

GRCB 05

ENTERED



Hope Monzeglio  
New Mexico Environmental Department  
Hazardous Waste Bureau  
2905 Rodeo Park Drive East  
Bldg 1  
Santa Fe, NM 87505



Certified Mail: 7004 2510 0005 4408

July 11, 2005

**RE: Giant Refining Company, Bloomfield Refinery  
EPA ID# NMD089416416**

Dear Ms. Monzeglio,

Please find attached analytical results for the June 7, 2005 sampling event for wells MW #48 and MW #49 on the river terrace at the Giant Refining facility. Note that the results for well MW #49, located down gradient of the barrier wall, had a detection of benzene at a concentration of 2.7 ug/L. That result is well below the WQCC limit of 10 ug/l. A BTEX sample was taken out of the San Juan River adjacent to MW #49. The results of that sample were non detect. We will continue to monitor both wells on a monthly basis and evaluate the concentration trends.

Tank #33 and Fresh Water Pond samples were pulled on June 7, 2005. Analytical results are included with this packet. Tank #33 benzene levels were below WQCC standards at a concentration of 1.2 ug/L. Fresh Water Pond results were all non detect.

If you need additional information, please contact me at (505) 632-4161.

Sincerely,

Cindy Hurtado  
Environmental Coordinator  
Giant Refining – Bloomfield

Cc: Ed Riege – Environmental Superintendent – Giant Refining  
Randy Schmaltz – Environmental Manager – Giant Refining

PHONE  
505-632-8013  
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50 ROAD 4990  
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BLOOMFIELD  
NEW MEXICO  
87413



COVER LETTER

July 05, 2005

Cindy Hurtado  
San Juan Refining  
#50 CR 4990  
Bloomfield, NM 87413  
TEL: (505) 632-4161  
FAX (505) 632-3911

RE: River Terrace - 6/05

Order No.: 0506108

Dear Cindy Hurtado:


Hall Environmental Analysis Laboratory received 4 samples on 6/10/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,

  
Andy Freeman, Business Manager  
Nancy McDuffie, Laboratory Manager



# Hall Environmental Analysis Laboratory

Date: 05-Jul-05

CLIENT: San Juan Refining  
 Lab Order: 0506108  
 Project: River Terrace - 6/05  
 Lab ID: 0506108-01

Client Sample ID: MW #49  
 Collection Date: 6/9/2005 10:35:00 AM  
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: SCC
Diesel Range Organics (DRO)	1.1	1.0		mg/L	1	6/16/2005 1:56:32 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/16/2005 1:56:32 PM
Surr: DNOP	108	58-140		%REC	1	6/16/2005 1:56:32 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	0.29	0.050		mg/L	1	6/15/2005 6:04:55 PM
Surr: BFB	112	78.3-120		%REC	1	6/15/2005 6:04:55 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	6/15/2005 6:04:55 PM
Benzene	2.7	0.50		µg/L	1	6/15/2005 6:04:55 PM
Toluene	ND	0.50		µg/L	1	6/15/2005 6:04:55 PM
Ethylbenzene	ND	0.50		µg/L	1	6/15/2005 6:04:55 PM
Xylenes, Total	0.64	0.50		µg/L	1	6/15/2005 6:04:55 PM
Surr: 4-Bromofluorobenzene	106	83.3-121		%REC	1	6/15/2005 6:04:55 PM
<b>EPA METHOD 8310: PAHS</b>						Analyst: JMP
Naphthalene	ND	2.5		µg/L	1	6/23/2005 3:31:47 PM
1-Methylnaphthalene	ND	2.5		µg/L	1	6/23/2005 3:31:47 PM
2-Methylnaphthalene	ND	2.5		µg/L	1	6/23/2005 3:31:47 PM
Acenaphthylene	ND	2.5		µg/L	1	6/23/2005 3:31:47 PM
Acenaphthene	ND	2.5		µg/L	1	6/23/2005 3:31:47 PM
Fluorene	ND	0.80		µg/L	1	6/23/2005 3:31:47 PM
Phenanthrene	ND	0.60		µg/L	1	6/23/2005 3:31:47 PM
Anthracene	ND	0.60		µg/L	1	6/23/2005 3:31:47 PM
Fluoranthene	ND	0.30		µg/L	1	6/23/2005 3:31:47 PM
Pyrene	ND	0.30		µg/L	1	6/23/2005 3:31:47 PM
Benz(a)anthracene	ND	0.020		µg/L	1	6/23/2005 3:31:47 PM
Chrysene	ND	0.20		µg/L	1	6/23/2005 3:31:47 PM
Benzo(b)fluoranthene	ND	0.050		µg/L	1	6/23/2005 3:31:47 PM
Benzo(k)fluoranthene	ND	0.020		µg/L	1	6/23/2005 3:31:47 PM
Benzo(a)pyrene	ND	0.020		µg/L	1	6/23/2005 3:31:47 PM
Dibenz(a,h)anthracene	ND	0.040		µg/L	1	6/23/2005 3:31:47 PM
Benzo(g,h,i)perylene	ND	0.030		µg/L	1	6/23/2005 3:31:47 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	6/23/2005 3:31:47 PM
Surr: Benzo(e)pyrene	71.9	54-102		%REC	1	6/23/2005 3:31:47 PM

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

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

**Hall Environmental Analysis Laboratory**

Date: 05-Jul-05

CLIENT: San Juan Refining Client Sample ID: River Near MW 49  
 Lab Order: 0506108 Collection Date: 6/9/2005 10:45:00 AM  
 Project: River Terrace - 6/05  
 Lab ID: 0506108-02 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	6/15/2005 6:36:20 PM
Benzene	ND	0.50		µg/L	1	6/15/2005 6:36:20 PM
Toluene	ND	0.50		µg/L	1	6/15/2005 6:36:20 PM
Ethylbenzene	ND	0.50		µg/L	1	6/15/2005 6:36:20 PM
Xylenes, Total	ND	0.50		µg/L	1	6/15/2005 6:36:20 PM
Surr: 4-Bromofluorobenzene	102	83.3-121		%REC	1	6/15/2005 6:36:20 PM

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits  
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank E - Value above quantitation range  
 \* - Value exceeds Maximum Contaminant Level

# Hall Environmental Analysis Laboratory

Date: 05-Jul-05

CLIENT: San Juan Refining  
 Lab Order: 0506108  
 Project: River Terrace - 6/05  
 Lab ID: 0506108-03

Client Sample ID: MW #48  
 Collection Date: 6/9/2005 11:20:00 AM  
 Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: DIESEL RANGE</b>						Analyst: SCC
Diesel Range Organics (DRO)	1.3	1.0		mg/L	1	6/16/2005 2:29:19 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	6/16/2005 2:29:19 PM
Surr: DNOP	134	58-140		%REC	1	6/16/2005 2:29:19 PM
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	20	2.0		mg/L	40	6/15/2005 7:07:36 PM
Surr: BFB	107	78.3-120		%REC	40	6/15/2005 7:07:36 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	40	6/15/2005 7:07:36 PM
Benzene	540	20		µg/L	40	6/15/2005 7:07:36 PM
Toluene	20	20		µg/L	40	6/15/2005 7:07:36 PM
Ethylbenzene	1400	20		µg/L	40	6/15/2005 7:07:36 PM
Xylenes, Total	7200	20		µg/L	40	6/15/2005 7:07:36 PM
Surr: 4-Bromofluorobenzene	108	83.3-121		%REC	40	6/15/2005 7:07:36 PM
<b>EPA METHOD 8310: PAHS</b>						Analyst: JMP
Naphthalene	160	2.5		µg/L	1	6/23/2005 4:19:47 PM
1-Methylnaphthalene	46	2.5		µg/L	1	6/23/2005 4:19:47 PM
2-Methylnaphthalene	49	2.5		µg/L	1	6/23/2005 4:19:47 PM
Acenaphthylene	ND	2.5		µg/L	1	6/23/2005 4:19:47 PM
Acenaphthene	ND	2.5		µg/L	1	6/23/2005 4:19:47 PM
Fluorene	ND	0.80		µg/L	1	6/23/2005 4:19:47 PM
Phenanthrene	1.3	0.60		µg/L	1	6/23/2005 4:19:47 PM
Anthracene	ND	0.60		µg/L	1	6/23/2005 4:19:47 PM
Fluoranthene	ND	0.30		µg/L	1	6/23/2005 4:19:47 PM
Pyrene	ND	0.30		µg/L	1	6/23/2005 4:19:47 PM
Benz(a)anthracene	ND	0.020		µg/L	1	6/23/2005 4:19:47 PM
Chrysene	ND	0.20		µg/L	1	6/23/2005 4:19:47 PM
Benzo(b)fluoranthene	ND	0.050		µg/L	1	6/23/2005 4:19:47 PM
Benzo(k)fluoranthene	ND	0.020		µg/L	1	6/23/2005 4:19:47 PM
Benzo(a)pyrene	ND	0.020		µg/L	1	6/23/2005 4:19:47 PM
Dibenz(a,h)anthracene	ND	0.040		µg/L	1	6/23/2005 4:19:47 PM
Benzo(g,h,i)perylene	ND	0.030		µg/L	1	6/23/2005 4:19:47 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	6/23/2005 4:19:47 PM
Surr: Benzo(e)pyrene	75.2	54-102		%REC	1	6/23/2005 4:19:47 PM

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

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

**Hall Environmental Analysis Laboratory**

Date: 05-Jul-05

<b>CLIENT:</b> San Juan Refining	<b>Client Sample ID:</b> Trip Blank
<b>Lab Order:</b> 0506108	<b>Collection Date:</b>
<b>Project:</b> River Terrace - 6/05	
<b>Lab ID:</b> 0506108-04	<b>Matrix:</b> TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015B: GASOLINE RANGE</b>						Analyst: NSB
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	6/15/2005 7:38:45 PM
Surr: BFB	98.6	78.3-120		%REC	1	6/15/2005 7:38:45 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	6/15/2005 7:38:45 PM
Benzene	ND	0.50		µg/L	1	6/15/2005 7:38:45 PM
Toluene	ND	0.50		µg/L	1	6/15/2005 7:38:45 PM
Ethylbenzene	ND	0.50		µg/L	1	6/15/2005 7:38:45 PM
Xylenes, Total	ND	0.50		µg/L	1	6/15/2005 7:38:45 PM
Surr: 4-Bromofluorobenzene	98.1	83.3-121		%REC	1	6/15/2005 7:38:45 PM

<b>Qualifiers:</b>	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	E - Value above quantitation range
	* - Value exceeds Maximum Contaminant Level	

Hall Environmental Analysis Laboratory

Date: 05-Jul-05

CLIENT: San Juan Refining  
 Work Order: 0506108  
 Project: River Terrace - 6/05

QC SUMMARY REPORT  
 Method Blank

Sample ID	MB-8160	Batch ID:	8160	Test Code:	SW8015	Units:	mg/L	Analysis Date	6/16/2005 10:40:32 AM	Prep Date	6/16/2005
Client ID:		Run ID:	FID(17A) 2_050613A	SeqNo:	372186						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1									
Motor Oil Range Organics (MRO)	ND	5									
Surr: DNOP	1.19	0	1	0	119	58	140	0			

Sample ID	Reagent Blank 5m	Batch ID:	R15696	Test Code:	SW8015	Units:	mg/L	Analysis Date	6/15/2005 10:13:36 AM	Prep Date	
Client ID:		Run ID:	PIDFID_050615A	SeqNo:	371885						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.05									
Surr: BFB	20.17	0	20	0	101	78.3	120	0			

Sample ID	Reagent Blank 5m	Batch ID:	R15696	Test Code:	SW8021	Units:	µg/L	Analysis Date	6/15/2005 10:13:36 AM	Prep Date	
Client ID:		Run ID:	PIDFID_050615A	SeqNo:	371884						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	0.5									
Toluene	ND	0.5									
Ethylbenzene	ND	0.5									
Xylenes, Total	ND	0.5									
Surr: 4-Bromofluorobenzene	19.32	0	20	0	96.6	83.3	121	0			

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

CLIENT: San Juan Refining  
 Work Order: 0506108  
 Project: River Terrace - 6/05

QC SUMMARY REPORT

Method Blank

Sample ID MB-8151 Batch ID: 8151 Test Code: SW8310 Units: µg/L Analysis Date 6/23/2005 11:31:49 AM Prep Date 6/14/2005  
 Client ID: Run ID: HUGO\_050623B SeqNo: 374867

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.8									
Phenanthrene	ND	0.6									
Anthracene	ND	0.6									
Fluoranthene	ND	0.3									
Pyrene	ND	0.3									
Benz(a)anthracene	ND	0.02									
Chrysene	ND	0.2									
Benzo(b)fluoranthene	ND	0.05									
Benzo(k)fluoranthene	ND	0.02									
Benzo(a)pyrene	ND	0.02									
Dibenz(a,h)anthracene	ND	0.04									
Benzo(g,h,i)perylene	ND	0.03									
Indeno(1,2,3-cd)pyrene	ND	0.08									
Surr: Benzo(e)pyrene	7.36	0	10	0	73.6	54	102	0			

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



CLIENT: San Juan Refining  
 Work Order: 0506108  
 Project: River Terrace - 6/05

**QC SUMMARY REPORT**  
 Sample Matrix Spike

Sample ID	0506108-01a ms	Batch ID:	R15696	Test Code:	SW8015	Units:	mg/L	Analysis Date	6/15/2005 8:09:56 PM	Prep Date				
Client ID:	MW #49	Run ID:	PIDFID_050615A	SeqNo:	371922									
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		0.7714		0.05	0.5	0.2854		97.2	82.6	114	0			
Surr: BFB		26.49		0	25	0		106	78.3	120	0			

Sample ID	0506108-01a msd	Batch ID:	R15696	Test Code:	SW8015	Units:	mg/L	Analysis Date	6/15/2005 8:41:12 PM	Prep Date				
Client ID:	MW #49	Run ID:	PIDFID_050615A	SeqNo:	371923									
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		0.689		0.05	0.5	0.2854		80.7	80	114	0.7714	11.3	15	
Surr: BFB		26.2		0	25	0		105	78.3	120	26.49	1.08	0	

Sample ID	0506108-02a ms	Batch ID:	R15696	Test Code:	SW8021	Units:	µg/L	Analysis Date	6/15/2005 9:43:09 PM	Prep Date				
Client ID:	River Near MW 49	Run ID:	PIDFID_050615A	SeqNo:	371915									
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)		42.63		2.5	40	0		107	64.5	133	0			
Benzene		19.78		0.5	20	0		98.9	88.7	114	0			
Toluene		20		0.5	20	0		100	89.3	112	0			
Ethylbenzene		19.9		0.5	20	0		99.5	88.6	113	0			
Xylenes, Total		60.02		0.5	60	0		100	89.4	112	0			
Surr: 4-Bromofluorobenzene		23.44		0	24	0		97.7	83.3	121	0			

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

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**CLIENT:** San Juan Refining  
**Work Order:** 0506108  
**Project:** River Terrace - 6/05

**QC SUMMARY REPORT**  
 Sample Matrix Spike Duplicate

Sample ID 0506108-02a msd Batch ID: R15696 Test Code: SW8021 Units: µg/L Analysis Date 6/15/2005 10:14:07 PM Prep Date  
 Client ID: River Near MW 49 Run ID: PIDFID\_050615A SeqNo: 371917

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	43.48	2.5	40	0	109	64.5	133	42.63	1.97	28	
Benzene	19.74	0.5	20	0	98.7	88.7	114	19.78	0.196	27	
Toluene	19.64	0.5	20	0	98.2	89.3	112	20	1.82	19	
Ethylbenzene	19.83	0.5	20	0	99.1	88.6	113	19.9	0.376	10	
Xylenes, Total	59.81	0.5	60	0	99.7	89.4	112	60.02	0.342	13	
Surr: 4-Bromofluorobenzene	23.83	0	24	0	99.3	83.3	121	23.44	1.63	0	

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

Hall Environmental Analysis Laboratory

Date: 05-Jul-05

CLIENT: San Juan Refining  
 Work Order: 0506108  
 Project: River Terrace - 6/05

QC SUMMARY REPORT  
 Laboratory Control Spike - generic

Sample ID	LCS-8160	Batch ID: 8160	Test Code: SW8015	Units: mg/L	Analysis Date	6/16/2005 12:03:17 PM	Prep Date	6/16/2005				
Client ID:			Run ID: FID(17A) 2_050613A		SeqNo:	372224						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		6.801	1	5	0	136	81.2	149	0			

Sample ID	LCSD-8160	Batch ID: 8160	Test Code: SW8015	Units: mg/L	Analysis Date	6/16/2005 11:44:30 AM	Prep Date	6/16/2005				
Client ID:			Run ID: FID(17A) 2_050613A		SeqNo:	372236						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)		6.591	1	5	0	132	81.2	149	6.801	3.14	23	

Sample ID	GRO ccv 2.5ug	Batch ID: R15696	Test Code: SW8015	Units: mg/L	Analysis Date	6/15/2005 4:30:43 PM	Prep Date					
Client ID:			Run ID: PIDFID_050615A		SeqNo:	371908						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		0.471	0.05	0.5	0	94.2	82.6	114	0			

Sample ID	BTEX ccv 100ng	Batch ID: R15696	Test Code: SW8021	Units: µg/l	Analysis Date	6/15/2005 5:02:10 PM	Prep Date					
Client ID:			Run ID: PIDFID_050615A		SeqNo:	371900						
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)		37.54	2.5	40	0	93.9	64.5	133	0			
Benzene		19.49	0.5	20	0	97.4	88.7	114	0			
Toluene		19.54	0.5	20	0	97.7	89.3	112	0			
Ethylbenzene		19.45	0.5	20	0	97.3	88.6	113	0			
Xylenes, Total		59.31	0.5	60	0	98.8	89.4	112	0			

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

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CLIENT: San Juan Refining  
 Work Order: 0506108  
 Project: River Terrace - 6/05

**QC SUMMARY REPORT**  
 Laboratory Control Spike - generic

Sample ID LCS-8151 Batch ID: 8151 Test Code: SWB310 Units: µg/L Analysis Date 6/23/2005 12:19:49 PM Prep Date 6/14/2005  
 Client ID: Run ID: HUGO\_050623B SeqNo: 374875

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	20.55	2.5	40	0	51.4	34.8	97.4	0			
1-Methylnaphthalene	20.42	2.5	40.1	0	50.9	34.7	100	0			
2-Methylnaphthalene	19.32	2.5	40	0	48.3	35	98.1	0			
Acenaphthylene	22.61	2.5	40.1	0	56.4	48.3	95.1	0			
Acenaphthene	22.91	2.5	40	0	57.3	45	95	0			
Fluorene	2.38	0.8	4.01	0	59.4	46.8	93.4	0			
Phenanthrene	1.25	0.6	2.01	0	62.2	48.7	104	0			
Anthracene	1.42	0.6	2.01	0	70.6	47.5	102	0			
Fluoranthene	2.81	0.3	4.01	0	70.1	46.3	108	0			
Pyrene	2.45	0.3	4.01	0	61.1	43.8	109	0			
Benz(a)anthracene	0.27	0.02	0.401	0	67.3	40.3	115	0			
Chrysene	1.24	0.2	2.01	0	61.7	42.6	107	0			
Benzo(b)fluoranthene	0.3	0.05	0.501	0	59.9	48.6	107	0			
Benzo(k)fluoranthene	0.17	0.02	0.25	0	68.0	23.3	136	0			
Benzo(a)pyrene	0.17	0.02	0.251	0	67.7	33.4	117	0			
Dibenz(a,h)anthracene	0.29	0.04	0.501	0	57.9	27.3	139	0			
Benzo(g,h,i)perylene	0.372	0.03	0.5	0	74.4	38.2	117	0			
Indeno(1,2,3-cd)pyrene	0.666	0.08	1.002	0	66.5	39.9	125	0			

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

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name SJR

Date and Time Received:

6/10/2005

Work Order Number 0506108

Received by AT

Checklist completed by

*[Handwritten Signature]*  
Signature

Date

6/10/05

Matrix

Carrier name UPS

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

Container/Temp Blank temperature? 5° 4° C ± 2 Acceptable  
If given sufficient time to cool.

COMMENTS:

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Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Corrective Action \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

COVER LETTER

June 10, 2005

Cindy Hurtado  
San Juan Refining  
#50 CR 4990  
Bloomfield, NM 87413  
TEL: (505) 632-4161  
FAX (505) 632-3911

RE: TC #33 Effluent

Order No.: 0506078

Dear Cindy Hurtado:

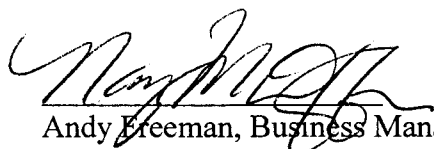
Hall Environmental Analysis Laboratory received 2 samples on 6/8/2005 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,



Andy Freeman, Business Manager  
Nancy McDuffie, Laboratory Manager



# Hall Environmental Analysis Laboratory

Date: 10-Jun-05

**CLIENT:** San Juan Refining  
**Project:** TC #33 Effluent

**Lab Order:** 0506078

**Lab ID:** 0506078-01

**Collection Date:** 6/7/2005 2:10:00 PM

**Client Sample ID:** T/c#33

**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**EPA METHOD 8021B: VOLATILES**

Analyst: NSB

Benzene	1.2	0.50		µg/L	1	6/10/2005 1:12:44 AM
Toluene	ND	0.50		µg/L	1	6/10/2005 1:12:44 AM
Ethylbenzene	0.63	0.50		µg/L	1	6/10/2005 1:12:44 AM
Xylenes, Total	1.3	0.50		µg/L	1	6/10/2005 1:12:44 AM
Surr: 4-Bromofluorobenzene	109	83.3-121		%REC	1	6/10/2005 1:12:44 AM

**Lab ID:** 0506078-02

**Collection Date:** 6/7/2005 2:16:00 PM

**Client Sample ID:** Fresh Water Ponds

**Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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**EPA METHOD 8021B: VOLATILES**

Analyst: NSB

Benzene	ND	0.50		µg/L	1	6/10/2005 1:43:07 AM
Toluene	ND	0.50		µg/L	1	6/10/2005 1:43:07 AM
Ethylbenzene	ND	0.50		µg/L	1	6/10/2005 1:43:07 AM
Xylenes, Total	ND	0.50		µg/L	1	6/10/2005 1:43:07 AM
Surr: 4-Bromofluorobenzene	102	83.3-121		%REC	1	6/10/2005 1:43:07 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: San Juan Refining  
 Work Order: 0506078  
 Project: TC #33 Effluent

**QC SUMMARY REPORT**

Method Blank

Sample ID	Reagent Blank 5m	Batch ID: R15641	Test Code: SW8021	Units: µg/L	Analysis Date 6/9/2005 9:16:17 AM	Prep Date						
Client ID:			Run ID: PIDFID_050609A			SeqNo: 369704						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	ND	0.5										
Toluene	ND	0.5										
Ethylbenzene	ND	0.5										
Xylenes, Total	ND	0.5										
Surr: 4-Bromofluorobenzene	19.39	0	20	0	96.9	83.3	121	0				

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



CLIENT: San Juan Refining  
 Work Order: 0506078  
 Project: TC #33 Effluent

**QC SUMMARY REPORT**  
 Sample Matrix Spike

Sample ID	Batch ID	Test Code	Units	Analysis Date	Prep Date						
0506078-02a ms	R15641	SW8021	µg/L	6/10/2005 2:13:27 AM							
Client ID: Fresh Water Pond		Run ID: PIDFID_050609A		SeqNo: 369824							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.68	0.5	20	0	103	88.7	114	0			
Toluene	21.37	0.5	20	0	107	89.3	112	0			
Ethylbenzene	21.09	0.5	20	0	105	88.6	113	0			
Xylenes, Total	63.74	0.5	60	0.4698	105	89.4	112	0			
Surr: 4-Bromofluorobenzene	24.89	0	24	0	104	83.3	121	0			

Sample ID	Batch ID	Test Code	Units	Analysis Date	Prep Date						
0506078-02a msd	R15641	SW8021	µg/L	6/10/2005 2:43:48 AM							
Client ID: Fresh Water Pond		Run ID: PIDFID_050609A		SeqNo: 369825							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.3	0.5	20	0	102	88.7	114	20.68	1.86	27	
Toluene	20.97	0.5	20	0	105	89.3	112	21.37	1.84	19	
Ethylbenzene	20.81	0.5	20	0	104	88.6	113	21.09	1.32	10	
Xylenes, Total	62.82	0.5	60	0.4698	104	89.4	112	63.74	1.46	13	
Surr: 4-Bromofluorobenzene	24.68	0	24	0	103	83.3	121	24.89	0.851	0	

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

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Hall Environmental Analysis Laboratory

Date: 10-Jun-05

CLIENT: San Juan Refining  
 Work Order: 0506078  
 Project: TC #33 Effluent

**QC SUMMARY REPORT**  
 Laboratory Control Spike - generic

Sample ID	BTEX Ics 100ng	Batch ID: R15641	Test Code: SW8021	Units: µg/L	Analysis Date	6/9/2005 12:51:23 PM	Prep Date					
Client ID:	Run ID: PIDFID_050609A		SeqNo: 369826									
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Benzene	20.81	0.5	20	0	104	88.7	114	0				
Toluene	20.97	0.5	20	0	105	89.3	112	0				
Ethylbenzene	20.6	0.5	20	0	103	88.6	113	0				
Xylenes, Total	62.78	0.5	60	0	105	89.4	112	0				

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

# Hall Environmental Analysis Laboratory

## Sample Receipt Checklist

Client Name SJR

Date and Time Received:

Work Order Number 0506078

Received by AMG

Checklist completed by *Abonzals* *6/8/05*  
Signature Date

Matrix \_\_\_\_\_

Carrier name UPS

- |   |   |   |   |                                      |
|---|---|---|---|--------------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>                                     | Not Present <input type="checkbox"/>            |                                      |
| Custody seals intact on shipping container/cooler?      | Yes <input type="checkbox"/>                    | No <input type="checkbox"/>                                     | Not Present <input checked="" type="checkbox"/> | Not Shipped <input type="checkbox"/> |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>                    | No <input type="checkbox"/>                                     | N/A <input checked="" type="checkbox"/>         |                                      |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>                                     |   |                                      |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>                                     |   |                                      |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>                                     |   |                                      |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>                                     |   |                                      |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>                                     |   |                                      |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>                                     |   |                                      |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>                                     |   |                                      |
| Water - VOA vials have zero headspace?                  | No VOA vials submitted <input type="checkbox"/> | Yes <input checked="" type="checkbox"/>                         | No <input type="checkbox"/>                     |                                      |
| Water - pH acceptable upon receipt?                     | Yes <input type="checkbox"/>                    | No <input type="checkbox"/>                                     | N/A <input checked="" type="checkbox"/>         |                                      |
| Container/Temp Blank temperature?                       | <b>13°</b>                                      | <i>4° C ± 2 Acceptable</i><br>If given sufficient time to cool. |   |                                      |

COMMENTS:

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Client contacted \_\_\_\_\_ Date contacted: \_\_\_\_\_ Person contacted \_\_\_\_\_

Contacted by: \_\_\_\_\_ Regarding \_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Corrective Action \_\_\_\_\_

\_\_\_\_\_