Order:

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

Project:

QC SUMMARY REPORT

Laboratory Control Spike - generic

Sample ID LCS-8649 Cllent ID:	Batch ID: 8649	Test Code: SW8015 Run ID: FID(17A)	: SW8015 Units: FID(17A) 2_050901A	Units: mg/Kg 50901A		Analysis SeqNo:	: Date 9/1/200	Analysis Date 9/1/2005 10:00:21 PM SeqNo: 395110	Ргер Da	Prep Date 8/31/2005	
Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	45.26	. 0			90.5	67.4	117	0			
Sample ID LCSD-8649 Client ID:	Batch ID: 8649	Test Code: SW8015 Run ID: FID(17A	: SW8015 Units: FID(17A) 2_050901A	Units: mg/Kg 50901A		Analysis SeqNo:	. Date 9/1/200	Analysis Date 9/1/2005 11:05:57 PM SeqNo: 395112	Prep Da	Prep Date 8/31/2005	
Analyte	Result	Pal	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 Client ID:	Batch ID: 8648	Test Code Run ID:	Test Code: SW8260B L Run ID: THOR_050903A	Units: mg/Kg 3A		Analysis SeqNo:	Analysis Date <i>9/3/</i> 2005 SeqNo: 395601	005 11	Prep Da	Prep Date 8/31/2005	
Analyte	Result	Pal	SPK value	SPK value SPK Ref Val	%REC		HighLimit	LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Benzene Toluene	0.8733	0.05		00	87.3 102	78 79.4	126 117	00			

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

Qualifiers:

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

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

Work Order:

Project:

QC SUMMARY REPORT Laboratory Control Spike - generic

Sample ID LCS-8646	Batch ID: 8646	Test Cade:	SW8270C	Units: mg/Kg		Analysi	Analysis Date 9/4/2005	2005	Prep Date	ate 8/31/2005	ro.
Client ID:		Run ID:	ELMO_050904A	74A		SeqNo:	395726	26			
Analyte	Result	PaL	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	O			
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			
Ругепе	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	Analysis Date 9/4/2005	2005	Prep Date	ate 8/31/2005	2
Client ID:		Run ID:	ELMO_050904A	14A		SeqNo:	395728	28			
Analyte	Result	g	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPOLimit	Qual
Acenaphthene	1.397	0.2	1.67	0	83.7	24	125	1,264	10.0	22	
4-Chloro-3-methylphenol	2.881	0.2	3.33	0	86.5	14.6	154	2.484	14.8	22	
2-Chloraphenal	2.495	0.2	3.33	0	74.9	13.3	149	2,206	12.3	25	
1,4-Dichlorabenzene	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	o	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	D	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	52	
Pyrene	1.411	0.2	1.67	Q	84.5	59	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	
		;									
	ND - Not Detected at the Reporting Limit		S - Sp	S - Spike Recovery outside accepted recovery limits	accepted rec	overy limits		B - Analyte detected in the associated Method Blank	d in the associ	iated Method B	llank
J - Analyte	J - Analyte detected below quantitation limits	zits	R-RF	R - RPD outside accepted recovery limits	ecovery limit	ιΛ					7

Sample Receipt Checklist

Client Name GIANTREFIN			Date and Time	Received:	8/31/2005
Work Order Number 0508346	\bigcap		Received by	AT	
Checklist completed by	Ja		8/31	105	
Signature	<u> </u>	Date			
Matrix	Carrier name	Client drop-of	Í		
Shipping container/cooler in good condition?		Yes 🗆	No 🗆	Not Present	
Custody seals intact on shipping container/cooler?		Yes 🗌	No 🗆	Not Present	Not Shipped 🔽
Custody seals intact on sample bottles?		Yes 🗹	No 🗆	N/A	
Chain of custody present?		Yes 🗹	No 🗀		
Chain of custody signed when relinquished and reco	eived?	Yes 🗹	No 🗀		
Chain of custody agrees with sample labels?		Yes 🗹	No 🗆		
Samples in proper container/bottle?		Yes 🗹	No 🗆		
Sample containers intact?		Yes 🗹	No 🗀		
Sufficient sample volume for indicated test?		Yes 🗹	No 🗆		
All samples received within holding time?		Yes 🗹	No 🗆		
Water - VOA vials have zero headspace?	No VOA vials subi	nitted 🗹	Yes 🗆	No 🗆	
Water - pH acceptable upon receipt?		Yes 🗌	№ 🖵	N/A 🔽	
Container/Temp Blank temperature?		3°	4° C ± 2 Accepta	ble	
			If given sufficient	time to cool.	
COMMENTS:					
	<u></u>				
Client contacted Da	ate contacted:		Pare	on contacted	
Office Contracted					
Contacted by:	egarding	······································			
Comments:					
•					
Corrective Action					

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Date:), Date; / 0 S		13	1)	(1)	,,	٤	77	77	٤	>	30/05	Date	Fax #:	Phone #:			(1)	Address:	3		GRAI	
Time:	2530 Jime:		0900	0840	0830	0829	0810	0800	0750	0740	0730	0715	Time	305	400			R	30	mod		N-CT-	
Relinquish	Relinquish												Matrix	NC	7,			8	43	4	7	CUSI	
Relinquished By: (Signature)	Relinquished By: (Signatura)		RR-10-83005	RR-9- 53005	RR-8-83005	PR-7- 83005	RB-6-83905	B-5-83005	RR-4-83005	RR-3-83005	RR-2-83005	RR-1-83005	Sample I.D. No.	22 0210	5585 ZZ			(65CB W/	18	anisa	divine,	CHAIN-OF-COS LODY REGORD	
Received	Receivéc		 :	1 7	٠ ٢	,	;	3	3		٠	2-40	Number/Valume	Sample Temperature:	Sampler:	Z.	Project Manager:		Project #:	abolitional	Project Name:	Other:	
Received By: (Signature)	Received By: Kignature	7											Preserval	ine:	Er.	6	. :				RRR		OA/QC
sture)	(ampl	>			:								Preservative		De	The	:			المتامع	Rock		QA/QC Package:
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	RUSH												EDC (Met	hod 80	1211						ਗ⊉	4.	ÞI
													8310 (PN		AH)				E	www.lighelikat.com) 505 1. 505	4901 Hawkins NE, Suite D	Z A P F
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			 *	イ	4	*	7	*	ナ	×	×	×	8021	- 8	TE	χ			_ _		Abbuquerque, New Mexico o7 109 Tel. 505.345.3975		HALL ENVIRONMENTAL ANALYSIS LABORATORY
													Air Bubble	s or He	eadsp	ace (Y d	or N)	,	_				



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



Date: 02-Sep-05

CLIENT:

Giant Refining Co

Client Sample ID: Concrete Pipe

Lab Order:

0508273

Collection Date: 8/22/2005 2:00:00 PM

Project:

RR Rack Lagoon Concrete Pipe TCLP

Lab ID:

0508273-01

Matrix: SOLID

Analyses	Result	PQL Qu	al 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 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
Sur: 4-Bromafluorobenzene	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

CLIENT: Giant Refining Co

Work Order: 0508273

RR Rack Lagoon Concrete Pipe TCLP

Project:

Date: 02-Sep-05

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QC SUMMARY REPORT

Method Blank

Sample ID MB-8623	Batch ID: 8623	Test Code	Test Code: SW8260B	Units: mg/L		Analysis	Analysis Date 8/29/2005		Prep Da	Prep Date 8/25/2005	
Client ID:		Run ID:	NEPTUNE_050829A	50829A		SeqNo:	393367				
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	Ref Val	%RPD	RPDLimit	Qual
Benzene		. 0.5			•						
2-Butanone	S	200									
Carbon Tefrachforide	Q	0.5									
Chlorobenzene	Q	100									
Chloraform	밒	9									
1,4-Dichlorobenzene	S	7.5									
1,2-Dichloroethane (EDC)	Q	0.5									
1,1-Dichloroethene	Q	0.7									
Hexachlorobutadiene	Q	0.5									
Tetrachloroethene (PCE)	Q	0.7									
Trichloroethene (TCE)	S	0.5									
Vinyl chloride	QN	0.2									
Surr: 1,2-Dichloroethane-d4	0.00894	O	0.01	0	89.4	75.8	124	D			
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	SW7470	Units: mg/L		Analysis	Analysis Date 9/1/2005		Prep Da	Prep Date 9/1/2005	
Client ID;		Run 1D:	MI-LA254_050901A	0901A		SeqNo:	394830				
Analyte	Result	PaL	SPK value	SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	Ref Val	%RPD	RPDLimit	Qual
Mercury	QN	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

								The second secon			Ì
Sample ID MB-8663	Batch (D: 8663	Test Code	Test Code: SW1311/6010 Units: mg/L	Units: mg/L		Analysis	Date 9/2/2	Analysis Date 9/2/2005 9:41:04 AM	Prep Da	Prep Date 9/1/2005	
Client ID:		Run 10:	Run ID: 1CP_050902B			SeqNo:	394972	2			
Analyte	Result	Pal		SPK value SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ON	5									
Barlum	ON.	100									
Cadmium	S	-									
Chromium	ON	ß									
Lead	ON	IJ									
Silver	Q.	S									
Sample ID MB-8663 Client ID:	Batch ID; 8663	Test Code Run ID:	Test Code: SW1311/6010 Units: mg/L Run ID: ICP_050902B	Units: mg/L		Analysis SeqNo:	Date 9/2/200 395130	Analysis Date 9/2/2005 11:23:01 AM SeqNo: 395130	Prep Da	Prep Date 9/1/2005	
Analyte	Result	Pal	SPK value SPK Ref Val	SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	ON	-									

	emplor de fina (\$141) de de desirable (o despesar espesar espesar de la composition della composition	UR R. C. C. C. C. C. C. C. C. C. C. C. C. C.	
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	2

CLIENT: Giant Refining Co

Work Order: 0508273

Project: RR Rack Lagoon Concrete Pipe TCLP

Date: 02-Sep-05

QC SUMMARY REPORT

Sample Duplicate

1/2005		%RPD RPDLimit Qual	20
Prep Date 9/1/2005		"RPD RPC	
		tef Val	. 0
Analysis Date 9/1/2005	394833	WREC LowLimit HighLimit RPD Ref Val	0
Analysis D	SeqNo:	LowLimit h	0
		%REC	0
Units: mg/L)901A	SPK Ref Val	0
i	Run ID: MI-LA254_050901A	SPK value SPK Ref Val	0
Test Code: SW7470	Run ID:	Pal	0.02
Batch ID: 8666		Result	ON
Sample ID 0508273-01B DUP Batch ID: 8666	Cllent ID: Concrete Pipe		
Sample ID	Client ID:	Analyte	Mercury

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

Qualifiers:

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

4/8

Giant Refining Co 0508273 CLIENT:

Work Order:

Project:

RR Rack Lagoon Concrete Pipe TCLP

Date: 02-Sep-05

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID 0508273-01B MS	Batch ID: 8666	Test Code: SW7470	SW7470	Units: mg/L		Analysis	Analysis Date 9/1/2005	005	Prep Da	Prep Date 9/1/2005	
Client ID: Concrete Pipe		Run ID:	MI-LA254_050901A	10901A		SeqNo:	394834	4			
Analyte	Result	Pa		SPK value SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD	RPDLImit	Qual
Mercury	0.004774	0.002	0.005	0	95.5	75	125	0			
Sample ID 0508273-01B MSD	Batch ID: 8666	Test Code: SW7470	SW7470	Units: mg/L		Analysis	Analysis Date 9/1/2005	305	Prep Da	Prep Date 9/1/2005	
Client ID: Concrete Pipe		Run ID:	Run ID: MI-LA254_050901A	0901A		SeqNo:	394835	2			
Analyte	Result	PaL		SPK value SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004905	0.002	0.005	0	98.1	75	125	0.004774	2.71	50	

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

Qualifiers:

5/8

Date: 02-Sep-05

Laboratory Control Spike - generic QC SUMMARY REPORT

5

Hall Environmental Analysis Laboratory

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

Sample ID LCS-8666	Batch ID; 8666	Test Code:	ist Code: SW7470	Units: mg/L		Analysis	Analysis Date 9/1/2005	005	Prep Date	Prep Date 9/1/2005	
Clent ID:		Run ID:	MI-LA254_050901A)901A		SeqNo:	394831	5			
Analyte	Result	Pol	SPK value	SPK Ref Val	%REC	LowLimit	High∐mit	%REC LOWLIMIT HIGHLIMIT RPD Ref Val	%RPD	%RPD RPDLImit	Qual
Mercury	. 0.004336	0.002	0.005	0	86.7	8	120	0			
Sample ID LCSD-8666	Batch ID: 8666	Test Code:	ist Code: SW7470	Units; mg/L		Analysis	Analysis Date 9/1/2005	005	Prep Date	Prep Date 9/1/2005	
Client ID:		Run 1D:	MI-LA254_050901A)901A		SeqNo:	394836	10			
Analyte	Result	POL	SPK value	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD	%RPD RPDLimit	Qual
Mercury	0.004353	0.002	0.005	0	87.1	8	120	0.004336	0.380	20	
Sample ID LCS-8663 Client ID:	Batch ID: 8663	Test Code: Run ID:	ısı Code: SW1311/6010 Unils: mg/L ın ID: 1CP_050902B	Units: mg/L		Analysis SeqNo:	Date 9/2/200	Analysis Date 9/2/2005 9:44:10 AM SeqNo: 394973	Prep Date	Prep Date 9/1/2005	
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLiml	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5852	0.2	0.5	0	117	8	120	, o			
Barlum	0.4917	0.2	0.5	0	98.3	8	120	Q			
Cadmium	0.5218	0.2	0.5	O	104	8	120	0			
Chromlum	0.4953	0.2	0.5	0	99.1	80	120	0			
Lead	0.5058	0.2	0.5	0	104	80	120	0			
Silver	0.5261	0.2	0.5	0	105	80	120	0			

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

and the second s	OC SUMMARY REPORT	I abount Control Control Control	Daboratory Common Spine Duplicate
	Giant Refining Co	0508273	RR Rack Lagoon Concrete Pipe TCLP
	CLIENT:	Work Order:	Project:

Sample ID LCSD-8663	Batch ID: 8663	Test Code	Test Code: SW1311/6010 Units: mg/L	Units: mg/L		Analysis	5 Date 9/2/2	Analysis Date 9/2/2005 9:48:26 AM	Prep Da	Prep Date 9/1/2005	
Client ID:		Run ID:	ICP_050902B			SeqNo:	394974	74			
Analyte	Result	PaL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5508	0.2	0.5	0	110	8	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	93.6	80	120	0.5218	4.70	20	
Chramium	0.4728	0.2	0.5	0	94.6	88	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	Test Code: SW1311/6010 Units: mg/L	Units: mg/L		Analysis	Date 9/2/2	Analysis Date 9/2/2005 11:25:32 AM	Prep Da	Prep Date 9/1/2005	
Client ID;		Run ID:	ICP_050902B			SeqNo:	395131	31			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	LowLimit HighLimit RPD Ref Val	%RPD	%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	Test Code: SW1311/6010 Units: mg/L	Units: mg/L		Analysis	Date 9/2/2	Analysis Date 9/2/2005 11:31:06 AM	Prep Date	le le	
Client ID:		Run (D:	ICP_050902B			SeqNo:	395133	33			
Analyte	Result	ᅙ	SPK value	SPK Ref Val	%REC	LowLimit	HlghLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Selenium	0.4242	0.2	0.5	0	84.8	80	120	0.4209	0.762	20	

B - Analyte detected in the associated Method Blank 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

Sample Receipt Checklist

Client Name GIANTREFIN			Date and Time	Received:	8/24/2005
Work Order Number 0508273	4		Received by	ΑT	
Checklist completed by Signature	legger-	Date	8-24-0	25	
Matrix	Carrier name	Client drop-o	<u>ff</u>		
Shipping container/cooler in good condition?		Yes 🔽	No 🗆	Not Present	
Custody seals intact on shipping container/cooler	?	Yes 🗌	No 🗀	Not Present	Not Shipped
Custody seals intact on sample bottles?		Yes 🗌	No 🗀	N/A ☑	
Chain of custody present?		Yes 🗹	No 🗀		
Chain of custody signed when relinquished and re	eceived?	Yes 🗹	No 🗆		
Chain of custody agrees with sample labels?		Yes 🗹	No 🗆		
Samples in proper container/bottle?		Yes 🗹	No 🗀		
Sample containers intact?		Yes 🗹	No 🗆		
Sufficient sample volume for Indicated test?		Yes 🗹	No 🗆		
All samples received within holding time?		Yes 🗹	No 🗆		
Water - VOA vials have zero headspace?	No VOA vials subm	nitted 🗹	Yes 🗆	No 🗌	
Water - pH acceptable upon receipt?		Yes 🗌	No 🗌	N/A ☑	
Container/Temp Blank temperature?		6°	4° C ± 2 Accepta		
COMMENTS:					
			,		
Client contacted	Date contacted:		Pers	on contacted	
Contacted by:	Regarding				
Comments:					
Corrective Action					

HALL ENVIRONMENTAL ANALYSIS LABORATORY 4901 Hawkins NE, Suite D Albuquerque, New Mexico 87109 Tel. 505.345.3975 Fax 505.345.4107 www.hallervironmental.com	(lese) (l	tals 1, NO ₂ , NO ₂ , PO ₄ , 1, NO ₂ , PO ₄ , 1, NO ₂ , PO ₄ , 1, NOA)	M + X3T8 TPH Methor TPH (Methor) EDB (Methor) B310 (PW) RABA 8 Mo Anions (F, C) 8081 Pesto 8081 Pesto S20 (Sento) A	メX				Remarks:
		Sampler: Herre Morra Sample Temperature:	Number/Volume HgCl ₂ HNO ₃ HSAL No.					Repeived By: (Signature) 1/8 24 105 Received By: (Signature)
CHAIN-OF-CUSTODY RECORD Client: Frank Peffrins Frank Can's	Address: Panto & Sor of	Phone #: 505722 9833 Fax #: 505722 0210	Sample 1.1	823/05 1400 Casul Greents Lips				8/24/05 9800 Relinquished By: (Signature) Date: Time: Relinquished By: (Signature)

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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



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 Qu	ial Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	E 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 RA	NGE				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: SEMIVOLATIL	ES				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
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range

* - Value exceeds Maximum Contaminant Level

Page 1 of 12

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
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
Hexachiorocyclopentadiene	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
Pentachiorophenol	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

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

Date: 31-Aug-05

CLIENT:

Giant Refining Co

Client Sample ID: North Wall

Lab Order:

Project:

0508272

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

Lab ID:

RR Rock Lagoon NW Add. Excav. 0508272-01

Matrix: SOIL

Analyses	Result	PQL	Qual Units	DF	Date Analyzed
1,2,4-Trichlarobenzene	ND	0.20	mg/Kg	1	8/25/2005
2,4,5-Trichtorophenol	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	B/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

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

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
EPA METHOD 8015B: DIESEL RANG	SE 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 RA	ANGE				Analyst: NSE
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: NSE
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: SEMIVOLATII	LES			•	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-chioroisopropyl)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 phthalale	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

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

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
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
Hexachiorobenzene	ND	0.20	mg/Kg	1	8/25/2005
Hexachlorobuladiene	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-Nitroanlline	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

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

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

^{* -} Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

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
EPA METHOD 8015B: DIESEL RANG	SE 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 RA	ANGE				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: SEMIVOLATIL	ES				Analyst: BL
Acenaphthene	ND	0.20	mg/Kg	1	8/25/2005
Acenaphthylene	ND	0.20	mg/Kg	1	8/25/2005
Aniline	ИD	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	ИD	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

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

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

nalyses	Result	PQL	Qual Units	DF	Date Analyzed
Chrysene	ND	0.20	mg/Kg	1	8/25/2005
Dî-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°-Dichlorobenzldine	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
Hexachiorobenzene	ND	0.20	mg/Kg	1	8/25/2005
Hexachtorobutadiene	ND	0.20	mg/Kg	1	8/25/2005
Hexachtorocyclopentadiene	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
Isophoro∩ē	ND	0.20	mg/Kg	1	8/25/2005
2-Methylnaphthalene	ND	0.20	mg/Kg	1	8/25/2005
2-Methylpheno!	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

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

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-Trichtorophenol	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

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
EPA METHOD 8015B: DIESEL RANG	SE 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 RA		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: SEMIVOLATION	LES				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-Chioroaniline	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

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

Date: 31-Aug-05

CLIENT:

Giant Refining Co

Lab Order: 050

0508272

Client Sample ID: South BTM

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

Project:

RR Rock Lagoon NW Add. Excav.

Lab ID:

0508272-04

Matrix: SOIL

nalyses	Result	PQL	Qual U	nits	DF	Date Analyzed
Chrysene	ND	0.20	m	g/Kg	1	8/25/2005
Di-n-butyl phthalate	ND	0.25	m	g/K g	1	8/25/2005
Di-n-octyl phthalate	ND	0.50	m	g/Kg	1	8/25/2005
Dibenz(a,h)anthracene	ND	0.25	m	g/Kg	1	8/25/2005
Dibenzofuran	ND	0.50	m	g/Kg	1	8/25/2005
1,2-Dichlorobenzene	ND	0.20	m	g/Kg	1	8/25/2005
1,3-Dichlorobenzene	ND	0.20	m	g/Kg	1	8/25/2005
1,4-Dichlorobenzene	ND	0.20	m	g/Kg	1	8/25/2005
3,3'-Dichlorobenzidine	ND	0.20	m	g/Kg	1	8/25/2005
Diethyl phthalate	ND	0.20	m	g/Kg	1	8/25/2005
Dimethyl phthalate	П	0.20	m	g/Kg	1	8/25/2005
2,4-Dichlorophenal	ND	0.20	m	g/Kg	1	8/25/2005
2,4-Dimethylphenol	ND	0.20	m	g/Kg	1	8/25/2005
4,6-Dinitro-2-methylphenol	ND	0.50	m	g/Kg	1	8/25/2005
2,4-Dinitrophenol	ND	0.50	m	g/Kg	1	8/25/2005
2,4-Dinitrotoluene	ND	0.20	m	g/Kg	1	8/25/2005
2,6-Dinitrotoluene	ND	0.20	m	g/Kg	1	8/25/2005
Fluoranthene	ND	0.20	m	g/Kg	1	8/25/2005
Fluorene	ND	0.20	m	g/Kg	1	8/25/2005
Hexachlorobenzene	ND	0.20	m	g/Kg	1	8/25/2005
Hexachlorobutadiene	ND	0.20	m	g/Kg	1	8/25/2005
Hexachlorocyclopentadiene	ND	0.25	m	g/Kg	1	8/25/2005
Hexachloroethane	ND	0.50	m	g/Kg	1	8/25/2005
Indeno(1,2,3-cd)pyrene	ND	0.20	m	g/Kg	1	8/25/2005
Isophorane	ND	0.20	m	g/Kg	1	8/25/2005
2-Methylnaphthalene	ND	0.20	m	g/Kg	1	8/25/2005
2-Methylphenol	ND	0.20	m	g/Kg	1	8/25/2005
3+4-Methylphenol	ND	0.20	m	g/Kg	1	8/25/2005
N-Nitrosodi-n-propylamine	ND	0.20	m	g/Kg	1	8/25/2005
N-Nitrosodiphenylamine	ND	0.20	m	g/Kg	1	8/25/2005
Naphthalene	ND	0.20	m	g/Kg	1	8/25/2005
2-Nitroaniline	ND	0.50	m	ıg/Kg	1	8/25/2005
3-Nitroanlline	ND	0.50	m	ıg/Kg	1	8/25/2005
4-Nitroaniline	ND	0.25	m	ıg/Kg	1	8/25/2005
Nitrobenzene	ND	0.20	m	ıg/Kg	1	8/25/2005
2-Nitrophenol	ND	0.20	m	g/Kg	1	8/25/2005
4-Nitrophenol	ND	0.20	m	ıg/Kg	1	8/25/2005
Pentachlorophenot	ND	0.50	m	ıg/Kg	1	8/25/2005
Phenanthrene	ND	0.20	m	ıg/Kg	1	8/25/2005
Phenol	ND	0.20	m	ıg/Kg	1	8/25/2005
Pyrene	ND	0.20	m	ıg/Kg	1	8/25/2005
Pyridine	ND	0.50	m	ıg/Kg	1	8/25/2005

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

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

^{* -} Value exceeds Maximum Contaminant Level

R - RPD outside accepted recovery limits

E - Value above quantitation range

Date: 31-Aug-05

Hall Environmental Analysis Laboratory

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CLIENT: Giant Refining Co

0508272 Work Order:

RR Rock Lagoon NW Add. Excav.

Project:

Method Blank

QC SUMMARY REPORT

Sample ID MB-8603	Batch ID: 8603	Test Code: SW8015	SW8015	Units: mg/Kg		Analysis	Date 8/25/20	Analysis Date 8/25/2005 4:13:11 PM	Prep Date 8/24/2005	L .
Cilent ID:		Run IO:	FID(17A) 2_050824A	50824A		SeqNo:	392317			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	Ref Val	%RPD RPDLimit	Qual
Diesel Range Organics (DRO) Motor Oil Range Organics (MRO)	ON O	10					<u>:</u>			
Surr: DNOP	κò	0	5	0	81.0	99	124	0	ļ	
Sample ID mb-8607	Batch (D: 8607	Test Code: SW8015	SW8015	Units: mg/Kg		Analysis	: Date 8/30/20	Analysis Date 8/30/2005 4;33:28 PM	Prep Date 8/24/2005	
Client ID:		Run ID:	PIDFID_050830A	30A		SeqNo:	393964			
Analyte	Result	PQ	SPK value	SPK Ref Vai	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	PD Ref Val	%RPD RPDLImit	Qual
Gasoline Range Organics (GRO) Surr. BFB	ON (C	5	1000	0	101	83.1	124			
Sample ID mb-8607	Batch ID: 8607	Test Code: SW8021	SW8021	Units: mg/Kg		Analysis	Date 8/30/20	Analysis Date 8/30/2005 4:33:28 PM	Prep Date 8/24/2005	,,
Client ID:		Run ID:	PIDFID_050830A	30A		SeqNo:	393927			
Analyte	Result	PaL	SPK value	SPK Ref Val	%REC		LowLimit HighLimit RPD Ref Val	PD Ref Val	%RPD RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	QN	0.1				:				
Benzene	Q	0.025								
Toluene	Q.	0.025								
Elhylbenzene	Q	0.025								
Xylenes, Total	QN	0.025								
Surr: 4-Bromofluorobenzene	0.9898	a	-	0	0.66	87.5	115	0		

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

Qualifiers:

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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Method Blank

RR Rock Lagoon NW Add. Excav.

Project:

CLIENT: Giant Refining Co Work Order: 0508272

Sample ID MB-8513	Batch IU: 8613	l est Code	lest Code: SW8Z70C Units: mg/Kg		Analysis Date 8/25/2005	rrep ua	riep Date 6/24/2003	
Client ID:		Run ID:	ELMO_050825A		SeqNo: 392429			
Analyte	Result	Pal	SPK value SPK Ref Val	%REC L	LowLimit HighLimit RPD Ref Val	%RPD	RPOLimit	Qual
Acenaphthene	QN	0.2					:	
Acenaphthylene	2	0.2						
Aniline	QN	0.2						
Anthracene	D	0.2						
Azobenzene	2	0.2						
Benz(a)anthracene	Q	0.25						
Benzidine	Q	0.2						
Benzo(a)pyrene	9	0.2						
Benzo(b)fluoranthene	2	0.2						
Benzo(g,h,i)perylene	2	0.3						
Benzo(k)fluoranthene	2	0.5						
Benzoic acid	2	0.5						
Benzyi alcohol	S	0.5						
Bis(2-chloroethoxy)methane	QV.	0.5						
Bis(2-chloroethyl)ether	Q	0.25						
Bis(2-chloraisoprapyl)ether	S	0.5						
Bis(2-ethylhexyl)phthalate	0.07633	0.2						-,
4-Bromophenyl phenyl ether	ġ	0.25					•	
Butyl benzyl phthalate	Q	0.5						
Carbazole	QN	0.2						
4-Chloro-3-methylphenol	ON	0.2						
4-Chloroaniline	QN	0.2						
2-Chloronaphthalene	2	0.2						
2-Chlorophenol	2	0.2						
4-Chlorophenyl phenyl ether	Q.	0.2						
Chrysene	QN	0.2						
Di-n-butyl phthalate	0.1017	0.25						_
Di-n-octyl phthalate	2	0.5						

B - Analyte detected in the associated Method Blank

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

Work Order: 0.0029272 Mothlood Blank Projects: RR Rock Lagoon NW Add Excav. Model Debrack Debrack Jalphrocense ND 0.5 1.3-Obisionobarone ND 0.2 1-A-Obisionobarone ND 0.2 <th>CLIENT: Giant Refining Co</th> <th>ng Co</th> <th></th> <th>OC SIIMMARY REPORT</th>	CLIENT: Giant Refining Co	ng Co		OC SIIMMARY REPORT
RR Rock Legoon NW Add Excav. All 0.25 A				
Infracore ND 0.25 Infracore ND 0.2 entrace ND 0.2 stale ND 0.2 stack ND 0.2 strace ND 0.2 stra		goon NW Add. Excav.		Method Blank
In Description In Desc	Dibenz(a,h)anthracene	QN	0.25	
refrace ND 0.2 refracene ND 0.2 refracene ND 0.2 beraldie ND 0.2 hard 0.2 0.2 hard 0.2 0.2 hard 0.2 0.2 hard 0.2 0.2 hard ND 0.2 hard ND 0.2 hard ND 0.2 hard ND 0.2 color ND 0.2 hard ND 0.2 color ND 0.2 color ND 0.2 color ND 0.2 color ND 0.2 chold ND 0.2 chold ND 0.2 chold ND 0.2 hard ND 0.2 hard ND 0.2 hard ND 0.2 hard ND </td <td>Dibenzofuran</td> <td>Ž</td> <td>0.5</td> <td></td>	Dibenzofuran	Ž	0.5	
remzene ND 0.2 enzidine ND 0.2 enzidine ND 0.2 benzidine ND 0.2 salate ND 0.2 shenol ND 0.2 shenol ND 0.5 snot ND 0.2 dolytene ND 0.2 snot ND	1,2-Dichlorobenzene	2	0.2	
enreche ND 0.2 benzidire ND 0.2 benzidire ND 0.2 benzidire ND 0.2 henol ND 0.2 henol ND 0.5 henol ND 0.5 and 0.5 0.2 and 0.2 0.2 colphyrene ND 0.2 AD 0.2	1,3-Dichlorobenzene	S	0.2	
Denzicline ND 0.2 Late ND 0.2 Amenol ND 0.2 Amenol ND 0.2 Amenol ND 0.5 Amenol ND 0.5 Amenol ND 0.2 Alboyrene ND 0.2 <td>1,4-Dichlorobenzene</td> <td>Z</td> <td>0.2</td> <td></td>	1,4-Dichlorobenzene	Z	0.2	
late ND 0.2 habilate ND 0.2 habilate ND 0.2 habilate ND 0.2 habilate ND 0.5 and 0.5 0.2 and 0.2 0.2 latene ND 0.2 ND 0.2 0.2 laddene ND 0.2 name ND 0.2 colphytene ND 0.2 hand 0.2 0.2 hand 0.2 0.2 chopylamine ND 0.2 nD 0.2 0.2 nD 0.2 0.2 nD 0.2 0.2 npopylamine ND 0.2 ND 0.2 0.2 ND 0	3,3'-Dichlorobenzidine	OZ.	0.2	
halelet ND 0.2 harbol ND 0.2 harbol ND 0.5 and block ND 0.5 and block ND 0.2 and block 0.2 0.2 chare ND 0.2 nD 0.2 ND 0.2 ND 0.2	Diethyi phihalate	2	0.2	
henol ND 0.2 phenol ND 0.2 methylphenol ND 0.5 methylphenol ND 0.2 smooth ND 0.2 clopentacliene ND 0.2 share ND 0.2 chopylamic ND 0.2 share ND 0.2 chopylamine ND 0.2 ND 0.2 0.2 smooth/amine ND 0.2 ND 0.2 0.2 ND	Dimethyl phthalate	Q.	0.2	
nethyliphenol ND 0.2 methyliphenol ND 0.5 enol ND 0.5 enol ND 0.2 actore ND 0.2 nnce ND 0.2 natediene ND 0.2 natediene ND 0.2 nate ND 0.2 colporatediene ND 0.2 nate ND 0.2 nate ND 0.2 chaper action ND 0.2 that alene ND 0.2 that alene ND 0.2 chopylamine ND 0.2 ND 0.2 0.2 ND 0.2 0.5 ND 0.2 ND 0.2 0.2 ND	2,4-Dichlorophenol	QN	0.2	
methylphenol ND 0.5 enol ND 0.2 Jame ND 0.2 Jame ND 0.2 And 0.2 0.2 Anderse ND 0.2 Anales ND 0.2 Appropriate ND 0.2 Appropriate ND 0.2 Inhalene ND 0.2 And 0.2 0.2 Appropriate ND 0.2 And 0.2 0.3 And 0.2 0.2 And 0.2 0.3 And 0.2 0.2 And 0.2 0.2 And 0.2 0.2 And	2,4-Dímethylphenol	2	0.2	
enol ND 0.5 Jame ND 0.2 Jame ND 0.2 ND 0.2 0.2 Instante ND 0.2 Apyrene ND 0.2	4,6-Dinitro-2-methylphenol	OZ	0.5	
Lene ND 0.2 Jene ND 0.2 ND 0.2 0.2 Anzene ND 0.2 Anzene ND 0.25 Analogoentadiene ND 0.2 Analogoentadiene ND 0.2 Analogoene ND 0.2 Analogoene ND 0.2 Analogoene ND 0.2 Anthalene ND 0.2 Anthalene <td< td=""><td>2,4-Dinitrophenol</td><td>2</td><td>0.5</td><td></td></td<>	2,4-Dinitrophenol	2	0.5	
Left of Line ND 0.2 ND 0.2 ND Inactione ND 0.2 Inactioned at the Reporting Limit ND 0.25 Inactioned at the Reporting Limit ND 0.2 Inactioned at the Reporting Limit 0.2 ND Incorporation of the Reporting Limit 0.5 ND Incorporation of the Reporting Limit ND 0.2	2,4-Dinitrotoluene	2	0.2	
ND 0.2 ND 0.2 tradeline ND 0.2 tradeline ND 0.25 colopentadiene ND 0.5 thane ND 0.2 thale ND 0.2 chopylamine ND 0.2 propylamine ND 0.2 propylamine ND 0.2 ND 0.2 0.2 propylamine ND 0.2 ND 0.2 0.2	2,6-Dinitrotaluene	N O	0.2	
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surgene ND 0.2 stradelene ND 0.25 cdopentadiene ND 0.5 hane 0.0 0.2 cd)pyrene ND 0.2 thalene ND 0.2 ord ND 0.2 enol ND 0.2 propylamine ND 0.2 enylamine ND 0.2 ND 0.2 ND ND 0.2 ND ND 0.5 ND ND 0.5 ND ND 0.2 ND	Fluorene	Ω	0.2	
Itadlene ND 0.2 Colpentacliene ND 0.5 hane ND 0.2 col)pyrene ND 0.2 thalene ND 0.2 ol ND 0.2 propylamine ND 0.2 propylamine ND 0.2 ND 0.2 ND no 0.2 ND ND 0.2 ND	Hexachlorobenzene	ΩN	0.2	
Ciopentadiene ND 0.25 hane ND 0.5 cd)pyrene ND 0.2 Ithalene ND 0.2 ool ND 0.2 propylamine ND 0.2 enylamine ND 0.2 ND 0.2 0.2 ND 0.2 ND <t< td=""><td>Hexachlorobutadiene</td><td>QN</td><td>0.2</td><td></td></t<>	Hexachlorobutadiene	QN	0.2	
hane ND 0.5 cd/pyrene ND 0.2 tratalene ND 0.2 ol ND 0.2 propylamine ND 0.2 propylamine ND 0.2 enylamine ND 0.2 ND 0.2 ND 0.5 ND 0.5 ND 0.2	Hexachlorocyclopentadiene	Q	0.25	
cd/pyrene ND 0.2 Intalene ND 0.2 ol ND 0.2 propylamine ND 0.2 enylamine ND 0.2 ND 0.2 0.2 ND 0.5 ND ND 0.5 ND ND 0.2 ND	Hexachloroethane	2	0.5	
thalene ND 0.2 ol ND 0.2 enol ND 0.2 propylamine ND 0.2 enylamine ND 0.2 ND 0.5 ND 0.5 ND 0.25 ND 0.25 ND 0.2	Indeno(1,2,3-cd)pyrene	<u>0</u> 2	0.2	
thalene ND 0.2 ol ND 0.2 propylamine ND 0.2 enylamine ND 0.2 ND 0.5 ND ND 0.5 ND ND 0.25 ND ND 0.2 ND	Isophorone	<u>Q</u>	0.2	
ol ND 0.2 propylamine ND 0.2 enylamine ND 0.2 ND 0.5 ND ND 0.5 ND ND 0.25 ND ND 0.25 ND ND 0.2 ND	2-Methylnaphthalene	QN QN	0.2	
lenol ND 0.2 propylamine ND 0.2 RND 0.2 ND ND 0.5 ND ND 0.25 ND ND 0.25 ND ND 0.2 ND ND 0.2 ND ND 0.2 ND ND 0.2 ND	2-Methylphenol	2	0.2	
-propylamine ND 0.2 enylamine ND 0.2 ND 0.5 ND 0.25 ND 0.25 ND 0.2 ND 0.2 ND 0.2 ND - Not Detected at the Reparting Limit S - Spike Recovery outside accepted recovery limits	3+4-Methyiphenol	<u>Q</u>	0.2	
enylamine ND 0.2 ND 0.2 ND 0.5 ND 0.25 ND 0.2 ND 0.2 ND 0.2 ND 0.2 ND - Not Detected at the Reparting Limit S - Spike Recovery outside accepted recovery limits	N-Nitrosodi-n-propylamine	۵N	0.2	
ND 0.2 ND 0.5 ND 0.25 ND 0.2 ND 0.2 ND - Not Detected at the Reparting Limit S - Spike Recovery outside accepted recovery limits	N-Nitrosodíphenylamine	ΩN	0.2	
ND 0.5 ND 0.25 ND 0.2 ND 0.2 ND - Not Detected at the Reparting Limit S - Spike Recovery outside accepted recovery limits	Naphthalene	QN QN	0.2	
ND 0.5 ND 0.25 ND 0.2 ND 0.2 ND - Not Detected at the Reparting Limit S - Spike Recovery outside accepted recovery limits	2-Nitroaniline	Q	0.5	
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	3-Nitroanlline	N Q	0.5	
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	4-Nitroaniline	QN	3,25	
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	Nitrobenzene	ΩN	0.2	
ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits	2-Nitrophenoi	O Z	0.2	
כי ביני ביניביים זו זור וצלים וווון בינים		of at the Reporting 1 imit		A mailtain de la constant de la cons
		ed at the Neporting Elmit		 Analyte detected in the associated Method Blank

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CLIENT:	Giant Refining Co								OC STIMMARY REPORT
Work Order:	0508272								
Project:	RR Rock Lagoon NW Add. Excav.	ld. Excav.							Method Blank
4-Nitrophenal		2	0.2						
Pentachlorophenol		20	0.5						
Phenanthrene		2	0.2						
Phenol		S S	0.2						
Pyrene		Q	0.2						
Pyridine		Q	0.5						
1,2,4-Trichlarobenzene	ene	ND	0.2						
2,4,5-Trichlorophenol	Įo.	ND	0.2						
2,4,6-Trichloraphenol	ō	N Q	0.2						
Surr: 2,4,6-Tribramophenol		3.006	0	3.33	o	90.3	35.5	141	0
Surr: 2-Fluorobiphenyl		1.251	O	1.67	O	74.9	30.4	128	0
Surr: 2-Fluorophenol		2.686	0	3.33	0	80.7	28.1	129	0
Surr: 4-Terphenyl-d14		1.586	0	1.67	0	95.0	34.6	151	0
Surr: Nitrobenzene-d5		1.45	0	1.67	0	86.8	26.5	122	0
Surr: Phenol-d6	2.	2.784	0	3.33	0	83.6	37.6	118	0

	S - Analyte detected in the associated Method Blank	4
	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
1	Qualifiers:	

Date: 31-Aug-05

Hall Environmental Analysis Laboratory

Giant Refining Co CLIENT:

Work Order:

0508272 RR Rock Lagoon NW Add. Excav.

Project:

Sample Matrix Spike QC SUMMARY REPORT

Sample ID 0508272-01a ms Client ID: North Wall	Batch ID: 8607	Test Code Run ID:	Test Code: SW8015 U Run ID: PIDFID_050830A	Units: mg/Kg 130A		Analysis SeqNo:	393971 393971	Analysis Date 8/30/2005 8:46:18 PM SeqNo: 393971	Prep Dk	Prep Date 8/24/2005	
Analyte	Result	Pa	SPK value	SPK Ref Val	%REC	LowLimit	HighLímit	LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr: BFB	25.26 1065	3 O	25 1000	00	101	83.1	120	0 :			
Sample ID 0508272-01a msd	Batch ID: 8607	Test Code: SW8015	: SW8015	Units: mg/Kg		Analysis	: Date 8/30/2	Analysis Date 8/30/2005 9:17:21 PM	Prep Da	Prep Date 8/24/2005	
Client ID: North Wall		Run ID:	PIDFID_050830A	30A		SeqNo:	393972	8			
Analyte	Result	Pa	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr. BFB	23.88	5	25 1000	00	95.5 110	84	120	25.26 1065	5.62 2.86	11.6	
Sample ID 0508272-01a ms Client ID: North Wall	Batch ID: 8607	Test Code: SW8021 Run ID: PIDFID_	: SW8021 U	Units: mg/Kg 30A		Analysis SeqNo:	Date 8/30/20 393939	Analysis Date 8/30/2005 8:46:18 PM SeqNo: 393939	Prep Da	Prep Date 8/24/2005	
Analyte	Result	PaL	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			
Вепzеле	0.4063	0.025	0.42	0	96.7	85.6	116	0			
Toluene	2.051	0.025	6.1	O	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	-	0	106	87.5	115	0			

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

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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Sample Matrix Spike Duplicate

RR Rock Lagoon NW Add. Excav. Project:

Giant Refining Co 0508272

CLIENT: Work Order:

Sample ID 0508272-01a msd	Batch ID; 8607	Test Code	Test Code: SW8021	Units: mg/Kg		Analysis	Date 8/30/	Analysis Date 8/30/2005 9:17:21 PM	Prep Da	Prep Date 8/24/2005	
Client ID: North Wall		Run ID:	PIDFID_050830A	30A		SeqNo:	393940	01			
Analyte	Result	Pal		SPK value SPK Ref Val	%REC	LowLimit	흗	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	2.66	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	•	0	105	87.5	115	1.062	0.816	0	

/ limits B - Analyte detected in the associated Method Blank	2
S - Spike Recovery outside accepted recovery	R - RPD outside accepted recovery limits
ND - Not Detected at the Reporting Limit	J - Analyte detected below quantitation limits

Date: 31-Aug-05

Hall Environmental Analysis Laboratory

CLIENT: Gi Work Order: 05 Project: RF	Giant Refining Co 0508272 RR Rock Lagoon l	Giant Refining Co 0508272 RR Rock Lagoon NW Add, Excav.	av.						QC SUMMARY REPORT Laboratory Control Spike - generic	MARY Control Spi	REPO ike - ger	RT leric
Sample ID LCS-8603 Client ID:		Batch ID: 8603	Test Code: SW8015 Run ID: FID(17A)	SW8015 Units: FID(17A) 2_050824A	Units: mg/Kg 150824A		Analysis SeqNo:	Analysis Date 8/25/2005 5:19:21 PM SeqNo: 392318	05 5:19:21 PM	Prep Date 8/24/2005	8/24/2005	
Analyte		Result	Pal	SPK value	SPK Ref Val	%REC	LawLimit	HighLimit RPD Ref Val	OD Ref Val	%RPD R	RPDLImit	Qual
Diesel Range Organics (DRO)	(DRO)	43.03	10	.50	0	86.1	67.4	117	. Q			
Sample ID LCSD-8603	9	Batch ID; 8603	Test Code: SW8015	SW8015	Units: mg/Kg		Analysis	Analysis Date 8/26/2005 7:29:18 AM	05 7:29:18 AM	Prep Date 8/24/2005	8/24/2005	1
Client ID:			Run ID:	FID(17A) 2_050824A	150824A		SeqNo:	392319				
Analyte		Result	Pa	SPK value	SPK Ref Val	"REC	LowLimit	HighLimit RPD Ref Val	D Ref Val	%RPD RF	RPDLimit	Qual
Diesel Range Organics (DRO)	(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	SW8015	Units: mg/Kg		Analysis	Analysis Date 8/30/2005 5:05:02 PM	35 5:05:02 PM	Prep Date 8/24/2005	8/24/2005	
Client ID:			Run ID:	PIDFID_050830A	30A		SeqNo:	393965				
Analyte		Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	D Ref Val	%RPD RF	RPDLimit	Qual
Gasoline Range Organics (GRO)	ics (GRO)	26.86	5	25	0	107	84	120	0			
Sample ID Ics-8607		Batch ID: 8607	Test Code: SW8021	SW8021	Units: mg/Kg		Analysis	Analysis Date 8/30/2005 5:05:02 PM	15 5:05:02 PM	Prep Date 8/24/2005	8/24/2005	
Client ID:			Run ID:	PIDFID_050830A	30A		SeqNo:	393929				
Analyte		Result	Pa	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	O Ref Val	%RPD RF	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	MTBE)	1.737	0.1	2	0	86.8	65	132				
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	131	0			
Xylenes, Total		2.147	0.025	1.9	0	113	78.4	125	0			

	B - Analyte detected in the associated Method Blank	1
The state of the s	S - Spike Recovery outside accepted recovery limits	R - RPD outside accepted recovery limits
A STATE OF THE PROPERTY OF THE	ND - Not Detected at the Reporting Limit	J - Analyte detected below quantitation limits
	Qualifiers:	

CLIENT:	Giant Refining Co	OC SUMMARY REPORT
Work Order:	0508272	1 - London On Land Seller
Project:	RR Rock Lagoon NW Add. Excav.	Laboratory Control Spike - genenc

Project:

D: Run ID: ELMO_050825A Inthene 1.268 0.2 1.67 0 0-3-methylphenol 2.687 0.2 3.33 0 0-3-methylphenol 2.687 0.2 3.33 0 nirotoluena 0.987 0.2 1.67 0 itotoluena 1.244 0.2 1.57 0 sodi-n-propylamine 2.444 0.2 3.33 0 sodi-n-propylamine 2.247 0.2 3.33 0 sodi-n-propylamine 2.247 0.2 3.33 0 introphenol 2.247 0.2 3.33 0 introphenol 1.15 0.2 1.67 0 introphenol 1.272 0.2 1.67 0 introluene 1.272 0.2 3.33 0 obhenol 2.253 0.2 3.33 0 obhenol 2.253 0.2 3.33 0 obhenol 2.253 0.2	7K Ref Val 0 0 0 0 0 0	SeqNo: %REC LowLimit	la: 392430				
hithene 1.268 0.2 1.67 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SPK Ref Val 0 0 0 0 0						
htthrene 1.268 0.2 1.67 0 o-3-methylphenol 2.687 0.2 1.67 0 ophenol 2.195 0.2 3.33 0 ophenol 0.987 0.2 1.67 0 itrololuene 1.043 0.2 1.67 0 sodi-n-propylamine 1.044 0.2 1.67 0 sodi-n-propylamine 2.444 0.2 3.33 0 sodi-n-propylamine 2.444 0.2 3.33 0 itrololuene 2.444 0.2 3.33 0 ilorophenol 2.247 0.2 1.67 0 ilorophenol 1.15 0.2 1.67 0 ichlorobenzene 1.272 0.2 1.67 0 ichlorobenzene 1.272 0.2 1.67 0 co-3-methylphenol 2.2474 0.2 3.33 0 co-3-methylphenol 2.263 0.2 1.67 0		The state of the s	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
c-3-methylphenol 2.687 0.2 3.33 0 ophenol 2.195 0.2 3.33 0 hlorobenzene 1.288 0.2 1.67 0 itrotoluene 1.288 0.2 1.67 0 sodi-n-propylamine 1.043 0.2 1.67 0 sodi-n-propylamine 2.244 0.2 3.33 0 nlorophenol 2.247 0.2 1.67 0 richlorobenzene 1.15 0.2 1.67 0 richlorobenzene 1.15 0.2 1.67 0 Dohenol 2.247 0.2 1.67 0 Amerikylphenol 2.247 0.2 1.67 0 Dohenol 2.247 0.2 1.67 0 Acceptable 1.272 0.2 1.67 0 Acceptable 1.272 0.2 3.33 0 Acceptable 1.274 0.2 3.33 0 Acceptable <td></td> <td>75.9 2</td> <td>24 125</td> <td>. o</td> <td>:</td> <td></td> <td></td>		75.9 2	24 125	. o	:		
ophenol 2.195 0.2 3.33 0 hlorobenzene 0.987 0.2 1.67 0 itrotoluene 1.288 0.2 1.67 0 sodi-n-propylamine 1.043 0.2 1.67 0 sodi-n-propylamine 2.444 0.2 3.33 0 nlorophenol 2.247 0.2 3.33 0 rio LCSD-8613 Batch ID: 8613 Test Code: SWB270C Unlis: mg/Kg D: Result PQL SPK Ref Val hthene 1.272 0.2 1.67 0 o-3-methylphenol 2.474 0.2 3.33 0 ophenol 2.253 0.2 1.67 0 ob-smethylphenol 2.253 0.2 3.33 0 itotoluene 1.272 0.2 3.33 0 sodi-n-propylamine 1.011 0.2 3.33 0 ob-smethylphenol 2.316 0.2 3.33 0 ob-smethyl		80.7 14.6	154	0			
Inforobenzene 0.987 0.2 1.67 0 Itotoluene 1.288 0.2 1.67 0 sodi-n-propylamine 1.043 0.2 1.67 0 sodi-n-propylamine 2.444 0.2 3.33 0 nlorophenol 2.247 0.2 3.33 0 richlorobenzene 1.15 0.2 1.67 0 richlorobenzene 1.15 0.2 1.67 0 richlorobenzene 1.272 0.2 1.67 0 richlorobenzene 1.272 0.2 1.67 0 richlorobenzene 2.474 0.2 1.67 0 richlorobenzene 2.253 0.2 1.67 0 richlorobenzene 1.272 0.2 1.67 0 richloruene 1.237 0.2 1.67 0 richloruene 1.011 0.2 3.33 0 richloruene 1.011 0.2 3.33 0		65.9 13.3	3 149	0			
Itrololuene 1.288 0.2 1.67 0 sodi-n-propylamine 1.043 0.2 1.67 0 shenol 2.444 0.2 3.33 0 niorophenol 2.247 0.5 3.33 0 richlorobenzene 1.315 0.2 1.67 0 richlorobenzene 1.15 0.2 1.67 0 D.: Result PQL SPK value SPK Ref Val Inhene 1.272 0.2 1.67 0 0-3-methylphenol 2.474 0.2 3.33 0 ophenol 2.253 0.2 3.33 0 iloroblenol 0.922 0.2 3.33 0 introluene 1.011 0.2 3.33 0 sodi-n-propylamine 1.011 0.2 3.33 0 introluence 1.011 0.2 3.33 0 introluence 1.011 0.2 3.33 0 introloph		59.1 23.6	6 118	o			
sodi-n-propylamine 1.043 0.2 1.67 0 shenol 2.444 0.2 3.33 0 allorophenol 3.074 0.5 3.33 0 richlorobenzene 1.315 0.2 1.67 0 richlorobenzene 1.15 0.2 1.67 0 D.: Run ID: ELMO_050825A 0 0 D.: Result PQL SPK Ref Val 0 Arbhene 1.272 0.2 1.67 0 O-3-methylphenol 2.474 0.2 3.33 0 Intotoluene 1.237 0.2 3.33 0 Intotoluene 1.011 0.2 3.33 0 Intotoluene 2.941 0.5 3.33 0		77.1	В 136	0			
ophenol 2.444 0.2 3.33 0 Allorophenol 3.074 0.5 3.33 0 1.315 0.2 3.33 0 richlorobenzene 1.315 0.2 1.67 0 richlorobenzene 1.15 0.2 1.67 0 D: Result PQL SPK Ref Val 0 Result PQL SPK value SPK Ref Val 0 Anhene 1.272 0.2 1.67 0 Androbenzene 1.274 0.2 3.33 0 Antotoluene 1.237 0.2 3.33 0 Antotoluene 1.011 0.2 3.33 0 Antotoluene 1.011 0.2 3.33 0 Antotoluene 1.011 0.2 3.33 0 Antonol 2.941 0.5 3.33 0		62.5 28	8 114	0			
Inforophanol 3.074 0.5 3.33 0 2.247 0.2 3.33 0 richlorobenzene 1.315 0.2 1.67 0 richlorobenzene 1.15 0.2 1.67 0 ID LCSD-8613 Batch ID: 8613 Test Code: SW8270C Unlis: mg/Kg 0 D: Result PQL SPK Ref Val 0 Inhene 1.272 0.2 1.67 0 O-3-methylphenol 2.474 0.2 3.33 0 Intotoluene 1.277 0.2 3.33 0 Intotoluene 1.237 0.2 1.67 0 Intotoluene 1.011 0.2 1.67 0 Intotoluene 1.011 0.2 3.33 0 Intervolphenol 2.941 0.5 3.33 0		73.4 13.1	1 150	0			
2.247 0.2 3.33 0 richlorobenzene 1.315 0.2 1.67 0 richlorobenzene 1.15 0.2 1.67 0 richlorobenzene 1.15 0.2 1.67 0 D: Result PQL SPK value SPK Ref Val Inhene 1.272 0.2 1.67 0 o-3-methylphenol 2.474 0.2 3.33 0 nlorobenzene 1.272 0.2 3.33 0 rtotoluene 1.237 0.2 1.67 0 sodi-n-propylamine 1.011 0.2 1.67 0 shenol 2.341 0.5 3.33 0 nlorophenol 2.941 0.5 3.33 0		92.3 20.1	1 139	0			
richlorobenzene 1.315 0.2 1.67 0 richlorobenzene 1.15 0.2 1.67 0 D. LCSD-8613 Batch ID: 8613 Test Code: SW8270C Unlis: mg/Kg D: Result PQL SPK value SPK Ref Val hithene 1.272 0.2 1.67 0 o-3-methylphenol 2.474 0.2 3.33 0 nlorobenzene 1.272 0.2 3.33 0 Itotoluene 1.237 0.2 1.67 0 Itotoluene 1.011 0.2 1.67 0 sodi-n-propylamine 1.011 0.2 3.33 0 ihenol 2.341 0.5 3.33 0 indrophenol 2.941 0.5 3.33 0		67.5 17.3	3 141	Ö			
richlorobenzene 1.15 0.2 1.67 0 ID LCSD-8613 Batch ID: 8613 Test Code: SW8270C Units: mg/Kg D: Run ID: ELMO_050825A Run ID: ELMO_050825A Nithene 1.272 0.2 1.67 0 0-3-methylphenol 2.474 0.2 3.33 0 nlorobenzene 1.272 0.2 3.33 0 rtotoluene 1.237 0.2 1.67 0 rtotoluene 1.011 0.2 1.67 0 sodi-n-propylamine 2.316 0.2 3.33 0 nhenol 2.941 0.5 3.33 0		78.7 29	9 131	0			
D LCSD-8613 Batch D: 8613 Test Code: SW8270C Units: mg/Kg		68.8 17.9	9 126	0			
Run D: ELMO_050825A		Anaiy	Analysis Date 8/25/2005	2	Prep Da	Prep Date 8/24/2005	
Result PQL SPK value SPK Ref Val hithene 1.272 0.2 1.67 0 o-3-methylphenol 2.474 0.2 3.33 0 nlorobenzene 0.2253 0.2 3.33 0 trotoluene 1.237 0.2 1.67 0 sodi-n-propylamine 1.011 0.2 1.67 0 shenol 2.316 0.2 3.33 0 nlorophenol 2.941 0.5 3.33 0	_050825A	SeqNo:	0: 392431				
hithene 1.272 0.2 1.67 0 o-3-methylphenol 2.474 0.2 3.33 0 ophenol 2.253 0.2 3.33 0 nlorobenzene 0.922 0.2 1.67 0 trotoluene 1.237 0.2 1.67 0 sodi-n-propylamine 2.316 0.2 3.33 0 nlorophenol 2.941 0.5 3.33 0	SPK Ref Val	"REC LowLimit	HighLimit	RPD Ref Val	%RPD	RPOLimit	Qual
o-3-methylphenol 2.474 0.2 3.33 0 ophenol 2.253 0.2 3.33 0 nlorobenzene 0.922 0.2 1.67 0 trotoluene 1.237 0.2 1.67 0 sodi-n-propylamine 1.011 0.2 1.67 0 inhenol 2.316 0.2 3.33 0 incophenol 2.941 0.5 3.33 0	1.67 0	76.2 24	125	1.268	0.341	: 52	
ophenol 2.253 0.2 3.33 0 Ilorobenzene 0.922 0.2 1.67 0 Irotoluene 1.237 0.2 1.67 0 sodi-n-propylamine 1.011 0.2 1.67 0 inhenol 2.316 0.2 3.33 0 inlorophenol 2.941 0.5 3.33 0		74.3 14.6	3 154	2.687	8.28	25	
Ilorobenzene 0.922 0.2 1.67 0 Irotoluene 1.237 0.2 1.67 0 sodi-n-propylamine 1.011 0.2 1.67 0 ihenol 2.316 0.2 3.33 0 ilorophenol 2.941 0.5 3.33 0		67.7 13.3	3 149	2.195	2.61	25	
Irotoluene 1.237 0.2 1.67 0 sodi-n-propylamine 1.011 0.2 1.67 0 ihenol 2.316 0.2 3.33 0 allorophenol 2.941 0.5 3.33 0		55.2 23.6	3 118	0.987	6.81	25	
sodi-n-propylamine 1.011 0.2 1.67 0 bhenol 2.316 0.2 3.33 0 allorophenol 2.941 0.5 3.33 0		74.1 28	3 136	1.288	4.07	25	
hend 2.316 0.2 3.33 0 1 2.941 0.5 3.33 0		60.5 28	3 114	1.043	3,15	25	
ilorophenol 2.941 0.5 3.33 0		69.6 13.1	1 150	2.444	5.36	25	
7100		88.3 20.1	1 139	3.074	4.44	25	
	3.33 0	68.2 17.3	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-Trichlarobenzene 1.08 0.2 1.67 0		64.7 17.9	9 126	1.15	6.28	22	

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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

Qualifiers:

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Sample Receipt Checklist

Client Name GIANTREFIN				Date and Time	Received:	8/2	24/2005
Work Order Number 0508272	11			Received by	ΑT		
Checklist completed by Signature	hleppe		Date	24-0	5		
Matrix	Carrier name	<u>Client</u>	drop-off				
Shipping container/cooler in good condition?		Yes S	Z	No 🗆	Not Present		
Custody seals intact on shipping container/cooler	?	Yes [No 🗆	Not Present	Not Shipped	V
Custody seals intact on sample bottles?		Yes 5	Z	No 🗆	N/A		
Chain of custody present?		Yes 5	Z	No 🗆			
Chain of custody signed when relinquished and re	eceived?	Yes 5	7	No 🗌			
Chain of custody agrees with sample labels?		Yes 5	Z	No 🗆			
Samples in proper container/bottle?		Yes 5	Z	No 🗆			
Sample containers intact?		Yes 5	✓	No 🗆			
Sufficient sample volume for indicated test?		Yes (Z	No 🗆			
All samples received within holding time?		Yes [No 🗆			
Water - VOA vials have zero headspace?	No VOA vials subm	nitted (V	Yes 🗌	No 🗆		
Water - pH acceptable upon receipt?		Yes [コ	No 🗆	N/A 🗹		
Container/Temp Blank temperature?		. 6		" C ± 2 Accepta given sufficient			
COMMENTS:							
Client contacted	Date contacted:			Pers	on contacted	 	
Contacted by:	Regarding					 	
Comments:						 	
				W-544-1	·····	 	
Corrective Action				· · · · · · · · · · · · · · · · · · ·		 	

	80				(9											
Date:	2 Py 5	•			•			3	7	`	23/55	Oate	Fax #:	Phone #:			4	Address:	1	Gint:	GRA	
Time:	Time:				I			1345	1330	1315	1300	Time	50	505		\	Mu	30	rpon	()	N-CT	
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Relinquished By: (Signature)	Relinquisped By: (Signature)							South Ston	South Well	North B. Em	North Wall	Sample I.D. No.	22 02/0	55853			M 87301	Box7	who !	Think	CHAIN-OF-CUS LODY RECORD	
Receive	Receive											Number/Volume	Sample Temperature:	Sampler:	A	Project Manager:		Project #:	NW add	Project Name:	Other:	
Received By: (Signature)	Received By: (Signature))										Preservative HgCl ₂ HNO ₃	ature:	Stew M	Ex Mil	ar:		•	Sectional George	RR Rocks to		QA/QC Package: Std ☐ Level 4 ☐
	00/00 Solh=18						_	_<	W	2	1	HEAL No.	- Property of the Control of the Con	and in	re ,	•			revotion-	rosda		
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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,

Andy Freeman, Business Manager

Nancy McDuffie, Laboratory Manager



Date: 26-Aug-05

CLIENT:

Giant Refining Co

Project:

R.R. Rack Lagoon Additional SE Wall Excavati

CASE NARRATIVE

Lab Order: 0508234

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

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 RANG	E ORGANICS					Analyst: SC0
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 RA	ANGE					Analyst: NSE
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: NSE
Methyl tert-butyl ether (MTBE)	ND	2.0		mg/Kg	20	8/23/2005 11:21:34 PN
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 PN
Surr. 4-Bromofluorobenzene	109	87.5-115		%REC	20	8/23/2005 11:21:34 PM
EPA METHOD 8270C: SEMIVOLATIL	.ES					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-Chlarophenol	ND	0.20		mg/Kg	1	8/23/2005
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg	1	8/23/2005

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

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

nalyses	Result	PQL Qu	al 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
Isophorene	ND	0.20	mg/Kg	1	8/23/2005
2-Methylnaphthalene	9.8	2.0	mg/Kg	10	B/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

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

Date: 26-Aug-05

CLIENT:

Giant Refining Co

Client Sample ID: North Wall

Lab Order:

0508234

Project:

R.R. Rack Lagoon Additional SE Wall Excavati

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

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

- * Value exceeds Maximum Contaminant Level
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range

4/21

Date: 26-Aug-05

THE RESIDENCE OF THE PROPERTY

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 RANG	SE 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	Ö	60-124	S	%REC	100	8/21/2005 7:16:33 PM
EPA METHOD 8015B: GASOLINE RA	ANGE					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: SEMIVOLATION	_ES					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	ДИ	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-Chlora-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

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

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 Qu	ial 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-Dichiorophenol	ND	2.0	mg/Kg	10	8/23/2005
2,4-Dimethylphenol	ПИ	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	ИD	2.0	mg/Kg	10	B/23/2005
Hexachlorocyclopenladiene	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

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

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

the production of the transfer of the contract	and the second of the second of the second		*********		
Analyses	Result	PQL Q	ual 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

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:

0500251

R.R. Rack Lagoon Additional SE Wall Excavati

Lab ID:

0508234-03

Matrix: SOIL

Analyses	Result		Qual	Units	 DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANG	E 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 RA	ANGE					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: SEMIVOLATIL	ES.					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	В	2.0		mg/Kg	10	8/23/2005
4-Chloroaniline	МD	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

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

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

The second secon

Analyses	Result	PQL Qı	al 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	B/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
Ругеле	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

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

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

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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

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

Date: 26-Aug-05

The state of the s

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 RANG	E 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 RA	ANGE				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: SEMIVOLATII	_ES				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

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

D Thany to detected in the agreement in

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Date: 26-Aug-05

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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

nalyses	Result	PQL Qu	al 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	DN	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-Methylpheno!	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	ЙN	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

Date: 26-Aug-05

CLIENT:

Giant Refining Co

Client Sample 1D: 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-Fluorophenal	62.7	28.1-129	%REC	1	8/23/2005
Sur: 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

R - RPD outside accepted recovery limits

E - Value above quantitation range

Date: 26-4ug-05

Hall Environmental Analysis Laboratory

Giant Refining Co CLIENT:

0508234 Work Order:

QC SUMMARY REPORT

Project: K.K. Ka	ואיני וומכור הפפספוו וופפונים כד זו מון האפשים										
Sample ID MB-8573 Client ID:	Batch ID: 8573	Test Code: SW8015 Run ID: FID(17A)	: SW8015 Units: FID(17A) 2_050820A	Units: mg/Kg 50820A		Analysis SeqNo:	Date 8/21/20	Analysis Date 8/21/2005 1:58:54 AM SeqNo: 390355	Prep Date 8/19/2005	19/2005	
Analyte	Result	Pal	SPK value	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD RPD	RPDLimit	Qual
Diesel Range Organics (DRO) Motor Oll Range Organics (MRO) Surr: DNOP	ND ND ND ND 10.5	, 10 50 0	10		105	90	124	0			
Sample ID mb-8571 Client ID:	Batch (D: 8571	Test Code: Run ID:	est Code: SW8015 U	Units: mg/Kg 22A		Analysis SeqNo:	Date 8/22/20 391043	Analysis Date 8/22/2005 6:42:39 PM SeqNo: 391043	Prep Date 8/19/2005	19/2005	l
Analyte	Result	Pol	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	HighLimit RPD Ref Val	%RPD RPD	RPDLimit	Qual
Gasoline Range Organics (GRO) Surr. BFB	(O) ND 914.7	0.0	1000	0	91.5	83.1	124	0			
Sample ID mb-8571	Batch ID: 8571	Test Code:	est Code: SW8021	Units: mg/Kg		Analysis	Date 8/22/2	Analysis Date 8/22/2005 6:42:39 PM	Prep Date 8/19/2005	19/2005	1
Client ID:		Run ID:	PIDFID_050822A	22A		SeqNo:	391004	v t			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit		HighLimit RPD Ref Val	%RPD RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE) Benzene Toluene Ethylbenzene Xylenes, Tolal		0.1 0.025 0.025 0.025 0.025		:							, , , , ,
Surr: 4-Bromofluorobanzene	0.9884	0	-	0	98.8	87.5	15	0			

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

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

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

Giant Refining Co

CLIENT:

Sample ID MB-8570	Batch ID: 8570	Test Code	Test Code: SW8270C	Units: mg/Kg		Analysis	Analysis Date 8/22/2005	/2005	Prep Dat	Prep Date 8/19/2005	
Client ID:		Run ID:	ELMO_050822A	2A		SeqNo:	391145	45			
Analyte	Result	PaL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ON.	0.2		:	:						
Acenaphthylene	Q	0.2									
Aniline	QN	0.2									
Anthracene	QV	0.2									
Azobenzene	S	0.2									
Benz(a)anthracene	Q	0.25									
Benzidine	QN	0.2									
Benzo(a)pyrene	QN	0.2									
Benzo(b)fluoranthene	S	0.2									
Benzo(g,h,i)perylene	0.02967	0.3									7
Benzo(k)fluoranthene	QN	0.5									
Benzoic acid	QN	0.5									
Benzyi alcohol	Q	0.5									
Bis(2-chloroethoxy)methane	Q	0.5									
Bis(2-chloroethyl)ether	QN	0.25									
Bis(2-chloroisopropyl)ether	Q	0.5									
Bis(2-ethylhexyi)phthalate	0.06733	0.2									٦
4-Bromophenyl phenyl ether	ON	0.25									
Butyi benzyl phthalate	QN	0.2									
Carbazole	Q.	0.2									
4-Chloro-3-methylphenol	Q	0.2									
4-Chloroaniline	Q	0.2									
2-Chloronaphthalene	ON	0.2									
2-Chloraphenol	ON.	0.2									
4-Chloraphenyl phenyl ether	Q	0.2									
Chrysene	QV	0.2									
Di-n-butyl phthalate	0.257	0.25									
Di-n-octyl phthalate	QN	0.5									

B - Analyte delected in the associated Method Blank

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

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Giant Refining Co 0508234

Work Order: CLIENT:

Method Blank

Vall Excavati	0.25	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.25	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.5	0.25	0.2
Rack Lagoon Additional SE Wall Excavati	DN	Q	ON.	QN	QN	QN	ΩN	Q	B	R	Q	QN	QN	Q	ON	ON	Q	N ON	S	R	2	Q	D.	S	2	O.	Q	g	2	2	2	2
Project: R.R. Rack L.	Dibenz(a,h)anthracene	Dibenzofuran	1,2-Dichlarobenzene	1,3-Dichlarobenzene	1,4-Dichlorobenzene	3,3'-Dichlorobenzidine	Diethyl phthalate	Dimethyl phthalate	2,4-Dichlorophenol	2,4-Dimethylphenol	4,6-Dinitro-2-methylphenol	2,4-Dinitraphenal	2,4-Dinitratoluene	2,6-Dinitrotoluene	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isaphorone	2-Methylnaphthalene	2-Methylphenol	3+4-Methylphenol	N-Nitrosodi-n-propylamine	N-Nitrosodiphenylamine	Naphthalene	2-Nitroaniline	3-Nitroaniline	4-Nitroaniline	Nitrobenzene

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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

CLIENT:	Giant Refining Co	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				:			OC SUMMARY REPORT
Work Order:	0508234							•	
Project:	R.R. Rack Lagoon Additional SE Wall Excavati	lditional SE W	/all Excavati						Method Blank
4-Nitrophenol		QN	0.2						
Pentachlorophenol		ON ON	0.5						
Phenanthrene		S	0.2						
Phenol		S	0.2						
Pyrene		S	0.2						
Pyridine		N O	0.5						
1,2,4-Trichlorobenzene	ene	2	0.2						
2,4,5-Trichlorophenol	lo	8	0.2						
2,4,6-Trichlorophenol	Jo.	2	0.2						
Surr: 2,4,6-Tribromophenol	mophenol	2.838	0	3.33	0	85.2	35.5	141	0
Surr: 2-Fluorabiphenyl	henyl	1.208	0	1.67	0	72.4	30.4	128	0
Surr: 2-Fluorophenol	enoi	2.164	0	3.33	O,	65.0	28.1	129	0
Surr: 4-Terphenyl-d14	1-d14	1.483	0	1.67	o	88.8	34.6	151	0
Surr: Nitrobenzene-d5	ne-d5	1.198	0	1.67	0	7.1.7	26.5	122	0
Surr: Phenol-d6		2.348	0	3.33	0	70.5	37.6	118	0
				,					
Quallifiers:	ND - Not Detected at the Reporting Limit J - Analyte detected below quantitation limits	orting Limit antitation limits		S - Spike Recovery outside accepted recovery limits R - RPD outside accepted recovery limits	ery outside acc	repled recover	very limits	В - Ап	B - Analyte detected in the associated Method Blank $oldsymbol{q}$

CLIENT: Giant Refining Co

Work Order: 0508234

Project:

R.R. Rack Lagoon Additional SE Wall Excavati

Date: 26-.4118-05

QC SUMMARY REPORT Laboratory Control Spike - generic

Sample ID LCS-8573	Batch ID: 8573	Test Code: SW8015	SW8015	Units: mg/Kg		Analysis	Analysis Date 8/21/2005 2:31:43 AM	:31:43 AM	Prep Date 8/19/2005	8/19/2005	
Client ID;		Run ID:	FID(17A) 2_050820A	50820A		SedNo:	390356				
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	Ref Val	%RPD RF	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:	st Code: SW8015	Units: mg/Kg		Analysis	Analysis Date 8/21/2005 3:04:32 AM	:04:32 AM	Prep Date 8/19/2005	8/19/2005	
Client ID;		Run ID:	FID(17A) 2_050820A	50820A		SeqNo:	390357				
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	tef Val	%RPD RF	RPDLimit	Qual
Diesel Range Organics (DRO)	58.49	10	50		117	67.4	117	53.51	8.89	17.4	
Sample ID Ics-8571	Batch ID: 8571	Test Code: SW8015	SW8015	Units: mg/Kg		Analysis	Analysis Date 8/22/2005 7:45:44 PM	45:44 PM	Prep Date 8/19/2005	8/19/2005	
Client ID:		Run ID:	PIDFID_050822A	22A		SeqNo:	391059				
Analyte	Result	PQ	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	tef Vai	%RPD RF	RPDLimit	Qual
Gasoline Range Organics (GRO)	24.66	2	25	0	98.6	. 48	120	0			
Sample ID GRO Ics 2.5ug	Batch ID: 8571	Test Code: SW8015	SW8015	Units: mg/Kg		Analysis	Analysis Date 8/23/2005 12:52:35 PM	2:52:35 PM	Prep Date	ļ	
Clent ID:		Run ID:	PIDFID_050823A	23A		SedNo:	391457				
Analyte	Result	Pal	SPK value	SPK value SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	tef Val	"RPD RP	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	SW8015	Units: mg/Kg		Analysis	Analysis Date 8/24/2005 4:49:06 PM	49:06 PM	Prep Date		
Client ID:		Run ID:	PIDFID_050824A	24A		SeqNo:	392009				
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	ef Val	%RPD RP	RPDLimit	Qual
Gasoline Range Organics (GRO)) 22.35	ເນ	25	0.0214	89.3	84	120	0			

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD autside accepted recovery limits

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

REPORT
SUMMARY
8

CLIENT: Gjant Refinin Work Order: 0508234 Project: R.R. Rack La	g Co goon Additional	SE Wall Excavati	vati				O Lab	C SUM	QC SUMMARY REPORT Laboratory Control Spike - generic	St.
Sample ID Ics-8571 Client ID:	Batch ID: 8571	Test Code: SW8021 Run ID: PIDFID_	SW8021 U PIDFID_050822A	Units: mg/Kg		Analysis SeqNo:	Analysis Date 8/22/2005 7:45:44 PM SeqNo: 391005	45:44 PM	Prep Date 8/19/2005	1
Analyte	Result	PaL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	ef Val	%RPD RPDLImit (Qual
Methyl tert-butyl ether (MTBE)	2.093	0.1	2	0	105	. 65	132	0		
Велzепе	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		
Xytenes, Total	2.185	0.025	2	0.02385	108	78.4	125	0		
Sample 10 BTEX Ics 100ng	Batch ID: 8571	Test Code: SW8021	SW8021	Units: mg/Kg		Analysis	Analysis Date 8/23/2005 1:55:24 PM	55:24 PM	Prep Date	
Client ID:		Run lÖ:	PIDFID_050823A	23A		SeqNo:	391323			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	ef Val	%RPD RPDLimit C	Qual
Methyl tert-butyl ether (MTBE)	0.9565	0.1	; -	0	95.6		132	0		
Benzene	1.04	0.025	-	O	104	85.6	116	0		
Toluene	1.027	0.025	-	O	103	82.4	120	0		
Ethylbenzene	1.036	0.025	_	0	104	86.4	111	0		
Xylenes, Total	2.1	0.025	2	0	105	78.4	125	0		

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

QC SUMMARY REPORT

Laboratory Control Spike - generic

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

Giant Refining Co 0508234

CLIENT: Work Order:

Sample ID LCS-8570	Batch ID: 8570	Test Code:	est Code: SW8270C	Units: mg/Kg		Analysis	Analysis Date 8/22/2005	2005	Prep Da	Prep Date 8/19/2005	5
		Run ID:	ELMO_050822A	2A		SeqNo:	391146	9			
Analyte	Result	PaL	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	7.6.7	14.6	154	0			
2-Chlorophenol	2.177	0.2	3.33	0	65.4	13.3	149	0			
1 4-Dichloropenzene	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-orogylamine	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			
Phenal	2.213	0.2	3,33	0	66.4	17.3	141	0			
Pvene	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:	est Code: SW8270C	Units: mg/Kg		Analysis	Analysis Date 8/22/2005	2005	Prep Da	Prep Date 8/19/2005	ເດ
Client ID:		Run ID:	ELMO_050822A	22A		SeqNo:	391147	1.1			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.298	0.2	1.67	0	7.77	24	125	1,344	3.48	25	
4-Chloro-3-methylohenol	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-Nitrosadi-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	
Pentachtorophenol	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	ND - Not Detected at the Reporting Limit	:	S-Sp	S - Spike Recovery outside accepted recovery limits	accepted rec	overy limits		B - Analyte detected in the associated Method Blank	d in the associ	iated Method I	Blank
	J - Analyte detected below quantitation limits	mits	R.R	R - RPD outside accepted recovery limits	ecovery limi	S					ω

Sample Receipt Checklist

Client Name GIANTREFIN			Date and Time	Received:		8/1	19/2005
Work Order Number 0508234			Received by	AMF			
Checklist completed by Signal Gre	ppe.	S	19-05	• • •			
Matrix	Carrier name	Client drop-	<u>off</u>				
Shipping container/cooler in good condition?		Yes 🗹	No 🗆	Not Present			
Custody seals intact on shipping container/cooler?	•	Yes	No 🗆	Not Present		Not Shipped	\checkmark
Custody seals intact on sample bottles?		Yes 🔽	No 🗆	N/A			
Chain of custody present?		Yes 🗹	No 🗆				
Chain of custody signed when relinquished and re	ceived?	Yes 🗹	No 🗆				
Chain of custody agrees with sample labels?		Yes 🗹	No 🗆				
Samples in proper container/bottle?		Yes 🗹	No 🗀				
Sample containers intact?		Yes 🗹	No 🗆				
Sufficient sample volume for indicated test?		Yes 🗹	No 🗆				
All samples received within holding time?		Yes 🗹	No 🗆				
Water - VOA vials have zero headspace?	No VOA vials subm	nitted 🗹	Yes 🗌	No 🗌			
Water - pH acceptable upon receipt?		Yes 🗌	No 🗆	N/A			
Container/Temp Blank temperature?		6°	4° C ± 2 Accepta If given sufficient				
COMMENTS:							
Client contacted [Date contacted:		Pers	on contacted			
Contacted by:	Regarding			·			
Comments:		· · · · · · · · · · · · · · · · · · ·		<u></u>			
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	real and the second section of the section of the second section of the section of t	······································					
	<u> </u>						
Corrective Action							
All agreements the same and the				· · · · · · · · · · · · · · · · · · ·			

HALL ENVIRONMENTAL ANALYSIS LABORATORY 4901 Hawkins NE, Suite D Albuquerque, New Mexico 87109 Tel. 505,345,3975 Fax 505,345,4107 www.hallenvironmental.com	### STANDARD STEX + MTBE + TMB's (8021) ### METH WHIBE + TMB's (8021) ### Method 8015B (Ges/Diesel) ### Method 8015B (Ges/Diesel) ### Method 8015B (Ges/Diesel) ### Method 8021) ### Method 8021) ### Method 8021) ### METH Wethod 8021) ### METHOD WO IT WO IT WO IT WO IT ### METHOD WO IT WO IT WO IT ### METHOD WO IT WO IT ### METHOD WO IT WO IT ### METHOD WO IT #### # METHOD WO IT ###################################	Remarks: KUSH, ASAP,
CHAIN-OF-CUSTODY RECORD Client: Std Level 4 Other: Client: Std Level 4 Other: Client: Std Level 4 Other: Client: Std Level 4 Other: Addressguld Std Std Company Std Fally, N.W. 87301 Project Wanager:	Pate: Time: Relinquished By: (Signature) Received By: (Signature) Received By: (Signature) Received By: (Signature)	

R.R. Rack Lagoon Additional SE Wall Excavati

Date: 24-Aug-05

CLIENT:

Giant Refining Co

Client Sample ID: North Wall

Lab Order:

0508234

Tag Number:

Project:

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

Lab ID:

0508234-01A

Matrix: SOIL

Analyses	Result	PQL Q	ual Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RA	ANGE				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

[:] Sp : Rec 'ery outsid' accept 1 re -vei_ 'imits

I RF outside ceptade over lings

E - Value above quantitation range

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
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	DN	0.50		mg/Kg	1	8/23/2005
Bis(2-ethylhexyl)phthalate	ND	0.20		mg/Kg	1	8/23/2005
4-Bromophenyl phenyl elher	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 Det lec et Re ortic Limit

: Sp : Rec 'ery outsid' accep l're 'vei_ limits

J - Analyte de sted be w santi loa limi

I RF outside cept.rd: over lin bs

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

^{* -} Value exceeds Maximum Contaminant Level

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	тд/Кд	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 Det lee et Re orth Lincit .

J - Analyte de sted be w santi ion limi

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

2 Sp : Rec 'ery outsid' accept it re 'ver, 'imits

I RF outside cepted: ever line's

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 RAN	IGE				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	5 0	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	87.5-1 15	%REC	50	8/23/2005 11:52:19 PM
				,	

B - Analyte detected in the associated Method Blank

I RF outside cepted: over ling's

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 RANG	E 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: SEMIVOLATIL	.ES					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-chlorolsopropyl)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 Det tec tit Re ortic Limit

J - Analyte de sted be w santi sion limi

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

: Sp : Rec 'ery outsid' accept the 'ver, 'imits

1 RF outside pepted: over lin's

Date: 24-Aug-05

CLIENT:

Giant Refining Co

Client Sample ID: South Wall

Lab Order:

0.50

Tag Number:

Project:

0508234

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-Tribromophenal	109	35.5- 1 41		%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 Det tec tt Re orth Limit

J - Analyte de lated be w lanti lion limi

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

: Sp : Rec 'ery outsir' accept fre 'ver_'imits

I RF outside ceptade over livits

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 RA	NGE				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

² Sp : Rec 'ery outsir' accep. Lee vei, 'imits

¹ RF outside cepted: over ling's

E - Value above quantitation range

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 Oll 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: SEMIVOLATILE	S					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		m g/K g	10	8/23/2005
Benzoic acid	МD	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
Butyi benzyi phihalate	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 Det tec tit Re orth Lin.it

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: Sp. : Rec very outsid accept. The overy limits

J - Analyte de sted be w ranti ion limi

1 RF outside peptidir over licos

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

^{* -} Value exceeds Maximum Contaminant Level

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 Q	ial Units	DF	Date Analyzed
2,4-Dichlarophenol	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-Dinitrophenal	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
Hexachlorocydopentadiene	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	ИD	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	B/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 Det lec tit Re orth Limit

J - Analyte de sted be w panti ion limi

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

: Sp : Rec 'ery outsir' accept the 'ver, 'imits

I RF outside cept.ed: over live's

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 RA	NGE				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

I RF outside cept.d: over lin 's

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

Lab ID: 0508234-04B	watra: SOIL										
Analyses	Result	PQL	Qual U	Units		DF	Date Analyzed				
EPA METHOD 8015B: DIESEL RANG	SE ORGANICS						Analyst: SCC				
Diesel Range Organics (DRO)	15	10	п	ng/Kg		1	8/21/2005 10:25:32 AM				
Motor Oil Range Organics (MRO)	ND	50	П	ng/Kg		1	8/21/2005 10:25:32 AM				
Surr: DNOP	117	60-124	9,	%REC		1	8/21/2005 10:25:32 AM				
EPA METHOD 8270C: SEMIVOLATIL	_ES						Analyst: BL				
Acenaphthene	ND	0.20	n	ng/Kg		1	8/23/2005				
Acenaphthylene	ND	0.20	п	ng/Kg		1	8/23/2005				
Aniline	ND	0.20	п	ng/Kg		1	8/23/2005				
Anthracene	ND	0.20	п	ng/Kg		1	8/23/2005				
Azobenzene	ND	0.20	n	ng/Kg		1	8/23/2005				
Benz(a)anthracene	ND	0.25	г	ng/Kg		1	8/23/2005				
Benzidine	ND	0.20	Г	ng/Kg		1	8/23/2005				
Benzo(a)pyrene	ND	0.20	r	ng/Kg		1	8/23/2005				
Benzo(b)fluoranthene	ND	0.20	r	ng/Kg		1	8/23/2005				
Benzo(g,h,i)perylene	ND	0.30	ı	ng/Kg		1	8/23/2005				
Benzo(k)fluoranthene	ND	0.50	г	ng/Kg		1	8/23/2005				
Benzoic acid	ND	0.50	r	mg/Kg		1	8/23/2005				
Benzyl alcohol	ND	0.50	1	mg/Kg		1	8/23/2005				
Bis(2-chloroethoxy)methane	ND	0.50	1	mg/Kg		1	8/23/2005				
Bis(2-chloroethyl)ether	ND	0.25	1	mg/Kg		1	8/23/2005				
Bis(2-chlorolsopropyl)ether	ND	0.50	ſ	mg/Kg		1	8/23/2005				
Bis(2-ethylhexyl)phthalate	ND	0.20	1	mg/Kg		1	8/23/2005				
4-Bromophenyl phenyl ether	ND	0.25	1	mg/Kg		1	8/23/2005				
Butyl benzyl phthalate	ND	0.20	г	mg/Kg		1	8/23/2005				
Carbazole	ND	0.20	1	mg/Kg		1	8/23/2005				
4-Chloro-3-methylphenol	ND	0.20	r	mg/Kg		1	8/23/2005				
4-Chloroaniline	ND	0.20	1	mg/Kg		1	8/23/2005				
2-Chloronaphthalene	ИD	0.20	1	mg/Kg		1	8/23/2005				
2-Chlorophenoi	ND	0.20	ı	mg/Kg		1	8/23/2005				
4-Chlorophenyl phenyl ether	ND	0.20	1	mg/Kg		1	8/23/2005				
Chrysene	ND	0.20	1	mg/Kg		1	8/23/2005				
Di-n-butyl phthalate	ND	0.25	1	mg/Kg		1	8/23/2005				
Di-n-octyl phthalate	ND	0.50	1	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	ı	mg/Kg		1	8/23/2005				
1,3-Dichlorobenzene	ND	0.20	1	mg/Kg		1	8/23/2005				
1,4-Dichlorobenzene	ND	0.20	ı	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 Det lec ti Re ortin Lin.it

J - Analyte de eted be w ranti ion limi

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

: Sp : Rec 'ery outsid' accept I re 'ver, 'imits

I RF outside peptal: over lin is

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	
Nilrobenzene	ND	0.20	_	/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	%F	REC	1	8/23/2005	
Surr: 2-Fluorobiphenyl	63.9	30.4-128	%F	REC	1	8/23/2005	
Surr: 2-Fluorophenol	62.7	28.1-129	%F	REC	1	8/23/2005	
Surr: 4-Terphenyl-d14	82.0	34.6-151	%F	REC	1	8/23/2005	
Surr: Nitrobenzene-d5	66.7	26.5-122	%F	REC	1	8/23/2005	
Surr: Phenol-d6	67.9	37.6-118	%F	REC	1	8/23/2005	

Qualifiers:

ND - Not Det lec 11 Rc orth Lin.it

J - Analyte de sted be w santi son limi

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

: Sp : Rec ery outsid accep | I re ver 'imits

I RF outside ceptada over linos



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 Preeman, Business Manager Nancy McDuffie, Laboratory Manager

nelae:

Date: 13-Dec-04

CLIENT:

Giant Relining Co

Project: Lab Order: Railroad Rack Lagoon SWMU

0411234

CASE NARRATIVE

Analytical Comments for METHOD 8015DRO_S, SAMPLE 0411234-01A: Surrogate not recovered due to dilution.

Date: 13-Dec-04

CLIENT: Lab Order: Giant Refining Co

0411234 Railroad Rack Lagoon SWMU

Project: Lab ID:

0411234-01

Client Sample ID: RR-E-1 Wall S

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

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst; MAP
Fluoride	ND	3.0		mg/l <g< td=""><td>10</td><td>12/2/2004 2:40:18 PM</td></g<>	10	12/2/2004 2:40:18 PM
Chloride	57	3.0		mg/Kg	10	12/2/2004 2:40:18 PM
Nitrogen, Nitrato (As N)	ND	3.0		mg/Kg	10	12/2/2004 2:40:18 PM
Sulfale	ND	15		mg/Kg	10	12/2/2004 2:40:18 PM
Nitrogen, Nitrite (As N)	ИĎ	3.0		mg/Kg	10	12/2/2004 2:40:18 PM
Phosphorus, Orthophosphale (As P)	ND	15		mg/Kg	10	12/2/2004 2:40:18 PM
EPA METHOD 8015B; DIESEL RANGE	•					Analyst: JMP
Diesel Rango 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	\$	%REC	20	12/8/2004 2:16;56 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl ton-butyl other (MTSE)	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	ИD	0.20		rng/Kg	2	11/24/2004 2:22:50 PM
Calcium	28000	130		mg/Kg	5	11/24/2004 2:26:51 PM
Chromlum	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
Scienium	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
pl-t .	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY 4901 Hawkins NE, Suite D Albuquerque, New Mexico 67109 Tel. 505,345.3975 Fax 505,345,4107 www.hallenvironmental.com		2, PO4, SO ₄	-VOA) -VOA) -VOA) -VOA, NO3, NO -VOA, NO3, NO -VOA, NOA -VOA, NO -VOA, NO -VOA, NO -VOA, NO -VOA, NO -VOA, NO -VOA, NOA -VOA, NO -VOA, NO -VOA, NO -VOA, NO -VOA, NO -VOA, NO -VOA, NOA	EDB (Methorshot Methorshot Methor	XXXXXX					on Now = Cations
		s (BOS1) Gasoline On (Oasol)ie) H9T + 38 N 82108 b							Remarks: Enrice
Project Name: Residency Party Renaul Parch Support	Project 1:	Project Manager.	Samples Coldi. 70 IN Yes ON	Numberl Yokuma Preservative HEAL No.	2					Received By (Signature) 11-27 34 Received By (Signature)
USTODY RECORD Talming 4 - Emiga	5 8 Bar 7		722 5253	Matrix Sample I.D. No.	Soid RR-E-1-4448					Relinquished By: (Signature) Relinquished By: (Signature)
CHAIN OF-C	Gally	Dhana 8.	Fax I.	Date Time	1/20/04 1100				ļ	//22/04 //50 H



COVER LETTER

December 03, 2004

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

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



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

Date: 03-Dec-04

CLIENT:

Giant Refining Co

Client Sample ID: RR-N-1

Lab Order:

0411218

0411218-01

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

Project: Lab ID: Railroad Rack Lagoon SWMU

Matrix: SOIL

Analyses	Result	PQL	Qual U	nits	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: MAP
Fluoride	18	3.0	m	g/Kg	10	11/30/2004 11:48:28 AM
Chloride	320	3.0	m	g/Kg	10	11/30/2004 11:48:28 AM
Nitrogen, Nitrate (As N)	4.9	3.0	m	g/Kg	10	11/30/2004 11:48:28 AM
Sulfate	680	15	m	g/Kg	10	11/30/2004 11:48:28 AM
Nitrogen, Nitrite (As N)	ND	3.0	m	g/Kg	10	11/30/2004 11:48:28 AM
Phosphorus, Orthophosphate (As P)	ND	15	m	g/Kg	10	11/30/2004 11:48:28 AM
EPA METHOD 8015B: DIESEL RANGE						Analyst: JMP
Diesel Range Organics (DRO)	ND	10	m	g/Kg	1	11/23/2004 12:13:36 PM
Motor Oil Range Organics (MRO)	ND	50	m	g/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	m	g/Kg	1	11/23/2004 3:37:35 PM
Benzene	ND	0.025	m	g/Kg	1	11/23/2004 3:37:35 PM
Toluene	NĐ	0.025	m	g/Kg	1	11/23/2004 3:37:35 PM
Ethylbenzene	ND	0.025	m	g/Kg	. 1	11/23/2004 3:37:35 PM
Xylenes, Total	ND	0.025	m	g/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	m	g/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						Analyst: CMC
Arsenic	ND	2.5	m	ıg/Kg	1	11/23/2004 12:16:56 PM
Barium	250	0.99	m	ıg/Kg	10	11/24/2004 4:28:22 PM
Cadmium	ND	0.10	m	ig/Kg	1	11/23/2004 12:16:56 PM
Calcium	18000	130	m	ıg/Kg	5	11/23/2004 4:51:19 PM
Chromium	7.0	0.30	m	ıg/Kg	1	11/23/2004 12:16:56 PM
Lead	14	0.25	m	ıg/Kg	1	11/23/2004 12:16:56 PM
Magnesium	5200	25	m	ıg/K g	1	11/23/2004 12:16:56 PM
Potassium	2100	50	m	ıg/Kg -	1	11/23/2004 12:16:56 PM
Selenium	ND	2.5	m	ıg/Kg	1	11/23/2004 12:16:56 PM
Silver	ND	0.25	m	ig/Kg	1	11/23/2004 12:16:56 PM
Sodium	2000	25	m	ıg/Kg	1	11/23/2004 12:16:56 PM
EPA METHOD 150.1: PH						Analyst: CMC
рH	8.25	0.010	pl	H 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

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 U	nits	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: MAP
Fluoride	6.1	3.0	m	g/Kg	10	11/30/2004 12:05:17 PM
Chloride	54	3.0	m	ıg/Kg	10	11/30/2004 12:05:17 PM
Nitrogen, Nitrate (As N)	ND	3.0	m	g/Kg	10	11/30/2004 12:05:17 PM
Sulfate	74	15	m	g/Kg	10	11/30/2004 12:05:17 PM
Nitrogen, Nitrite (As N)	ND	3.0	m	ıg/Kg	10	11/30/2004 12:05:17 PM
Phosphorus, Orthophosphate (As P)	ND	15	m	ıg/Kg	10	11/30/2004 12:05:17 PM
EPA METHOD 8015B: DIESEL RANGE	=					Analyst: JMP
Diesel Range Organics (DRO)	81	10	rr	ıg/Kg	1	11/22/2004 8:26:19 PM
Motor Oil Range Organics (MRO)	ND	50	n	ıg/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	π	ng/Kg	2	11/23/2004 4:07:37 PM
Benzene	ND	0.050	IT	ng/Kg	2	11/23/2004 4:07:37 PM
Toluene	ND	0.050	m	ng/Kg	2	11/23/2004 4:07:37 PM
Ethylbenzene	ND	0.050	n	ng/Kg	2	11/23/2004 4:07:37 PM
Xylenes, Total	ND	0.050	n	ng/Kg	2	11/23/2004 4:07:37 PM
Surr: 4-Bromofluorobenzene	103	74-118	9	6REC	2	11/23/2004 4:07:37 PM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	ND	0.033	n	ng/Kg	1	11/30/2004
EPA METHOD 6010C: SOIL METALS						Analyst: CMC
Arsenic	ND	2.5	n	ng/Kg	1	11/23/2004 12:20:55 PM
Barium	290	0.96	п	ng/Kg	10	11/24/2004 4:32:37 PM
Cadmium	ND	0.10	n	ng/Kg	1	11/23/2004 12:20:55 PM
Calcium	16000	130	n	ng/Kg	5	11/23/2004 4:55:16 PM
Chromium	5.8	0.30	n	ng/Kg	1	11/23/2004 12:20:55 PM
Lead	5.7	0.25	n	ng/Kg	1	11/23/2004 12:20:55 PM
Magnesium	4600	25	n	ng/Kg	1	11/23/2004 12:20:55 PM
Potassium	1300	50	n	ng/Kg	1	11/23/2004 12:20:55 PM
Selenium	ND	2.5	ก	ng/Kg	1	11/23/2004 12:20:55 PM
Silver	ND	0.25	n	ng/Kg	1	11/23/2004 12:20:55 PM
Sodium	1300	25	, n	ng/Kg	1	11/23/2004 12:20:55 PM
EPA METHOD 150.1: PH						Analyst: CMC
pН	9.23	0.010	þ	H 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

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	ļ	mg/Kg	10	11/30/2004 12:22:06 PM
Chloride	27	3.0	i	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

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level 4 / 23

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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
pН	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

* - Value exceeds Maximum Contaminant Level 5/23

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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
Sur: 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
pΗ	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

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

Date: 03-Dec-04

CLIENT:

Giant Refining Co

Lab Order:

0411218

Client Sample ID: RR-S-I-Wall

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

Project:

Railroad Rack Lagoon SWMU

Lab ID:

0411218-06

Matrix: SOIL

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
pΗ	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

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)	ИD	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	ИD	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
pН	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

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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	i	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	ı	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

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 Q	ual 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

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 9 of 13

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/K g	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
ρΗ	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

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

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	1	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
рН	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

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Page 11 of 13

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
pН	8.25	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 13/23

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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
рH	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

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Date: 03-Dec-04

Hall Environmental Analysis Laboratory

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

Sample ID MB-6967	Batch ID: 6967	lest Code: #300	2002	Colles: mg/vg		אומין על	Analysis Date 11,50/2004 10:41:10 A	4 10:41:10	Prep Date 11/30/2004	4007
Client ID:		Run ID:	LC_041130A			SeqNo:	323552			
Analyte	Result	Pol	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD	RPD Ref Val	%RPD RPDLimit	it Qual
Fluoride	QN	0.3								
Chloride	2	0.3								
Nitrogen, Nitrate (As N)	ON .	0.3								
Sulfate	QN	£.								
Nitrogen, Nitrite (As N)	R	0.3								
Phosphorus, Orthophosphate (As P)	(As P) ND	1,5								
Sample ID MB-6969	Batch ID: 6969	Test Code: E300	E300	Units: mg/Kg		Analysis	Analysis Date 11/30/2004 3:26:53 PM	1 3:26:53 PM	Prep Date 11/30/2004	72004
Client ID:		Run ID:	LC_041130A			SeqNo:	323569			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	Ref Val	%RPD RPDLimit	it Qual
Fluoride	ON	0.3								
Chloride	QN	0.3								
Nitrogen, Nitrate (As N)	ΩN	0.3								
Sulfate	Q	t;-								
Nitrogen, Nitrite (As N)	QN	0.3								
Phosphorus, Orthophosphate (As P)	(As P) ND	1.5				,				
Sample ID MB-6944	Batch ID: 6944	Test Code: SW8015	SW8015	Units: mg/Kg		Analysis	Analysis Date 11/22/2004 5:41:51 PM	5:41:51 PM	Prep Date 11/22/2004	2004
Client ID:		Run ID:	FID(17A) 2_041122A	11122A		SeqNo:	322601			
Analyte	Result	PQ	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD	RPD Ref Val	%RPD RPDLimit	t Qual
Diesel Range Organics (DRO)	QN .	10								
Motor Oil Range Organics (MRO)	SO) ND	20								
	40.	•	•	•						

J - Analyte detected below quantitation limits R-RPD outside accepted recovery limits

CLIENT:	Giant Refining Co	OC STIMMARY REPORT
Work Order: 0411218	0411218	
Project:	Railroad Rack Lagoon SWMU	Method Blank

Sample ID MB-6930 B Client ID: Analyte										
Client ID: Analyte	Batch (D: 6930	Test Code: SW8021	SW8021	Units: mg/Kg		Analysis	Date 11/23/2	Analysis Date 11/23/2004 12:37:21 P	Prep Date 11/19/2004	/2004
Analyte		Run ID:	PIDFID_041123A	23A		SeqNo:	322790			
	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit HighLimit		RPD Ref Val	%RPD RPDLimit	iit Qual
Methyl tert-butyl ether (MTBE)	ON	0.1						er og er er er er er er er er er er er er er		
Benzene	Q	0.025								
Toluene	QN	0.025								
Ethylbenzene	Q	0.025								
Xylenes, Total	ON O	0.025								
Surr: 4-Bromofluorobenzene	0.9942	0	~	0	99.4	74	118	0		
Sample ID MB-6972 B	Batch ID: 6972	Test Code: SW7471	SW7471	Units: mg/Kg		Analysis	Analysis Date 11/30/2004	2004	Prep Date 11/30/2004	/2004
Client ID:		Run IÖ:	MI-LA254_041130A	1130A		SedNo:	323375			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	Ref Val	%RPO RPDLimit	iit Qual
Mercury	QN	0.033								
Sample ID MB-6954 B.	Batch ID: 6954	Test Code:	Fest Code: SW6010A	Units: mg/Kg		Analysis	Date 11/23/2	Analysis Date 11/23/2004 11:10:00 A	Prep Date 11/22/2004	/2004
Client ID:		Run ID:	ICP_041123A			SeqNo:	322690			
Analyte	Result	PQ	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RPD Ref Val	Ref Val	%RPD RPDLimit	it Qual
Arsenic	QN	2.5	in the same of the						****	:
Cadmium	0.05491	0.1								7
Calcium	12.41	25								7
Chromium	QN	0.3								
Lead	ΩN	0.25								
Magnesium	ON.	25								
Potassium	Q.	20			٠					
Selenium	ΩN	2.5								
Silver	Q	0.25								

CLIENT:	Giant Refining Co						MITS DO	OC SIIMMARY REPORT	FPORT
Work Order:	0411218							* * * * * * * * * * * * * * * * * * *	
Project:	Railroad Rack Lagoon SWMU							Mer	Method Blank
Sample ID MB-6954	54 Batch ID: 6954	Test Code	Test Code: SW6010A	Units: mg/Kg		Analysis Date	Analysis Date 11/24/2004 4:05:08 PM Prep Date 11/22/2004	Prep Date 11	122/2004
Client ID:		Run ID:	Run ID: ICP_041124A	_		SeqNo:	323121		
Analyte	Result	Pol		SPK value SPK Ref Val	%REC	LowLimit HighL	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit	Limit Qual
Barium	ON	0.1						:	:
Sample ID MB-6954	54 Batch ID: 6954	Test Code	Test Code: SW6010A	Units: mg/Kg		Analysis Date	Analysis Date 11/24/2004 2:15:41 PM Prep Date 11/22/2004	Prep Date 11	/22/2004
Client ID:		Run ID:	Run ID: ICP_041123B			SeqNo: 3	323162		
Analyte	Result	PQL		SPK value SPK Ref Val	%REC	LowLimit HighL	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit	Limit Qual
Sodium	QN	25							

17/23

			A THE REAL PROPERTY AND ASSESSMENT OF THE PROPERTY OF THE PROP
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	m

Hall Environmental Analysis Laboratory

OC STIMMARY REPORT	THE THE THE TAKE THE TAKE	Sample Duplicate
Giant Refining Co	0411218	Railroad Rack Lagoon SWMU
CLIENT:	Work Order:	Project:

Sample ID 0411218-09A DUP Batch ID: 6967	Batch ID: 6967	Test Code: E300	E300	Units: mg/Kg		Analysis	Date 11/30	Analysis Date 11/30/2004 2:36:34 PM Prep Date 11/30/2004	Prep Da	ate 11/30/20	04
Client ID: RR-W-1-Wall N		Run ID:	Run ID: LC_041130A			SeqNo:	323566	36			
Analyte	Result	PQ		SPK value SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	13.08	1.5	0	0	0	0	0	14.15	7.88	. 50	
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	27.6	20	œ
Sulfate	859	7.5	0	0	0	0	0	863.5	0.516	20	
Nitrogen, Nitrite (As N)	ΩN	1.5	0	0	0	0	0	0	0	20	
Phosphorus, Orthophosphate (As P)	P) ND	7.5	0	0	0	0	0	0	0	20	

** ** ** ** ** ** ** ** ** ** ** ** **	B - Analyte detected in the associated Method Blank	1
	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
	Qualifiers:	

Batch ID: 6967 Test Code: 5300 Units: mg/kg Analysis Date 11/30/2004 10:58:07 Prep Date 11/30/2004 10:58:07 Prep Date 11/30/2004 10:58:07 Prep Date 11/30/2004 10:58:07 Prep Date 11/30/2004 Prep Date 11/20/2004	CLIENT:	Giant Refining Co								QC SUM	QC SUMMARY REPORT
Patch ID: 6967 Test Code: E300 Units: mg/Kg Analysis Date 11/30/2004 10:58:07 A Prep Date 11/30/2004	Work Order: Project:	0411218 Railroad Rack La	goon SWMU							Laboratory C	Control Spike - generic
Run D; C_041130A SPK Ref Val SPK R	Sample ID LCS-69t		D: 6967	Test Code:	E300	Units: mg/Kg		Analysis	Date 11/30	/2004 10:58:07 A	Prep Date 11/30/2004
High High	Client ID:			Run ID:	LC_041130A			SeqNo:	32355	8	
1.372 0.3 1.5 0.0 0.10 0.0 0	Analyte		Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit		RPD Ref Val	;
15.84 0.3 15 0 106 90 110 0 0 0 0 0 0 0 0	Fluoride		1.372	0.3	1.5	0	91.5	96	110	0	
7.983 0.3 7.5 0 106 90 110 0 2 32.26 1.5 30 0 108 90 110 0 0 2.984 0.3 3 0 0 115 90 110 0 0 2.984 0.3 3 0 0 1018: mg/K9 110 0 0 8uch ID: 6969 Test Code: E300 Units: mg/K9 SPK Ref Val Rebull 1130 2004 3.43:42 PM Rep Date 11130/2004 3.23670 1.397	Chloride		15.84	0.3	15	0	106	06	110	0	
2.984 0.3 3 0 0 108 99.5 110 0 0 2.984 0.3 1 5 15 0 9 99.5 99.0 110 0 0 Batch ID: 6969	Nitrogen, Nitrate (As	(N.	7.983	0.3	7.5	0	106	06	110	0	
14.85 1.5 1.5 1.5 1.5 1.0 1.10 0 0 0 0 0 0 0 0 0	Sulfate	•	32.25	1.5	30	0	108	06	110	0	
As P) 14.85 1.5 15 0 99.0 90 110 0 Batch ID: 6969 Test Code: E300 Units: mg/Kg Analysis Date 11/30/2004 3:43:42 PM Prep Date 11/30/2004 Run ID: LC_041130A LC_041130A SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit 1.397 0.3 1.5 0 99.7 90 110 0 0 1130/2004 110 0	Nitrogen, Nitrite (As	ê	2.984	0.3	ო	0	99.5	6	110	0	
Batch ID: 6969 Test Code: E300 Units: mg/Kg Analysis Date 11/30/2004 3:43:42 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:45 PM Prep Date 11/30/2004 3:43:43:45 PM Prep Date 11/30/2004 3:43:43:43 PM Prep Da	Phosphorus, Orthop	hosphate (As P)	14.85	1.5	15	0	99.0	06	110	0	
Result PQL SPK Kef Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit RPD Ref Val RPD Ref	Sample ID LCS-69		D: 6969	Test Code:	E300	Units: mg/Kg		Analysis	Date 11/30	/2004 3:43:42 PM	Prep Date 11/30/2004
As Political (As) SPK Nalue SPK Ref Val WREC LowLimit HighLimit RPD Ref Val %RPD RPDLimit 1.397 0.3 1.5 0 93.2 90.7 110 0 0 110 0 0 0 110 0 0 0 0 110 0	Client ID:			Run ID:	LC_041130A			SeqNo:	32357	0	
1.397 0.3 1.5 0 93.2 90 110 0 0 14.95 0 110 0 0 0 110 0	Analyte		Result	POL	SPK value	SPK Ref Val	%REC	LowLimit		RPD Ref Val	
14.95 0.3 15 0 99.7 90 110 0 7.953 0.3 7.5 0 106 90 110 0 30.98 1.5 30 0 103 90 110 0 As P) 15.24 1.5 15 0 102 90 110 0 Batch ID: 6944 Test Code: SW8015 Units: mg/Kg Analysis Date 11/22/2004 6:14:46 PM Prop Date 11/22/2004 Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val RPD Limit 34.85 10 60 69.7 67.4 117 0 RPD Limit	Flioride		1.397	0,3	1.5	0	93.2	06	110	0	
7.953 0.3 7.5 0 106 90 110 0 30.98 1.5 30 0 103 90 110 0 2.878 0.3 3 0 95.9 90 110 0 As Politic Patch ID: 694 1.5 0 102 90 110 0 Ratch ID: 1.5.24 1.5 1.6 0 110 0 0 Ratch ID: 694 1.0 1.0 0 1.10 0 0 1.122/2004 6:14:46 PM Prep Date 11/122/2004 Result PQL 8PK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit 34.85 10 60 69.7 67.4 117 0 0 0	Chloride		14,95	0.3	15	0	99.7	8	110	0	
30.98 1.5 30 0 103 90 110 0 2.878 0.3 3 0 95.9 90 110 0 (As P) 15.24 1.5 15 0 102 90 110 0 Batch ID: 6944 Test Code: SW8015 Units: mg/kg Analysis Date 11/22/2004 6:14:46 PM Prep Date 11/22/2004 Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit 34.85 10 60 69.7 67.4 117 0 0	Nitrogen, Nitrate (As	(Z	7.953	0.3	7.5	0	106	06	110	0	
2.878 0.3 3 0 95.9 90 110 0 As Political Politic	Sulfate	•	30.98	1.5	30	0	103	80	110	0	
(As P) 15.24 1.5 15 0 102 90 110 0 Batch ID: 6944 Test Code: SW8015 Units: mg/Kg Analysis Date 11/22/2004 6:14:46 PM Prep Date 11/22/2004 Run ID: FID(17A) 2_041122A SeqNo: 322602 322602 Result PQL SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit 34.85 10 50 0 69.7 67.4 117 0	Nitrogen, Nitrite (As	ŝ	2.878	0.3	က	0	95.9	06	110	0	
Batch ID: 6944 Test Code: SW8015 Units: mg/Kg Analysis Date 11/22/2004 6:14:46 PM Prep Date 11/22/2006 Run ID: FID(17A) 2_041122A SeqNo: 322602 Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit 34.85 10 50 0 69.7 67.4 117 0	Phosphorus, Orthop	hosphate (As P)	15.24	1.5	15	0	102	06	110	0	
Run ID: FID(17A) 2_041122A SeqNo: 322602 Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit 34,85 10 50 0 69.7 67.4 117 0	Sample ID LCS-69		D: 6944	Test Code:	SW8015	Units: mg/Kg		Analysis	Date 11/22	1/2004 6:14:46 PM	Prep Date 11/22/2004
Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit 34.85 10 50 0 69.7 67.4 117 0	Client ID:			Run ID:	FID(17A) 2_0	41122A		SeqNo:	32260	2	
34.85 10 50 0 69.7 67.4 117	Analyte		Result	PQ	SPK value		%REC	LowLimit	HighLimit	RPD Ref Val	:
	Diesel Range Organ	ics (DRO)	34.85	10	20	0	69.7	67.4	117	0	

B - Analyte detected in the associated Method Blank

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

Qualifiers:

Giant Refining Co

0411218 Work Order: CLIENT:

QC SUMMARY REPORT

Project: Railroad	Railroad Rack Lagoon SWMU							Laboratory Control Spike Duplicate	ontrol Spik	te Duplica	ate
Sample ID LCSD-6944	Batch ID: 6944	Test Code: SW8015	SW8015	Units: mg/Kg		Analysis	: Date 11/22	Analysis Date 11/22/2004 6:47:44 PM	Prep Date	Prep Date 11/22/2004	
. Client ID:		Run ID:	FID(17A) 2_041122A	41122A		SeqNo:	322603	5			
Analyte	Result	Pa	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Vai	%RPD RF	RPDLimit Q	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	SW8021	Units: mg/Kg		Analysis	: Date 11/23	Analysis Date 11/23/2004 1:07:20 PM	Prep Date	Prep Date 11/19/2004	l
Client ID:		Run ID:	PIDFID_041123A	23A		SeqNo:	322792	Ø			
Analyte	Result	Pal	SPK value	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	LowLimit HighLimit RPD Ref Val	%RPD RF	RPDLimit Q	Qual
Benzene	0.4318	0.025	0.42	0	103	77	122	0			
Toluene	2.009	0.025	1.9	0	106	91	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	SW7471	Units: mg/Kg		Analysis	Analysis Date 11/30/2004	/2004	Prep Date	Prep Date 11/30/2004	
Client ID:		Run ID:	MI-LA254_041130A	1130A		SeqNo:	323376	9			
Analyte	Result	Pal	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Vai	%RPD RF	RPDLimit Q	Qual
Mercury	0.1791	0.033	0.1667	0	107	75	125	0			
Sample ID LCSD-6972	Batch ID: 6972	Test Code: SW7471	SW7471	Units: mg/Kg		Analysis	Analysis Date 11/30/2004	/2004	Prep Date 11/30/2004	11/30/2004	
Client ID:		Run ID:	MI-LA254_041130A	1130A		SeqNo:	323394	4			
Analyte	Result	Pal	SPK value	SPK value SPK Ref Val	%REC	LowLimit	HighLimit	LowLimit HighLimit RPD Ref Val	%RPD RP	RPDLimit Q	Qual
Mercury	0.1796	0.033	0.1667	0	108	75	125	0.1791	0.242	:: 20	

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

Qualifiers:

B - Analyte detected in the associated Method Blank

CLIENT:	Giant Refining Co OC SUMMARY REP	ORT
Work Order: 0411218		- 0
Project:	Railroad Rack Lagoon SWMU	למונכו זר

Sample ID LCS-6954	Batch ID: 6954	Test Code: SW6010A	SW6010A	Units: mg/Kg		Analysis	Date 11/2	Analysis Date 11/23/2004 11:22:33 A	Prep D	Prep Date 11/22/2004	4
Client ID:		Run ID:	ICP_041123A			SeqNo:	322691	14			
Analyte	Result	Pal	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	8	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	8	120	Q			
Potassium	2484	50	2500	0	99.4	80	120	0			
Selenium	77.77	2.5	25	0	111	8	120	0			
Silver	25.75	0.25	25	0	103	80	120	0			
Sample ID LCSD-6954	Batch ID: 6954	Test Code: SW6010A	SW6010A	Units: mg/Kg		Analysis	Date 11/2	Analysis Date 11/23/2004 11:25:36 A	Prep Da	Prep Date 11/22/2004	4
Client ID:		Run ID:	ICP_041123A			SeqNo:	322692	25			
Analyte	Result	POL	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	20	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	

			The state of the s
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	33

	TO TO THE PARTY OF	
CLIENT:	Giant Refining Co	
Work Order: 0411218		
Project:	Railroad Rack Lagoon SWMU	

Sample ID LCS-6954 Client ID:	Batch ID: 6954	Test Code: Run ID:	Test Code: SW6010A Run ID: ICP_041123B	Units: mg/Kg		Analysis SeqNo:	Date 11/23/2	Analysis Date 11/23/2004 11:22:33 A SeqNo: 322871	Prep Da	Prep Date 11/22/2004	4
Analyte	Result	Pal	SPK value	SPK value SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	PD Ref Val	%RPD	RPDLimit	Qual
Sodium	2763	25	2500	0	111	80	120	0			:
Sample ID LCSD-6954 Client ID:	Batch ID: 6954	Test Code: Run ID:	Test Code: SW6010A Run ID: ICP_041123B	Units: mg/Kg		Analysis SeqNo:	. Date 11/23/2 322872	Analysis Date 11/23/2004 11:25:36 A SeqNo: 322872	Prep Da	Prep Date 11/22/2004	4
Analyte	Result	Pal	SPK value	SPK value SPK Ref Val	%REC	LowLimit	%REC LowLimit HighLimit RPD Ref Val	PD Ref Val	%RPD	RPDLimit	Qual
Sodium	2726	25	2500	0	109	80	120	2763	1.34	20	
Sample ID LCS-6954 Client ID:	Batch ID: 6954	Test Code; Run ID:	Test Code: SW6010A Run ID: ICP_041124A	Units: mg/Kg		Analysis SeqNo:	Date 11/24/2 323122	Analysis Date 11/24/2004 4:23:50 PM SeqNo: 323122	Prep Da	Prep Date 11/22/2004	4
Analyte	Result	Pa	SPK value	SPK value SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	PD Ref Val	%RPD	RPDLimit	Qual
Barium	24.55	0.1	25	0	98.2	80	120	0			
Sample ID LCSD-6954 Client ID:	Batch ID: 6954	Test Code; Run ID:	Test Code: SW6010A Run ID: ICP_041124A	Units: mg/Kg		Analysis SeqNo:	Date 11/24/2/ 323123	Analysis Date 11/24/2004 4:26:06 PM SeqNo: 323123	Prep Da	Prep Date 11/22/2004	4
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	LowLimit HighLimit RPD Ref Val	PD Ref Val	%RPD	RPDLimit	Qual
Barium	23.86	0.1	25	0	95.4	80	120	24.55	2.85	20	

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

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN			Date and Time	Received:		
Work Order Number 0411218	1	1	Received by	AT		
Checklist completed by Sphalure	eles II	19/07 Date				
Matrix	Carrier name	Client drop-off				
Shipping container/cooler in good condition?		Yes 🗹	No 🗆	Not Present		
Custody seals intact on shipping container/coole	r?	Yes 🗌	No 🗆	Not Present	Not Shipped	V
Custody seals intact on sample bottles?		Yes 🗹	No 🗆	N/A		
Chain of custody present?		Yes 🗹	No 🗀			
Chain of custody signed when relinquished and	received?	Yes 🗹	No 🗆			
Chain of custody agrees with sample labels?		Yes 🗹	No 🗆	•		
Samples in proper container/bottle?		Yes 🗹	No 🗆			
Sample containers intact?		Yes 🗹	No 🗆			
Sufficient sample volume for indicated test?		Yes 🗹	No 🗌			
All samples received within holding time?		Yes 🗹	No 🗆			
Water - VOA vials have zero headspace?	No VOA viáls subr	mitted 🗹	Yes 🗆	No 🗆		
Water - pH acceptable upon receipt?		Yes 🗌	No 🗆	N/A 🗹		
Container/Temp Blank temperature?		•	4° C ± 2 Accepta If given sufficient			
COMMENTS:						

0"	D		n			
Client contacted	Date contacted:		Pels	on contacted	······································	
Contacted by:	Regarding					·
Comments:						

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Corrective Action				·	.,	

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	Date:	Pale:	=	=	=	ت	1	=	=	:	ن ا	>	2	11/18/11	Date	rax #.	Phone #:	2		9	Address:	2	Client:		
	Time:	Тітв: /34c	1230	1130	1100	1045	1030	0730	51/60	0700	230	0830	5180	0630	Time	20.5	10			3/2	3	npo	4)	20	
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	Relinquished By: (Signature)	Relinquished By: (Signature)	RR-8-2	RR- B-1	RR-W-1-Walls	RR-W-1-Wall K	SMANN-2-88	RR-E-1-WallN	RR-5-1-120	RR-N.1-Wall	RR-W-1	RP-51	PR-E-1	RR-N-1	Sample I.D. No.	22/0	55855			MM 87301	3 80x7	- amila	Relining	CHAIN-OF-CUSTODY RECORD	
_	Receive	Receive	la	λJ	h	Ŋ	, i	2	N	N	Ŋ	در	13	N	Number/Volume	Samples Cold?:	Sampler:	Mteur	Project Manager.		Project #:	Logo	Project Name:		A Last
	Received By: (Signature)	Received by: (Signature)	3												Preservative	" □Yes	Stave Mr.	20	٠. ا			SWMU	Railsoo		
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	(,			``										EDB (Met						1	***	Tel. 505.345-3975 Fax 505.345.4	HALL ENVIRONMENTAL A 4901 Hawkins NE, Suite D	}
	N.	Kenn													EDC (Met	hod 80	21)				ANALYSIS REQUEST	www.nallenvironmental.com	Tel. 505.345-3975	H M	
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	and boelph	aniens,	. يح	>	×	*	×	<u> </u>	*	*	Y.	Х.	^	Х.	Air Bubble				Or 811	·				HALL ENVIRONMENTAL ANALYSIS LABORATORY 4901 Hawkins NE, Suite D	

HALL ENVIRONMENTAL ANALYSIS LABORATORY 4901 Hawkins NE, Suite D Albuquerque, New Mexico 87109 Tel. 505.345.3975 Fax 505.345.4107 www.hallenvironmental.com	(4) (Gas/Diesel) (18015B MG 418.1) Helst (8021 6021) A 408.1) Helst (8021 7.1) A 504.1) A 604.1) A 604.1) A 604.1) A 7.2 A 604.1) A 7.2	BTEX + MTE BTEX + MTE TPH Method Velatites Ful BDB (Method S310 (PNA B310 (PNA B310 (PNA B310 (PNA B Method BOSTO (VOA) BOSTO (Semi	X X X	× × × × × × × × × × × × × × × × × × ×					77/9104 Remarks:
CHAIN-OF-CUSTODY RECORD Client Sant Refund Chief Sant Address: Courte S & S & S & S & S & S & S & S & S & S	alley 18th	Phone #: 505 722 5933 Sampler. He Mush	Date Time Matrix Sample I.D. No. Number/Volume HgCt Hci OCT/I	04 1300 Soil	1, 1330 " RR-BP-Z 2					Date: Time: Relinquished By: (Signature) Received By: (Signature) Received By: (Signature)

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> 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

Form C-141 Revised October 10, 2003

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

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

Release Notification ar	ad Corrective Action	
0	PERATOR	7

						OPEKA	TOK	<u>⊠</u> Initia	al Report
Name of Co	mpany G	iant Industri	es, Inc.			Contact Jan	nes Romero		
Address Rt.	3, Box 7					Telephone 1	No. 505-722-02	27	
Facility Nan	ne Giant I	ndustries, In	c.			Facility Typ	e Refinery	-	
Surface Ow	ner Giant	Industries, Ir	c.	Min	eral Owner	Giant Indust	tries, Inc.	Lease N	No.
				L	OCATIO	N OF RE	LEASE		
Unit Letter	Section 33	Township 15N	Range 15W	Feet from	the North	/South Line	Feet from the	East/West Line	County McKinley
	<u> </u>	Latitu	de	30	° 29' 30"	_ Longitud	e 108° 24" 4	0"	
					NATURE	OF REL	EASE		
Type of Rele	ase Tran	smix				Volume of	Release 2184 ga	l Volume R	ecovered 1747 gal
Source of Re		k 232					lour of Occurrence		Hour of Discover
							2 1705 to 1725	10/17/05	2 1730
Was Immedia	ate Notice (_	_		If YES, To			
		\boxtimes	Yes	No L N	Not Required	Carl Cha	vez, OCD; Hope	Monzeglio, NME	D; Denny Foust, OCD
By Whom?						Date and I	Toyat 10/05/05 @	12:00am /0	/18/05 ~9:15 am
Was a Water	course Read					If YES, V	olume Impacting t	the Watercourse.	
			Yes 🗵] No					
If a Watercou	ırse was Im	pacted, Descr	ibe Fully.	No watero	ourse was Im	pacted		·	
(gasoline/die containment	esel) ran ov and did n	er. At 1730 ot reach any	the releas waterway	e was disc s	overed and re	emedial actio	ns were taken. T		ntained within secondary
and approxi	mately 80%	and Cleanup A	is) was re	covered.	Cause(s) of th	sonnei took a e run over ai	e under investig	release. Also, a va ation at this time.	cuum truck was dispatched
regulations a public health should their or or the environ	Il operators or the envi operations h nment. In a	are required to ronment. The nave failed to	o report a acceptand dequately OCD accep	nd/or file co ce of a C-1 investigat	ertain release if 41 report by the e and remedia	notifications and NMOCD notes that the notes that the notes that the contaminates the contaminates the contaminates the contaminates the notes that the note	and perform correct parked as "Final R ion that pose a thr	ctive actions for rel deport" does not rel reat to ground wate	suant to NMOCD rules and leases which may endanger leve the operator of liability r, surface water, human health compliance with any other
							OIL CON	SERVATION	DIVISION
Cionat				-					
Signature:									
Printed Name	e: JAMES	ROMERO				Approved by	District Supervis	sor:	
Title: Enviro	onmental E	ngineer				Approval Da	ite:	Expiration	Date:
E-mail Addre	ess: Jromei	ro@Giant.con	, <u> </u>			Conditions of	of Approval:		Attached
Date: Oct 1 Attach Addi		one: 505-722-							
Auach Addi	uonai Sne	els it necess	arv						

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.



Subject: Location:

Release Notification

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

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

Hope Monzeylio

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

 ${\bf Investigation\ Report\ Format\ Excerpt}$

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 <u>TITLE PAGE</u>

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 <u>SCOPE OF SERVICES</u>

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 vaporphase 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 rational 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 rational 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 <u>CONCLUSIONS</u>

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 <u>RECOMMENDATIONS</u>

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 <u>APPENDICES</u>

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 <u>OTHER APPENDICES</u>

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

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
EPA METHOD 300.0: ANIONS					Analyst: MAI
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: KTN
Benzene	49	10	μ g/ 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		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		10	10/8/2005
Dibromomethane	ND	20		10	10/8/2005
1,2-Dichlorobenzene	ND	10		10	10/8/2005
1,3-Dichlorobenzene	ND	10	μg/L	10	10/8/2005
1,4-Dichlorobenzene	ND	10		10	10/8/2005

Qualifiers:

ND - Not Det tec ti Re min Lin.it

J - Analyte de ated be wanti ion limi

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

: Sp : Rec very outsid accept the every limits

I RF outside cepted: over line's

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-Dichtoropropene	ND	10	µg/L	10	10/8/2005
Hexachiorobutadiene	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-Tetrachioroethane	ND	10	μg/L	10	10/8/2005
Tetrachloroethene (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	μ g /L	10	10/8/2005
Surr. 1,2-Dichloroethane-d4	96.5	69. 9 -130	%REC	· · ·	10/8/2005
Surr: 4-Bromofluorobenzene	103	71.2-123	%REC	10	10/8/2005
Surr: Dibromofluoromethane	95.3	73. 9 -134	%REC		10/8/2005
Surr: Toluene-d8	9 6 .3	81.9-122	%REC	10	10/8/2005
EPA METHOD 7470: MERCURY					Analyst: Cl
Mercury	ND	0.00020	mg/L	1	10/10/2005

Qualifiers:

ND - Not Det let tit Re ortis Lin.it

J - Analyte de ated be wa nati fon limi

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

: Sp : Rec very outsid accept fire very limits

I RF outside cept.d: over lin'ts

E - Value above quantitation range

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

The following email was returned, not sure if your email system was down.

-----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)

<u>CAUSE(s)</u>: (1) Personnel washing equipment near the FCC allowing runoff to enter storm drains; (2) Inadequate stormwater training.

INTERIM MEASUERES: (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
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: W 10/5/2005 1:23 PM



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';

REMOVE & REPLACE -SO UT OF DRIST COME WALK N 2500 DWG EZ80-09~533 MATCH LINE DETAIL -- MANHOLL & NAZA45 NAZA45 NAZA45 NAZA45 NAZA45 NAZA46 NAZA4 NAZA46 NAZA CRUD! MILES CONCERT MARK SHALL CHARACTER MARK SHALL CHARA WARROLL #16 ---N2638 #678 10P 254.51 INV 249.78 (NC) INV 249.58 (OUT) MATCH LINE DWG EZ80-09-531 -- COMBON MICH SAY NOT HE DESCRIPTION IS ACTIVE, LOCATION, THEN WE WANTED YOU WANTED TO THE SANCTON TO THE STUDY OF STUDY IN STUDY OF STUD , , , CINCL OF CONCRETE

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This prest of the Stormwater System will be Ilustred

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,

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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

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EMNRD

Cc: Ed Riege; Steve Morris; Ted Gonzales; John Laurent; Ed Rios

Subject: RE: Weekly Reporting (Week Four Clarification)

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Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
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1220 South St. Francis Dr., Santa Fe, New Mexico 87505

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Cc: Chavez, Carl J, EMNRD

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Subject: RE: Weekly Reporting (Week Four)

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Hope Monzeglio Environmental Specialist New Mexico Environment Department Hazardous Waste Bureau 2905 Rodeo Park Drive East, BLDG 1 Santa Fe NM 87505 Price; Wayne, EMNRD

From:

James Romero [jromero@giant.com]

To:

James Romero; Chavez, Carl J, EMNRD; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD

Cc:

Subject:

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Carl J. Chavez, CHMM

New Mexico Energy, Remerals & Natural Resources Dept.

Oil Conservation Division, Environmental Bureau

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Subject: RE: Weekly Reporting (Week Four)

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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, C

Cc: Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD

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From: nes 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). If 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 reciplostation 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 Pre-
- 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 be
- 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 refrom Pilot was diverted into pond 9. The pipe was fixed on 9/16 and flow was returned again which and repaired on 9/17. Again, flow was diverted into pond 9 until the repaired 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 a
- 4) Weekly lab results were received for the week of 9/5/05 (sampling date 9/9/05) Be 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 Girwas and and one boring. A report will be sent to OCD and NMED asking for concurrence of the concurrence o
- 6) Excavation on the RR Lagoon was completed and additional soil samples were ta

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 r 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 effortattached 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 (Hope
- 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 weekely

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 Rome 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 weekenc

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 fo 2005
- 3) All new instrumentation has been specified and n 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 underw
- 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 barre
- 2) Utilized a 200 barrel truck (underway) to removereintroduced
- 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 e
- 2) Water is being drained from the water tall system
- 3) The oil tank will be pumped out later this



4) Conducted our second weekly grab samfirst sample have not been received)

5) visual inspection thru the night were goo

----Original Message----From: James Romero

Sent: Monday, August 29, 2005 2:3 To: James Romero; 'Price, Wayne, E 'hope.monzeglio@state.nm.us'; 'den

Cc: Steve Morris

Subject: RE: Spill Report (daily upd

Daily update for 8/29/05

1) Riley is contuning operations to cl

2) Water is now being removed from API

As of 28Aug05 61 trucks (60barre from tanks

3) Visual Inspections thru the weeke-

Attached are spreadsheets showing water from tanks to api

----Original Message----

From: James Romero Sent: Tuesday, August 23, 20

To: James Romero; 'Price, Wa 'hope.monzeglio@state.nm.us

Cc: Steve Morris

Subject: RE: Spill Report (da

Attached is a spreadsheet sho Moreover, all operations to clemaking progress. Continued nighttime hours have not docu-API.

> ----Original Message--From: James Romero Sent: Thursday, Augus To: 'Price, Wayne, EMI Cc: Ed Riege; Steve Mo. Subject: RE: Spill Rep

> Daily update for 8/18/0

1) Riley started operati 4000 barrels were rem-

2) Visual inspections th 3) Started release of w-

4) Completed spill/rem-

Friday)

-----Original Mes From: Price, Wa [mailto:wayne.p Sent: Thursday To: James Rome Cc: Ed Rios; Ed 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:

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.

Sent: Thu 10/6/200!

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 reoccurre

Regarding item #8, photos of the enlarged stormwater outfall #1 basin is requested along with recalculations of storage volume capa

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, EDRD; Foust, Denny, EMNRD; Chavez, Carl MNR

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 results 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 forwarde 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 pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis and pictures are considered as a full report with lab analysis.

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. I 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 ε 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 forwaveek.
- 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@sta

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 9/20/0 20/26/05 58 trucks of oily wastewater were noved
- Loads from the 5-,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 permeabilit
- 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 wee
- 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 proce 30 truck loads of water removed
- 2) The wastewater line from the Pilot travel center failed causing a spill which was reported to OCD. Dur from Pilot was diverted into pond 9. The pipe was fixed on 9/16 and flow was returned to lagoon 1. Howe again which and repaired on 9/17. Again, flow was diverted into pond 9 until the repair was made. This via telephone 9/19. Moreover, a new valve was installed at the Pilot diversion where flows are diverted in
- 3) The new chopper pump should arrive this week, however, a new control valve is needed which could
- 4) Weekly lab results were received for the week of 9/5/05 (sampling date 9/9/05) Benzene=ND, Toluene Xylenes Total= 20ppb

A complete report/lab results will be forward to OCD and NMED. Other weekly sampling dates are 9/5) A conference call was held between OCD, NMED, Precision Engineering, and Giant to discuss the inswas and 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 exp

----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 the source of the oil was the FCC unit storm drain. We've ordered absorbents to place in the storm of
- 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 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. Aslo, they will back fill the area near the railroad due to concerns about stability of
- 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/
- 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

Fig.: Price, Wayne, EMNRD [mailto:wayne.pi@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 weekely 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/

- 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 ha 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.ni

'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 t 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@!

'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 b system
- 3) The oil tank will be pumped out later this week and oil reintroprocess
- 4) Conducted our second weekly grab sampled per NMED (test 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.u

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 barrel tanks API

As of 28Aug05 61 trucks (60barrels/each) of water has from tanks

3) Visual Inspections thru the weekend and night were go

Attached are eadsheets showing truck numbers for po 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/C

Attached is a spreadsheet showing our daily truck Moreover, all operations to clean the ponds are mmaking progress. Continued visual inspections du nighttime hours have not documented any new sp ΑΡΙ.

----Original Message----

From: James Romero

Sent: Thursday, August 18, 2005 3:17 PM To: 'Price, Wayne, EMNRD'; 'hope.monzegl Cc: Ed Riege; Steve Morris; James Romero Subject: RE: Spill Report (daily update for

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

3) Started release of water from lower storr

4) Completed spill/remediation plan (should Friday)

-Original Message-----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nm.us] Sent: Thursday, August 18, 2005 7:

To: James Romero

Cc: Ed Rios; Ed Riege; Steve Morris;

Sanchez; David Kirby

Subject: RE: Spill Report (daily upd

8/17/05)

OCD hereby approves of your reg

Please be advised that NMOCD a this request does not relieve (Giar. responsibility should their operati adequately investigate and remed contamination that pose a threat to water, surface water, human healt environment. In addition, NMOC approval does not relieve (Giant) responsibility for compliance with other federal, state, or local laws: regulations.

Wayne Price-Senior Environmental I 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 (v telephone) on Storm water Outfall #

Benzene ND EthylBen ND Toluene .35ppl Xylene 2.1ppl

With these tests results, and due to t lower storm water basin is at capacit your approval to release water off pr

- 2) Riley Industrial is onsite and unpluprocess sewer lines to the weir box.
- 3) The outlet to the upper storm water has been plugged to contain the spil

If you have any questions please fee call me anytime, James

----Original Message-----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nn Sent: Tuesday, August 16, 20

8:01 AM

To: Price, Wayne, EMNRD; Ja 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 AN To: James Romero; Monzeglin Hope, NMENV; 'foust.denny@state.nm.us' Cc: Ed Riege; Steve Morris; Johnny Sanchez; Ed Rios

OCD hereby approves of the emergency actions with the following conditions:

Subject: RE: Spill Report

- 1. All water sales from the poshall cease, unless approved OCD.
- 2. No stormwater shall be released that exceeds the WC standards.
- 3. The emergeny actions shabe continous (24 hour) until A problem is correct.
- 4. A daily E-mail report shall submitted until emergency is
- 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 (Gi: of responsibility should the operations fail to adequa investigate and remediat contamination that pose threat to ground water, surface water, human health or the environmer. In addition, NMOCD approval does not relieve (Giant) of responsibility fc. compliance with any other federal, state, or local lav 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: Mon 8/15/2005 5:12 PI 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) w resulted in a reportable discha 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 t email with a formal C-141 spill report. Moreover, I will submit pics, la results, and a site map, etc.

However, as an interim measi and with your approval, we ai taking the following actions:

(1) Vac-trucks will be used to pump and clean out the aerat lagoons/API sump

(2) Interim emergency storag material within two 55,000 batanks

located on western part of the property (map will follow hard copy).

(3) A chopper pump will be installed and has been ordere (replacement of old API pump)

LAB RESULTS

Lagoon 2

Evap Pon

MTBE

Benzene

306 ppb

2 88

8.7

<;

60 ppb

oo ppi

1000 ppb

Toluene

76 ppb

Ethylbenzene

ppb <10.0 ppb

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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/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 discus

----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
Phono: (505) 428 2545

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

Tioni. James Romeio

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 unite 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';

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 telegone 9/19. Moreover, a new valve was instead 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, Ethybenzene=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 was and 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. Aslo, 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 weekely 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 1
- 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

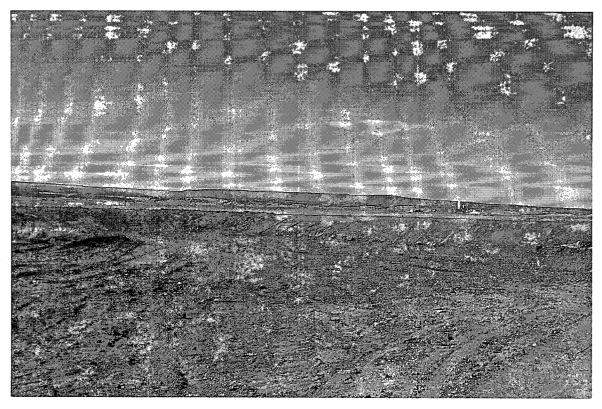
Subject: RE: Spill Report

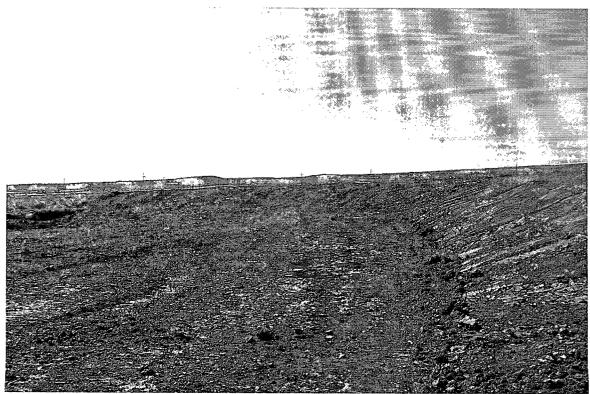
(daily update for 8/

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.

Price, Wayne, EMNRD

From: James Romero [jromero@giant.com]

Chavez, Carl J, EMNRD; James Romero; Monzeglio, Hope, NMENV; Price, Wayne, EMNRD; Foust, Denny, EMNRD To:

Ed Riege; Steve Morris; Ted Gonzales; John Laurent; Ed Rios Cc:

RE: Weekly Reporting (Week Four Clarification)

Subject:

Attachments:

Good Morning Carl, Giant will develop a detailed response which will clarify the point source(s) responsible for the Old API Separate 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 d∈

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 a metals, and general chemistry, Clarification of the point source(s) responsible for the Old API Separator problem is requested 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 Sent: The

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.

- 4) A new C 141 spill report was filed this week notifying OCD/NMED of a leak into the secondary of the new API separ secondary have been pumped and measures have been taken ensuring the secondary continues to stay dry (i.e., purç on Monday 10/10/05 to repair the primary with work beginning on the east bay followed by the west bay. This item as 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 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.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 contibe 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 Sat
- 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)

- 7) Railroad Lambn sampling is complete. All samples can mack clean and the area will be backfilled no
- 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 30 truck loads of water removed
- 2) The wastewater line from the Pilot travel center failed causing a spill which was reported to OC from Pilot was diverted into pond 9. The pipe was fixed on 9/16 and flow was returned to lagoon 1 again which and 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 div 3) The new chopper pump should arrive this week, however, a new control valve is needed which
- 4) Weekly lab results were received for the week of 9/5/05 (sampling date 9/9/05) Benzene=ND, 7 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 was and and one boring. A report will be sent to OCD and NMED asking for concurrence of our p

6) Excavation on the RR Lagoon was completed and additional soil samples were taken (lab resu

-----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.

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 mair the source of the oil was the FCC unit storm drain. We've ordered absorbents to place in the source of the oil was the FCC unit storm drain.
- 2) Between 9/8/05 thru 9/12/05 34 trucks of sludge and 8 trucks of water have been remove Evaporation pond one has been cleaned (very little oil remaining) and all efforts have been attached pic)
- 3) Samples from the old API and aeration 2 into evap pond 1 have been taken and are at tl
- 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 addition contamination. Aslo, they will back fill the area near the railroad due to concerns about sta
- 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 file
- 8) As of today we have not received lab analysis for our weekly sample (Hope's weekly sar
- 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 weekely 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.ni

'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 a 2005
- 3) All new instrumentation has been specified and material requesubmitted to purchasing
- 4) All new electrical equipment and materials have been specific 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@s

'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 v

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'

pe.monzeglio@state.nm.us'; 'denny.fous

Cc: Steve Morris

Subject: RE: Spill Report (daily update for

Attached is a spreadsheet showing our dail Moreover, all operations to clean the ponds making progress. Continued visual inspect nighttime hours have not documented any PAPI.

----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 lower
- 4) Completed spill/remediation plan : Friday)

----Original Message----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nn 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 NMC this request does not relieve responsibility should their cadequately investigate and contamination that pose a tl water, surface water, huma environment. In addition, l approval does not relieve (Cresponsibility 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

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 a

1) We just received the lab retelephone) on Storm water Ou

Benzene EthylBen Toluene Xylene

With these tests results, and clower 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 pleacall me anytime, James

----Original Message--From: Price, Wayne, E [mailto:wayne.price@s Sent: Tuesday, Augus 8:01 AM To: Price, Wayne, EMN Romero; Monzeglio, Hc NMENV; foust.denny@state.nm Cc: Ed Riege; Steve Mc 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: 50

505-4763462

From: Price, Wayne, E Sent: Tue 8/16/2005 { To: James Romero; Mc Hope, NMENV; 'foust.denny@state.nm Cc: Ed Riege; Steve Mc Johnny Sanchez; Ed Ri-Subject: RE: Spill Rep

OCD hereby approves emergency actions witl following conditions:

- 1. All water sales from shall cease, unless app OCD.
- 2. No stormwater sha released that exceeds standards.
- 3. The emergeny action be continous (24 hour) problem is correct.
- 4. A daily E-mail repo submitted until emerge 5. Giant shall isolate t ponds, if possible durir emergency condition.

Please be advised to NMOCD approval o plan does not reliev of responsibility she operations fail to a investigate and ren contamination that threat to ground wa surface water, hum health or the environ In addition, NMOCI approval does not i (Giant) of responsib compliance with an federal, state, or lo and/or regulations.

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: James Romero [mailto:jromero@giant Sent: Mon 8/15/2005 To: Price, Wayne, EMN Monzeglio, Hope, NMEI 'foust.denny@state.nm Cc: Ed Riege; Steve Mo Johnny Sanchez; Ed Ri Subject: Spill Report

As we discussed via tel today, our API pump m working properly (20-30% capa resulted in a reportable into our aeration lagoons. Samp gathered and lab result received today on Lagoon 2, and Evap (see below). I will folk email with a formal C-141 spill rep Moreover, I will submit results, and a site map, etc.

However, as an interim and with your approval taking the following actions:

(1) Vac-trucks will be ι pump and clean out the lagoons/API sump

(2) Interim emergency material within two 55, tanks located on western par property (map will follo copy).

(3) A chopper pump wi installed and has been (replacement of old API pump)

LAB RESULTS Lagoon 2

Εv

30

MTBE

60 ppb

Benzene 1000 ppb

Toluene

76 ppb

Ethylbenzene

ppb <10.0 p

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Price, Wayne, EMNRD

From:

James Romero [iromero@giant.com]

Sent: The

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)

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 o capacity was approximately 3000-4000 barrels. The new enlarged basin is approximately 11,000-12,000 barrels. If you need anymi 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 r metals, and general chemistry, Clarification of the point source(s) responsible for the Old API Separator problem is requested 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 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.
- 4) A new C 141 spill report was filed this week notifying OCD/NMED of a leak into the secondary of the new API separate secondary have been pumped and measures have been taken ensuring the secondary continues to stay dry (i.e., purgon Monday 10/10/05 to repair the primary with work beginning on the east bay followed by the west bay. This item as 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 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.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 Sai
- 4) A soil boring was completed for the proposed firewater pond a sample was sent to Precision for pern

5) A soil same 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 ne

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.

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 30 truck loads of water removed

- 2) The wastewater line from the Pilot travel center failed causing a spill which was reported to OC from Pilot was diverted into pond 9. The pipe was fixed on 9/16 and flow was returned to lagoon 1 again which and 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 div
- 3) The new chopper pump should arrive this week, however, a new control valve is needed which
- 4) Weekly lab results were received for the week of 9/5/05 (sampling date 9/9/05) Benzene=ND, 1 Xvlenes 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 was and and one boring. A report will be sent to OCD and NMED asking for concurrence of our p

6) Excavation on the RR Lagoon was completed and additional soil samples were taken (lab resu

----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.

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 mair the source of the oil was the FCC unit storm drain. We've ordered absorbents to place in the source of the oil was the FCC unit storm drain.
- 2) Between 9/8/05 thru 9/12/05 34 trucks of sludge and 8 trucks of water have been remove Evaporation pond one has been cleaned (very little oil remaining) and all efforts have been attached pic)
- 3) Samples from the old API and aeration 2 into evap pond 1 have been taken and are at the
- 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 addition contamination. Aslo, they will back fill the area near the railroad due to concerns about sta
- 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 file
- 8) As of today we have not received lab analysis for our weekly sample (Hope's weekly sar
- 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

505-476-3487 Tele: 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 weekely 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.ni

'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 c 2005
- 3) All new instrumentation has been specified and material reque submitted to purchasing

- 4) All new electrical exponent 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@s

'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 v

Attached are spreadsheets showing truck number water from tanks to api

----Original Message-----**From:** James Romero

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 dail Moreover, all operations to clean the ponds making progress. Continued visual inspect nighttime hours have not documented any i 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 lowe4) Completed spill/remediation planFriday)

----Original Message----

From: Price, Wayne, EMNRD [mailto:wayne.price@state.nn 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 NMC this request does not relieve responsibility should their cadequately investigate and contamination that pose a tl water, surface water, huma environment. In addition, lapproval does not relieve (Cresponsibility 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

E-maii wayne price@stat Tele: 505-476-3487

Fax: 505-4763462

Price, Wayne, EMNRD

From:

James Romero [jromero@gianacim]

To:

Monzeglio, Hope, NMENV; Price, Wayne, EMNRD

ent: Thu 10/6/2005 7:55 AM

Cc:

Subject:

Old API Grab Sample

Attachments:

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

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

Price, Wayne, EMNRD

From:

James Romero [iromero@giant.com]

To:

James Romero; Price, Wayne, EMNRD; Monzeglio, Hope, NMENV; Foust, Denny, EMNRD; Chavez, Carl J, EMNRD

Sent: Wed 10/5/2005 1:23 PM

Cc:

Ed Riege; Steve Morris; Johnny Sanchez; Chavez, Carl J, EMNRD

Subject:

RE: Weekly Reporting (Week Four)

Attachments:

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----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

Cc: Ed Riege: Steve Morris: Johnny Sanchez: 'carli,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----

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@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 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

" next week on the SMW wells

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) "

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 ret 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, 1 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 n

----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. Aslo, 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 mes Romero [mailto:jromero@giant.com]

Sent: FT 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 weekely until the emergency is ove

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 weeken 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 bee submitted to purchasing
- 4) All new electrical equipment and materials have been specified and mater 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, Wayn MNRD'; '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, the 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.ni

'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 integrated system

3) The oil tank will be pumped out later this week and oil reintroduced is process

4) Conducted our second weekly grab sampled per NMED (tests resulfirst 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 contuning operations to clean ponds

2) Water is now being removed from 55,000 barrel tanks and se API

As of 28Aug05 61 trucks (60barrels/each) of water has been from tanks

3) Visual Inspections thru the weekend and night were good

Attached are spreadsheets showing truck numbers for pond cle 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.u

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 for making progress. Continued visual inspections during nighttime hours have not documented any new spills around the spills around t

----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; Johns Subject: RE: Spill Report (daily update for 8/18/0

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 ou 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 approve this request does not relieve (Giant) of responsibility should their operations fa adequately investigate and remediate contamination that pose a threat to grou 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.

Wayne Price-Senior Environmental Engr.
Oil Conservation Division
1220 S. Saint Francis
Santa Fe, NM 87505
F. mail. wayne price@state.pm.us

E-mail wayne.price@state.nm.us Tele: 505-476-3487

Fax: 505-476-3462

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 updat

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 tests results, and due to the fact lower storm water basin is at capacity, we'd 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 basir 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 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 ponds shall cease, unless approved by OCD.
- 2. No stormwater shall be

released that exceeds the WQCC standards.

3. The emergeny actions shall be continous (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.

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: 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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