

GW - _____ 32 _____

MONITORING REPORTS

DATE:

2006 – Present (3/3)



COVER LETTER

Monday, April 10, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833

FAX (505) 722-0210

RE: PDA/SRU Excavation Wall Samples

Order No.: 0603351

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/31/2006 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

AZ license # AZ0682
ORELAP Lab # NM100001



Hall Environmental Analysis Laboratory

Date: 10-Apr-06

CLIENT: Giant Refining Co
Project: PDA/SRU Excavation Wall Samples
Lab Order: 0603351

CASE NARRATIVE

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

Hall Environmental Analysis Laboratory

Date: 10-Apr-06

CLIENT: Giant Refining Co
Lab Order: 0603351
Project: PDA/SRU Excavation Wall Samples
Lab ID: 0603351-01

Client Sample ID: East Wall
Collection Date: 3/29/2006 7:15:00 AM
Date Received: 3/31/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	32000	500		mg/Kg	50	4/7/2006 2:30:21 PM
Motor Oil Range Organics (MRO)	ND	2500		mg/Kg	50	4/7/2006 2:30:21 PM
Surr: DNOP	0	60-124	S	%REC	50	4/7/2006 2:30:21 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	170	100		mg/Kg	20	4/5/2006 10:23:05 PM
Surr: BFB	128	79-128		%REC	20	4/5/2006 10:23:05 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		mg/Kg	20	4/5/2006 10:23:05 PM
Toluene	5.6	1.0		mg/Kg	20	4/5/2006 10:23:05 PM
Ethylbenzene	5.4	1.0		mg/Kg	20	4/5/2006 10:23:05 PM
Xylenes, Total	29	1.0		mg/Kg	20	4/5/2006 10:23:05 PM
Surr: 4-Bromofluorobenzene	107	84.4-117		%REC	20	4/5/2006 10:23:05 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 10-Apr-06

CLIENT: Giant Refining Co

Client Sample ID: West Wall

Lab Order: 0603351

Collection Date: 3/29/2006 7:30:00 AM

Project: PDA/SRU Excavation Wall Samples

Date Received: 3/31/2006

Lab ID: 0603351-02

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/7/2006 1:23:59 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/7/2006 1:23:59 PM
Surr: DNOP	107	60-124		%REC	1	4/7/2006 1:23:59 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/6/2006 11:44:34 AM
Surr: BFB	107	79-128		%REC	1	4/6/2006 11:44:34 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	4/6/2006 11:44:34 AM
Toluene	ND	0.050		mg/Kg	1	4/6/2006 11:44:34 AM
Ethylbenzene	ND	0.050		mg/Kg	1	4/6/2006 11:44:34 AM
Xylenes, Total	ND	0.050		mg/Kg	1	4/6/2006 11:44:34 AM
Surr: 4-Bromofluorobenzene	96.7	84.4-117		%REC	1	4/6/2006 11:44:34 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 10-Apr-06

CLIENT: Giant Refining Co

Client Sample ID: North Wall

Lab Order: 0603351

Collection Date: 3/29/2006 7:45:00 AM

Project: PDA/SRU Excavation Wall Samples

Date Received: 3/31/2006

Lab ID: 0603351-03

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	45000	500		mg/Kg	50	4/7/2006 1:50:51 AM
Motor Oil Range Organics (MRO)	ND	2500		mg/Kg	50	4/7/2006 1:50:51 AM
Surr: DNOP	0	60-124	S	%REC	50	4/7/2006 1:50:51 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	240	100		mg/Kg	20	4/5/2006 11:19:39 PM
Surr: BFB	138	79-128	S	%REC	20	4/5/2006 11:19:39 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		mg/Kg	20	4/5/2006 11:19:39 PM
Toluene	3.5	1.0		mg/Kg	20	4/5/2006 11:19:39 PM
Ethylbenzene	ND	1.0		mg/Kg	20	4/5/2006 11:19:39 PM
Xylenes, Total	33	1.0		mg/Kg	20	4/5/2006 11:19:39 PM
Surr: 4-Bromofluorobenzene	113	84.4-117		%REC	20	4/5/2006 11:19:39 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 10-Apr-06

CLIENT: Giant Refining Co

Client Sample ID: South Wall

Lab Order: 0603351

Collection Date: 3/29/2006 8:00:00 AM

Project: PDA/SRU Excavation Wall Samples

Date Received: 3/31/2006

Lab ID: 0603351-04

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	40000	500		mg/Kg	50	4/7/2006 2:23:58 AM
Motor Oil Range Organics (MRO)	ND	2500		mg/Kg	50	4/7/2006 2:23:58 AM
Surr: DNOP	0	60-124	S	%REC	50	4/7/2006 2:23:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	220	100		mg/Kg	20	4/6/2006 12:40:36 PM
Surr: BFB	149	79-128	S	%REC	20	4/6/2006 12:40:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		mg/Kg	20	4/6/2006 12:40:36 PM
Toluene	5.8	1.0		mg/Kg	20	4/6/2006 12:40:36 PM
Ethylbenzene	7.4	1.0		mg/Kg	20	4/6/2006 12:40:36 PM
Xylenes, Total	44	1.0		mg/Kg	20	4/6/2006 12:40:36 PM
Surr: 4-Bromofluorobenzene	116	84.4-117		%REC	20	4/6/2006 12:40:36 PM

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 10-Apr-06

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co

Work Order: 0603351

Project: PDA/SRU Excavation Wall Samples

TestCode: 801SDRO_S

Sample ID: MB-10113	Sample Type: MBLK	TestCode: 801SDRO_S	Units: mg/Kg	Prep Date: 4/4/2006	RunNo: 18818
Client ID: ZZZZZ	Batch ID: 10113	TestNo: SW8015		Analysis Date: 4/5/2006	SeqNo: 467263
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND	10			
Motor Oil Range Organics (MRO)	ND	50			

Sample ID: LCS-10113	Sample Type: LCS	TestCode: 801SDRO_S	Units: mg/Kg	Prep Date: 4/4/2006	RunNo: 18818
Client ID: ZZZZZ	Batch ID: 10113	TestNo: SW8015		Analysis Date: 4/5/2006	SeqNo: 467264
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diesel Range Organics (DRO)	41.47	10	50	0	82.9 67.4 117

Sample ID: LCSD-10113	Sample Type: LCSD	TestCode: 801SDRO_S	Units: mg/Kg	Prep Date: 4/4/2006	RunNo: 18818
Client ID: ZZZZZ	Batch ID: 10113	TestNo: SW8015		Analysis Date: 4/5/2006	SeqNo: 467265
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diesel Range Organics (DRO)	38.68	10	50	0	77.4 67.4 117 41.47 6.97 17.4

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co

0603351

TestCode: 8015GRO_S

Gasoline Range Organics (GRO)

E Value above quantitation range

H Holding times for preparation or analysis exceeded

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Analyte detected below quantitation limits

RPD outside accepted recovery limits

5

Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co

Work Order: 0603351

Project: PDA/SRU Excavation Wall Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_S

Sample ID: MB-10098	SampleType: MBLK	TestCode: 8021BTEX_S	Units: mg/Kg	Prep Date: 3/31/2006	RunNo: 18842						
Client ID: ZZZZZ	Batch ID: 10098	TestNo: SW8021	(SW5035)	Analysis Date: 4/5/2006	SeqNo: 467531						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene ND 0.050
Toluene ND 0.050
Ethylbenzene ND 0.050
Xylenes, Total ND 0.050

Sample ID: LCS-10098	SampleType: LCS	TestCode: 8021BTEX_S	Units: mg/Kg	Prep Date: 3/31/2006	RunNo: 18842						
Client ID: ZZZZZ	Batch ID: 10098	TestNo: SW8021	(SW5035)	Analysis Date: 4/5/2006	SeqNo: 467532						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene 0.4721 0.050 0.452 0 104 85.6 116
Toluene 1.859 0.050 1.62 0 115 82.4 120
Ethylbenzene 0.4260 0.050 0.456 0 93.4 86.4 111
Xylenes, Total 2.002 0.050 1.8 0 111 78.4 125

Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

J Analyte detected below quantitation limits

S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

3/31/2006

Work Order Number 0603351

Received by AT

Checklist completed by

Signature

Date

3/31/06

Matrix

Carrier name Client drop-off

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

Container/Temp Blank temperature?

2°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____



COVER LETTER

Monday, May 15, 2006

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833

FAX (505) 722-0210

RE: Stockpile Banks from Lagoons & Ponds

Order No.: 0605060

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 12 sample(s) on 5/5/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a horizontal line.

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

AZ license # AZ0682
ORELAP Lab # NM100001



Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT: Giant Refining Co
Project: Stockpile Banks from Lagoons & Ponds
Lab Order: 0605060

CASE NARRATIVE

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

Reporting limits for many of the 8260 and 8270 samples are elevated due to the high amounts of diesel and motor oil range organic compounds in the samples.

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT: Giant Refining Co **Client Sample ID:** NW Comp
Lab Order: 0605060 **Collection Date:** 5/3/2006 9:30:00 AM
Project: Stockpile Banks from Lagoons & Ponds **Date Received:** 5/5/2006
Lab ID: 0605060-01 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	82000	1000		mg/Kg	100	5/10/2006 10:59:28 AM
Motor Oil Range Organics (MRO)	8000	5000		mg/Kg	100	5/10/2006 10:59:28 AM
Surr: DNOP	0	61.7-135	S	%REC	100	5/10/2006 10:59:28 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	5/8/2006 11:29:07 AM
Surr: BFB	104	81.7-127		%REC	20	5/8/2006 11:29:07 AM
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/11/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/12/2006 2:26:43 PM
Barium	ND	100		mg/L	1	5/12/2006 2:26:43 PM
Cadmium	ND	1.0		mg/L	1	5/12/2006 2:26:43 PM
Chromium	ND	5.0		mg/L	1	5/12/2006 2:26:43 PM
Lead	ND	5.0		mg/L	1	5/12/2006 2:26:43 PM
Selenium	ND	1.0		mg/L	1	5/12/2006 2:26:43 PM
Silver	ND	5.0		mg/L	1	5/12/2006 2:26:43 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	40		mg/Kg	20	5/10/2006
Acenaphthylene	ND	40		mg/Kg	20	5/10/2006
Aniline	ND	40		mg/Kg	20	5/10/2006
Anthracene	ND	40		mg/Kg	20	5/10/2006
Azobenzene	ND	40		mg/Kg	20	5/10/2006
Benz(a)anthracene	ND	50		mg/Kg	20	5/10/2006
Benzo(a)pyrene	ND	40		mg/Kg	20	5/10/2006
Benzo(b)fluoranthene	ND	40		mg/Kg	20	5/10/2006
Benzo(g,h,i)perylene	ND	60		mg/Kg	20	5/10/2006
Benzo(k)fluoranthene	ND	100		mg/Kg	20	5/10/2006
Benzoic acid	ND	100		mg/Kg	20	5/10/2006
Benzyl alcohol	ND	200		mg/Kg	20	5/10/2006
Bis(2-chloroethoxy)methane	ND	100		mg/Kg	20	5/10/2006
Bis(2-chloroethyl)ether	ND	50		mg/Kg	20	5/10/2006
Bis(2-chloroisopropyl)ether	ND	100		mg/Kg	20	5/10/2006
Bis(2-ethylhexyl)phthalate	ND	40		mg/Kg	20	5/10/2006
4-Bromophenyl phenyl ether	ND	50		mg/Kg	20	5/10/2006

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 E Value above quantitation range H Holding times for preparation or analysis exceeded
 J Analyte detected below quantitation limits ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	NW Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:30:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-01	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Butyl benzyl phthalate	ND	40		mg/Kg	20	5/10/2006
Carbazole	ND	40		mg/Kg	20	5/10/2006
4-Chloro-3-methylphenol	ND	40		mg/Kg	20	5/10/2006
4-Chloroaniline	ND	40		mg/Kg	20	5/10/2006
2-Chloronaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Chlorophenol	ND	40		mg/Kg	20	5/10/2006
4-Chlorophenyl phenyl ether	ND	40		mg/Kg	20	5/10/2006
Chrysene	ND	40		mg/Kg	20	5/10/2006
Di-n-butyl phthalate	ND	100		mg/Kg	20	5/10/2006
Di-n-octyl phthalate	ND	100		mg/Kg	20	5/10/2006
Dibenz(a,h)anthracene	ND	50		mg/Kg	20	5/10/2006
Dibenzofuran	ND	100		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
3,3'-Dichlorobenzidine	ND	40		mg/Kg	20	5/10/2006
Diethyl phthalate	ND	40		mg/Kg	20	5/10/2006
Dimethyl phthalate	ND	40		mg/Kg	20	5/10/2006
2,4-Dichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4-Dimethylphenol	ND	40		mg/Kg	20	5/10/2006
4,6-Dinitro-2-methylphenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrophenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
2,6-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
Fluoranthene	ND	40		mg/Kg	20	5/10/2006
Fluorene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobenzene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	40		mg/Kg	20	5/10/2006
Hexachlorocyclopentadiene	ND	50		mg/Kg	20	5/10/2006
Hexachloroethane	ND	100		mg/Kg	20	5/10/2006
Indeno(1,2,3-cd)pyrene	ND	40		mg/Kg	20	5/10/2006
Isophorone	ND	40		mg/Kg	20	5/10/2006
2-Methylnaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Methylphenol	ND	40		mg/Kg	20	5/10/2006
3+4-Methylphenol	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodi-n-propylamine	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodiphenylamine	ND	40		mg/Kg	20	5/10/2006
Naphthalene	ND	40		mg/Kg	20	5/10/2006
2-Nitroaniline	ND	100		mg/Kg	20	5/10/2006
3-Nitroaniline	ND	100		mg/Kg	20	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E Value above quantitation range	H Holding times for preparation or analysis exceeded	
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	NW Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:30:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-01	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Nitroaniline	ND	50		mg/Kg	20	5/10/2006
Nitrobenzene	ND	40		mg/Kg	20	5/10/2006
2-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
4-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
Pentachlorophenol	ND	100		mg/Kg	20	5/10/2006
Phenanthrene	110	40		mg/Kg	20	5/10/2006
Phenol	ND	40		mg/Kg	20	5/10/2006
Pyrene	ND	40		mg/Kg	20	5/10/2006
Pyridine	ND	100		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	40		mg/Kg	20	5/10/2006
2,4,5-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4,6-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
Surr: 2,4,6-Tribromophenol	0	35.5-141	S	%REC	20	5/10/2006
Surr: 2-Fluorobiphenyl	91.8	30.4-128		%REC	20	5/10/2006
Surr: 2-Fluorophenol	537	28.1-129	S	%REC	20	5/10/2006
Surr: 4-Terphenyl-d14	0	34.6-151	S	%REC	20	5/10/2006
Surr: Nitrobenzene-d5	136	26.5-122	S	%REC	20	5/10/2006
Surr: Phenol-d5	204	37.6-118	S	%REC	20	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT: Giant Refining Co **Client Sample ID:** NE Comp
Lab Order: 0605060 **Collection Date:** 5/3/2006 9:35:00 AM
Project: Stockpile Banks from Lagoons & Ponds **Date Received:** 5/5/2006
Lab ID: 0605060-02 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	44000	1000		mg/Kg	100	5/10/2006 11:32:15 AM
Motor Oil Range Organics (MRO)	6700	5000		mg/Kg	100	5/10/2006 11:32:15 AM
Surr: DNOP	0	61.7-135	S	%REC	100	5/10/2006 11:32:15 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	5/10/2006 10:42:03 PM
Surr: BFB	97.5	81.7-127		%REC	10	5/10/2006 10:42:03 PM
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/11/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/12/2006 2:31:03 PM
Barium	ND	100		mg/L	1	5/12/2006 2:31:03 PM
Cadmium	ND	1.0		mg/L	1	5/12/2006 2:31:03 PM
Chromium	ND	5.0		mg/L	1	5/12/2006 2:31:03 PM
Lead	ND	5.0		mg/L	1	5/12/2006 2:31:03 PM
Selenium	ND	1.0		mg/L	1	5/12/2006 2:31:03 PM
Silver	ND	5.0		mg/L	1	5/12/2006 2:31:03 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	40		mg/Kg	20	5/10/2006
Acenaphthylene	ND	40		mg/Kg	20	5/10/2006
Aniline	ND	40		mg/Kg	20	5/10/2006
Anthracene	ND	40		mg/Kg	20	5/10/2006
Azobenzene	ND	40		mg/Kg	20	5/10/2006
Benz(a)anthracene	ND	50		mg/Kg	20	5/10/2006
Benzo(a)pyrene	ND	40		mg/Kg	20	5/10/2006
Benzo(b)fluoranthene	ND	40		mg/Kg	20	5/10/2006
Benzo(g,h,i)perylene	ND	60		mg/Kg	20	5/10/2006
Benzo(k)fluoranthene	ND	100		mg/Kg	20	5/10/2006
Benzoic acid	ND	100		mg/Kg	20	5/10/2006
Benzyl alcohol	ND	200		mg/Kg	20	5/10/2006
Bis(2-chloroethoxy)methane	ND	100		mg/Kg	20	5/10/2006
Bis(2-chloroethyl)ether	ND	50		mg/Kg	20	5/10/2006
Bis(2-chloroisopropyl)ether	ND	100		mg/Kg	20	5/10/2006
Bis(2-ethylhexyl)phthalate	ND	40		mg/Kg	20	5/10/2006
4-Bromophenyl phenyl ether	ND	50		mg/Kg	20	5/10/2006

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 E Value above quantitation range H Holding times for preparation or analysis exceeded
 J Analyte detected below quantitation limits ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	NE Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:35:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-02	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Butyl benzyl phthalate	ND	40		mg/Kg	20	5/10/2006
Carbazole	ND	40		mg/Kg	20	5/10/2006
4-Chloro-3-methylphenol	ND	40		mg/Kg	20	5/10/2006
4-Chloroaniline	ND	40		mg/Kg	20	5/10/2006
2-Chloronaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Chlorophenol	ND	40		mg/Kg	20	5/10/2006
4-Chlorophenyl phenyl ether	ND	40		mg/Kg	20	5/10/2006
Chrysene	ND	40		mg/Kg	20	5/10/2006
Di-n-butyl phthalate	ND	100		mg/Kg	20	5/10/2006
Di-n-octyl phthalate	ND	100		mg/Kg	20	5/10/2006
Dibenz(a,h)anthracene	ND	50		mg/Kg	20	5/10/2006
Dibenzofuran	ND	100		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
3,3'-Dichlorobenzidine	ND	40		mg/Kg	20	5/10/2006
Diethyl phthalate	ND	40		mg/Kg	20	5/10/2006
Dimethyl phthalate	ND	40		mg/Kg	20	5/10/2006
2,4-Dichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4-Dimethylphenol	ND	40		mg/Kg	20	5/10/2006
4,6-Dinitro-2-methylphenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrophenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
2,6-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
Fluoranthene	ND	40		mg/Kg	20	5/10/2006
Fluorene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobenzene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	40		mg/Kg	20	5/10/2006
Hexachlorocyclopentadiene	ND	50		mg/Kg	20	5/10/2006
Hexachloroethane	ND	100		mg/Kg	20	5/10/2006
Indeno(1,2,3-cd)pyrene	ND	40		mg/Kg	20	5/10/2006
Isophorone	ND	40		mg/Kg	20	5/10/2006
2-Methylnaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Methylphenol	ND	40		mg/Kg	20	5/10/2006
3+4-Methylphenol	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodi-n-propylamine	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodiphenylamine	ND	40		mg/Kg	20	5/10/2006
Naphthalene	ND	40		mg/Kg	20	5/10/2006
2-Nitroaniline	ND	100		mg/Kg	20	5/10/2006
3-Nitroaniline	ND	100		mg/Kg	20	5/10/2006

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	NE Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:35:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-02	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Nitroaniline	ND	50		mg/Kg	20	5/10/2006
Nitrobenzene	ND	40		mg/Kg	20	5/10/2006
2-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
4-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
Pentachlorophenol	ND	100		mg/Kg	20	5/10/2006
Phenanthrene	58	40		mg/Kg	20	5/10/2006
Phenol	ND	40		mg/Kg	20	5/10/2006
Pyrene	ND	40		mg/Kg	20	5/10/2006
Pyridine	ND	100		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	40		mg/Kg	20	5/10/2006
2,4,5-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4,6-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
Surr: 2,4,6-Tribromophenol	0	35.5-141	S	%REC	20	5/10/2006
Surr: 2-Fluorobiphenyl	79.8	30.4-128		%REC	20	5/10/2006
Surr: 2-Fluorophenol	535	28.1-129	S	%REC	20	5/10/2006
Surr: 4-Terphenyl-d14	679	34.6-151	S	%REC	20	5/10/2006
Surr: Nitrobenzene-d5	116	26.5-122		%REC	20	5/10/2006
Surr: Phenol-d5	210	37.6-118	S	%REC	20	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E Value above quantitation range	H Holding times for preparation or analysis exceeded	
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	MID W Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:40:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-03	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						
Diesel Range Organics (DRO)	65000	1000		mg/Kg	100	5/10/2006 12:05:06 PM
Motor Oil Range Organics (MRO)	9400	5000		mg/Kg	100	5/10/2006 12:05:06 PM
Surr: DNOP	0	61.7-135	S	%REC	100	5/10/2006 12:05:06 PM

Analyst: SCC

EPA METHOD 8015B: GASOLINE RANGE						
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	5/8/2006 12:27:18 PM
Surr: BFB	157	81.7-127	S	%REC	10	5/8/2006 12:27:18 PM

Analyst: HLM

MERCURY, TCLP LEACHED						
Mercury	ND	0.020		mg/L	1	5/11/2006

Analyst: CMC

EPA METHOD 6010B: TCLP METALS						
Arsenic	ND	5.0		mg/L	1	5/12/2006 2:35:12 PM
Barium	ND	100		mg/L	1	5/12/2006 2:35:12 PM
Cadmium	ND	1.0		mg/L	1	5/12/2006 2:35:12 PM
Chromium	ND	5.0		mg/L	1	5/12/2006 2:35:12 PM
Lead	ND	5.0		mg/L	1	5/12/2006 2:35:12 PM
Selenium	ND	1.0		mg/L	1	5/12/2006 2:35:12 PM
Silver	ND	5.0		mg/L	1	5/12/2006 2:35:12 PM

Analyst: NMO

EPA METHOD 8270C: SEMIVOLATILES						
Acenaphthene	ND	40		mg/Kg	20	5/10/2006
Acenaphthylene	ND	40		mg/Kg	20	5/10/2006
Aniline	ND	40		mg/Kg	20	5/10/2006
Anthracene	ND	40		mg/Kg	20	5/10/2006
Azobenzene	ND	40		mg/Kg	20	5/10/2006
Benz(a)anthracene	ND	50		mg/Kg	20	5/10/2006
Benzo(a)pyrene	ND	40		mg/Kg	20	5/10/2006
Benzo(b)fluoranthene	ND	40		mg/Kg	20	5/10/2006
Benzo(g,h,i)perylene	ND	60		mg/Kg	20	5/10/2006
Benzo(k)fluoranthene	ND	100		mg/Kg	20	5/10/2006
Benzoic acid	ND	100		mg/Kg	20	5/10/2006
Benzyl alcohol	ND	200		mg/Kg	20	5/10/2006
Bis(2-chloroethoxy)methane	ND	100		mg/Kg	20	5/10/2006
Bis(2-chloroethyl)ether	ND	50		mg/Kg	20	5/10/2006
Bis(2-chloroisopropyl)ether	ND	100		mg/Kg	20	5/10/2006
Bis(2-ethylhexyl)phthalate	ND	40		mg/Kg	20	5/10/2006
4-Bromophenyl phenyl ether	ND	50		mg/Kg	20	5/10/2006

Analyst: BL

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E Value above quantitation range	H Holding times for preparation or analysis exceeded	
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT: Giant Refining Co
Lab Order: 0605060
Project: Stockpile Banks from Lagoons & Ponds
Lab ID: 0605060-03

Client Sample ID: MID W Comp
Collection Date: 5/3/2006 9:40:00 AM
Date Received: 5/5/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Butyl benzyl phthalate	ND	40		mg/Kg	20	5/10/2006
Carbazole	ND	40		mg/Kg	20	5/10/2006
4-Chloro-3-methylphenol	ND	40		mg/Kg	20	5/10/2006
4-Chloroaniline	ND	40		mg/Kg	20	5/10/2006
2-Chloronaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Chlorophenol	ND	40		mg/Kg	20	5/10/2006
4-Chlorophenyl phenyl ether	ND	40		mg/Kg	20	5/10/2006
Chrysene	ND	40		mg/Kg	20	5/10/2006
Di-n-butyl phthalate	ND	100		mg/Kg	20	5/10/2006
Di-n-octyl phthalate	ND	100		mg/Kg	20	5/10/2006
Dibenz(a,h)anthracene	ND	50		mg/Kg	20	5/10/2006
Dibenzofuran	ND	100		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
3,3'-Dichlorobenzidine	ND	40		mg/Kg	20	5/10/2006
Diethyl phthalate	ND	40		mg/Kg	20	5/10/2006
Dimethyl phthalate	ND	40		mg/Kg	20	5/10/2006
2,4-Dichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4-Dimethylphenol	ND	40		mg/Kg	20	5/10/2006
4,6-Dinitro-2-methylphenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrophenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
2,6-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
Fluoranthene	ND	40		mg/Kg	20	5/10/2006
Fluorene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobenzene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	40		mg/Kg	20	5/10/2006
Hexachlorocyclopentadiene	ND	50		mg/Kg	20	5/10/2006
Hexachloroethane	ND	100		mg/Kg	20	5/10/2006
Indeno(1,2,3-cd)pyrene	ND	40		mg/Kg	20	5/10/2006
Isophorone	ND	40		mg/Kg	20	5/10/2006
2-Methylnaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Methylphenol	ND	40		mg/Kg	20	5/10/2006
3+4-Methylphenol	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodi-n-propylamine	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodiphenylamine	ND	40		mg/Kg	20	5/10/2006
Naphthalene	ND	40		mg/Kg	20	5/10/2006
2-Nitroaniline	ND	100		mg/Kg	20	5/10/2006
3-Nitroaniline	ND	100		mg/Kg	20	5/10/2006

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	MID W Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:40:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-03	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Nitroaniline	ND	50		mg/Kg	20	5/10/2006
Nitrobenzene	ND	40		mg/Kg	20	5/10/2006
2-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
4-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
Pentachlorophenol	ND	100		mg/Kg	20	5/10/2006
Phenanthrene	57	40		mg/Kg	20	5/10/2006
Phenol	ND	40		mg/Kg	20	5/10/2006
Pyrene	ND	40		mg/Kg	20	5/10/2006
Pyridine	ND	100		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	40		mg/Kg	20	5/10/2006
2,4,5-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4,6-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
Surr: 2,4,6-Tribromophenol	0	35.5-141	S	%REC	20	5/10/2006
Surr: 2-Fluorobiphenyl	71.9	30.4-128		%REC	20	5/10/2006
Surr: 2-Fluorophenol	553	28.1-129	S	%REC	20	5/10/2006
Surr: 4-Terphenyl-d14	659	34.6-151	S	%REC	20	5/10/2006
Surr: Nitrobenzene-d5	128	26.5-122	S	%REC	20	5/10/2006
Surr: Phenol-d5	202	37.6-118	S	%REC	20	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT: Giant Refining Co
Lab Order: 0605060
Project: Stockpile Banks from Lagoons & Ponds
Lab ID: 0605060-04

Client Sample ID: MID E Comp
Collection Date: 5/3/2006 9:45:00 AM
Date Received: 5/5/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	82000	1000		mg/Kg	100	5/10/2006 12:37:54 PM
Motor Oil Range Organics (MRO)	9500	5000		mg/Kg	100	5/10/2006 12:37:54 PM
Surr: DNOP	0	61.7-135	S	%REC	100	5/10/2006 12:37:54 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	5/10/2006 11:40:17 PM
Surr: BFB	100	81.7-127		%REC	10	5/10/2006 11:40:17 PM
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/11/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/12/2006 2:39:29 PM
Barium	ND	100		mg/L	1	5/12/2006 2:39:29 PM
Cadmium	ND	1.0		mg/L	1	5/12/2006 2:39:29 PM
Chromium	ND	5.0		mg/L	1	5/12/2006 2:39:29 PM
Lead	ND	5.0		mg/L	1	5/12/2006 2:39:29 PM
Selenium	ND	1.0		mg/L	1	5/12/2006 2:39:29 PM
Silver	ND	5.0		mg/L	1	5/12/2006 2:39:29 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	40		mg/Kg	20	5/10/2006
Acenaphthylene	ND	40		mg/Kg	20	5/10/2006
Aniline	ND	40		mg/Kg	20	5/10/2006
Anthracene	ND	40		mg/Kg	20	5/10/2006
Azobenzene	ND	40		mg/Kg	20	5/10/2006
Benz(a)anthracene	ND	50		mg/Kg	20	5/10/2006
Benzo(a)pyrene	ND	40		mg/Kg	20	5/10/2006
Benzo(b)fluoranthene	ND	40		mg/Kg	20	5/10/2006
Benzo(g,h,i)perylene	ND	60		mg/Kg	20	5/10/2006
Benzo(k)fluoranthene	ND	100		mg/Kg	20	5/10/2006
Benzic acid	ND	100		mg/Kg	20	5/10/2006
Benzyl alcohol	ND	200		mg/Kg	20	5/10/2006
Bis(2-chloroethoxy)methane	ND	100		mg/Kg	20	5/10/2006
Bis(2-chloroethyl)ether	ND	50		mg/Kg	20	5/10/2006
Bis(2-chloroisopropyl)ether	ND	100		mg/Kg	20	5/10/2006
Bis(2-ethylhexyl)phthalate	ND	40		mg/Kg	20	5/10/2006
4-Bromophenyl phenyl ether	ND	50		mg/Kg	20	5/10/2006

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	MID E Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:45:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-04	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Butyl benzyl phthalate	ND	40		mg/Kg	20	5/10/2006
Carbazole	ND	40		mg/Kg	20	5/10/2006
4-Chloro-3-methylphenol	ND	40		mg/Kg	20	5/10/2006
4-Chloroaniline	ND	40		mg/Kg	20	5/10/2006
2-Chloronaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Chlorophenol	ND	40		mg/Kg	20	5/10/2006
4-Chlorophenyl phenyl ether	ND	40		mg/Kg	20	5/10/2006
Chrysene	ND	40		mg/Kg	20	5/10/2006
Di-n-butyl phthalate	ND	100		mg/Kg	20	5/10/2006
Di-n-octyl phthalate	ND	100		mg/Kg	20	5/10/2006
Dibenz(a,h)anthracene	ND	50		mg/Kg	20	5/10/2006
Dibenzofuran	ND	100		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
3,3'-Dichlorobenzidine	ND	40		mg/Kg	20	5/10/2006
Diethyl phthalate	ND	40		mg/Kg	20	5/10/2006
Dimethyl phthalate	ND	40		mg/Kg	20	5/10/2006
2,4-Dichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4-Dimethylphenol	ND	40		mg/Kg	20	5/10/2006
4,6-Dinitro-2-methylphenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrophenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
2,6-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
Fluoranthene	ND	40		mg/Kg	20	5/10/2006
Fluorene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobenzene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	40		mg/Kg	20	5/10/2006
Hexachlorocyclopentadiene	ND	50		mg/Kg	20	5/10/2006
Hexachloroethane	ND	100		mg/Kg	20	5/10/2006
Indeno(1,2,3-cd)pyrene	ND	40		mg/Kg	20	5/10/2006
Isophorone	ND	40		mg/Kg	20	5/10/2006
2-Methylnaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Methylphenol	ND	40		mg/Kg	20	5/10/2006
3+4-Methylphenol	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodi-n-propylamine	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodiphenylamine	ND	40		mg/Kg	20	5/10/2006
Naphthalene	ND	40		mg/Kg	20	5/10/2006
2-Nitroaniline	ND	100		mg/Kg	20	5/10/2006
3-Nitroaniline	ND	100		mg/Kg	20	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	MID E Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:45:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-04	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Nitroaniline	ND	50		mg/Kg	20	5/10/2006
Nitrobenzene	ND	40		mg/Kg	20	5/10/2006
2-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
4-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
Pentachlorophenol	ND	100		mg/Kg	20	5/10/2006
Phenanthrene	100	40		mg/Kg	20	5/10/2006
Phenol	ND	40		mg/Kg	20	5/10/2006
Pyrene	ND	40		mg/Kg	20	5/10/2006
Pyridine	ND	100		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	40		mg/Kg	20	5/10/2006
2,4,5-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4,6-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
Surr: 2,4,6-Tribromophenol	0	35.5-141	S	%REC	20	5/10/2006
Surr: 2-Fluorobiphenyl	95.8	30.4-128		%REC	20	5/10/2006
Surr: 2-Fluorophenol	545	28.1-129	S	%REC	20	5/10/2006
Surr: 4-Terphenyl-d14	671	34.6-151	S	%REC	20	5/10/2006
Surr: Nitrobenzene-d5	124	26.5-122	S	%REC	20	5/10/2006
Surr: Phenol-d5	214	37.6-118	S	%REC	20	5/10/2006

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	SW Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:50:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-05	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	53000	1000		mg/Kg	100	5/10/2006 1:10:37 PM
Motor Oil Range Organics (MRO)	8700	5000		mg/Kg	100	5/10/2006 1:10:37 PM
Surr: DNOP	0	61.7-135	S	%REC	100	5/10/2006 1:10:37 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	5/11/2006 12:38:15 AM
Surr: BFB	105	81.7-127		%REC	10	5/11/2006 12:38:15 AM
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/11/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/12/2006 2:43:46 PM
Barium	ND	100		mg/L	1	5/12/2006 2:43:46 PM
Cadmium	ND	1.0		mg/L	1	5/12/2006 2:43:46 PM
Chromium	ND	5.0		mg/L	1	5/12/2006 2:43:46 PM
Lead	ND	5.0		mg/L	1	5/12/2006 2:43:46 PM
Selenium	ND	1.0		mg/L	1	5/12/2006 2:43:46 PM
Silver	ND	5.0		mg/L	1	5/12/2006 2:43:46 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	40		mg/Kg	20	5/10/2006
Acenaphthylene	ND	40		mg/Kg	20	5/10/2006
Aniline	ND	40		mg/Kg	20	5/10/2006
Anthracene	ND	40		mg/Kg	20	5/10/2006
Azobenzene	ND	40		mg/Kg	20	5/10/2006
Benz(a)anthracene	ND	50		mg/Kg	20	5/10/2006
Benzo(a)pyrene	ND	40		mg/Kg	20	5/10/2006
Benzo(b)fluoranthene	ND	40		mg/Kg	20	5/10/2006
Benzo(g,h,i)perylene	ND	60		mg/Kg	20	5/10/2006
Benzo(k)fluoranthene	ND	100		mg/Kg	20	5/10/2006
Benzoic acid	ND	100		mg/Kg	20	5/10/2006
Benzyl alcohol	ND	200		mg/Kg	20	5/10/2006
Bis(2-chloroethoxy)methane	ND	100		mg/Kg	20	5/10/2006
Bis(2-chloroethyl)ether	ND	50		mg/Kg	20	5/10/2006
Bis(2-chloroisopropyl)ether	ND	100		mg/Kg	20	5/10/2006
Bis(2-ethylhexyl)phthalate	ND	40		mg/Kg	20	5/10/2006
4-Bromophenyl phenyl ether	ND	50		mg/Kg	20	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	SW Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:50:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-05	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Butyl benzyl phthalate	ND	40		mg/Kg	20	5/10/2006
Carbazole	ND	40		mg/Kg	20	5/10/2006
4-Chloro-3-methylphenol	ND	40		mg/Kg	20	5/10/2006
4-Chloroaniline	ND	40		mg/Kg	20	5/10/2006
2-Chloronaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Chlorophenol	ND	40		mg/Kg	20	5/10/2006
4-Chlorophenyl phenyl ether	ND	40		mg/Kg	20	5/10/2006
Chrysene	ND	40		mg/Kg	20	5/10/2006
Di-n-butyl phthalate	ND	100		mg/Kg	20	5/10/2006
Di-n-octyl phthalate	ND	100		mg/Kg	20	5/10/2006
Dibenz(a,h)anthracene	ND	50		mg/Kg	20	5/10/2006
Dibenzofuran	ND	100		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
3,3'-Dichlorobenzidine	ND	40		mg/Kg	20	5/10/2006
Diethyl phthalate	ND	40		mg/Kg	20	5/10/2006
Dimethyl phthalate	ND	40		mg/Kg	20	5/10/2006
2,4-Dichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4-Dimethylphenol	ND	40		mg/Kg	20	5/10/2006
4,6-Dinitro-2-methylphenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrophenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
2,6-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
Fluoranthene	ND	40		mg/Kg	20	5/10/2006
Fluorene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobenzene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	40		mg/Kg	20	5/10/2006
Hexachlorocyclopentadiene	ND	50		mg/Kg	20	5/10/2006
Hexachloroethane	ND	100		mg/Kg	20	5/10/2006
Indeno(1,2,3-cd)pyrene	ND	40		mg/Kg	20	5/10/2006
Isophorone	ND	40		mg/Kg	20	5/10/2006
2-Methylnaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Methylphenol	ND	40		mg/Kg	20	5/10/2006
3+4-Methylphenol	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodi-n-propylamine	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodiphenylamine	ND	40		mg/Kg	20	5/10/2006
Naphthalene	ND	40		mg/Kg	20	5/10/2006
2-Nitroaniline	ND	100		mg/Kg	20	5/10/2006
3-Nitroaniline	ND	100		mg/Kg	20	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E Value above quantitation range	H Holding times for preparation or analysis exceeded	
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	SW Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:50:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-05	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Nitroaniline	ND	50		mg/Kg	20	5/10/2006
Nitrobenzene	ND	40		mg/Kg	20	5/10/2006
2-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
4-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
Pentachlorophenol	ND	100		mg/Kg	20	5/10/2006
Phenanthrene	55	40		mg/Kg	20	5/10/2006
Phenol	ND	40		mg/Kg	20	5/10/2006
Pyrene	ND	40		mg/Kg	20	5/10/2006
Pyridine	ND	100		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	40		mg/Kg	20	5/10/2006
2,4,5-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4,6-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
Surr: 2,4,6-Tribromophenol	468	35.5-141	S	%REC	20	5/10/2006
Surr: 2-Fluorobiphenyl	83.8	30.4-128		%REC	20	5/10/2006
Surr: 2-Fluorophenol	539	28.1-129	S	%REC	20	5/10/2006
Surr: 4-Terphenyl-d14	679	34.6-151	S	%REC	20	5/10/2006
Surr: Nitrobenzene-d5	124	26.5-122	S	%REC	20	5/10/2006
Surr: Phenol-d5	204	37.6-118	S	%REC	20	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E Value above quantitation range	H Holding times for preparation or analysis exceeded	
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	SE Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:55:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-06	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						
						Analyst: SCC
Diesel Range Organics (DRO)	51000	1000		mg/Kg	100	5/10/2006 1:43:20 PM
Motor Oil Range Organics (MRO)	9800	5000		mg/Kg	100	5/10/2006 1:43:20 PM
Surr: DNOP	0	61.7-135	S	%REC	100	5/10/2006 1:43:20 PM
EPA METHOD 8015B: GASOLINE RANGE						
						Analyst: HLM
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	5/11/2006 1:36:08 AM
Surr: BFB	96.6	81.7-127		%REC	5	5/11/2006 1:36:08 AM
MERCURY, TCLP LEACHED						
						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/11/2006
EPA METHOD 6010B: TCLP METALS						
						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/12/2006 2:47:55 PM
Barium	ND	100		mg/L	1	5/12/2006 2:47:55 PM
Cadmium	ND	1.0		mg/L	1	5/12/2006 2:47:55 PM
Chromium	ND	5.0		mg/L	1	5/12/2006 2:47:55 PM
Lead	ND	5.0		mg/L	1	5/12/2006 2:47:55 PM
Selenium	ND	1.0		mg/L	1	5/12/2006 2:47:55 PM
Silver	ND	5.0		mg/L	1	5/12/2006 2:47:55 PM
EPA METHOD 8270C: SEMIVOLATILES						
						Analyst: BL
Acenaphthene	ND	40		mg/Kg	20	5/10/2006
Acenaphthylene	ND	40		mg/Kg	20	5/10/2006
Aniline	ND	40		mg/Kg	20	5/10/2006
Anthracene	ND	40		mg/Kg	20	5/10/2006
Azobenzene	ND	40		mg/Kg	20	5/10/2006
Benz(a)anthracene	ND	50		mg/Kg	20	5/10/2006
Benzo(a)pyrene	ND	40		mg/Kg	20	5/10/2006
Benzo(b)fluoranthene	ND	40		mg/Kg	20	5/10/2006
Benzo(g,h,i)perylene	ND	60		mg/Kg	20	5/10/2006
Benzo(k)fluoranthene	ND	100		mg/Kg	20	5/10/2006
Benzoic acid	ND	100		mg/Kg	20	5/10/2006
Benzyl alcohol	ND	200		mg/Kg	20	5/10/2006
Bis(2-chloroethoxy)methane	ND	100		mg/Kg	20	5/10/2006
Bis(2-chloroethyl)ether	ND	50		mg/Kg	20	5/10/2006
Bis(2-chloroisopropyl)ether	ND	100		mg/Kg	20	5/10/2006
Bis(2-ethylhexyl)phthalate	ND	40		mg/Kg	20	5/10/2006
4-Bromophenyl phenyl ether	ND	50		mg/Kg	20	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E Value above quantitation range	H Holding times for preparation or analysis exceeded	
J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit	
S Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT: Giant Refining Co **Client Sample ID:** SE Comp
Lab Order: 0605060 **Collection Date:** 5/3/2006 9:55:00 AM
Project: Stockpile Banks from Lagoons & Ponds **Date Received:** 5/5/2006
Lab ID: 0605060-06 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Butyl benzyl phthalate	ND	40		mg/Kg	20	5/10/2006
Carbazole	ND	40		mg/Kg	20	5/10/2006
4-Chloro-3-methylphenol	ND	40		mg/Kg	20	5/10/2006
4-Chloroaniline	ND	40		mg/Kg	20	5/10/2006
2-Chloronaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Chlorophenol	ND	40		mg/Kg	20	5/10/2006
4-Chlorophenyl phenyl ether	ND	40		mg/Kg	20	5/10/2006
Chrysene	ND	40		mg/Kg	20	5/10/2006
Di-n-butyl phthalate	ND	100		mg/Kg	20	5/10/2006
Di-n-octyl phthalate	ND	100		mg/Kg	20	5/10/2006
Dibenz(a,h)anthracene	ND	50		mg/Kg	20	5/10/2006
Dibenzofuran	ND	100		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
3,3'-Dichlorobenzidine	ND	40		mg/Kg	20	5/10/2006
Diethyl phthalate	ND	40		mg/Kg	20	5/10/2006
Dimethyl phthalate	ND	40		mg/Kg	20	5/10/2006
2,4-Dichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4-Dimethylphenol	ND	40		mg/Kg	20	5/10/2006
4,6-Dinitro-2-methylphenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrophenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
2,6-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
Fluoranthene	ND	40		mg/Kg	20	5/10/2006
Fluorene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobenzene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	40		mg/Kg	20	5/10/2006
Hexachlorocyclopentadiene	ND	50		mg/Kg	20	5/10/2006
Hexachloroethane	ND	100		mg/Kg	20	5/10/2006
Indeno(1,2,3-cd)pyrene	ND	40		mg/Kg	20	5/10/2006
Isophorone	ND	40		mg/Kg	20	5/10/2006
2-Methylnaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Methylphenol	ND	40		mg/Kg	20	5/10/2006
3+4-Methylphenol	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodi-n-propylamine	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodiphenylamine	ND	40		mg/Kg	20	5/10/2006
Naphthalene	ND	40		mg/Kg	20	5/10/2006
2-Nitroaniline	ND	100		mg/Kg	20	5/10/2006
3-Nitroaniline	ND	100		mg/Kg	20	5/10/2006

Qualifiers:
 * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	SE Comp
Lab Order:	0605060	Collection Date:	5/3/2006 9:55:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-06	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Nitroaniline	ND	50		mg/Kg	20	5/10/2006
Nitrobenzene	ND	40		mg/Kg	20	5/10/2006
2-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
4-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
Pentachlorophenol	ND	100		mg/Kg	20	5/10/2006
Phenanthrene	47	40		mg/Kg	20	5/10/2006
Phenol	ND	40		mg/Kg	20	5/10/2006
Pyrene	ND	40		mg/Kg	20	5/10/2006
Pyridine	ND	100		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	40		mg/Kg	20	5/10/2006
2,4,5-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4,6-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
Surr: 2,4,6-Tribromophenol	0	35.5-141	S	%REC	20	5/10/2006
Surr: 2-Fluorobiphenyl	95.8	30.4-128		%REC	20	5/10/2006
Surr: 2-Fluorophenol	543	28.1-129	S	%REC	20	5/10/2006
Surr: 4-Terphenyl-d14	663	34.6-151	S	%REC	20	5/10/2006
Surr: Nitrobenzene-d5	116	26.5-122		%REC	20	5/10/2006
Surr: Phenol-d5	208	37.6-118	S	%REC	20	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT: Giant Refining Co
Lab Order: 0605060
Project: Stockpile Banks from Lagoons & Ponds
Lab ID: 0605060-07

Client Sample ID: #1 More Contam.
Collection Date: 5/3/2006 10:00:00 AM
Date Received: 5/5/2006
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
Benzene	ND	1.0		mg/Kg	20	5/10/2006
Toluene	ND	1.0		mg/Kg	20	5/10/2006
Ethylbenzene	ND	1.0		mg/Kg	20	5/10/2006
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	5/10/2006
1,2,4-Trimethylbenzene	2.0	1.0		mg/Kg	20	5/10/2006
1,3,5-Trimethylbenzene	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	5/10/2006
Naphthalene	2.9	2.0		mg/Kg	20	5/10/2006
1-Methylnaphthalene	16	4.0		mg/Kg	20	5/10/2006
2-Methylnaphthalene	21	4.0		mg/Kg	20	5/10/2006
Acetone	ND	15		mg/Kg	20	5/10/2006
Bromobenzene	ND	1.0		mg/Kg	20	5/10/2006
Bromochloromethane	ND	1.0		mg/Kg	20	5/10/2006
Bromodichloromethane	ND	1.0		mg/Kg	20	5/10/2006
Bromoform	ND	1.0		mg/Kg	20	5/10/2006
Bromomethane	ND	2.0		mg/Kg	20	5/10/2006
2-Butanone	ND	10		mg/Kg	20	5/10/2006
Carbon disulfide	ND	10		mg/Kg	20	5/10/2006
Carbon tetrachloride	ND	2.0		mg/Kg	20	5/10/2006
Chlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
Chloroethane	ND	2.0		mg/Kg	20	5/10/2006
Chloroform	ND	1.0		mg/Kg	20	5/10/2006
Chloromethane	ND	1.0		mg/Kg	20	5/10/2006
2-Chlorotoluene	ND	1.0		mg/Kg	20	5/10/2006
4-Chlorotoluene	ND	1.0		mg/Kg	20	5/10/2006
cis-1,2-DCE	ND	1.0		mg/Kg	20	5/10/2006
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	5/10/2006
Dibromochloromethane	ND	1.0		mg/Kg	20	5/10/2006
Dibromomethane	ND	2.0		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	5/10/2006
1,1-Dichloroethane	ND	2.0		mg/Kg	20	5/10/2006
1,1-Dichloroethene	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dichloropropane	ND	1.0		mg/Kg	20	5/10/2006
1,3-Dichloropropane	ND	1.0		mg/Kg	20	5/10/2006
2,2-Dichloropropane	ND	2.0		mg/Kg	20	5/10/2006

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	#1 More Contam.
Lab Order:	0605060	Collection Date:	5/3/2006 10:00:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-07	Matrix:	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
1,1-Dichloropropene	ND	1.0		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	2.0		mg/Kg	20	5/10/2006
2-Hexanone	ND	10		mg/Kg	20	5/10/2006
Isopropylbenzene	ND	1.0		mg/Kg	20	5/10/2006
4-Isopropyltoluene	ND	1.0		mg/Kg	20	5/10/2006
4-Methyl-2-pentanone	ND	10		mg/Kg	20	5/10/2006
Methylene chloride	ND	3.0		mg/Kg	20	5/10/2006
n-Butylbenzene	ND	1.0		mg/Kg	20	5/10/2006
n-Propylbenzene	ND	1.0		mg/Kg	20	5/10/2006
sec-Butylbenzene	ND	1.0		mg/Kg	20	5/10/2006
Styrene	ND	1.0		mg/Kg	20	5/10/2006
tert-Butylbenzene	ND	1.0		mg/Kg	20	5/10/2006
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	5/10/2006
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	5/10/2006
Tetrachloroethane (PCE)	ND	1.0		mg/Kg	20	5/10/2006
trans-1,2-DCE	ND	1.0		mg/Kg	20	5/10/2006
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	5/10/2006
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	5/10/2006
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	5/10/2006
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	5/10/2006
Trichlorofluoromethane	ND	1.0		mg/Kg	20	5/10/2006
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	5/10/2006
Vinyl chloride	ND	1.0		mg/Kg	20	5/10/2006
Xylenes, Total	ND	1.0		mg/Kg	20	5/10/2006
Surr: 1,2-Dichloroethane-d4	124	74.2-135		%REC	20	5/10/2006
Surr: 4-Bromofluorobenzene	92.5	75.2-127		%REC	20	5/10/2006
Surr: Dibromofluoromethane	115	76.9-138		%REC	20	5/10/2006
Surr: Toluene-d8	95.9	74-119		%REC	20	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	#2 More Contam.
Lab Order:	0605060	Collection Date:	5/3/2006 10:05:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-08	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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EPA METHOD 8260B: VOLATILES

Analyst: KTM

Benzene	ND	5.0		mg/Kg	100	5/9/2006
Toluene	ND	5.0		mg/Kg	100	5/9/2006
Ethylbenzene	ND	5.0		mg/Kg	100	5/9/2006
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	100	5/9/2006
1,2,4-Trimethylbenzene	ND	5.0		mg/Kg	100	5/9/2006
1,3,5-Trimethylbenzene	ND	5.0		mg/Kg	100	5/9/2006
1,2-Dichloroethane (EDC)	ND	5.0		mg/Kg	100	5/9/2006
1,2-Dibromoethane (EDB)	ND	5.0		mg/Kg	100	5/9/2006
Naphthalene	ND	10		mg/Kg	100	5/9/2006
1-Methylnaphthalene	43	20		mg/Kg	100	5/9/2006
2-Methylnaphthalene	ND	20		mg/Kg	100	5/9/2006
Acetone	ND	75		mg/Kg	100	5/9/2006
Bromobenzene	ND	5.0		mg/Kg	100	5/9/2006
Bromochloromethane	ND	5.0		mg/Kg	100	5/9/2006
Bromodichloromethane	ND	5.0		mg/Kg	100	5/9/2006
Bromoform	ND	5.0		mg/Kg	100	5/9/2006
Bromomethane	ND	10		mg/Kg	100	5/9/2006
2-Butanone	ND	50		mg/Kg	100	5/9/2006
Carbon disulfide	ND	50		mg/Kg	100	5/9/2006
Carbon tetrachloride	ND	10		mg/Kg	100	5/9/2006
Chlorobenzene	ND	5.0		mg/Kg	100	5/9/2006
Chloroethane	ND	10		mg/Kg	100	5/9/2006
Chloroform	ND	5.0		mg/Kg	100	5/9/2006
Chloromethane	ND	5.0		mg/Kg	100	5/9/2006
2-Chlorotoluene	ND	5.0		mg/Kg	100	5/9/2006
4-Chlorotoluene	ND	5.0		mg/Kg	100	5/9/2006
cis-1,2-DCE	ND	5.0		mg/Kg	100	5/9/2006
cis-1,3-Dichloropropene	ND	5.0		mg/Kg	100	5/9/2006
1,2-Dibromo-3-chloropropane	ND	10		mg/Kg	100	5/9/2006
Dibromochloromethane	ND	5.0		mg/Kg	100	5/9/2006
Dibromomethane	ND	10		mg/Kg	100	5/9/2006
1,2-Dichlorobenzene	ND	5.0		mg/Kg	100	5/9/2006
1,3-Dichlorobenzene	ND	5.0		mg/Kg	100	5/9/2006
1,4-Dichlorobenzene	ND	5.0		mg/Kg	100	5/9/2006
Dichlorodifluoromethane	ND	5.0		mg/Kg	100	5/9/2006
1,1-Dichloroethane	ND	10		mg/Kg	100	5/9/2006
1,1-Dichloroethene	ND	5.0		mg/Kg	100	5/9/2006
1,2-Dichloropropane	ND	5.0		mg/Kg	100	5/9/2006
1,3-Dichloropropane	ND	5.0		mg/Kg	100	5/9/2006
2,2-Dichloropropane	ND	10		mg/Kg	100	5/9/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	#2 More Contam.
Lab Order:	0605060	Collection Date:	5/3/2006 10:05:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-08	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
1,1-Dichloropropene	ND	5.0		mg/Kg	100	5/9/2006
Hexachlorobutadiene	ND	10		mg/Kg	100	5/9/2006
2-Hexanone	ND	50		mg/Kg	100	5/9/2006
Isopropylbenzene	ND	5.0		mg/Kg	100	5/9/2006
4-Isopropyltoluene	ND	5.0		mg/Kg	100	5/9/2006
4-Methyl-2-pentanone	ND	50		mg/Kg	100	5/9/2006
Methylene chloride	ND	15		mg/Kg	100	5/9/2006
n-Butylbenzene	ND	5.0		mg/Kg	100	5/9/2006
n-Propylbenzene	ND	5.0		mg/Kg	100	5/9/2006
sec-Butylbenzene	ND	5.0		mg/Kg	100	5/9/2006
Styrene	ND	5.0		mg/Kg	100	5/9/2006
tert-Butylbenzene	ND	5.0		mg/Kg	100	5/9/2006
1,1,1,2-Tetrachloroethane	ND	5.0		mg/Kg	100	5/9/2006
1,1,2,2-Tetrachloroethane	ND	5.0		mg/Kg	100	5/9/2006
Tetrachloroethene (PCE)	ND	5.0		mg/Kg	100	5/9/2006
trans-1,2-DCE	ND	5.0		mg/Kg	100	5/9/2006
trans-1,3-Dichloropropene	ND	5.0		mg/Kg	100	5/9/2006
1,2,3-Trichlorobenzene	ND	10		mg/Kg	100	5/9/2006
1,2,4-Trichlorobenzene	ND	5.0		mg/Kg	100	5/9/2006
1,1,1-Trichloroethane	ND	5.0		mg/Kg	100	5/9/2006
1,1,2-Trichloroethane	ND	5.0		mg/Kg	100	5/9/2006
Trichloroethene (TCE)	ND	5.0		mg/Kg	100	5/9/2006
Trichlorofluoromethane	ND	5.0		mg/Kg	100	5/9/2006
1,2,3-Trichloropropane	ND	10		mg/Kg	100	5/9/2006
Vinyl chloride	ND	5.0		mg/Kg	100	5/9/2006
Xylenes, Total	ND	5.0		mg/Kg	100	5/9/2006
Surr: 1,2-Dichloroethane-d4	136	74.2-135	S	%REC	100	5/9/2006
Surr: 4-Bromofluorobenzene	96.4	75.2-127		%REC	100	5/9/2006
Surr: Dibromofluoromethane	116	76.9-138		%REC	100	5/9/2006
Surr: Toluene-d8	102	74-119		%REC	100	5/9/2006

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT: Giant Refining Co
Lab Order: 0605060
Project: Stockpile Banks from Lagoons & Ponds
Lab ID: 0605060-09

Client Sample ID: #3 More Contam.
Collection Date: 5/3/2006 10:10:00 AM
Date Received: 5/5/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
Benzene	ND	1.0		mg/Kg	20	5/10/2006
Toluene	ND	1.0		mg/Kg	20	5/10/2006
Ethylbenzene	ND	1.0		mg/Kg	20	5/10/2006
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	5/10/2006
1,2,4-Trimethylbenzene	ND	1.0		mg/Kg	20	5/10/2006
1,3,5-Trimethylbenzene	1.2	1.0		mg/Kg	20	5/10/2006
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	5/10/2006
Naphthalene	2.2	2.0		mg/Kg	20	5/10/2006
1-Methylnaphthalene	12	4.0		mg/Kg	20	5/10/2006
2-Methylnaphthalene	11	4.0		mg/Kg	20	5/10/2006
Acetone	ND	15		mg/Kg	20	5/10/2006
Bromobenzene	ND	1.0		mg/Kg	20	5/10/2006
Bromochloromethane	ND	1.0		mg/Kg	20	5/10/2006
Bromodichloromethane	ND	1.0		mg/Kg	20	5/10/2006
Bromoform	ND	1.0		mg/Kg	20	5/10/2006
Bromomethane	ND	2.0		mg/Kg	20	5/10/2006
2-Butanone	ND	10		mg/Kg	20	5/10/2006
Carbon disulfide	ND	10		mg/Kg	20	5/10/2006
Carbon tetrachloride	ND	2.0		mg/Kg	20	5/10/2006
Chlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
Chloroethane	ND	2.0		mg/Kg	20	5/10/2006
Chloroform	ND	1.0		mg/Kg	20	5/10/2006
Chloromethane	ND	1.0		mg/Kg	20	5/10/2006
2-Chlorotoluene	ND	1.0		mg/Kg	20	5/10/2006
4-Chlorotoluene	ND	1.0		mg/Kg	20	5/10/2006
cis-1,2-DCE	ND	1.0		mg/Kg	20	5/10/2006
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	5/10/2006
Dibromochloromethane	ND	1.0		mg/Kg	20	5/10/2006
Dibromomethane	ND	2.0		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	5/10/2006
1,1-Dichloroethane	ND	2.0		mg/Kg	20	5/10/2006
1,1-Dichloroethene	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dichloropropane	ND	1.0		mg/Kg	20	5/10/2006
1,3-Dichloropropane	ND	1.0		mg/Kg	20	5/10/2006
2,2-Dichloropropane	ND	2.0		mg/Kg	20	5/10/2006

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT: Giant Refining Co **Client Sample ID:** #3 More Contam.
Lab Order: 0605060 **Collection Date:** 5/3/2006 10:10:00 AM
Project: Stockpile Banks from Lagoons & Ponds **Date Received:** 5/5/2006
Lab ID: 0605060-09 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
1,1-Dichloropropene	ND	1.0		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	2.0		mg/Kg	20	5/10/2006
2-Hexanone	ND	10		mg/Kg	20	5/10/2006
Isopropylbenzene	ND	1.0		mg/Kg	20	5/10/2006
4-Isopropyltoluene	ND	1.0		mg/Kg	20	5/10/2006
4-Methyl-2-pentanone	ND	10		mg/Kg	20	5/10/2006
Methylene chloride	ND	3.0		mg/Kg	20	5/10/2006
n-Butylbenzene	1.3	1.0		mg/Kg	20	5/10/2006
n-Propylbenzene	ND	1.0		mg/Kg	20	5/10/2006
sec-Butylbenzene	ND	1.0		mg/Kg	20	5/10/2006
Styrene	ND	1.0		mg/Kg	20	5/10/2006
tert-Butylbenzene	ND	1.0		mg/Kg	20	5/10/2006
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	5/10/2006
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	5/10/2006
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	5/10/2006
trans-1,2-DCE	ND	1.0		mg/Kg	20	5/10/2006
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	5/10/2006
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	5/10/2006
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	5/10/2006
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	5/10/2006
Trichlorofluoromethane	ND	1.0		mg/Kg	20	5/10/2006
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	5/10/2006
Vinyl chloride	ND	1.0		mg/Kg	20	5/10/2006
Xylenes, Total	ND	1.0		mg/Kg	20	5/10/2006
Surr: 1,2-Dichloroethane-d4	117	74.2-135		%REC	20	5/10/2006
Surr: 4-Bromofluorobenzene	105	75.2-127		%REC	20	5/10/2006
Surr: Dibromofluoromethane	111	76.9-138		%REC	20	5/10/2006
Surr: Toluene-d8	102	74-119		%REC	20	5/10/2006

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	#4 Less Contam.
Lab Order:	0605060	Collection Date:	5/3/2006 10:15:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-10	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
Benzene	ND	0.050		mg/Kg	1	5/10/2006
Toluene	ND	0.050		mg/Kg	1	5/10/2006
Ethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	5/10/2006
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	5/10/2006
Naphthalene	ND	0.10		mg/Kg	1	5/10/2006
1-Methylnaphthalene	ND	0.20		mg/Kg	1	5/10/2006
2-Methylnaphthalene	ND	0.20		mg/Kg	1	5/10/2006
Acetone	ND	0.75		mg/Kg	1	5/10/2006
Bromobenzene	ND	0.050		mg/Kg	1	5/10/2006
Bromochloromethane	ND	0.050		mg/Kg	1	5/10/2006
Bromodichloromethane	ND	0.050		mg/Kg	1	5/10/2006
Bromoform	ND	0.050		mg/Kg	1	5/10/2006
Bromomethane	ND	0.10		mg/Kg	1	5/10/2006
2-Butanone	ND	0.50		mg/Kg	1	5/10/2006
Carbon disulfide	ND	0.50		mg/Kg	1	5/10/2006
Carbon tetrachloride	ND	0.10		mg/Kg	1	5/10/2006
Chlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
Chloroethane	ND	0.10		mg/Kg	1	5/10/2006
Chloroform	ND	0.050		mg/Kg	1	5/10/2006
Chloromethane	ND	0.050		mg/Kg	1	5/10/2006
2-Chlorotoluene	ND	0.050		mg/Kg	1	5/10/2006
4-Chlorotoluene	ND	0.050		mg/Kg	1	5/10/2006
cis-1,2-DCE	ND	0.050		mg/Kg	1	5/10/2006
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	5/10/2006
Dibromochloromethane	ND	0.050		mg/Kg	1	5/10/2006
Dibromomethane	ND	0.10		mg/Kg	1	5/10/2006
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	5/10/2006
1,1-Dichloroethane	ND	0.10		mg/Kg	1	5/10/2006
1,1-Dichloroethene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dichloropropane	ND	0.050		mg/Kg	1	5/10/2006
1,3-Dichloropropane	ND	0.050		mg/Kg	1	5/10/2006
2,2-Dichloropropane	ND	0.10		mg/Kg	1	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	#4 Less Contam.
Lab Order:	0605060	Collection Date:	5/3/2006 10:15:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-10	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
1,1-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
Hexachlorobutadiene	ND	0.10		mg/Kg	1	5/10/2006
2-Hexanone	ND	0.50		mg/Kg	1	5/10/2006
Isopropylbenzene	ND	0.050		mg/Kg	1	5/10/2006
4-Isopropyltoluene	ND	0.050		mg/Kg	1	5/10/2006
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	5/10/2006
Methylene chloride	ND	0.15		mg/Kg	1	5/10/2006
n-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
n-Propylbenzene	ND	0.050		mg/Kg	1	5/10/2006
sec-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
Styrene	ND	0.050		mg/Kg	1	5/10/2006
tert-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/10/2006
1,1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/10/2006
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	5/10/2006
trans-1,2-DCE	ND	0.050		mg/Kg	1	5/10/2006
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	5/10/2006
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	5/10/2006
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	5/10/2006
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	5/10/2006
Trichlorofluoromethane	ND	0.050		mg/Kg	1	5/10/2006
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	5/10/2006
Vinyl chloride	ND	0.050		mg/Kg	1	5/10/2006
Xylenes, Total	ND	0.050		mg/Kg	1	5/10/2006
Sum: 1,2-Dichloroethane-d4	116	74.2-135		%REC	1	5/10/2006
Sum: 4-Bromofluorobenzene	93.4	75.2-127		%REC	1	5/10/2006
Sum: Dibromofluoromethane	105	76.9-138		%REC	1	5/10/2006
Sum: Toluene-d8	96.9	74-119		%REC	1	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	#5 Less Contam.
Lab Order:	0605060	Collection Date:	5/3/2006 10:20:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-11	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
Benzene	ND	0.050		mg/Kg	1	5/10/2006
Toluene	ND	0.050		mg/Kg	1	5/10/2006
Ethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	5/10/2006
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	5/10/2006
Naphthalene	ND	0.10		mg/Kg	1	5/10/2006
1-Methylnaphthalene	ND	0.20		mg/Kg	1	5/10/2006
2-Methylnaphthalene	ND	0.20		mg/Kg	1	5/10/2006
Acetone	ND	0.75		mg/Kg	1	5/10/2006
Bromobenzene	ND	0.050		mg/Kg	1	5/10/2006
Bromochloromethane	ND	0.050		mg/Kg	1	5/10/2006
Bromodichloromethane	ND	0.050		mg/Kg	1	5/10/2006
Bromoform	ND	0.050		mg/Kg	1	5/10/2006
Bromomethane	ND	0.10		mg/Kg	1	5/10/2006
2-Butanone	ND	0.50		mg/Kg	1	5/10/2006
Carbon disulfide	ND	0.50		mg/Kg	1	5/10/2006
Carbon tetrachloride	ND	0.10		mg/Kg	1	5/10/2006
Chlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
Chloroethane	ND	0.10		mg/Kg	1	5/10/2006
Chloroform	ND	0.050		mg/Kg	1	5/10/2006
Chloromethane	ND	0.050		mg/Kg	1	5/10/2006
2-Chlorotoluene	ND	0.050		mg/Kg	1	5/10/2006
4-Chlorotoluene	ND	0.050		mg/Kg	1	5/10/2006
cis-1,2-DCE	ND	0.050		mg/Kg	1	5/10/2006
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	5/10/2006
Dibromochloromethane	ND	0.050		mg/Kg	1	5/10/2006
Dibromomethane	ND	0.10		mg/Kg	1	5/10/2006
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	5/10/2006
1,1-Dichloroethane	ND	0.10		mg/Kg	1	5/10/2006
1,1-Dichloroethene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dichloropropane	ND	0.050		mg/Kg	1	5/10/2006
1,3-Dichloropropane	ND	0.050		mg/Kg	1	5/10/2006
2,2-Dichloropropane	ND	0.10		mg/Kg	1	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	#5 Less Contam.
Lab Order:	0605060	Collection Date:	5/3/2006 10:20:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-11	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
1,1-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
Hexachlorobutadiene	ND	0.10		mg/Kg	1	5/10/2006
2-Hexanone	ND	0.50		mg/Kg	1	5/10/2006
Isopropylbenzene	ND	0.050		mg/Kg	1	5/10/2006
4-Isopropyltoluene	ND	0.050		mg/Kg	1	5/10/2006
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	5/10/2006
Methylene chloride	ND	0.15		mg/Kg	1	5/10/2006
n-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
n-Propylbenzene	ND	0.050		mg/Kg	1	5/10/2006
sec-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
Styrene	ND	0.050		mg/Kg	1	5/10/2006
tert-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/10/2006
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/10/2006
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	5/10/2006
trans-1,2-DCE	ND	0.050		mg/Kg	1	5/10/2006
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	5/10/2006
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	5/10/2006
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	5/10/2006
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	5/10/2006
Trichlorofluoromethane	ND	0.050		mg/Kg	1	5/10/2006
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	5/10/2006
Vinyl chloride	ND	0.050		mg/Kg	1	5/10/2006
Xylenes, Total	ND	0.050		mg/Kg	1	5/10/2006
Surr: 1,2-Dichloroethane-d4	132	74.2-135		%REC	1	5/10/2006
Surr: 4-Bromofluorobenzene	103	75.2-127		%REC	1	5/10/2006
Surr: Dibromofluoromethane	118	76.9-138		%REC	1	5/10/2006
Surr: Toluene-d8	101	74-119		%REC	1	5/10/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	ND Not Detected at the Reporting Limit
	S Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	#6 Less Contam.
Lab Order:	0605060	Collection Date:	5/3/2006 10:25:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-12	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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EPA METHOD 8260B: VOLATILES

Analyst: KTM

Benzene	ND	0.050		mg/Kg	1	5/10/2006
Toluene	ND	0.050		mg/Kg	1	5/10/2006
Ethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	5/10/2006
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	5/10/2006
Naphthalene	ND	0.10		mg/Kg	1	5/10/2006
1-Methylnaphthalene	0.56	0.20		mg/Kg	1	5/10/2006
2-Methylnaphthalene	0.43	0.20		mg/Kg	1	5/10/2006
Acetone	ND	0.75		mg/Kg	1	5/10/2006
Bromobenzene	ND	0.050		mg/Kg	1	5/10/2006
Bromochloromethane	ND	0.050		mg/Kg	1	5/10/2006
Bromodichloromethane	ND	0.050		mg/Kg	1	5/10/2006
Bromoform	ND	0.050		mg/Kg	1	5/10/2006
Bromomethane	ND	0.10		mg/Kg	1	5/10/2006
2-Butanone	ND	0.50		mg/Kg	1	5/10/2006
Carbon disulfide	ND	0.50		mg/Kg	1	5/10/2006
Carbon tetrachloride	ND	0.10		mg/Kg	1	5/10/2006
Chlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
Chloroethane	ND	0.10		mg/Kg	1	5/10/2006
Chloroform	ND	0.050		mg/Kg	1	5/10/2006
Chloromethane	ND	0.050		mg/Kg	1	5/10/2006
2-Chlorotoluene	ND	0.050		mg/Kg	1	5/10/2006
4-Chlorotoluene	ND	0.050		mg/Kg	1	5/10/2006
cis-1,2-DCE	ND	0.050		mg/Kg	1	5/10/2006
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	5/10/2006
Dibromochloromethane	ND	0.050		mg/Kg	1	5/10/2006
Dibromomethane	ND	0.10		mg/Kg	1	5/10/2006
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	5/10/2006
1,1-Dichloroethane	ND	0.10		mg/Kg	1	5/10/2006
1,1-Dichloroethene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dichloropropane	ND	0.050		mg/Kg	1	5/10/2006
1,3-Dichloropropane	ND	0.050		mg/Kg	1	5/10/2006
2,2-Dichloropropane	ND	0.10		mg/Kg	1	5/10/2006

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 15-May-06

CLIENT:	Giant Refining Co	Client Sample ID:	#6 Less Contam.
Lab Order:	0605060	Collection Date:	5/3/2006 10:25:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	Date Received:	5/5/2006
Lab ID:	0605060-12	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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EPA METHOD 8260B: VOLATILES

Analyst: KTM

1,1-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
Hexachlorobutadiene	ND	0.10		mg/Kg	1	5/10/2006
2-Hexanone	ND	0.50		mg/Kg	1	5/10/2006
Isopropylbenzene	ND	0.050		mg/Kg	1	5/10/2006
4-Isopropyltoluene	ND	0.050		mg/Kg	1	5/10/2006
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	5/10/2006
Methylene chloride	ND	0.15		mg/Kg	1	5/10/2006
n-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
n-Propylbenzene	ND	0.050		mg/Kg	1	5/10/2006
sec-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
Styrene	ND	0.050		mg/Kg	1	5/10/2006
tert-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/10/2006
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/10/2006
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	5/10/2006
trans-1,2-DCE	ND	0.050		mg/Kg	1	5/10/2006
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	5/10/2006
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	5/10/2006
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	5/10/2006
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	5/10/2006
Trichlorofluoromethane	ND	0.050		mg/Kg	1	5/10/2006
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	5/10/2006
Vinyl chloride	ND	0.050		mg/Kg	1	5/10/2006
Xylenes, Total	ND	0.050		mg/Kg	1	5/10/2006
Surr: 1,2-Dichloroethane-d4	128	74.2-135		%REC	1	5/10/2006
Surr: 4-Bromofluorobenzene	93.6	75.2-127		%REC	1	5/10/2006
Surr: Dibromofluoromethane	112	76.9-138		%REC	1	5/10/2006
Surr: Toluene-d8	99.6	74-119		%REC	1	5/10/2006

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0605060
Lab ID: C06050423-001
Client Sample ID: MW Comp

Report Date: 05/12/06
Collection Date: 05/03/06 09:30
Date Received: 05/09/06
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Corrosivity - pH	7.46	s.u.		0.01		SW9045C	05/11/06 14:23 / ph
Flash Point (Ignitability)	>140	°F		60	140	SW1010	05/11/06 08:53 / bah
REACTIVITY							
Sulfide, Reactive	ND	mg/kg		20.0	500	SW846 Ch 7	05/10/06 14:21 / jl
Cyanide, Reactive	ND	mg/kg		1.0	250	SW846 Ch 7	05/11/06 14:14 / ell-b

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

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

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0605060
Lab ID: C06050423-002
Client Sample ID: NE Comp

Report Date: 05/12/06
Collection Date: 05/03/06 09:35
Date Received: 05/09/06
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Corrosivity - pH	7.53	s.u.		0.01		SW9045C	05/11/06 14:23 / ph
Flash Point (Ignitability)	>140	°F		60	140	SW1010	05/11/06 11:00 / bah
REACTIVITY							
Sulfide, Reactive	ND	mg/kg		20.0	500	SW846 Ch 7	05/10/06 14:23 / ji
Cyanide, Reactive	ND	mg/kg		1.0	250	SW846 Ch 7	05/11/06 14:16 / eli-b

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

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

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0605060
Lab ID: C06050423-003
Client Sample ID: MID W Comp

Report Date: 05/12/06
Collection Date: 05/03/06 09:40
Date Received: 05/09/06
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Corrosivity - pH	7.17	s.u.		0.01		SW9045C	05/11/06 14:23 / ph
Flash Point (Ignitability)	>140	°F		60	140	SW1010	05/11/06 13:10 / bah
REACTIVITY							
Sulfide, Reactive	ND	mg/kg		20.0	500	SW846 Ch 7	05/10/06 14:26 / jl
Cyanide, Reactive	ND	mg/kg		1.0	250	SW846 Ch 7	05/11/06 14:18 / ell-b

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

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

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
 Project: 0605060
 Lab ID: C06050423-004
 Client Sample ID: MID E Comp

Report Date: 05/12/06
 Collection Date: 05/03/06 09:45
 Date Received: 05/09/06
 Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Corrosivity - pH	7.21	s.u.		0.01		SW9045C	05/11/06 14:23 / ph
Flash Point (Ignitability)	>140	°F		60	140	SW1010	05/11/06 14:44 / bah
REACTIVITY							
Sulfide, Reactive	ND	mg/kg		20.0	500	SW846 Ch 7	05/10/06 14:28 / jl
Cyanide, Reactive	ND	mg/kg		1.0	250	SW846 Ch 7	05/11/08 14:20 / eñ-b

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

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

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0605060
Lab ID: C06050423-005
Client Sample ID: SW Comp

Report Date: 05/12/06
Collection Date: 05/03/06 09:50
Date Received: 05/09/06
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Corrosivity - pH	7.41	s.u.		0.01		SW9045C	05/11/06 14:23 / ph
Flash Point (Ignitability)	>140	°F		60	140	SW1010	05/11/06 15:45 / bah
REACTIVITY							
Sulfide, Reactive	ND	mg/kg		20.0	500	SW846 Ch 7	05/10/06 14:31 / jl
Cyanide, Reactive	ND	mg/kg		1.0	250	SW846 Ch 7	05/11/06 14:21 / eli-b

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

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

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0605060
Lab ID: C06050423-006
Client Sample ID: SE Comp

Report Date: 05/12/06
Collection Date: 05/03/06 09:55
Date Received: 05/09/06
Matrix: Soil

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Corrosivity - pH	7.33	s.u.		0.01		SW9045C	05/11/06 14:23 / ph
Flash Point (Ignitability)	>140	°F		60	140	SW1010	05/11/06 16:49 / bah
REACTIVITY							
Sulfide, Reactive	ND	mg/kg		20.0	500	SW846 Ch 7	05/10/06 14:34 / jj
Cyanide, Reactive	ND	mg/kg		1.0	250	SW846 Ch 7	05/11/06 14:23 / eli-b

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

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

QA/QC Summary Report

Client: Hall Environmental
Project: 0605060

Report Date: 05/12/06
Work Order: C06050423

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW1010		Batch: 060511A-FLSHPNT-S							
Sample ID: C06050423-001ADUP	Sample Duplicate					Run: PM_FLASHPOINT_060511A		05/11/06 10:00	
Flash Point (Ignitability)	> 140	°F	60				0.0	5	
Sample ID: MBLK1_060511A	Method Blank					Run: PM_FLASHPOINT_060511A		05/11/06 16:58	
Flash Point (Ignitability)	ND	°F	60						
Sample ID: LCS1_050511A	Laboratory Control Sample					Run: PM_FLASHPOINT_060511A		05/11/06 07:54	
Flash Point (Ignitability)	82.0	°F	60	100	96	104			
Method: SW846 Ch 7		Batch: 10942							
Sample ID: MB-10942-S	Method Blank					Run: TITRATION_060510A		05/10/06 14:17	
Sulfide, Reactive	ND	mg/kg	1						
Sample ID: C06050423-006B	Sample Duplicate					Run: TITRATION_060510A		05/10/06 14:39	
Sulfide, Reactive	12.0	mg/kg	20				0.0	20	
Method: SW846 Ch 7		Batch: B_21065							
Sample ID: MB-21065	Method Blank					Run: SUB-B75568		05/11/06 14:27	
Cyanide, Reactive	ND	mg/kg	0.05						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Stockpile Banks from Lagoons & Ponds

Work Order: 0605060

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8015									
Sample ID: MB-10369		MBLK							
iesel Range Organics (DRO)	ND	mg/Kg	10						
otor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-10369		LCS							
iesel Range Organics (DRO)	43.73	mg/Kg	10	87.5	64.6	116			
Sample ID: LCSD-10369		LCSD							
iesel Range Organics (DRO)	45.86	mg/Kg	10	91.7	64.6	116	4.76	17.4	
Method: SW8015									
Sample ID: MB-10361		MBLK							
asoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: LCS-10361		LCS							
asoline Range Organics (GRO)	20.20	mg/Kg	5.0	80.8	77	115			
Sample ID: LCSD-10361		LCSD							
asoline Range Organics (GRO)	22.00	mg/Kg	5.0	88.0	77	115	8.53	11.6	

Qualifiers:

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

Work Order: 0605060



H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits



QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Stockpile Banks from Lagoons & Ponds

Work Order: 0605060

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-10367		MBLK							
							Batch ID: 10367		
							Analysis Date: 5/10/2006		
xachlorobutadiene	ND	mg/Kg	0.20						
xachlorocyclopentadiene	ND	mg/Kg	0.25						
xachloroethane	ND	mg/Kg	0.50						
eno(1,2,3-cd)pyrene	ND	mg/Kg	0.20						
phorone	ND	mg/Kg	0.20						
l-methylnaphthalene	ND	mg/Kg	0.20						
l-methylphenol	ND	mg/Kg	0.20						
4-Methylphenol	ND	mg/Kg	0.20						
nitrosodi-n-propylamine	ND	mg/Kg	0.20						
nitrosodiphenylamine	ND	mg/Kg	0.20						
phthalene	ND	mg/Kg	0.20						
nitroaniline	ND	mg/Kg	0.50						
nitroaniline	ND	mg/Kg	0.50						
nitroaniline	ND	mg/Kg	0.25						
robenzene	ND	mg/Kg	0.20						
nitrophenol	ND	mg/Kg	0.20						
nitrophenol	ND	mg/Kg	0.20						
achlorophenol	ND	mg/Kg	0.50						
nananthrene	ND	mg/Kg	0.20						
anol	ND	mg/Kg	0.20						
ene	ND	mg/Kg	0.20						
idine	ND	mg/Kg	0.50						
,4-Trichlorobenzene	ND	mg/Kg	0.20						
,5-Trichlorophenol	ND	mg/Kg	0.20						
,6-Trichlorophenol	ND	mg/Kg	0.20						
Sample ID: LCS-10367		LCS							
							Analysis Date: 5/10/2006		
anaphthene	1.223	mg/Kg	0.20	73.3	24	125			
hloro-3-methylphenol	2.391	mg/Kg	0.20	71.8	14.6	154			
hlorophenol	2.073	mg/Kg	0.20	62.3	13.3	149			
-Dichlorobenzene	0.8983	mg/Kg	0.20	53.8	23.6	118			
-Dinitrotoluene	1.072	mg/Kg	0.20	64.2	28	136			
nitrosodi-n-propylamine	1.098	mg/Kg	0.20	65.8	28	114			
nitrophenol	2.234	mg/Kg	0.20	67.1	13.1	150			
ntachlorophenol	2.441	mg/Kg	0.50	73.3	20.1	139			
anol	2.037	mg/Kg	0.20	61.2	17.3	141			
ene	1.224	mg/Kg	0.20	73.3	29	131			
,4-Trichlorobenzene	0.9813	mg/Kg	0.20	58.8	17.9	126			
Sample ID: LCSD-10367		LCSD							
							Analysis Date: 5/10/2006		
anaphthene	1.200	mg/Kg	0.20	71.9	24	125	1.93	25	
hloro-3-methylphenol	2.163	mg/Kg	0.20	65.0	14.6	154	9.98	25	
hlorophenol	1.725	mg/Kg	0.20	51.8	13.3	149	18.3	25	
-Dichlorobenzene	0.7727	mg/Kg	0.20	46.3	23.6	118	15.0	25	
-Dinitrotoluene	1.086	mg/Kg	0.20	65.0	28	136	1.30	25	
nitrosodi-n-propylamine	0.9733	mg/Kg	0.20	58.3	28	114	12.1	25	

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Stockpile Banks from Lagoons & Ponds

Work Order: 0605060

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C								Batch ID: 10367	
Sample ID: LCSD-10367		LCSD						Analysis Date: 5/10/2006	
4-Nitrophenol	2.254	mg/Kg	0.20	67.7	13.1	150	0.862	25	
2,4-Dichlorophenol	2.344	mg/Kg	0.50	70.4	20.1	139	4.05	25	
4-Nitrophenol	1.721	mg/Kg	0.20	51.7	17.3	141	16.8	25	
4-Nitrophenol	1.193	mg/Kg	0.20	71.4	29	131	2.54	25	
2,4-Trichlorobenzene	0.8497	mg/Kg	0.20	50.9	17.9	126	14.4	25	
Method: SW7470								Batch ID: 10399	
Sample ID: MB-10399		MBLK						Analysis Date: 5/11/2006	
Mercury	ND	mg/L	0.020						
Sample ID: LCS-10399		LCS						Analysis Date: 5/11/2006	
Mercury	0.004860	mg/L	0.0020	97.2	80	120			
Sample ID: 0605060-02AMS		MS						Analysis Date: 5/11/2006	
Mercury	0.004785	mg/L	0.0020	95.7	75	125			
Sample ID: 0605060-02AMSD		MSD						Analysis Date: 5/11/2006	
Mercury	0.004530	mg/L	0.0020	90.6	75	125	5.48	20	

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Stockpile Banks from Lagoons & Ponds

Work Order: 0605060

analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW1311/6010									
Sample ID: MB-10391									
		MBLK							
senic	ND	mg/L	5.0						
rium	ND	mg/L	100						
dmium	ND	mg/L	1.0						
romium	ND	mg/L	5.0						
ad	ND	mg/L	5.0						
lenium	ND	mg/L	1.0						
ver	ND	mg/L	5.0						
Sample ID: LCS-10391									
		LCS							
senic	0.5714	mg/L	0.20	114	80	120			
rium	0.4692	mg/L	0.20	93.6	80	120			
dmium	0.5199	mg/L	0.20	104	80	120			
romium	0.4823	mg/L	0.20	96.5	80	120			
ad	0.4641	mg/L	0.20	92.8	80	120			
lenium	0.5610	mg/L	0.20	112	80	120			
ver	0.5307	mg/L	0.20	106	80	120			
Sample ID: 0605060-05AMS									
		MS							
senic	0.6494	mg/L	0.20	120	75	125			
rium	0.8321	mg/L	0.20	97.6	75	125			
dmium	0.5350	mg/L	0.20	107	75	125			
romium	0.4697	mg/L	0.20	93.9	75	125			
ad	0.4574	mg/L	0.20	90.9	75	125			
lenium	0.5508	mg/L	0.20	110	75	125			
ver	0.5574	mg/L	0.20	111	75	125			
Sample ID: 0605060-05AMSD									
		MSD							
senic	0.6296	mg/L	0.20	116	75	125	3.10	20	
rium	0.8358	mg/L	0.20	98.4	75	125	0.444	20	
dmium	0.5327	mg/L	0.20	107	75	125	0.421	20	
romium	0.5057	mg/L	0.20	101	75	125	7.39	20	
ad	0.4547	mg/L	0.20	90.4	75	125	0.596	20	
lenium	0.5251	mg/L	0.20	105	75	125	4.78	20	
ver	0.5582	mg/L	0.20	112	75	125	0.138	20	

Analysis Date: 5/12/2006

Analysis Date: 5/12/2006

Analysis Date: 5/12/2006

Modifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Stockpile Banks from Lagoons & Ponds

Work Order: 0605060

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									Batch ID: 10361
Sample ID: mb-10361		MBLK							Analysis Date: 5/9/2006
Aroclene	ND	mg/Kg	0.050						
Buene	ND	mg/Kg	0.050						
1,2-Dibenzene	ND	mg/Kg	0.050						
1,3-Diethyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
1,4-Trimethylbenzene	ND	mg/Kg	0.050						
1,5-Trimethylbenzene	ND	mg/Kg	0.050						
1,1-Dichloroethane (EDC)	ND	mg/Kg	0.050						
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
Phthalene	ND	mg/Kg	0.10						
1-Methylnaphthalene	ND	mg/Kg	0.20						
2-Methylnaphthalene	ND	mg/Kg	0.20						
Styrene	ND	mg/Kg	0.75						
1-Monobenzene	ND	mg/Kg	0.050						
1-Monochloromethane	ND	mg/Kg	0.050						
1-Monodichloromethane	ND	mg/Kg	0.050						
1-Monoform	ND	mg/Kg	0.050						
1-Monomethane	ND	mg/Kg	0.10						
1-Monone	ND	mg/Kg	0.50						
1-Monodisulfide	ND	mg/Kg	0.50						
1-Monotetrachloride	ND	mg/Kg	0.10						
1-Monobenzene	ND	mg/Kg	0.050						
1-Monoethane	ND	mg/Kg	0.10						
1-Monoform	ND	mg/Kg	0.050						
1-Monomethane	ND	mg/Kg	0.050						
1-Monochlorotoluene	ND	mg/Kg	0.050						
1-Monochlorotoluene	ND	mg/Kg	0.050						
1,1,2-DCE	ND	mg/Kg	0.050						
1,1,3-Dichloropropene	ND	mg/Kg	0.050						
1,1-Dibromo-3-chloropropane	ND	mg/Kg	0.10						
1-Monochloromethane	ND	mg/Kg	0.050						
1-Monomethane	ND	mg/Kg	0.10						
1-Dichlorobenzene	ND	mg/Kg	0.050						
1-Dichlorobenzene	ND	mg/Kg	0.050						
1-Dichlorobenzene	ND	mg/Kg	0.050						
1-Chlorodifluoromethane	ND	mg/Kg	0.050						
1-Dichloroethane	ND	mg/Kg	0.10						
1-Dichloroethene	ND	mg/Kg	0.050						
1-Dichloropropane	ND	mg/Kg	0.050						
1-Dichloropropane	ND	mg/Kg	0.050						
1-Dichloropropane	ND	mg/Kg	0.10						
1-Dichloropropene	ND	mg/Kg	0.050						
1-Monochlorobutadiene	ND	mg/Kg	0.10						
1-Monone	ND	mg/Kg	0.50						
1-Monopropylbenzene	ND	mg/Kg	0.050						

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Stockpile Banks from Lagoons & Ponds

Work Order: 0605060

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									Batch ID: 10361
Sample ID: mb-10361		MBLK							Analysis Date: 5/9/2006
Isopropyltoluene	ND	mg/Kg	0.050						
Methyl-2-pentanone	ND	mg/Kg	0.50						
Ethylene chloride	ND	mg/Kg	0.15						
Butylbenzene	ND	mg/Kg	0.050						
Propylbenzene	ND	mg/Kg	0.050						
n-Butylbenzene	ND	mg/Kg	0.050						
Xyrene	ND	mg/Kg	0.050						
t-Butylbenzene	ND	mg/Kg	0.050						
1,1,2-Tetrachloroethane	ND	mg/Kg	0.050						
1,2,2-Tetrachloroethane	ND	mg/Kg	0.050						
Trichloroethene (PCE)	ND	mg/Kg	0.050						
trans-1,2-DCE	ND	mg/Kg	0.050						
trans-1,3-Dichloropropene	ND	mg/Kg	0.050						
2,3-Trichlorobenzene	ND	mg/Kg	0.10						
2,4-Trichlorobenzene	ND	mg/Kg	0.050						
1,1-Trichloroethane	ND	mg/Kg	0.050						
1,2-Trichloroethane	ND	mg/Kg	0.050						
Trichloroethene (TCE)	ND	mg/Kg	0.050						
Chlorofluoromethane	ND	mg/Kg	0.050						
2,3-Trichloropropane	ND	mg/Kg	0.10						
Vinyl chloride	ND	mg/Kg	0.050						
Alkenes, Total	ND	mg/Kg	0.050						
Sample ID: mb-10361		MBLK							Analysis Date: 5/10/2006
Monobenzene	ND	mg/Kg	0.050						
Dibenzene	ND	mg/Kg	0.050						
Triphenylbenzene	ND	mg/Kg	0.050						
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
1,4-Trimethylbenzene	ND	mg/Kg	0.050						
1,5-Trimethylbenzene	ND	mg/Kg	0.050						
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050						
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
Phthalene	ND	mg/Kg	0.10						
Methylnaphthalene	ND	mg/Kg	0.20						
Methylnaphthalene	ND	mg/Kg	0.20						
Acetone	ND	mg/Kg	0.75						
Monobenzene	ND	mg/Kg	0.050						
Monochloromethane	ND	mg/Kg	0.050						
Monodichloromethane	ND	mg/Kg	0.050						
Monoform	ND	mg/Kg	0.050						
Monomethane	ND	mg/Kg	0.10						
Butanone	ND	mg/Kg	0.50						
Carbon disulfide	ND	mg/Kg	0.50						
Carbon tetrachloride	ND	mg/Kg	0.10						
Monobenzene	ND	mg/Kg	0.050						

Qualifiers:

H Value above quantitation range
 ND Analyte detected below quantitation limits
 S RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Stockpile Banks from Lagoons & Ponds

Work Order: 0605060

analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: mb-10361		MBLK							
							Batch ID: 10361		
							Analysis Date: 5/10/2006		
ethane	ND	mg/Kg	0.10						
ethane	ND	mg/Kg	0.050						
ethane	ND	mg/Kg	0.050						
chlorotoluene	ND	mg/Kg	0.050						
chlorotoluene	ND	mg/Kg	0.050						
-1,2-DCE	ND	mg/Kg	0.050						
-1,3-Dichloropropene	ND	mg/Kg	0.050						
-Dibromo-3-chloropropane	ND	mg/Kg	0.10						
romochloromethane	ND	mg/Kg	0.050						
romomethane	ND	mg/Kg	0.10						
-Dichlorobenzene	ND	mg/Kg	0.050						
-Dichlorobenzene	ND	mg/Kg	0.050						
-Dichlorobenzene	ND	mg/Kg	0.050						
chlorodifluoromethane	ND	mg/Kg	0.050						
-Dichloroethane	ND	mg/Kg	0.10						
-Dichloroethene	ND	mg/Kg	0.050						
-Dichloropropane	ND	mg/Kg	0.050						
-Dichloropropane	ND	mg/Kg	0.050						
-Dichloropropane	ND	mg/Kg	0.10						
-Dichloropropene	ND	mg/Kg	0.050						
achlorobutadiene	ND	mg/Kg	0.10						
hexanone	ND	mg/Kg	0.50						
propylbenzene	ND	mg/Kg	0.050						
isopropyltoluene	ND	mg/Kg	0.050						
Methyl-2-pentanone	ND	mg/Kg	0.50						
ethylene chloride	ND	mg/Kg	0.15						
butylbenzene	ND	mg/Kg	0.050						
propylbenzene	ND	mg/Kg	0.050						
n-Butylbenzene	ND	mg/Kg	0.050						
ene	ND	mg/Kg	0.050						
-Butylbenzene	ND	mg/Kg	0.050						
,1,2-Tetrachloroethane	ND	mg/Kg	0.050						
,2,2-Tetrachloroethane	ND	mg/Kg	0.050						
achloroethene (PCE)	ND	mg/Kg	0.050						
is-1,2-DCE	ND	mg/Kg	0.050						
is-1,3-Dichloropropene	ND	mg/Kg	0.050						
,3-Trichlorobenzene	ND	mg/Kg	0.10						
,4-Trichlorobenzene	ND	mg/Kg	0.050						
,1-Trichloroethane	ND	mg/Kg	0.050						
,2-Trichloroethane	ND	mg/Kg	0.050						
chloroethene (TCE)	ND	mg/Kg	0.050						
chlorofluoromethane	ND	mg/Kg	0.050						
3-Trichloropropane	ND	mg/Kg	0.10						
chloride	ND	mg/Kg	0.050						

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Stockpile Banks from Lagoons & Ponds

Work Order: 0605060

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									Batch ID: 10361
Sample ID: mb-10361		MBLK							Analysis Date: 5/10/2006
Arenes, Total	ND	mg/Kg	0.050						
Sample ID: lcs-10361		LCS							Analysis Date: 5/9/2006
Benzene	0.8252	mg/Kg	0.050	82.5	80.8	132			
Toluene	0.9339	mg/Kg	0.050	93.4	72.1	126			
Chlorobenzene	1.078	mg/Kg	0.050	108	75.4	140			
1,1-Dichloroethene	0.9166	mg/Kg	0.050	91.7	59	147			
1,1,1-Trichloroethene (TCE)	0.7785	mg/Kg	0.050	77.8	77.2	123			
Sample ID: 0605060-12a ms		MS							Analysis Date: 5/9/2006
Benzene	0.8676	mg/Kg	0.050	86.8	80.8	132			
Toluene	0.9851	mg/Kg	0.050	98.5	72.1	126			
Chlorobenzene	1.092	mg/Kg	0.050	109	75.4	140			
1,1-Dichloroethene	1.066	mg/Kg	0.050	107	59	147			
1,1,1-Trichloroethene (TCE)	0.8804	mg/Kg	0.050	88.0	77.2	123			
Sample ID: 0605060-12a msd		MSD							Analysis Date: 5/9/2006
Benzene	0.7971	mg/Kg	0.050	79.7	80.8	132	8.47	20	S
Toluene	0.8644	mg/Kg	0.050	86.4	72.1	126	13.1	20	
Chlorobenzene	1.061	mg/Kg	0.050	106	75.4	140	2.92	20	
1,1-Dichloroethene	0.9447	mg/Kg	0.050	94.5	59	147	12.0	20	
1,1,1-Trichloroethene (TCE)	0.7631	mg/Kg	0.050	76.3	77.2	123	14.3	20	S

Qualifiers:

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

Full Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

5/5/2006

Work Order Number 0605060

Received by AT

Checklist completed by

Signature

Date

5/5/06

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 ☐		
Water - VOA vials have zero headspace?	Yes ☒	No ☐		
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒	

No VOA vials submitted ☒

Yes ☐

No ☐

Container/Temp Blank temperature?

15°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

COVER LETTER

Friday, April 07, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: Evap. Pond #2 Bank Material

Order No.: 0603352

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/31/2006 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

AZ license # AZ0682
ORELAP Lab # NM100001





Hall Environmental Analysis Laboratory

Date: 07-Apr-06

CLIENT: Giant Refining Co
Project: Evap. Pond #2 Bank Material
Lab Order: 0603352

CASE NARRATIVE

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



Hall Environmental Analysis Laboratory

Date: 07-Apr-06

CLIENT: Giant Refining Co
Lab Order: 0603352
Project: Evap. Pond #2 Bank Material
Lab ID: 0603352-01

Client Sample ID: Pond 2 Bank 1
Collection Date: 3/30/2006 3:00:00 PM
Date Received: 3/31/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	64000	2000		mg/Kg	200	4/7/2006 4:36:46 AM
Motor Oil Range Organics (MRO)	ND	10000		mg/Kg	200	4/7/2006 4:36:46 AM
Surr: DNOP	0	60-124	S	%REC	200	4/7/2006 4:36:46 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	4/6/2006 2:04:24 PM
Surr: BFB	109	79-128		%REC	50	4/6/2006 2:04:24 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	4/6/2006 2:04:24 PM
Benzene	ND	2.5		mg/Kg	50	4/6/2006 2:04:24 PM
Toluene	ND	2.5		mg/Kg	50	4/6/2006 2:04:24 PM
Ethylbenzene	ND	2.5		mg/Kg	50	4/6/2006 2:04:24 PM
Xylenes, Total	ND	2.5		mg/Kg	50	4/6/2006 2:04:24 PM
Surr: 4-Bromofluorobenzene	99.2	84.4-117		%REC	50	4/6/2006 2:04:24 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 07-Apr-06

CLIENT: Giant Refining Co
Lab Order: 0603352
Project: Evap. Pond #2 Bank Material
Lab ID: 0603352-02

Client Sample ID: Pond 2 Bank 2
Collection Date: 3/30/2006 3:20:00 PM
Date Received: 3/31/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	200000	2000		mg/Kg	200	4/7/2006 5:41:56 AM
Motor Oil Range Organics (MRO)	ND	10000		mg/Kg	200	4/7/2006 5:41:56 AM
Surr: DNOP	0	60-124	S	%REC	200	4/7/2006 5:41:56 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	4/6/2006 2:32:15 PM
Surr: BFB	113	79-128		%REC	50	4/6/2006 2:32:15 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	4/6/2006 2:32:15 PM
Benzene	ND	2.5		mg/Kg	50	4/6/2006 2:32:15 PM
Toluene	ND	2.5		mg/Kg	50	4/6/2006 2:32:15 PM
Ethylbenzene	ND	2.5		mg/Kg	50	4/6/2006 2:32:15 PM
Xylenes, Total	ND	2.5		mg/Kg	50	4/6/2006 2:32:15 PM
Surr: 4-Bromofluorobenzene	103	84.4-117		%REC	50	4/6/2006 2:32:15 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 07-Apr-06

CLIENT: Giant Refining Co
Lab Order: 0603352
Project: Evap. Pond #2 Bank Material
Lab ID: 0603352-03

Client Sample ID: Pond 2 Bank 3
Collection Date: 3/30/2006 3:40:00 PM
Date Received: 3/31/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	110000	2000		mg/Kg	200	4/7/2006 6:15:18 AM
Motor Oil Range Organics (MRO)	ND	10000		mg/Kg	200	4/7/2006 6:15:18 AM
Surr: DNOP	0	60-124	S	%REC	200	4/7/2006 6:15:18 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	4/6/2006 3:00:08 PM
Surr: BFB	116	79-128		%REC	50	4/6/2006 3:00:08 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	4/6/2006 3:00:08 PM
Benzene	ND	2.5		mg/Kg	50	4/6/2006 3:00:08 PM
Toluene	ND	2.5		mg/Kg	50	4/6/2006 3:00:08 PM
Ethylbenzene	ND	2.5		mg/Kg	50	4/6/2006 3:00:08 PM
Xylenes, Total	ND	2.5		mg/Kg	50	4/6/2006 3:00:08 PM
Surr: 4-Bromofluorobenzene	107	84.4-117		%REC	50	4/6/2006 3:00:08 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 07-Apr-06

CLIENT: Giant Refining Co

Work Order: 0603352

Project: Evap. Pond #2 Bank Material

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_S

Sample ID: MB-10114	SampType: MBLK	TestCode: 8015DRO_S	Units: mg/Kg	Prep Date: 4/4/2006	RunNo: 18818
Client ID: ZZZZZ	Batch ID: 10114	TestNo: SW8015		Analysis Date: 4/5/2006	SeqNo: 467037
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diesel Range Organics (DRO)	ND	10			
Motor Oil Range Organics (MRO)	ND	50			

Sample ID: LCS-10114	SampType: LCS	TestCode: 8015DRO_S	Units: mg/Kg	Prep Date: 4/4/2006	RunNo: 18818
Client ID: ZZZZZ	Batch ID: 10114	TestNo: SW8015		Analysis Date: 4/5/2006	SeqNo: 467095
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diesel Range Organics (DRO)	42.18	10	50	0	84.4 67.4 117

Sample ID: LCSD-10114	SampType: LCSD	TestCode: 8015DRO_S	Units: mg/Kg	Prep Date: 4/4/2006	RunNo: 18818
Client ID: ZZZZZ	Batch ID: 10114	TestNo: SW8015		Analysis Date: 4/5/2006	SeqNo: 467096
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Diesel Range Organics (DRO)	40.59	10	50	0	81.2 67.4 117 42.18 3.84 17.4

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

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
 Work Order: 0603352
 Project: Evap. Pond #2 Bank Material

TestCode: 8015GRO_S

Sample ID: MB-10098	SampleType: MBLK	TestCode: 8015GRO_S	Units: mg/Kg	Prep Date: 3/31/2006	RunNo: 18842						
Client ID: ZZZZZ	Batch ID: 10098	TestNo: SW8015	(SW5035)	Analysis Date: 4/5/2006	SeqNo: 467547						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)		ND					5.0				

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

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co

Work Order: 0603352

Project: Evap. Pond #2 Bank Material

TestCode: 8021BTEX_S

Sample ID: MB-10098	SampType: MBLK	TestCode: 8021BTEX_S	Units: mg/Kg	Prep Date: 3/31/2006	RunNo: 18842						
Client ID: ZZZZZ	Batch ID: 10098	TestNo: SW8021	(SW5035)	Analysis Date: 4/5/2006	SeqNo: 467531						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methyl tert-butyl ether (MTBE)	ND	0.10									
Benzene	ND	0.050									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.050									

Sample ID: LCS-10098	SampType: LCS	TestCode: 8021BTEX_S	Units: mg/Kg	Prep Date: 3/31/2006	RunNo: 18842						
Client ID: ZZZZZ	Batch ID: 10098	TestNo: SW8021	(SW5035)	Analysis Date: 4/5/2006	SeqNo: 467532						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methyl tert-butyl ether (MTBE)	0.4064	0.10	0.4	0	102	65	132				
Benzene	0.4721	0.050	0.452	0	104	85.6	116				
Toluene	1.859	0.050	1.62	0	115	82.4	120				
Ethylbenzene	0.4260	0.050	0.456	0	93.4	86.4	111				
Xylenes, Total	2.002	0.050	1.8	0	111	78.4	125				

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

Full Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

3/31/2006

Work Order Number 0603352

Received by AT

Checklist completed by



Date

3/31/06

Matrix

Carrier name Client drop-off

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

Container/Temp Blank temperature?

2°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person 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.hallenvironmental.com

ANALYSIS REQUEST

Air Bubbles or Headspace (Y or N)

CHAIN-OF-CUSTODY RECORD							QA/QC Package:		
							Std ☐	Level 4 ☐	Other:
Client:		Giant Refining Company - Arizona					Project Name: Evap. Pond # 2		
Address:		Route 3 Box 7					Bank materials		
City/State/Zip:		Gallup, NM 87301					Project #:		
Phone #:		505 722 3833					Project Manager: Steve Morris		
Fax #:		505 722 0210					Sampler: Steve Morris		
							Sample Temperature: 2		
Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative		HEAL No.		
1/30/06	1500	Non Organic	Evap. Pond 2 Bank 1		HgCl ₂	HNO ₃	0603352		
"	1520	"	" " 2				0603352-1		
"	1540	"	" " 3				- 2		
							- 3		
Date:	Time:	Relinquished By: (Signature)			Received By: (Signature)				
1/31/06	0900	[Signature]			[Signature]				
Date:	Time:	Relinquished By: (Signature)			Received By: (Signature)				
					[Signature]		3/31/06		

COVER LETTER

Wednesday, June 07, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: Evap. Pond #2 Post Cleanup 6-1-2006

Order No.: 0606032

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/2/2006 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

AZ license # AZ0682
ORELAP Lab # NM100001



Hall Environmental Analysis Laboratory

Date: 07-Jun-06

CLIENT: Giant Refining Co
Project: Evap. Pond #2 Post Cleanup 6-1-2006
Lab Order: 0606032

CASE NARRATIVE

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

Hall Environmental Analysis Laboratory

Date: 07-Jun-06

CLIENT: Giant Refining Co **Client Sample ID:** Pond 2 Bank 1
Lab Order: 0606032 **Collection Date:** 6/1/2006 10:00:00 AM
Project: Evap. Pond #2 Post Cleanup 6-1-2006 **Date Received:** 6/2/2006
Lab ID: 0606032-01 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	18000	2000		mg/Kg	200	6/6/2006 8:38:24 AM
Motor Oil Range Organics (MRO)	ND	10000		mg/Kg	200	6/6/2006 8:38:24 AM
Surr: DNOP	0	61.7-135	S	%REC	200	6/6/2006 8:38:24 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	6/6/2006 12:05:02 PM
Surr: BFB	142	81.7-127	S	%REC	20	6/6/2006 12:05:02 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	2.0		mg/Kg	20	6/6/2006 12:05:02 PM
Benzene	ND	1.0		mg/Kg	20	6/6/2006 12:05:02 PM
Toluene	ND	1.0		mg/Kg	20	6/6/2006 12:05:02 PM
Ethylbenzene	ND	1.0		mg/Kg	20	6/6/2006 12:05:02 PM
Xylenes, Total	ND	3.0		mg/Kg	20	6/6/2006 12:05:02 PM
Surr: 4-Bromofluorobenzene	113	77.6-114		%REC	20	6/6/2006 12:05:02 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 07-Jun-06

CLIENT: Giant Refining Co **Client Sample ID:** Pond 2 BTM
Lab Order: 0606032 **Collection Date:** 6/1/2006 10:15:00 AM
Project: Evap. Pond #2 Post Cleanup 6-1-2006 **Date Received:** 6/2/2006
Lab ID: 0606032-02 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	1400	200		mg/Kg	20	6/6/2006 9:11:13 AM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	6/6/2006 9:11:13 AM
Surr: DNOP	0	61.7-135	S	%REC	20	6/6/2006 9:11:13 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	6/6/2006 12:34:13 PM
Surr: BFB	149	81.7-127	S	%REC	5	6/6/2006 12:34:13 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	5	6/6/2006 12:34:13 PM
Benzene	ND	0.25		mg/Kg	5	6/6/2006 12:34:13 PM
Toluene	ND	0.25		mg/Kg	5	6/6/2006 12:34:13 PM
Ethylbenzene	ND	0.25		mg/Kg	5	6/6/2006 12:34:13 PM
Xylenes, Total	1.3	0.75		mg/Kg	5	6/6/2006 12:34:13 PM
Surr: 4-Bromofluorobenzene	125	77.6-114	S	%REC	5	6/6/2006 12:34:13 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 07-Jun-06

CLIENT: Giant Refining Co
Lab Order: 0606032
Project: Evap. Pond #2 Post Cleanup 6-1-2006
Lab ID: 0606032-03

Client Sample ID: Pond 2 Bank 2
Collection Date: 6/1/2006 10:30:00 AM
Date Received: 6/2/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	9900	1000		mg/Kg	100	6/6/2006 9:44:02 AM
Motor Oil Range Organics (MRO)	ND	5000		mg/Kg	100	6/6/2006 9:44:02 AM
Surr: DNOP	0	61.7-135	S	%REC	100	6/6/2006 9:44:02 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	6/6/2006 1:03:18 PM
Surr: BFB	117	81.7-127		%REC	10	6/6/2006 1:03:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	10	6/6/2006 1:03:18 PM
Benzene	ND	0.50		mg/Kg	10	6/6/2006 1:03:18 PM
Toluene	ND	0.50		mg/Kg	10	6/6/2006 1:03:18 PM
Ethylbenzene	ND	0.50		mg/Kg	10	6/6/2006 1:03:18 PM
Xylenes, Total	ND	1.5		mg/Kg	10	6/6/2006 1:03:18 PM
Surr: 4-Bromofluorobenzene	118	77.6-114	S	%REC	10	6/6/2006 1:03:18 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 07-Jun-06

CLIENT: Giant Refining Co
Lab Order: 0606032
Project: Evap. Pond #2 Post Cleanup 6-1-2006
Lab ID: 0606032-04

Client Sample ID: Pond 2 Bank 3
Collection Date: 6/1/2006 10:45:00 AM
Date Received: 6/2/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/6/2006 10:17:06 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/6/2006 10:17:06 AM
Surr: DNOP	97.8	61.7-135		%REC	1	6/6/2006 10:17:06 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/6/2006 2:01:31 PM
Surr: BFB	110	81.7-127		%REC	1	6/6/2006 2:01:31 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	6/6/2006 2:01:31 PM
Benzene	ND	0.050		mg/Kg	1	6/6/2006 2:01:31 PM
Toluene	ND	0.050		mg/Kg	1	6/6/2006 2:01:31 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/6/2006 2:01:31 PM
Xylenes, Total	ND	0.15		mg/Kg	1	6/6/2006 2:01:31 PM
Surr: 4-Bromofluorobenzene	107	77.6-114		%REC	1	6/6/2006 2:01:31 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

QA/QC SUMMARY REPORT



Project: Giant Refining Co
Evap. Pond #2 Post Cleanup 6-1-2006

Work Order: 0606032

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8015									
Sample ID: MB-10554									
Batch ID: 10554									
Analysis Date: 6/6/2006									
iesel Range Organics (DRO)	ND	mg/Kg	10						
otor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-10554									
Batch ID: 10554									
Analysis Date: 6/6/2006									
iesel Range Organics (DRO)	47.47	mg/Kg	10	94.9	64.6	116			
Sample ID: LCSD-10554									
Batch ID: 10554									
Analysis Date: 6/6/2006									
iesel Range Organics (DRO)	50.04	mg/Kg	10	100	64.6	116	5.27	17.4	
Method: SW8015									
Sample ID: MB-10550									
Batch ID: 10550									
Analysis Date: 6/5/2006									
asoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: LCS-10550									
Batch ID: 10550									
Analysis Date: 6/6/2006									
asoline Range Organics (GRO)	22.40	mg/Kg	5.0	89.6	73.4	115			
Sample ID: LCSD-10550									
Batch ID: 10550									
Analysis Date: 6/6/2006									
asoline Range Organics (GRO)	22.80	mg/Kg	5.0	91.2	73.4	115	1.77	11.6	
Method: SW8021									
Sample ID: MB-10550									
Batch ID: 10550									
Analysis Date: 6/5/2006									
tert-butyl ether (MTBE)	ND	mg/Kg	0.10						
enzene	ND	mg/Kg	0.050						
oluene	ND	mg/Kg	0.050						
thylbenzene	ND	mg/Kg	0.050						
ylenes, Total	ND	mg/Kg	0.15						
Sample ID: LCS-10550									
Batch ID: 10550									
Analysis Date: 6/5/2006									
ethyl tert-butyl ether (MTBE)	0.3799	mg/Kg	0.10	95.0	67.9	135			
enzene	0.3061	mg/Kg	0.050	80.6	77.5	123			
oluene	1.909	mg/Kg	0.050	90.9	85.3	129			
thylbenzene	0.3925	mg/Kg	0.050	101	79.6	121			
ylenes, Total	2.273	mg/Kg	0.15	108	80	130			
Sample ID: LCSD-10550									
Batch ID: 10550									
Analysis Date: 6/5/2006									
ethyl tert-butyl ether (MTBE)	0.3753	mg/Kg	0.10	93.8	67.9	135	1.22	28	
enzene	0.3074	mg/Kg	0.050	80.9	77.5	123	0.424	27	
oluene	1.991	mg/Kg	0.050	94.8	85.3	129	4.20	19	
thylbenzene	0.4160	mg/Kg	0.050	107	79.6	121	5.81	10	
ylenes, Total	2.422	mg/Kg	0.15	115	80	130	6.36	13	

Qualifiers:

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

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

6/2/2006

Work Order Number 0606032

Received by AT

Checklist completed by

Signature

Date

6/2/06

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 ☐

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?

6°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

7071

COVER LETTER

Monday, March 13, 2006 ✓

Johnny Sanchez
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-0231
FAX (505) 722-0210

RE: Tank 339 Scale 1-25-06

Order No.: 0601272

Dear Johnny Sanchez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/27/2006 for the analyses presented in the following report.

This report is an addendum to the report dated February 6, 2006. TCLP Hg has been added to this report. Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager





Hall Environmental Analysis Laboratory

Date: 13-Mar-06

CLIENT: Giant Refining Co
Project: Tank 339 Scale 1-25-06
Lab Order: 0601272

CASE NARRATIVE

TCLP Mercury was analyzed past the EPA holding time at the clients request.



Hall Environmental Analysis Laboratory

Date: 13-Mar-06

CLIENT: Giant Refining Co
Lab Order: 0601272
Project: Tank 339 Scale 1-25-06
Lab ID: 0601272-01

Client Sample ID: Tank 339 Scale
Collection Date: 1/25/2006 2:00:00 PM
Date Received: 1/27/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	2/2/2006 9:53:57 PM
Benzene	14	2.5		mg/Kg	50	2/2/2006 9:53:57 PM
Toluene	160	2.5		mg/Kg	50	2/2/2006 9:53:57 PM
Ethylbenzene	80	2.5		mg/Kg	50	2/2/2006 9:53:57 PM
Xylenes, Total	470	2.5		mg/Kg	50	2/2/2006 9:53:57 PM
Surr: 4-Bromofluorobenzene	115	87.5-115		%REC	50	2/2/2006 9:53:57 PM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	150	33		mg/Kg	1000	1/27/2006
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020	H	mg/L	1	3/8/2006

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

CLIENT: Giant Refining Co

Work Order: 0601272

Project: Tank 339 Scale 1-25-06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_S

Sample ID: MB-9699	SampType: MBLK	TestCode: 8021BTEX_S	Units: mg/Kg	Prep Date: 2/1/2006	RunNo: 18141						
Client ID: ZZZZZ	Batch ID: 9699	TestNo: SW8021	(SW5035)	Analysis Date: 2/2/2006	SeqNo: 447429						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methyl tert-butyl ether (MTBE)	ND	0.10									
Benzene	ND	0.050									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.050									

Sample ID: LCS-9699	SampType: LCS	TestCode: 8021BTEX_S	Units: mg/Kg	Prep Date: 2/1/2006	RunNo: 18141						
Client ID: ZZZZZ	Batch ID: 9699	TestNo: SW8021	(SW5035)	Analysis Date: 2/2/2006	SeqNo: 447430						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	0.3558	0.050	0.372	0	95.6	85.6	116				
Toluene	1.725	0.050	1.78	0	96.9	82.4	120				
Ethylbenzene	0.5558	0.050	0.554	0	100	86.4	111				
Xylenes, Total	1.615	0.050	1.64	0	98.5	78.4	125				

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601272
Project: Tank 339 Scale 1-25-06
ANALYTICAL QC SUMMARY REPORT
TestCode: HG_CTS

Sample ID: MB-9667	SampType: MBLK	TestCode: HG_CTS	Units: mg/Kg	Prep Date: 1/27/2006	RunNo: 18067						
Client ID: ZZZZZ	Batch ID: 9667	TestNo: SW7471	(SW7471)	Analysis Date: 1/27/2006	SeqNo: 445282						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.033									

Sample ID: LCS-9667	SampType: LCS	TestCode: HG_CTS	Units: mg/Kg	Prep Date: 1/27/2006	RunNo: 18067						
Client ID: ZZZZZ	Batch ID: 9667	TestNo: SW7471	(SW7471)	Analysis Date: 1/27/2006	SeqNo: 445283						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.1773	0.033	0.1667	0	106	80	120				

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

CLIENT: Giant Refining Co
Work Order: 0601272
Project: Tank 339 Scale 1-25-06

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_TCLP

Sample ID: MB-9949	SampType: MBLK	TestCode: HG_TCLP	Units: mg/L	Prep Date: 3/8/2006	RunNo: 18515						
Client ID: ZZZZZ	Batch ID: 9949	TestNo: SW7470	(SW7470)	Analysis Date: 3/8/2006	SeqNo: 457586						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.020									

Sample ID: LCS-9949	SampType: LCS	TestCode: HG_TCLP	Units: mg/L	Prep Date: 3/8/2006	RunNo: 18515						
Client ID: ZZZZZ	Batch ID: 9949	TestNo: SW7470	(SW7470)	Analysis Date: 3/8/2006	SeqNo: 457587						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004826	0.0020	0.005	0	96.5	80	120				

Sample ID: LCSD-9949	SampType: LCSD	TestCode: HG_TCLP	Units: mg/L	Prep Date: 3/8/2006	RunNo: 18515						
Client ID: ZZZZZ	Batch ID: 9949	TestNo: SW7470	(SW7470)	Analysis Date: 3/8/2006	SeqNo: 457595						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005090	0.0020	0.005	0	102	80	120	0.004826	5.32	20	

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

FORM R ✓

COVER LETTER

Monday, January 30, 2006

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833

FAX (505) 722-0210

RE: Soil Cleanup by TK 576

Order No.: 0601121

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/13/2006 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

AZ license # AZ0682
ORELAP Lab # NM100001



Hall Environmental Analysis Laboratory

Date: 30-Jan-06

CLIENT: Giant Refining Co
Lab Order: 0601121
Project: Soil Cleanup by TK 576
Lab ID: 0601121-01

Client Sample ID: Soil Cleanup by TK 576
Collection Date: 1/9/2006 4:00:00 PM
Date Received: 1/13/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND ✓	10		mg/Kg	100	1/20/2006 9:37:08 PM
Benzene	17 ✓	2.5		mg/Kg	100	1/20/2006 9:37:08 PM
Toluene	100 ✓	2.5		mg/Kg	100	1/20/2006 9:37:08 PM
Ethylbenzene	39 ✓	2.5		mg/Kg	100	1/20/2006 9:37:08 PM
Xylenes, Total	250 ✓	2.5		mg/Kg	100	1/20/2006 9:37:08 PM
Surr: 4-Bromofluorobenzene	107	87.5-115		%REC	100	1/20/2006 9:37:08 PM
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	ND ✓	0.033		mg/Kg	1	1/27/2006
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	ND	2.5		mg/Kg	1	1/18/2006 9:25:22 AM
Barium	41	0.10		mg/Kg	1	1/18/2006 9:25:22 AM
Cadmium	0.24	0.10		mg/Kg	1	1/18/2006 9:25:22 AM
Chromium	3.3 ✓	0.30		mg/Kg	1	1/18/2006 9:25:22 AM
Lead	23 ✓	0.25		mg/Kg	1	1/18/2006 9:25:22 AM
Selenium	ND	2.5		mg/Kg	1	1/18/2006 9:25:22 AM
Silver	ND	0.25		mg/Kg	1	1/18/2006 9:25:22 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

CLIENT: Giant Refining Co

Work Order: 0601121

Project: Soil Cleanup by TK 576

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_S

Sample ID: MB-9603	SampType: MBLK	TestCode: 8021BTEX_S	Units: mg/Kg	Prep Date: 1/18/2006	RunNo: 17996						
Client ID: ZZZZZ	Batch ID: 9603	TestNo: SW8021	(SW5035)	Analysis Date: 1/20/2006	SeqNo: 442540						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methyl tert-butyl ether (MTBE)	ND	0.10									
Benzene	ND	0.025									
Toluene	ND	0.025									
Ethylbenzene	ND	0.025									
Xylenes, Total	ND	0.025									

Sample ID: LCS-9603	SampType: LCS	TestCode: 8021BTEX_S	Units: mg/Kg	Prep Date: 1/18/2006	RunNo: 17996						
Client ID: ZZZZZ	Batch ID: 9603	TestNo: SW8021	(SW5035)	Analysis Date: 1/20/2006	SeqNo: 442541						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methyl tert-butyl ether (MTBE)	1.840	0.10	2	0	92.0	65	132				
Benzene	0.4132	0.025	0.42	0	98.4	85.6	116				
Toluene	2.102	0.025	1.9	0	111	82.4	120				
Ethylbenzene	0.3893	0.025	0.41	0	95.0	86.4	111				
Xylenes, Total	2.064	0.025	1.9	0	109	78.4	125				

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

CLIENT: Giant Refining Co
Work Order: 0601121
Project: Soil Cleanup by TK 576
TestCode: HG_CTS

ANALYTICAL QC SUMMARY REPORT

Sample ID: MB-9667	SampType: MBLK	TestCode: HG_CTS	Units: mg/Kg	Prep Date: 1/27/2006	RunNo: 18067						
Client ID: ZZZZZ	Batch ID: 9667	TestNo: SW7471	(SW7471)	Analysis Date: 1/27/2006	SeqNo: 445282						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.033									

Sample ID: LCS-9667	SampType: LCS	TestCode: HG_CTS	Units: mg/Kg	Prep Date: 1/27/2006	RunNo: 18067						
Client ID: ZZZZZ	Batch ID: 9667	TestNo: SW7471	(SW7471)	Analysis Date: 1/27/2006	SeqNo: 445283						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.1773	0.033	0.1667	0	106	80	120				

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

CLIENT: Giant Refining Co
Work Order: 0601121
Project: Soil Cleanup by TK 576

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_SOIL

Sample ID: MB-9582	SampType: MBLK	TestCode: METALS_SOI	Units: mg/Kg	Prep Date: 1/16/2006	RunNo: 17954						
Client ID: ZZZZZ	Batch ID: 9582	TestNo: SW6010A		Analysis Date: 1/18/2006	SeqNo: 441307						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	2.5									
Barium	ND	0.10									
Cadmium	ND	0.10									
Chromium	ND	0.30									
Lead	ND	0.25									
Selenium	ND	2.5									
Silver	ND	0.25									

Sample ID: LCS-9582	SampType: LCS	TestCode: METALS_SOI	Units: mg/Kg	Prep Date: 1/16/2006	RunNo: 17954						
Client ID: ZZZZZ	Batch ID: 9582	TestNo: SW6010A		Analysis Date: 1/18/2006	SeqNo: 441308						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	24.72	2.5	25	0	98.9	80	120				
Barium	23.67	0.10	25	0	94.7	80	120				
Cadmium	24.07	0.10	25	0.02615	96.2	80	120				
Chromium	24.29	0.30	25	0	97.2	80	120				
Lead	23.26	0.25	25	0	93.0	80	120				
Selenium	24.21	2.5	25	0	96.8	80	120				
Silver	24.79	0.25	25	0	99.2	80	120				

Sample ID: LCSD-9582	SampType: LCSD	TestCode: METALS_SOI	Units: mg/Kg	Prep Date: 1/16/2006	RunNo: 17954						
Client ID: ZZZZZ	Batch ID: 9582	TestNo: SW6010A		Analysis Date: 1/18/2006	SeqNo: 441309						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	24.04	2.5	25	0	96.2	80	120	24.72	2.79	20	
Barium	23.42	0.10	25	0	93.7	80	120	23.67	1.07	20	
Cadmium	24.00	0.10	25	0.02615	95.9	80	120	24.07	0.281	20	
Chromium	24.04	0.30	25	0	96.2	80	120	24.29	1.04	20	
Lead	23.23	0.25	25	0	92.9	80	120	23.26	0.132	20	
Selenium	24.17	2.5	25	0	96.7	80	120	24.21	0.148	20	

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

CLIENT: Giant Refining Co
Work Order: 0601121
Project: Soil Cleanup by TK 576

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_SOIL

Sample ID: LCSD-9582	SampType: LCSD	TestCode: METALS_SOI		Units: mg/Kg	Prep Date: 1/16/2006	RunNo: 17954					
Client ID: ZZZZZ	Batch ID: 9582	TestNo: SW6010A			Analysis Date: 1/18/2006	SeqNo: 441309					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	24.60	0.25	25	0	98.4	80	120	24.79	0.800	20	

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

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

1/13/2006

Work Order Number 0601121

Received by LMM

Checklist completed by

Lise Halenbeck
Signature

1/13/06
Date

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?	7°	4° C ± 2 Acceptable	If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person 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.hallenvirohmental.com

ANALYSIS REQUEST

8081 Pesticides / PCB's (8082)
8260B (VOA)
8270 (Semi-VOA)
Air Bubbles or Headspace (Y or N)

[illegible]

Form R ✓

Hall Environmental Analysis Laboratory

Date: 26-May-06

CLIENT: Giant Refining Co
 Lab Order: 0605213
 Project: Process Sewer Sludge
 Lab ID: 0605213-01

Client Sample ID: Process Sewer Sludge
 Collection Date: 5/17/2006 2:00:00 PM
 Date Received: 5/19/2006
 Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	98000	2000		mg/Kg	200	5/25/2006 9:17:41 PM
Motor Oil Range Organics (MRO)	16000	10000		mg/Kg	200	5/25/2006 9:17:41 PM
Surr: DNOP	0	61.7-135	S	%REC	200	5/25/2006 9:17:41 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	500		mg/Kg	100	5/24/2006 3:50:06 PM
Surr: BFB	96.0	81.7-127		%REC	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: <C5	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C05-C6	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C06-C7	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C07-C8	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C08-C9	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C09-C10	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C10-C11	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C11-C12	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C12-C14	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C14+	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
EPA METHOD 8021B: VOLATILES						Analyst: HLM
Methyl tert-butyl ether (MTBE)	ND ✓	10		mg/Kg	100	5/24/2006 3:50:06 PM
Benzene	14 ✓	5.0		mg/Kg	100	5/24/2006 3:50:06 PM
Toluene	19 ✓	5.0		mg/Kg	100	5/24/2006 3:50:06 PM
Ethylbenzene	12 ✓	5.0		mg/Kg	100	5/24/2006 3:50:06 PM
Xylenes, Total	74 ✓	15		mg/Kg	100	5/24/2006 3:50:06 PM
Surr: 4-Bromofluorobenzene	97.8	77.6-114		%REC	100	5/24/2006 3:50:06 PM
m,p-Xylene	55	10		mg/Kg	100	5/24/2006 3:50:06 PM
o-Xylene	19	5.0		mg/Kg	100	5/24/2006 3:50:06 PM
1,2,4-Trimethylbenzene	33 ✓	5.0		mg/Kg	100	5/24/2006 3:50:06 PM
1,3,5-Trimethylbenzene	11	5.0		mg/Kg	100	5/24/2006 3:50:06 PM
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/23/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/25/2006 9:59:52 AM
Barium	ND	100		mg/L	1	5/25/2006 9:59:52 AM
Cadmium	ND	1.0		mg/L	1	5/25/2006 9:59:52 AM
Chromium	ND	5.0		mg/L	1	5/25/2006 9:59:52 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 26-May-06

CLIENT: Giant Refining Co
Lab Order: 0605213
Project: Process Sewer Sludge
Lab ID: 0605213-01

Client Sample ID: Process Sewer Sludge
Collection Date: 5/17/2006 2:00:00 PM
Date Received: 5/19/2006
Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Lead	ND	5.0		mg/L	1	5/25/2006 9:59:52 AM
Selenium	ND	1.0		mg/L	1	5/25/2006 9:59:52 AM
Silver	ND	5.0		mg/L	1	5/25/2006 9:59:52 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

COVER LETTER

Form R ✓

Thursday, April 13, 2006

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301
TEL: (505) 722-3833
FAX (505) 722-0210
RE: Tank #112 Diesel Sludge

Order No.: 0603301

Dear Ed Riege:

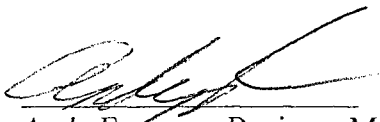
Hall Environmental Analysis Laboratory received 1 sample(s) on 3/28/2006 for the analyses presented in the following report.

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

AZ license # AZ0682
ORELAP Lab # NM100001





Hall Environmental Analysis Laboratory

Date: 13-Apr-06

CLIENT: Giant Refining Co
Project: Tank #112 Diesel Sludge
Lab Order: 0603301

CASE NARRATIVE

Analytical Comments for METHOD 8021BTEX_PROD, SAMPLE 0603301-01A: Necessary dilution for high amount of DRO hydrocarbons.

Hall Environmental Analysis Laboratory

Date: 13-Apr-06

CLIENT: Giant Refining Co
Project: Tank #112 Diesel Sludge

Lab Order: 0603301

Lab ID: 0603301-01

Collection Date: 3/23/2006 1:30:00 PM

Client Sample ID: TK 112 Diesel Sludge

Matrix: PRODUCT

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						
Benzene	ND ✓	120		mg/Kg	100	4/10/2006 6:09:46 PM
Toluene	ND ✓	120		mg/Kg	100	4/10/2006 6:09:46 PM
Ethylbenzene	ND ✓	120		mg/Kg	100	4/10/2006 6:09:46 PM
Xylenes, Total	600 ✓	120		mg/Kg	100	4/10/2006 6:09:46 PM
Surr: 4-Bromofluorobenzene	107	74-118		%REC	100	4/10/2006 6:09:46 PM

Analyst: NSB

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0603301
Lab ID: C06031281-001
Client Sample ID: TK 112 Diesel Sludge

Report Date: 04/12/06
Collection Date: 03/23/06 13:30
Date Received: 03/30/06
Matrix: Sludge

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Filterable	No					SW1311	04/04/06 08:02 / dj
METALS - TCLP							
Arsenic	ND	mg/L		0.50	5	SW6010B	04/06/06 09:46 / cp
Barium	ND	mg/L		10	100	SW6010B	04/06/06 09:46 / cp
Cadmium	ND	mg/L		0.10	1	SW6010B	04/06/06 09:46 / cp
Chromium	ND	mg/L		0.50	5	SW6010B	04/06/06 09:46 / cp
Lead	ND	mg/L		0.50	5	SW6010B	04/06/06 09:46 / cp
Mercury	ND	mg/L		0.02	0.2	SW7470A	04/05/06 16:05 / sjl
Selenium	ND	mg/L		0.10	1	SW6010B	04/06/06 09:46 / cp
Silver	ND	mg/L		0.50	5	SW6010B	04/06/06 09:46 / cp

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

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

QA/QC Summary Report

Client: Hall Environmental
Project: 0603301

Report Date: 04/12/06
Work Order: C06031281

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B							Batch: 10636		
Sample ID: MB-10636	Method Blank		Run: ICP2-C_060405B				04/05/06 19:10		
Arsenic	ND	mg/L	0.01						
Barium	ND	mg/L	0.0006						
Cadmium	ND	mg/L	0.0008						
Chromium	0.001	mg/L	0.001						
Lead	0.02	mg/L	0.004						
Selenium	ND	mg/L	0.02						
Silver	ND	mg/L	0.002						
Sample ID: C06040040-001CMS	Matrix Spike		Run: ICP2-C_060405B				04/06/06 09:59		
Arsenic	0.96	mg/L	0.50	95.7	75	125			
Barium	1.7	mg/L	10	111	75	125			
Cadmium	0.90	mg/L	0.10	89.5	75	125			
Chromium	0.92	mg/L	0.50	91.6	75	125			
Lead	0.93	mg/L	0.50	93	75	125			
Selenium	0.91	mg/L	0.10	90.8	75	125			
Silver	0.79	mg/L	0.50	79.3	75	125			
Sample ID: C06040040-001CMSD	Matrix Spike Duplicate		Run: ICP2-C_060405B				04/06/06 10:03		
Arsenic	0.95	mg/L	0.50	95.4	75	125	0.3	20	
Barium	1.7	mg/L	10	114	75	125	0	20	
Cadmium	0.88	mg/L	0.10	88.1	75	125	1.6	20	
Chromium	0.92	mg/L	0.50	91.6	75	125	0	20	
Lead	0.93	mg/L	0.50	93	75	125	0	20	
Selenium	0.91	mg/L	0.10	91.3	75	125	0.5	20	
Silver	0.77	mg/L	0.50	77.4	75	125	2.4	20	
Sample ID: LCS-10636	Laboratory Control Spike		Run: ICP2-C_060405B				04/06/06 10:26		
Arsenic	1.04	mg/L	0.50	104	90	110			
Barium	1.09	mg/L	10	109	90	110			
Cadmium	1.02	mg/L	0.10	102	90	110			
Chromium	1.03	mg/L	0.50	102	90	110			
Lead	1.01	mg/L	0.50	99.5	90	110			
Selenium	1.05	mg/L	0.10	105	90	110			
Silver	1.02	mg/L	0.50	102	90	110			
Method: SW7470A							Batch: HG3112-060405		
Sample ID: MBLK	Method Blank		Run: CVAA-C201_060405A				04/05/06 16:44		
Mercury	ND	mg/L	0.001						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

CLIENT: Giant Refining Co

Work Order: 0603301

Project: Tank #1112 Diesel Sludge

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEx_PROD

Sample ID: MB-10131	SampType: MBLK	TestCode: 8021BTEx_P	Units: mg/Kg	Prep Date: 4/6/2006	RunNo: 18885						
Client ID: ZZZZ	Batch ID: 10131	TestNo: SW8021	(SW5035)	Analysis Date: 4/10/2006	SeqNo: 468612						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.2									
Toluene	ND	1.2									
Ethylbenzene	ND	1.2									
Xylenes, Total	ND	1.2									

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

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

3/28/2006

Work Order Number 0603301

Received by LMM

Checklist completed by Lisa Helikar
Signature

3/28/06
Date

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?

6°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

COVER LETTER

Thursday, January 19, 2006

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

RE: Tank 577 Waste Analysis

Order No.: 0601056

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/6/2006 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

AZ license # AZ0682
ORELAP Lab # NM100001



Hall Environmental Analysis Laboratory

Date: 19-Jan-06

CLIENT: Giant Refining Co

Client Sample ID: Tank 577 BTMS Scale

Lab Order: 0601056

Collection Date: 1/4/2006 3:30:00 PM

Project: Tank 577 Waste Analysis

Date Received: 1/6/2006

Lab ID: 0601056-01A

Matrix: SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: CMC
Mercury	0.14	0.033		mg/Kg	1	1/10/2006
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	29	12		mg/Kg	5	1/18/2006 11:50:31 AM
Barium	25	0.50		mg/Kg	5	1/18/2006 11:50:31 AM
Cadmium	ND	1.0		mg/Kg	10	1/18/2006 11:47:51 AM
Chromium	62	1.5		mg/Kg	5	1/18/2006 11:50:31 AM
Lead	ND	2.5		mg/Kg	10	1/18/2006 11:47:51 AM
Selenium	ND	25		mg/Kg	10	1/18/2006 11:47:51 AM
Silver	ND	1.2		mg/Kg	5	1/18/2006 11:50:31 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 19-Jan-06

CLIENT: Giant Refining Co

Work Order: 0601056

Project: Tank 577 Waste Analysis

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTS

Sample ID: MB-9554	SampType: MBLK	TestCode: HG_CTS	Units: mg/Kg	Prep Date: 1/10/2006	RunNo: 17862						
Client ID: ZZZZZ	Batch ID: 9554	TestNo: SW7471	(SW7471)	Analysis Date: 1/10/2006	SeqNo: 439127						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.033									

Sample ID: LCS-9554	SampType: LCS	TestCode: HG_CTS	Units: mg/Kg	Prep Date: 1/10/2006	RunNo: 17862						
Client ID: ZZZZZ	Batch ID: 9554	TestNo: SW7471	(SW7471)	Analysis Date: 1/10/2006	SeqNo: 439128						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.1477	0.033	0.1667	0	88.6	80	120				

Sample ID: LCSD-9554	SampType: LCSD	TestCode: HG_CTS	Units: mg/Kg	Prep Date: 1/10/2006	RunNo: 17862						
Client ID: ZZZZZ	Batch ID: 9554	TestNo: SW7471	(SW7471)	Analysis Date: 1/10/2006	SeqNo: 439137						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.1786	0.033	0.1667	0	107	80	120	0.1477	18.9	20	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting LimitH Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limitsJ Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601056
Project: Tank 577 Waste Analysis

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_SOIL

Sample ID: MB-9545	SampType: MBLK	TestCode: METALS_SOI	Units: mg/Kg	Prep Date: 1/9/2006	RunNo: 17873						
Client ID: ZZZZZ	Batch ID: 9545	TestNo: SW6010A		Analysis Date: 1/11/2006	SeqNo: 439442						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	ND	2.5									
Barium	ND	0.10									
Cadmium	ND	0.10									
Chromium	ND	0.30									
Lead	ND	0.25									
Selenium	ND	2.5									
Silver	ND	0.25									

Sample ID: LCS-9545	SampType: LCS	TestCode: METALS_SOI	Units: mg/Kg	Prep Date: 1/9/2006	RunNo: 17873						
Client ID: ZZZZZ	Batch ID: 9545	TestNo: SW6010A		Analysis Date: 1/11/2006	SeqNo: 439443						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	25.33	2.5	25	0	101	80	120				
Barium	23.21	0.10	25	0	92.8	80	120				
Cadmium	23.93	0.10	25	0	95.7	80	120				
Chromium	23.49	0.30	25	0	93.9	80	120				
Lead	24.08	0.25	25	0	96.3	80	120				
Selenium	25.57	2.5	25	0	102	80	120				
Silver	24.27	0.25	25	0	97.1	80	120				

Sample ID: LCSD-9545	SampType: LCSD	TestCode: METALS_SOI	Units: mg/Kg	Prep Date: 1/9/2006	RunNo: 17873						
Client ID: ZZZZZ	Batch ID: 9545	TestNo: SW6010A		Analysis Date: 1/11/2006	SeqNo: 439444						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	25.64	2.5	25	0	103	80	120	25.33	1.21	20	
Barium	23.58	0.10	25	0	94.3	80	120	23.21	1.56	20	
Cadmium	24.07	0.10	25	0	96.3	80	120	23.93	0.557	20	
Chromium	23.91	0.30	25	0	95.6	80	120	23.49	1.77	20	
Lead	24.44	0.25	25	0	97.8	80	120	24.08	1.51	20	
Selenium	25.08	2.5	25	0	100	80	120	25.57	1.94	20	

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

CLIENT: Giant Refining Co
Work Order: 0601056
Project: Tank 577 Waste Analysis

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_SOIL

Sample ID: LCSD-9545	SampType: LCSD	TestCode: METALS_SOI	Units: mg/Kg	Prep Date: 1/9/2006	RunNo: 17873						
Client ID: ZZZZZ	Batch ID: 9545	TestNo: SW6010A		Analysis Date: 1/11/2006	SeqNo: 439444						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	24.52	0.25	25	0	98.1	80	120	24.27	1.02	20	

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

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

1/6/2006

Work Order Number 0601056

Received by AT

Checklist completed by

Signature

Date

1/6/06

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?	7°	4° C ± 2 Acceptable		If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person 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.hallenvironmental.com

ANALYSIS REQUEST

CHAIN-OF-CUSTODY RECORD					QA / QC Package:		
					Std ☐	Level 4 ☐	
Client: GIANT REFINING Company - CIVILIA					Project Name: TANK 5717 WATER ANALYSIS		
Address: Route 3, Box 17 Gallup, NM 87301					Project #:		
Phone #: 505-722-3833					Project Manager:		
Fax #:					Sampler: Johnny Sanchez 70		
					Sample Temperature:		
Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative		HEAL No.
1-4-06	1530	SCALE	TANK 5717 (BITAS SCALE)	1	HgCl ₂	HNO ₃	0601056-1
Date: 1-5-06	Time: 0900	Relinquished By: (Signature) J. Sanchez		Received By: (Signature) J. Sanchez			HEAL No. 1340
Date:	Time:	Relinquished By: (Signature)		Received By: (Signature)			

COVER LETTER

FORN RV

Thursday, April 13, 2006

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

RE: Tank #116 Diesel Sludge

Order No.: 0603300

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/28/2006 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

AZ license # AZ0682
ORELAP Lab # NM100001





Hall Environmental Analysis Laboratory

Date: 13-Apr-06

CLIENT: Giant Refining Co

Project: Tank #116 Diesel Sludge

Lab Order: 0603300

CASE NARRATIVE

Analytical Comments for METHOD 8021BTX_PROD, SAMPLE 0603300-01A: Necessary dilution for high amount of DRO hydrocarbons.

Hall Environmental Analysis Laboratory

Date: 13-Apr-06

CLIENT: Giant Refining Co
Project: Tank #116 Diesel Sludge

Lab Order: 0603300

Lab ID: 0603300-01
Client Sample ID: TK 116 Diesel Sludge

Collection Date: 3/23/2006 2:00:00 PM

Matrix: PRODUCT

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	------	-------	----	---------------

EPA METHOD 8021B: VOLATILES

Analyst: NSB

Benzene	ND ✓	120		mg/Kg	100	4/10/2006 5:07:23 PM
Toluene	ND ✓	120		mg/Kg	100	4/10/2006 5:07:23 PM
Ethylbenzene	ND ✓	120		mg/Kg	100	4/10/2006 5:07:23 PM
Xylenes, Total	430 ✓	120		mg/Kg	100	4/10/2006 5:07:23 PM
Surr: 4-Bromofluorobenzene	103	74-118		%REC	100	4/10/2006 5:07:23 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental

Project: 0603300

Lab ID: C06031279-001

Client Sample ID: TK 116 Diesel Sludge

Report Date: 04/11/06

Collection Date: 03/23/06 14:00

Date Received: 03/30/06

Matrix: Sludge

Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
PHYSICAL PROPERTIES							
Filterable	No					SW1311	04/04/06 08:02 / dj
METALS - TCLP							
Arsenic	ND	mg/L		0.50	5	SW6010B	04/06/06 09:43 / cp
Barium	ND	mg/L		10	100	SW6010B	04/06/06 09:43 / cp
Cadmium	ND	mg/L		0.10	1	SW6010B	04/06/06 09:43 / cp
Chromium	ND	mg/L		0.50	5	SW6010B	04/06/06 09:43 / cp
Lead	ND	mg/L		0.50	5	SW6010B	04/06/06 09:43 / cp
Mercury	ND	mg/L		0.0001	0.2	SW7470A	04/05/06 15:28 / sjl
Selenium	ND	mg/L		0.10	1	SW6010B	04/06/06 09:43 / cp
Silver	ND	mg/L		0.50	5	SW6010B	04/06/06 09:43 / cp

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

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

QA/QC Summary Report

Client: Hall Environmental

Project: 0603300

Report Date: 04/11/06

Work Order: C06031279

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B							Batch: 10636		
Sample ID: MB-10636	Method Blank		Run: ICP2-C_060405B				04/05/06 19:10		
Arsenic	ND	mg/L	0.01						
Barium	ND	mg/L	0.0006						
Cadmium	ND	mg/L	0.0008						
Chromium	0.001	mg/L	0.001						
Lead	0.02	mg/L	0.004						
Selenium	ND	mg/L	0.02						
Silver	ND	mg/L	0.002						
Sample ID: C06040040-001CMS	Matrix Spike		Run: ICP2-C_060405B				04/06/06 09:59		
Arsenic	0.96	mg/L	0.50	95.7	75	125			
Barium	1.7	mg/L	10	111	75	125			
Cadmium	0.90	mg/L	0.10	89.5	75	125			
Chromium	0.92	mg/L	0.50	91.6	75	125			
Lead	0.93	mg/L	0.50	93	75	125			
Selenium	0.91	mg/L	0.10	90.8	75	125			
Silver	0.79	mg/L	0.50	79.3	75	125			
Sample ID: C06040040-001CMSD	Matrix Spike Duplicate		Run: ICP2-C_060405B				04/06/06 10:03		
Arsenic	0.95	mg/L	0.50	95.4	75	125	0.3	20	
Barium	1.7	mg/L	10	114	75	125	0	20	
Cadmium	0.88	mg/L	0.10	88.1	75	125	1.6	20	
Chromium	0.92	mg/L	0.50	91.6	75	125	0	20	
Lead	0.93	mg/L	0.50	93	75	125	0	20	
Selenium	0.91	mg/L	0.10	91.3	75	125	0.5	20	
Silver	0.77	mg/L	0.50	77.4	75	125	2.4	20	
Sample ID: LCS-10636	Laboratory Control Spike		Run: ICP2-C_060405B				04/06/06 10:26		
Arsenic	1.04	mg/L	0.50	104	90	110			
Barium	1.09	mg/L	10	109	90	110			
Cadmium	1.02	mg/L	0.10	102	90	110			
Chromium	1.03	mg/L	0.50	102	90	110			
Lead	1.01	mg/L	0.50	99.5	90	110			
Selenium	1.05	mg/L	0.10	105	90	110			
Silver	1.02	mg/L	0.50	102	90	110			
Method: SW7470A							Batch: HG3112-060405		
Sample ID: MBLK	Method Blank		Run: CVAA-C201_060405A				04/05/06 16:44		
Mercury	ND	mg/L	0.001						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

CLIENT: Giant Refining Co

Work Order: 0603300

Project: Tank #116 Diesel Sludge

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_PROD

Sample ID: MB-10131	SampType: MBLK	TestCode: 8021BTEX_P	Units: mg/Kg	Prep Date: 4/6/2006	RunNo: 18885						
Client ID: ZZZZZ	Batch ID: 10131	TestNo: SW8021	(SW5035)	Analysis Date: 4/10/2006	SeqNo: 468612						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.2									
Toluene	ND	1.2									
Ethylbenzene	ND	1.2									
Xylenes, Total	ND	1.2									

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

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

3/28/2006

Work Order Number 0603300

Received by

LMM

Checklist completed by

Lise Helikar
Signature

3/28/06
Date

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?

6°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action



COVER LETTER

Wednesday, November 15, 2006

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

RE: Alky? Waste Determination 10/31/06

Order No.: 0611010

Dear Steve Morris:

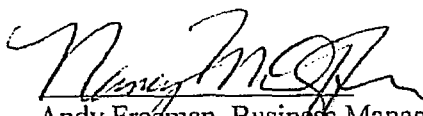
Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/1/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,


Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

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



Hall Environmental Analysis Laboratory, Inc.

Date: 15-Nov-06

CLIENT:	Giant Refining Co	Client Sample ID:	Alky?
Lab Order:	0611010	Collection Date:	10/31/2006 2:30:00 PM
Project:	Alky? Waste Determination 10/31/06	Date Received:	11/1/2006
Lab ID:	0611010-01	Matrix:	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						
Mercury	5.1	0.66		mg/Kg	20	Analyst: MAP 11/13/2006
EPA METHOD 6010B: SOIL METALS						
Arsenic	ND	25		mg/Kg	10	Analyst: NMO 11/9/2006 11:25:10 AM
Arsenic	11	2.5		mg/Kg	1	11/9/2006 1:19:15 PM
Barium	23	1.0		mg/Kg	10	11/9/2006 11:25:10 AM
Cadmium	ND	1.0		mg/Kg	10	11/9/2006 11:25:10 AM
Chromium	230	3.0		mg/Kg	10	11/9/2006 11:25:10 AM
Lead	4.9	2.5		mg/Kg	10	11/9/2006 11:25:10 AM
Selenium	ND	25		mg/Kg	10	11/9/2006 11:25:10 AM
Silver	ND	2.5		mg/Kg	10	11/9/2006 11:25:10 AM
EPA METHOD 8260B: VOLATILES						
Benzene	ND	0.50		mg/Kg	10	Analyst: LMM 11/7/2006
Toluene	ND	0.50		mg/Kg	10	11/7/2006
Ethylbenzene	ND	0.50		mg/Kg	10	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	11/7/2006
1,2,4-Trimethylbenzene	1.3	0.50		mg/Kg	10	11/7/2006
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	11/7/2006
Naphthalene	ND	1.0		mg/Kg	10	11/7/2006
1-Methylnaphthalene	ND	2.0		mg/Kg	10	11/7/2006
2-Methylnaphthalene	ND	2.0		mg/Kg	10	11/7/2006
Acetone	ND	7.5		mg/Kg	10	11/7/2006
Bromobenzene	ND	0.50		mg/Kg	10	11/7/2006
Bromochloromethane	ND	0.50		mg/Kg	10	11/7/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	11/7/2006
Bromoform	ND	0.50		mg/Kg	10	11/7/2006
Bromomethane	ND	1.0		mg/Kg	10	11/7/2006
2-Butanone	ND	5.0		mg/Kg	10	11/7/2006
Carbon disulfide	ND	5.0		mg/Kg	10	11/7/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	11/7/2006
Chlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
Chloroethane	ND	1.0		mg/Kg	10	11/7/2006
Chloroform	ND	0.50		mg/Kg	10	11/7/2006
Chloromethane	ND	0.50		mg/Kg	10	11/7/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	11/7/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	11/7/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level - E Value above quantitation range - J Analyte detected below quantitation limits - ND Not Detected at the Reporting Limit - S Spike recovery outside accepted recovery limits	- B Analyte detected in the associated Method Blank - H Holding times for preparation or analysis exceeded - MCL Maximum Contaminant Level - RL Reporting Limit
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Hall Environmental Analysis Laboratory, Inc.

Date: 15-Nov-06

CLIENT: Giant Refining Co
 Lab Order: 0611010
 Project: Alky? Waste Determination 10/31/06
 Lab ID: 0611010-01

Client Sample ID: Alky?
 Collection Date: 10/31/2006 2:30:00 PM
 Date Received: 11/1/2006
 Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
cis-1,2-DCE	ND	0.50		mg/Kg	10	11/7/2006
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	11/7/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	11/7/2006
Dibromomethane	ND	1.0		mg/Kg	10	11/7/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	11/7/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	11/7/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	11/7/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	11/7/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	11/7/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	11/7/2006
2-Hexanone	ND	5.0		mg/Kg	10	11/7/2006
Isopropylbenzene	ND	0.50		mg/Kg	10	11/7/2006
4-Isopropyltoluene	ND	0.50		mg/Kg	10	11/7/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	11/7/2006
Methylene chloride	ND	1.5		mg/Kg	10	11/7/2006
n-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
n-Propylbenzene	ND	0.50		mg/Kg	10	11/7/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
Styrene	ND	0.50		mg/Kg	10	11/7/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/7/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/7/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	11/7/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	11/7/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	11/7/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	11/7/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	11/7/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	11/7/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	11/7/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	11/7/2006
Vinyl chloride	ND	0.50		mg/Kg	10	11/7/2006
Xylenes, Total	ND	1.0		mg/Kg	10	11/7/2006

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 15-Nov-06

CLIENT:	Giant Refining Co	Client Sample ID:	Alky?
Lab Order:	0611010	Collection Date:	10/31/2006 2:30:00 PM
Project:	Alky? Waste Determination 10/31/06	Date Received:	11/1/2006
Lab ID:	0611010-01	Matrix:	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Surr: 1,2-Dichloroethane-d4	87.1	62-127	%REC		10	11/7/2006
Surr: 4-Bromofluorobenzene	92.2	75.2-127	%REC		10	11/7/2006
Surr: Dibromofluoromethane	92.1	68.1-120	%REC		10	11/7/2006
Surr: Toluene-d8	92.4	74-119	%REC		10	11/7/2006

Qualifiers:

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

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Alky? Waste Determination 10/31/06

Work Order: 0611010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	------	----------	-----------	------	----------	------

Method: SW7471

Sample ID: MB-11739

MBLK

Batch ID: 11739 Analysis Date: 11/13/2006

Mercury ND mg/Kg 0.033

Sample ID: LCS-11739

LCS

Batch ID: 11739 Analysis Date: 11/13/2006

Mercury 0.1680 mg/Kg 0.033 101 80 120

Method: SW6010A

Sample ID: MB-11677

MBLK

Batch ID: 11677 Analysis Date: 11/9/2006 10:31:33 AM

Arsenic ND mg/Kg 2.5

Barium ND mg/Kg 0.10

Cadmium ND mg/Kg 0.10

Chromium ND mg/Kg 0.30

Lead ND mg/Kg 0.25

Selenium ND mg/Kg 2.5

Silver ND mg/Kg 0.25

Sample ID: LCS-11677

LCS

Batch ID: 11677 Analysis Date: 11/9/2006 10:22:40 AM

Arsenic 26.17 mg/Kg 2.5 105 80 120

Barium 24.59 mg/Kg 0.10 98.3 80 120

Cadmium 24.59 mg/Kg 0.10 98.3 80 120

Chromium 24.24 mg/Kg 0.30 96.9 80 120

Lead 24.46 mg/Kg 0.25 97.8 80 120

Selenium 19.76 mg/Kg 2.5 79.0 80 120

Silver 23.78 mg/Kg 0.25 95.1 80 120

S

Qualifiers:

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Alky? Waste Determination 10/31/06

Work Order: 0611010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: MB-11635									
		MBLK							
Batch ID: 11635 Analysis Date: 11/4/2006									
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
Benzene	ND	mg/Kg	0.050						
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.10						
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050						
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050						
Naphthalene	ND	mg/Kg	0.10						
2-Methylnaphthalene	ND	mg/Kg	0.20						
1-Methylnaphthalene	ND	mg/Kg	0.20						
Sample ID: LCS-11635									
		LCS							
Batch ID: 11635 Analysis Date: 11/4/2006									
Benzene	1.074	mg/Kg	0.050	107	78	126			
Toluene	0.8104	mg/Kg	0.050	81.0	79.4	117			
Sample ID: LCSD-11635									
		LCSD							
Batch ID: 11635 Analysis Date: 11/4/2006									
Benzene	1.025	mg/Kg	0.050	103	78	126	8.88	19	
Toluene	0.8683	mg/Kg	0.050	86.8	79.4	117	0.670	0	

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

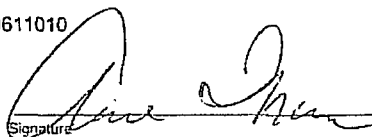
Date and Time Received:

11/1/2006

Work Order Number 0611010

Received by AT

Checklist completed by

 Date 11/1/06

Matrix

Carrier name Client drop-off

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

Container/Temp Blank temperature?

3°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____



COVER LETTER

Friday, October 27, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833

FAX (505) 722-0210

RE: Main Col. Btm. Solids + Desalter Solids

Order No.: 0610223

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 10/19/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

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



Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT:	Giant Refining Co	Client Sample ID:	Desalter Solids
Lab Order:	0610223	Collection Date:	10/13/2006 11:40:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	Date Received:	10/19/2006
Lab ID:	0610223-01	Matrix:	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						
Mercury	77	33		mg/Kg	1000	10/24/2006
EPA METHOD 6010B: SOIL METALS						
Arsenic	41	2.5		mg/Kg	1	10/25/2006 10:26:03 AM
Barium	130	1.0		mg/Kg	10	10/25/2006 11:19:57 AM
Cadmium	1.4	0.10		mg/Kg	1	10/25/2006 10:26:03 AM
Chromium	90	3.0		mg/Kg	10	10/25/2006 11:19:57 AM
Lead	250	2.5		mg/Kg	10	10/25/2006 11:19:57 AM
Selenium	ND	25		mg/Kg	10	10/25/2006 11:19:57 AM
Silver	ND	0.25		mg/Kg	1	10/25/2006 10:26:03 AM
EPA METHOD 8260B: VOLATILES						
Benzene	24	0.50		mg/Kg	10	10/23/2006
Toluene	140	5.0		mg/Kg	100	10/24/2006
Ethylbenzene	35	0.50		mg/Kg	10	10/23/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	10/23/2006
1,2,4-Trimethylbenzene	56	5.0		mg/Kg	100	10/24/2006
1,3,5-Trimethylbenzene	21	0.50		mg/Kg	10	10/23/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/23/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/23/2006
Naphthalene	24	1.0		mg/Kg	10	10/23/2006
1-Methylnaphthalene	33	2.0		mg/Kg	10	10/23/2006
2-Methylnaphthalene	47	2.0		mg/Kg	10	10/23/2006
Acetone	ND	7.5		mg/Kg	10	10/23/2006
Bromobenzene	ND	0.50		mg/Kg	10	10/23/2006
Bromochloromethane	ND	0.50		mg/Kg	10	10/23/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	10/23/2006
Bromoform	ND	0.50		mg/Kg	10	10/23/2006
Bromomethane	ND	1.0		mg/Kg	10	10/23/2006
2-Butanone	ND	5.0		mg/Kg	10	10/23/2006
Carbon disulfide	ND	5.0		mg/Kg	10	10/23/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/23/2006
Chlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
Chloroethane	ND	1.0		mg/Kg	10	10/23/2006
Chloroform	ND	0.50		mg/Kg	10	10/23/2006
Chloromethane	ND	0.50		mg/Kg	10	10/23/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/23/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/23/2006
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/23/2006

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT:	Giant Refining Co	Client Sample ID:	Desalter Solids
Lab Order:	0610223	Collection Date:	10/13/2006 11:40:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	Date Received:	10/19/2006
Lab ID:	0610223-01	Matrix:	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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EPA METHOD 8260B: VOLATILES

Analyst: LMM

cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/23/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	10/23/2006
Dibromomethane	ND	1.0		mg/Kg	10	10/23/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/23/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/23/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/23/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/23/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/23/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/23/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/23/2006
2-Hexanone	ND	5.0		mg/Kg	10	10/23/2006
Isopropylbenzene	9.1	0.50		mg/Kg	10	10/23/2006
4-Isopropyltoluene	6.2	0.50		mg/Kg	10	10/23/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/23/2006
Methylene chloride	ND	1.5		mg/Kg	10	10/23/2006
n-Butylbenzene	8.6	0.50		mg/Kg	10	10/23/2006
n-Propylbenzene	13	0.50		mg/Kg	10	10/23/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	10/23/2006
Styrene	ND	0.50		mg/Kg	10	10/23/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/23/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/23/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/23/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/23/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/23/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/23/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/23/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/23/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/23/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/23/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/23/2006
Vinyl chloride	ND	0.50		mg/Kg	10	10/23/2006
Xylenes, Total	200	10		mg/Kg	100	10/24/2006
Surr: 1,2-Dichloroethane-d4	104	62-127		%REC	10	10/23/2006

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT:	Giant Refining Co	Client Sample ID:	Desalter Solids
Lab Order:	0610223	Collection Date:	10/13/2006 11:40:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	Date Received:	10/19/2006
Lab ID:	0610223-01	Matrix:	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Surr: 4-Bromofluorobenzene	114	75.2-127		%REC	10	10/23/2006
Surr: Dibromofluoromethane	98.9	68.1-120		%REC	10	10/23/2006
Surr: Toluene-d8	84.6	74-119		%REC	10	10/23/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	MCL Maximum Contaminant Level
	ND Not Detected at the Reporting Limit	RL Reporting Limit
	S Spike recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT:	Giant Refining Co	Client Sample ID:	Main Col. Btm. Solids
Lab Order:	0610223	Collection Date:	10/13/2006 12:10:00 PM
Project:	Main Col. Btm. Solids + Desalter Solids	Date Received:	10/19/2006
Lab ID:	0610223-02	Matrix:	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						
Mercury	26	3.3		mg/Kg	100	Analyst: MAP 10/26/2006
EPA METHOD 6010B: SOIL METALS						
Arsenic	40	2.5		mg/Kg	1	Analyst: NMO 10/25/2006 10:30:30 AM
Barium	110	1.0		mg/Kg	10	10/25/2006 1:57:51 PM
Cadmium	2.1	0.10		mg/Kg	1	10/25/2006 10:30:30 AM
Chromium	91	3.0		mg/Kg	10	10/25/2006 1:57:51 PM
Lead	290	2.5		mg/Kg	10	10/25/2006 1:57:51 PM
Selenium	ND	25		mg/Kg	10	10/25/2006 1:57:51 PM
Silver	ND	0.25		mg/Kg	1	10/25/2006 10:30:30 AM
EPA METHOD 8260B: VOLATILES						
Benzene	80	5.0		mg/Kg	100	Analyst: LMM 10/24/2006
Toluene	450	5.0		mg/Kg	100	10/24/2006
Ethylbenzene	92	5.0		mg/Kg	100	10/24/2006
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	100	10/24/2006
1,2,4-Trimethylbenzene	120	5.0		mg/Kg	100	10/24/2006
1,3,5-Trimethylbenzene	48	5.0		mg/Kg	100	10/24/2006
1,2-Dichloroethane (EDC)	ND	5.0		mg/Kg	100	10/24/2006
1,2-Dibromoethane (EDB)	ND	5.0		mg/Kg	100	10/24/2006
Naphthalene	46	10		mg/Kg	100	10/24/2006
1-Methylnaphthalene	58	20		mg/Kg	100	10/24/2006
2-Methylnaphthalene	86	20		mg/Kg	100	10/24/2006
Acetone	ND	75		mg/Kg	100	10/24/2006
Bromobenzene	ND	5.0		mg/Kg	100	10/24/2006
Bromochloromethane	ND	5.0		mg/Kg	100	10/24/2006
Bromodichloromethane	ND	5.0		mg/Kg	100	10/24/2006
Bromoform	ND	5.0		mg/Kg	100	10/24/2006
Bromomethane	ND	10		mg/Kg	100	10/24/2006
2-Butanone	ND	50		mg/Kg	100	10/24/2006
Carbon disulfide	ND	50		mg/Kg	100	10/24/2006
Carbon tetrachloride	ND	10		mg/Kg	100	10/24/2006
Chlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
Chloroethane	ND	10		mg/Kg	100	10/24/2006
Chloroform	ND	5.0		mg/Kg	100	10/24/2006
Chloromethane	ND	5.0		mg/Kg	100	10/24/2006
2-Chlorotoluene	ND	5.0		mg/Kg	100	10/24/2006
4-Chlorotoluene	ND	5.0		mg/Kg	100	10/24/2006
cis-1,2-DCE	ND	5.0		mg/Kg	100	10/24/2006

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT:	Giant Refining Co	Client Sample ID:	Main Col. Btm. Solids
Lab Order:	0610223	Collection Date:	10/13/2006 12:10:00 PM
Project:	Main Col. Btm. Solids + Desalter Solids	Date Received:	10/19/2006
Lab ID:	0610223-02	Matrix:	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
cis-1,3-Dichloropropene	ND	5.0		mg/Kg	100	10/24/2006
1,2-Dibromo-3-chloropropane	ND	10		mg/Kg	100	10/24/2006
Dibromochloromethane	ND	5.0		mg/Kg	100	10/24/2006
Dibromomethane	ND	10		mg/Kg	100	10/24/2006
1,2-Dichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
1,3-Dichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
1,4-Dichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
Dichlorodifluoromethane	ND	5.0		mg/Kg	100	10/24/2006
1,1-Dichloroethane	ND	10		mg/Kg	100	10/24/2006
1,1-Dichloroethene	ND	5.0		mg/Kg	100	10/24/2006
1,2-Dichloropropane	ND	5.0		mg/Kg	100	10/24/2006
1,3-Dichloropropane	ND	5.0		mg/Kg	100	10/24/2006
2,2-Dichloropropane	ND	10		mg/Kg	100	10/24/2006
1,1-Dichloropropene	ND	5.0		mg/Kg	100	10/24/2006
Hexachlorobutadiene	ND	10		mg/Kg	100	10/24/2006
2-Hexanone	ND	50		mg/Kg	100	10/24/2006
Isopropylbenzene	23	5.0		mg/Kg	100	10/24/2006
4-Isopropyltoluene	12	5.0		mg/Kg	100	10/24/2006
4-Methyl-2-pentanone	ND	50		mg/Kg	100	10/24/2006
Methylene chloride	ND	15		mg/Kg	100	10/24/2006
n-Butylbenzene	19	5.0		mg/Kg	100	10/24/2006
n-Propylbenzene	33	5.0		mg/Kg	100	10/24/2006
sec-Butylbenzene	7.6	5.0		mg/Kg	100	10/24/2006
Styrene	ND	5.0		mg/Kg	100	10/24/2006
tert-Butylbenzene	ND	5.0		mg/Kg	100	10/24/2006
1,1,1,2-Tetrachloroethane	ND	5.0		mg/Kg	100	10/24/2006
1,1,2,2-Tetrachloroethane	ND	5.0		mg/Kg	100	10/24/2006
Tetrachloroethene (PCE)	ND	5.0		mg/Kg	100	10/24/2006
trans-1,2-DCE	ND	5.0		mg/Kg	100	10/24/2006
trans-1,3-Dichloropropene	ND	5.0		mg/Kg	100	10/24/2006
1,2,3-Trichlorobenzene	ND	10		mg/Kg	100	10/24/2006
1,2,4-Trichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
1,1,1-Trichloroethane	ND	5.0		mg/Kg	100	10/24/2006
1,1,2-Trichloroethane	ND	5.0		mg/Kg	100	10/24/2006
Trichloroethene (TCE)	ND	5.0		mg/Kg	100	10/24/2006
Trichlorofluoromethane	ND	5.0		mg/Kg	100	10/24/2006
1,2,3-Trichloropropane	ND	10		mg/Kg	100	10/24/2006
Vinyl chloride	ND	5.0		mg/Kg	100	10/24/2006
Xylenes, Total	540	10		mg/Kg	100	10/24/2006
Surr. 1,2-Dichloroethane-d4	95.8	62-127		%REC	100	10/24/2006

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT:	Giant Refining Co	Client Sample ID:	Main Col. Btm. Solids
Lab Order:	0610223	Collection Date:	10/13/2006 12:10:00 PM
Project:	Main Col. Btm. Solids + Desalter Solids	Date Received:	10/19/2006
Lab ID:	0610223-02	Matrix:	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Surr: 4-Bromofluorobenzene	97.2	75.2-127		%REC	100	10/24/2006
Surr: Dibromofluoromethane	92.5	68.1-120		%REC	100	10/24/2006
Surr: Toluene-d8	94.9	74-119		%REC	100	10/24/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	MCL Maximum Contaminant Level
	ND Not Detected at the Reporting Limit	RL Reporting Limit
	S Spike recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT:	Giant Refining Co	Client Sample ID:	FCC Clean up
Lab Order:	0610223	Collection Date:	10/19/2006 11:30:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	Date Received:	10/19/2006
Lab ID:	0610223-03	Matrix:	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						
Mercury	1.7	0.33		mg/Kg	10	Analyst: MAP 10/26/2006
EPA METHOD 6010B: SOIL METALS						
Arsenic	74	25		mg/Kg	10	Analyst: NMO 10/25/2006 11:25:47 AM
Barium	250	1.0		mg/Kg	10	10/25/2006 11:25:47 AM
Cadmium	2.1	0.10		mg/Kg	1	10/25/2006 10:33:03 AM
Chromium	81	3.0		mg/Kg	10	10/25/2006 11:25:47 AM
Lead	130	2.5		mg/Kg	10	10/25/2006 11:25:47 AM
Selenium	ND	25		mg/Kg	10	10/25/2006 11:25:47 AM
Silver	ND	0.25		mg/Kg	1	10/25/2006 10:33:03 AM
EPA METHOD 8260B: VOLATILES						
Benzene	ND	0.50		mg/Kg	10	Analyst: LMM 10/24/2006
Toluene	0.62	0.50		mg/Kg	10	10/24/2006
Ethylbenzene	ND	0.50		mg/Kg	10	10/24/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	10/24/2006
1,2,4-Trimethylbenzene	0.86	0.50		mg/Kg	10	10/24/2006
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/24/2006
Naphthalene	2.3	1.0		mg/Kg	10	10/24/2006
1-Methylnaphthalene	26	2.0		mg/Kg	10	10/24/2006
2-Methylnaphthalene	23	2.0		mg/Kg	10	10/24/2006
Acetone	ND	7.5		mg/Kg	10	10/24/2006
Bromobenzene	ND	0.50		mg/Kg	10	10/24/2006
Bromochloromethane	ND	0.50		mg/Kg	10	10/24/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	10/24/2006
Bromoform	ND	0.50		mg/Kg	10	10/24/2006
Bromomethane	ND	1.0		mg/Kg	10	10/24/2006
2-Butanone	ND	5.0		mg/Kg	10	10/24/2006
Carbon disulfide	ND	5.0		mg/Kg	10	10/24/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/24/2006
Chlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
Chloroethane	ND	1.0		mg/Kg	10	10/24/2006
Chloroform	ND	0.50		mg/Kg	10	10/24/2006
Chloromethane	ND	0.50		mg/Kg	10	10/24/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/24/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/24/2006
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/24/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
E	Value above quantitation range	H Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL Maximum Contaminant Level
ND	Not Detected at the Reporting Limit	RL Reporting Limit
S	Spike recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT:	Giant Refining Co	Client Sample ID:	FCC Clean up
Lab Order:	0610223	Collection Date:	10/19/2006 11:30:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	Date Received:	10/19/2006
Lab ID:	0610223-03	Matrix:	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/24/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	10/24/2006
Dibromomethane	ND	1.0		mg/Kg	10	10/24/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/24/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/24/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/24/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/24/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/24/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	10/24/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/24/2006
2-Hexanone	ND	5.0		mg/Kg	10	10/24/2006
Isopropylbenzene	ND	0.50		mg/Kg	10	10/24/2006
4-Isopropyltoluene	0.95	0.50		mg/Kg	10	10/24/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/24/2006
Methylene chloride	ND	1.5		mg/Kg	10	10/24/2006
n-Butylbenzene	ND	0.50		mg/Kg	10	10/24/2006
n-Propylbenzene	ND	0.50		mg/Kg	10	10/24/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	10/24/2006
Styrene	ND	0.50		mg/Kg	10	10/24/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/24/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/24/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/24/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/24/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/24/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/24/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/24/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/24/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/24/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/24/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/24/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/24/2006
Vinyl chloride	ND	0.50		mg/Kg	10	10/24/2006
Xylenes, Total	ND	1.0		mg/Kg	10	10/24/2006
Surr: 1,2-Dichloroethane-d4	90.5	62-127		%REC	10	10/24/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	MCL Maximum Contaminant Level
	ND Not Detected at the Reporting Limit	RL Reporting Limit
	S Spike recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT:	Giant Refining Co	Client Sample ID:	FCC Clean up
Lab Order:	0610223	Collection Date:	10/19/2006 11:30:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	Date Received:	10/19/2006
Lab ID:	0610223-03	Matrix:	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Surr: 4-Bromofluorobenzene	102	75.2-127		%REC	10	10/24/2006
Surr: Dibromofluoromethane	89.8	68.1-120		%REC	10	10/24/2006
Surr: Toluene-d8	102	74-119		%REC	10	10/24/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	MCL Maximum Contaminant Level
	ND Not Detected at the Reporting Limit	RL Reporting Limit
	S Spike recovery outside accepted recovery limits	

COVER LETTER

Monday, December 18, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: Alky? Waste Determination 10/31/06

Order No.: 0611010

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/1/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

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



Hall Environmental Analysis Laboratory, Inc.

Date: 18-Dec-06

CLIENT: Giant Refining Co **Client Sample ID:** Alky?
Lab Order: 0611010 **Collection Date:** 10/31/2006 2:30:00 PM
Project: Alky? Waste Determination 10/31/06 **Date Received:** 11/1/2006
Lab ID: 0611010-01 **Matrix:** SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: TES
Fluoride	13000	600		mg/Kg	2000	12/12/2006 6:10:54 PM
EPA METHOD 7471: MERCURY						Analyst: MAP
Mercury	5.1	0.66		mg/Kg	20	11/13/2006
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	ND	25		mg/Kg	10	11/9/2006 11:25:10 AM
Arsenic	11	2.5		mg/Kg	1	11/9/2006 1:19:15 PM
Barium	23	1.0		mg/Kg	10	11/9/2006 11:25:10 AM
Cadmium	ND	1.0		mg/Kg	10	11/9/2006 11:25:10 AM
Chromium	230	3.0		mg/Kg	10	11/9/2006 11:25:10 AM
Lead	4.9	2.5		mg/Kg	10	11/9/2006 11:25:10 AM
Selenium	ND	25		mg/Kg	10	11/9/2006 11:25:10 AM
Silver	ND	2.5		mg/Kg	10	11/9/2006 11:25:10 AM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	ND	0.50		mg/Kg	10	11/7/2006
Toluene	ND	0.50		mg/Kg	10	11/7/2006
Ethylbenzene	ND	0.50		mg/Kg	10	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	11/7/2006
1,2,4-Trimethylbenzene	1.3	0.50		mg/Kg	10	11/7/2006
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	11/7/2006
Naphthalene	ND	1.0		mg/Kg	10	11/7/2006
1-Methylnaphthalene	ND	2.0		mg/Kg	10	11/7/2006
2-Methylnaphthalene	ND	2.0		mg/Kg	10	11/7/2006
Acetone	ND	7.5		mg/Kg	10	11/7/2006
Bromobenzene	ND	0.50		mg/Kg	10	11/7/2006
Bromochloromethane	ND	0.50		mg/Kg	10	11/7/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	11/7/2006
Bromoform	ND	0.50		mg/Kg	10	11/7/2006
Bromomethane	ND	1.0		mg/Kg	10	11/7/2006
2-Butanone	ND	5.0		mg/Kg	10	11/7/2006
Carbon disulfide	ND	5.0		mg/Kg	10	11/7/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	11/7/2006
Chlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
Chloroethane	ND	1.0		mg/Kg	10	11/7/2006
Chloroform	ND	0.50		mg/Kg	10	11/7/2006

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 E Value above quantitation range H Holding times for preparation or analysis exceeded
 J Analyte detected below quantitation limits MCL Maximum Contaminant Level
 ND Not Detected at the Reporting Limit RL Reporting Limit
 S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: 18-Dec-06

CLIENT: Giant Refining Co

Client Sample ID: Alky?

Lab Order: 0611010

Collection Date: 10/31/2006 2:30:00 PM

Project: Alky? Waste Determination 10/31/06

Date Received: 11/1/2006

Lab ID: 0611010-01

Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Chloromethane	ND	0.50		mg/Kg	10	11/7/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	11/7/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	11/7/2006
cis-1,2-DCE	ND	0.50		mg/Kg	10	11/7/2006
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	11/7/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	11/7/2006
Dibromomethane	ND	1.0		mg/Kg	10	11/7/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	11/7/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	11/7/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	11/7/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	11/7/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	11/7/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	11/7/2006
2-Hexanone	ND	5.0		mg/Kg	10	11/7/2006
Isopropylbenzene	ND	0.50		mg/Kg	10	11/7/2006
4-Isopropyltoluene	ND	0.50		mg/Kg	10	11/7/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	11/7/2006
Methylene chloride	ND	1.5		mg/Kg	10	11/7/2006
n-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
n-Propylbenzene	ND	0.50		mg/Kg	10	11/7/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
Styrene	ND	0.50		mg/Kg	10	11/7/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/7/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/7/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	11/7/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	11/7/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	11/7/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	11/7/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	11/7/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	11/7/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	11/7/2006

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 18-Dec-06

CLIENT: Giant Refining Co**Client Sample ID:** Alky?**Lab Order:** 0611010**Collection Date:** 10/31/2006 2:30:00 PM**Project:** Alky? Waste Determination 10/31/06**Date Received:** 11/1/2006**Lab ID:** 0611010-01**Matrix:** SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	11/7/2006
Vinyl chloride	ND	0.50		mg/Kg	10	11/7/2006
Xylenes, Total	ND	1.0		mg/Kg	10	11/7/2006
Surr: 1,2-Dichloroethane-d4	87.1	62-127		%REC	10	11/7/2006
Surr: 4-Bromofluorobenzene	92.2	75.2-127		%REC	10	11/7/2006
Surr: Dibromofluoromethane	92.1	68.1-120		%REC	10	11/7/2006
Surr: Toluene-d8	92.4	74-119		%REC	10	11/7/2006

Qualifiers:

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

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Alky? Waste Determination 10/31/06

Work Order: 0611010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: MB-11958		MBLK			Batch ID: 11958	Analysis Date: 12/12/2006 5:36:05 PM			
Fluoride	ND	mg/Kg	0.30						
Sample ID: LCS-11958		LCS			Batch ID: 11958	Analysis Date: 12/12/2006 5:53:30 PM			
Fluoride	1.545	mg/Kg	0.30	103	90	110			
Method: SW7471									
Sample ID: MB-11739		MBLK			Batch ID: 11739	Analysis Date: 11/13/2006			
Mercury	ND	mg/Kg	0.033						
Sample ID: LCS-11739		LCS			Batch ID: 11739	Analysis Date: 11/13/2006			
Mercury	0.1680	mg/Kg	0.033	101	80	120			
Method: SW6010A									
Sample ID: MB-11677		MBLK			Batch ID: 11677	Analysis Date: 11/15/2006 1:58:47 PM			
Barium	ND	mg/Kg	0.10						
Cadmium	ND	mg/Kg	0.10						
Chromium	ND	mg/Kg	0.30						
Lead	ND	mg/Kg	0.25						
Silver	ND	mg/Kg	0.25						
Sample ID: MB-11677		MBLK			Batch ID: 11677	Analysis Date: 11/15/2006 3:43:41 PM			
Selenium	ND	mg/Kg	2.5						
Sample ID: LCS-11677		LCS			Batch ID: 11677	Analysis Date: 11/15/2006 2:00:55 PM			
Barium	24.54	mg/Kg	0.10	98.2	80	120			
Cadmium	25.13	mg/Kg	0.10	101	80	120			
Chromium	25.39	mg/Kg	0.30	102	80	120			
Lead	24.79	mg/Kg	0.25	99.2	80	120			
Silver	25.00	mg/Kg	0.25	100	80	120			

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Alky? Waste Determination 10/31/06

Work Order: 0611010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: MB-11635		<i>MBLK</i>			Batch ID: 11635		Analysis Date:		11/4/2006
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
Benzene	ND	mg/Kg	0.050						
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.10						
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050						
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050						
Naphthalene	ND	mg/Kg	0.10						
2-Methylnaphthalene	ND	mg/Kg	0.20						
1-Methylnaphthalene	ND	mg/Kg	0.20						
Sample ID: LCS-11635		<i>LCS</i>			Batch ID: 11635		Analysis Date:		11/4/2006
Benzene	1.074	mg/Kg	0.050	107	78	126			
Toluene	0.8104	mg/Kg	0.050	81.0	79.4	117			
Sample ID: LCSD-11635		<i>LCSD</i>			Batch ID: 11635		Analysis Date:		11/4/2006
Benzene	1.025	mg/Kg	0.050	103	78	126	8.88	19	
Toluene	0.8683	mg/Kg	0.050	86.8	79.4	117	0.670	0	

Qualifiers:

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

COVER LETTER

Wednesday, November 15, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: Alky? Waste Determination 10/31/06

Order No.: 0611010

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/1/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

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



Hall Environmental Analysis Laboratory, Inc.

Date: 15-Nov-06

CLIENT: Giant Refining Co Client Sample ID: Alky?
 Lab Order: 0611010 Collection Date: 10/31/2006 2:30:00 PM
 Project: Alky? Waste Determination 10/31/06 Date Received: 11/1/2006
 Lab ID: 0611010-01 Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: MAP
Mercury	5.1	0.66		mg/Kg	20	11/13/2006
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	ND	25		mg/Kg	10	11/9/2006 11:25:10 AM
Arsenic	11	2.5		mg/Kg	1	11/9/2006 1:19:15 PM
Barium	23	1.0		mg/Kg	10	11/9/2006 11:25:10 AM
Cadmium	ND	1.0		mg/Kg	10	11/9/2006 11:25:10 AM
Chromium	230	3.0		mg/Kg	10	11/9/2006 11:25:10 AM
Lead	4.9	2.5		mg/Kg	10	11/9/2006 11:25:10 AM
Selenium	ND	25		mg/Kg	10	11/9/2006 11:25:10 AM
Silver	ND	2.5		mg/Kg	10	11/9/2006 11:25:10 AM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	ND	0.50		mg/Kg	10	11/7/2006
Toluene	ND	0.50		mg/Kg	10	11/7/2006
Ethylbenzene	ND	0.50		mg/Kg	10	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	11/7/2006
1,2,4-Trimethylbenzene	1.3	0.50		mg/Kg	10	11/7/2006
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	11/7/2006
Naphthalene	ND	1.0		mg/Kg	10	11/7/2006
1-Methylnaphthalene	ND	2.0		mg/Kg	10	11/7/2006
2-Methylnaphthalene	ND	2.0		mg/Kg	10	11/7/2006
Acetone	ND	7.5		mg/Kg	10	11/7/2006
Bromobenzene	ND	0.50		mg/Kg	10	11/7/2006
Bromochloromethane	ND	0.50		mg/Kg	10	11/7/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	11/7/2006
Bromoform	ND	0.50		mg/Kg	10	11/7/2006
Bromomethane	ND	1.0		mg/Kg	10	11/7/2006
2-Butanone	ND	5.0		mg/Kg	10	11/7/2006
Carbon disulfide	ND	5.0		mg/Kg	10	11/7/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	11/7/2006
Chlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
Chloroethane	ND	1.0		mg/Kg	10	11/7/2006
Chloroform	ND	0.50		mg/Kg	10	11/7/2006
Chloromethane	ND	0.50		mg/Kg	10	11/7/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	11/7/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	11/7/2006

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 E Value above quantitation range H Holding times for preparation or analysis exceeded
 J Analyte detected below quantitation limits MCL Maximum Contaminant Level
 ND Not Detected at the Reporting Limit RL Reporting Limit
 S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: 15-Nov-06

CLIENT: Giant Refining Co

Client Sample ID: Alky?

Lab Order: 0611010

Collection Date: 10/31/2006 2:30:00 PM

Project: Alky? Waste Determination 10/31/06

Date Received: 11/1/2006

Lab ID: 0611010-01

Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
cis-1,2-DCE	ND	0.50		mg/Kg	10	11/7/2006
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	11/7/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	11/7/2006
Dibromomethane	ND	1.0		mg/Kg	10	11/7/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	11/7/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	11/7/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	11/7/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	11/7/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	11/7/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	11/7/2006
2-Hexanone	ND	5.0		mg/Kg	10	11/7/2006
Isopropylbenzene	ND	0.50		mg/Kg	10	11/7/2006
4-Isopropyltoluene	ND	0.50		mg/Kg	10	11/7/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	11/7/2006
Methylene chloride	ND	1.5		mg/Kg	10	11/7/2006
n-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
n-Propylbenzene	ND	0.50		mg/Kg	10	11/7/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
Styrene	ND	0.50		mg/Kg	10	11/7/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/7/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/7/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	11/7/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	11/7/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	11/7/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	11/7/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	11/7/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	11/7/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	11/7/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	11/7/2006
Vinyl chloride	ND	0.50		mg/Kg	10	11/7/2006
Xylenes, Total	ND	1.0		mg/Kg	10	11/7/2006

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 15-Nov-06

CLIENT: Giant Refining Co

Client Sample ID: Alky?

Lab Order: 0611010

Collection Date: 10/31/2006 2:30:00 PM

Project: Alky? Waste Determination 10/31/06

Date Received: 11/1/2006

Lab ID: 0611010-01

Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Surr: 1,2-Dichloroethane-d4	87.1	62-127		%REC	10	11/7/2006
Surr: 4-Bromofluorobenzene	92.2	75.2-127		%REC	10	11/7/2006
Surr: Dibromofluoromethane	92.1	68.1-120		%REC	10	11/7/2006
Surr: Toluene-d8	92.4	74-119		%REC	10	11/7/2006

Qualifiers:

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

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Alky? Waste Determination 10/31/06

Work Order: 0611010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	------	----------	-----------	------	----------	------

Method: SW7471

Sample ID: MB-11739

MBLK

Batch ID: 11739 Analysis Date: 11/13/2006

Mercury ND mg/Kg 0.033

Sample ID: LCS-11739

LCS

Batch ID: 11739 Analysis Date: 11/13/2006

Mercury 0.1680 mg/Kg 0.033 101 80 120

Method: SW6010A

Sample ID: MB-11677

MBLK

Batch ID: 11677 Analysis Date: 11/9/2006 10:31:33 AM

Arsenic ND mg/Kg 2.5

Barium ND mg/Kg 0.10

Cadmium ND mg/Kg 0.10

Chromium ND mg/Kg 0.30

Lead ND mg/Kg 0.25

Selenium ND mg/Kg 2.5

Silver ND mg/Kg 0.25

Sample ID: LCS-11677

LCS

Batch ID: 11677 Analysis Date: 11/9/2006 10:22:40 AM

Arsenic 26.17 mg/Kg 2.5 105 80 120

Barium 24.59 mg/Kg 0.10 98.3 80 120

Cadmium 24.59 mg/Kg 0.10 98.3 80 120

Chromium 24.24 mg/Kg 0.30 96.9 80 120

Lead 24.46 mg/Kg 0.25 97.8 80 120

Selenium 19.76 mg/Kg 2.5 79.0 80 120

Silver 23.78 mg/Kg 0.25 95.1 80 120

S

Qualifiers:

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Alky? Waste Determination 10/31/06

Work Order: 0611010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: MB-11635									
		MBLK			Batch ID: 11635		Analysis Date:		11/4/2006
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
Benzene	ND	mg/Kg	0.050						
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.10						
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050						
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050						
Naphthalene	ND	mg/Kg	0.10						
2-Methylnaphthalene	ND	mg/Kg	0.20						
1-Methylnaphthalene	ND	mg/Kg	0.20						
Sample ID: LCS-11635									
		LCS			Batch ID: 11635		Analysis Date:		11/4/2006
Benzene	1.074	mg/Kg	0.050	107	78	126			
Toluene	0.8104	mg/Kg	0.050	81.0	79.4	117			
Sample ID: LCSD-11635									
		LCSD			Batch ID: 11635		Analysis Date:		11/4/2006
Benzene	1.025	mg/Kg	0.050	103	78	126	8.88	19	
Toluene	0.8683	mg/Kg	0.050	86.8	79.4	117	0.670	0	

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

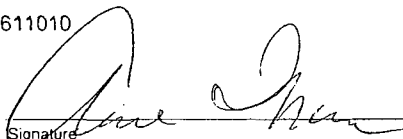
Date and Time Received:

11/1/2006

Work Order Number 0611010

Received by AT

Checklist completed by



Date

11/1/06

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☐

Not Shipped ☒

Custody seals intact on sample bottles?

Yes ☒

No ☐

N/A ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

3°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Remarks:

Remarks: Caution: The sample may contain trace amounts of Hydrochloric Acid

CHAIN-OF-CUSTODY RECORD					QA/QC Package:	
					Std ☐	Level 4 ☐
Client: <u>Giant Refining Company - Cimiza</u>					Project Name: <u>Alky? Waste</u>	
Address: <u>Route 3 Box 7</u>					Termination: <u>10/31/06</u>	
City: <u>Gallop, NM 87301</u>					Project #:	
Phone #: <u>505 722 3833</u>					Project Manager: <u>Steve Morris</u>	
Fax #: <u>505 722 0210</u>					Sampler: <u>Steve Morris</u>	
					Sample Temperature: <u>32</u>	
Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative	
					HgCl ₂	HNO ₃
10/31/06	1430	Sludge/Alky?		2 x 402		
Date: <u>11-1-06</u>	Time: <u>1100</u>	Relinquished By: (Signature) <u>Steve Morris</u>		Received By: (Signature) <u>[Signature]</u>		
Date:	Time:	Relinquished By: (Signature)		Received By: (Signature)		

TRI ✓

Hall Environmental Analysis Laboratory

Date: 26-May-06

CLIENT: Giant Refining Co
Lab Order: 0605211
Project: Crude TK Bottoms 101 & 102
Lab ID: 0605211-01

Client Sample ID: Crude Tk Bottoms
Collection Date: 5/17/2006 1:00:00 PM
Date Received: 5/19/2006
Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	140000	2000		mg/Kg	200	5/25/2006 8:44:18 PM
Motor Oil Range Organics (MRO)	ND	10000		mg/Kg	200	5/25/2006 8:44:18 PM
Surr: DNOP	0	61.7-135	S	%REC	200	5/25/2006 8:44:18 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	2700	500		mg/Kg	100	5/24/2006 2:52:00 PM
Surr: BFB	106	81.7-127		%REC	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: <C5	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C05-C6	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C06-C7	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C07-C8	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C08-C9	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C09-C10	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C10-C11	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C11-C12	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C12-C14	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C14+	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: HLM
Methyl tert-butyl ether (MTBE)	ND ✓	10		mg/Kg	100	5/24/2006 2:52:00 PM
Benzene "TCLP" = 3.3	66 ✓	5.0		mg/Kg	100	5/24/2006 2:52:00 PM
Toluene	270 ✓	5.0		mg/Kg	100	5/24/2006 2:52:00 PM
Ethylbenzene	63 ✓	5.0		mg/Kg	100	5/24/2006 2:52:00 PM
Xylenes, Total	300 ✓	15		mg/Kg	100	5/24/2006 2:52:00 PM
Surr: 4-Bromofluorobenzene	97.2	77.6-114		%REC	100	5/24/2006 2:52:00 PM
m,p-Xylene	220 ✓	10		mg/Kg	100	5/24/2006 2:52:00 PM
o-Xylene	74 ✓	5.0		mg/Kg	100	5/24/2006 2:52:00 PM
1,2,4-Trimethylbenzene	100 ✓	5.0		mg/Kg	100	5/24/2006 2:52:00 PM
1,3,5-Trimethylbenzene	34 ✓	5.0		mg/Kg	100	5/24/2006 2:52:00 PM
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/23/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/25/2006 9:55:35 AM
Barium	ND	100		mg/L	1	5/25/2006 9:55:35 AM
Cadmium	ND	1.0		mg/L	1	5/25/2006 9:55:35 AM
Chromium	ND	5.0		mg/L	1	5/25/2006 9:55:35 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 26-May-06

CLIENT: Giant Refining Co**Client Sample ID:** Crude Tk Bottoms**Lab Order:** 0605211**Collection Date:** 5/17/2006 1:00:00 PM**Project:** Crude TK Bottoms 101 & 102**Date Received:** 5/19/2006**Lab ID:** 0605211-01**Matrix:** SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Lead	ND	5.0		mg/L	1	5/25/2006 9:55:35 AM
Selenium	ND	1.0		mg/L	1	5/25/2006 9:55:35 AM
Silver	ND	5.0		mg/L	1	5/25/2006 9:55:35 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

COVER LETTER

Friday, October 27, 2006

Form R

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

RE: Main Col. Btm. Solids + Desalter Solids

Order No.: 0610223

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 10/19/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

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



Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT: Giant Refining Co
Lab Order: 0610223
Project: Main Col. Btm. Solids + Desalter Solids
Lab ID: 0610223-01

Client Sample ID: Desalter Solids
Collection Date: 10/13/2006 11:40:00 AM
Date Received: 10/19/2006
Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						
Mercury	77 ✓	33		mg/Kg	1000	Analyst: MAP 10/24/2006
EPA METHOD 6010B: SOIL METALS						
Arsenic	41 ✓	2.5		mg/Kg	1	Analyst: NMO 10/25/2006 10:26:03 AM
Barium	130	1.0		mg/Kg	10	10/25/2006 11:19:57 AM
Cadmium	1.4	0.10		mg/Kg	1	10/25/2006 10:26:03 AM
Chromium	90 ✓	3.0		mg/Kg	10	10/25/2006 11:19:57 AM
Lead	250 ✓	2.5		mg/Kg	10	10/25/2006 11:19:57 AM
Selenium	ND	25		mg/Kg	10	10/25/2006 11:19:57 AM
Silver	ND	0.25		mg/Kg	1	10/25/2006 10:26:03 AM
EPA METHOD 8260B: VOLATILES						
Benzene	24 ✓	0.50		mg/Kg	10	Analyst: LMM 10/23/2006
Toluene	140 ✓	5.0		mg/Kg	100	10/24/2006
Ethylbenzene	35 ✓	0.50		mg/Kg	10	10/23/2006
Methyl tert-butyl ether (MTBE)	ND ✓	0.50		mg/Kg	10	10/23/2006
1,2,4-Trimethylbenzene	56 ✓	5.0		mg/Kg	100	10/24/2006
1,3,5-Trimethylbenzene	21	0.50		mg/Kg	10	10/23/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/23/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/23/2006
Naphthalene	24 ✓	1.0		mg/Kg	10	10/23/2006
1-Methylnaphthalene	33	2.0		mg/Kg	10	10/23/2006
2-Methylnaphthalene	47	2.0		mg/Kg	10	10/23/2006
Acetone	ND	7.5		mg/Kg	10	10/23/2006
Bromobenzene	ND	0.50		mg/Kg	10	10/23/2006
Bromochloromethane	ND	0.50		mg/Kg	10	10/23/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	10/23/2006
Bromoform	ND	0.50		mg/Kg	10	10/23/2006
Bromomethane	ND	1.0		mg/Kg	10	10/23/2006
2-Butanone	ND	5.0		mg/Kg	10	10/23/2006
Carbon disulfide	ND	5.0		mg/Kg	10	10/23/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/23/2006
Chlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
Chloroethane	ND	1.0		mg/Kg	10	10/23/2006
Chloroform	ND	0.50		mg/Kg	10	10/23/2006
Chloromethane	ND	0.50		mg/Kg	10	10/23/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/23/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/23/2006
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/23/2006

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT: Giant Refining Co
Lab Order: 0610223
Project: Main Col. Btm. Solids + Desalter Solids
Lab ID: 0610223-01

Client Sample ID: Desalter Solids
Collection Date: 10/13/2006 11:40:00 AM
Date Received: 10/19/2006
Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/23/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	10/23/2006
Dibromomethane	ND	1.0		mg/Kg	10	10/23/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/23/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/23/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/23/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/23/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/23/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/23/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/23/2006
2-Hexanone	ND	5.0		mg/Kg	10	10/23/2006
Isopropylbenzene (Cumene)	9.1	0.50		mg/Kg	10	10/23/2006
4-Isopropyltoluene	6.2	0.50		mg/Kg	10	10/23/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/23/2006
Methylene chloride	ND	1.5		mg/Kg	10	10/23/2006
n-Butylbenzene	8.6	0.50		mg/Kg	10	10/23/2006
n-Propylbenzene	13	0.50		mg/Kg	10	10/23/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	10/23/2006
Styrene	ND	0.50		mg/Kg	10	10/23/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/23/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/23/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/23/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/23/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/23/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/23/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/23/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/23/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/23/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/23/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/23/2006
Vinyl chloride	ND	0.50		mg/Kg	10	10/23/2006
Xylenes, Total	200	10		mg/Kg	100	10/24/2006
Surr: 1,2-Dichloroethane-d4	104	62-127		%REC	10	10/23/2006

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT: Giant Refining Co

Client Sample ID: Desalter Solids

Lab Order: 0610223

Collection Date: 10/13/2006 11:40:00 AM

Project: Main Col. Btm. Solids + Desalter Solids

Date Received: 10/19/2006

Lab ID: 0610223-01

Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Surr: 4-Bromofluorobenzene	114	75.2-127		%REC	10	10/23/2006
Surr: Dibromofluoromethane	98.9	68.1-120		%REC	10	10/23/2006
Surr: Toluene-d8	84.6	74-119		%REC	10	10/23/2006

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT:	Giant Refining Co	Client Sample ID:	Main Col. Btm. Solids
Lab Order:	0610223	Collection Date:	10/13/2006 12:10:00 PM
Project:	Main Col. Btm. Solids + Desalter Solids	Date Received:	10/19/2006
Lab ID:	0610223-02	Matrix:	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						
Mercury	26	3.3		mg/Kg	100	Analyst: MAP 10/26/2006
EPA METHOD 6010B: SOIL METALS						
Arsenic	40	2.5		mg/Kg	1	Analyst: NMO 10/25/2006 10:30:30 AM
Barium	110	1.0		mg/Kg	10	10/25/2006 1:57:51 PM
Cadmium	2.1	0.10		mg/Kg	1	10/25/2006 10:30:30 AM
Chromium	91	3.0		mg/Kg	10	10/25/2006 1:57:51 PM
Lead	290	2.5		mg/Kg	10	10/25/2006 1:57:51 PM
Selenium	ND	25		mg/Kg	10	10/25/2006 1:57:51 PM
Silver	ND	0.25		mg/Kg	1	10/25/2006 10:30:30 AM
EPA METHOD 8260B: VOLATILES						
Benzene	80	5.0		mg/Kg	100	Analyst: LMM 10/24/2006
Toluene	450	5.0		mg/Kg	100	10/24/2006
Ethylbenzene	92	5.0		mg/Kg	100	10/24/2006
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	100	10/24/2006
1,2,4-Trimethylbenzene	120	5.0		mg/Kg	100	10/24/2006
1,3,5-Trimethylbenzene	48	5.0		mg/Kg	100	10/24/2006
1,2-Dichloroethane (EDC)	ND	5.0		mg/Kg	100	10/24/2006
1,2-Dibromoethane (EDB)	ND	5.0		mg/Kg	100	10/24/2006
Naphthalene	46	10		mg/Kg	100	10/24/2006
1-Methylnaphthalene	58	20		mg/Kg	100	10/24/2006
2-Methylnaphthalene	86	20		mg/Kg	100	10/24/2006
Acetone	ND	75		mg/Kg	100	10/24/2006
Bromobenzene	ND	5.0		mg/Kg	100	10/24/2006
Bromochloromethane	ND	5.0		mg/Kg	100	10/24/2006
Bromodichloromethane	ND	5.0		mg/Kg	100	10/24/2006
Bromoform	ND	5.0		mg/Kg	100	10/24/2006
Bromomethane	ND	10		mg/Kg	100	10/24/2006
2-Butanone	ND	50		mg/Kg	100	10/24/2006
Carbon disulfide	ND	50		mg/Kg	100	10/24/2006
Carbon tetrachloride	ND	10		mg/Kg	100	10/24/2006
Chlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
Chloroethane	ND	10		mg/Kg	100	10/24/2006
Chloroform	ND	5.0		mg/Kg	100	10/24/2006
Chloromethane	ND	5.0		mg/Kg	100	10/24/2006
2-Chlorotoluene	ND	5.0		mg/Kg	100	10/24/2006
4-Chlorotoluene	ND	5.0		mg/Kg	100	10/24/2006
cis-1,2-DCE	ND	5.0		mg/Kg	100	10/24/2006

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	MCL Maximum Contaminant Level
	ND Not Detected at the Reporting Limit	RL Reporting Limit
	S Spike recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT: Giant Refining Co **Client Sample ID:** Main Col. Btm. Solids
Lab Order: 0610223 **Collection Date:** 10/13/2006 12:10:00 PM
Project: Main Col. Btm. Solids + Desalter Solids **Date Received:** 10/19/2006
Lab ID: 0610223-02 **Matrix:** SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
cis-1,3-Dichloropropene	ND	5.0		mg/Kg	100	10/24/2006
1,2-Dibromo-3-chloropropane	ND	10		mg/Kg	100	10/24/2006
Dibromochloromethane	ND	5.0		mg/Kg	100	10/24/2006
Dibromomethane	ND	10		mg/Kg	100	10/24/2006
1,2-Dichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
1,3-Dichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
1,4-Dichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
Dichlorodifluoromethane	ND	5.0		mg/Kg	100	10/24/2006
1,1-Dichloroethane	ND	10		mg/Kg	100	10/24/2006
1,1-Dichloroethene	ND	5.0		mg/Kg	100	10/24/2006
1,2-Dichloropropane	ND	5.0		mg/Kg	100	10/24/2006
1,3-Dichloropropane	ND	5.0		mg/Kg	100	10/24/2006
2,2-Dichloropropane	ND	10		mg/Kg	100	10/24/2006
1,1-Dichloropropene	ND	5.0		mg/Kg	100	10/24/2006
Hexachlorobutadiene	ND	10		mg/Kg	100	10/24/2006
2-Hexanone	ND	50		mg/Kg	100	10/24/2006
Isopropylbenzene	23	5.0		mg/Kg	100	10/24/2006
4-Isopropyltoluene	12	5.0		mg/Kg	100	10/24/2006
4-Methyl-2-pentanone	ND	50		mg/Kg	100	10/24/2006
Methylene chloride	ND	15		mg/Kg	100	10/24/2006
n-Butylbenzene	19	5.0		mg/Kg	100	10/24/2006
n-Propylbenzene	33	5.0		mg/Kg	100	10/24/2006
sec-Butylbenzene	7.6	5.0		mg/Kg	100	10/24/2006
Styrene	ND	5.0		mg/Kg	100	10/24/2006
tert-Butylbenzene	ND	5.0		mg/Kg	100	10/24/2006
1,1,1,2-Tetrachloroethane	ND	5.0		mg/Kg	100	10/24/2006
1,1,2,2-Tetrachloroethane	ND	5.0		mg/Kg	100	10/24/2006
Tetrachloroethene (PCE)	ND	5.0		mg/Kg	100	10/24/2006
trans-1,2-DCE	ND	5.0		mg/Kg	100	10/24/2006
trans-1,3-Dichloropropene	ND	5.0		mg/Kg	100	10/24/2006
1,2,3-Trichlorobenzene	ND	10		mg/Kg	100	10/24/2006
1,2,4-Trichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
1,1,1-Trichloroethane	ND	5.0		mg/Kg	100	10/24/2006
1,1,2-Trichloroethane	ND	5.0		mg/Kg	100	10/24/2006
Trichloroethene (TCE)	ND	5.0		mg/Kg	100	10/24/2006
Trichlorofluoromethane	ND	5.0		mg/Kg	100	10/24/2006
1,2,3-Trichloropropane	ND	10		mg/Kg	100	10/24/2006
Vinyl chloride	ND	5.0		mg/Kg	100	10/24/2006
Xylenes, Total	540	10		mg/Kg	100	10/24/2006
Surr: 1,2-Dichloroethane-d4	95.8	62-127		%REC	100	10/24/2006

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT: Giant Refining Co**Client Sample ID:** Main Col. Btm. Solids**Lab Order:** 0610223**Collection Date:** 10/13/2006 12:10:00 PM**Project:** Main Col. Btm. Solids + Desalter Solids**Date Received:** 10/19/2006**Lab ID:** 0610223-02**Matrix:** SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Surr: 4-Bromofluorobenzene	97.2	75.2-127	%REC		100	10/24/2006
Surr: Dibromofluoromethane	92.5	68.1-120	%REC		100	10/24/2006
Surr: Toluene-d8	94.9	74-119	%REC		100	10/24/2006

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT: Giant Refining Co **Client Sample ID:** FCC Clean up
Lab Order: 0610223 **Collection Date:** 10/19/2006 11:30:00 AM
Project: Main Col. Btm. Solids + Desalter Solids **Date Received:** 10/19/2006
Lab ID: 0610223-03 **Matrix:** SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: MAP
Mercury	1.7	0.33		mg/Kg	10	10/26/2006
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	74	25		mg/Kg	10	10/25/2006 11:25:47 AM
Barium	250	1.0		mg/Kg	10	10/25/2006 11:25:47 AM
Cadmium	2.1	0.10		mg/Kg	1	10/25/2006 10:33:03 AM
Chromium	81	3.0		mg/Kg	10	10/25/2006 11:25:47 AM
Lead	130	2.5		mg/Kg	10	10/25/2006 11:25:47 AM
Selenium	ND	25		mg/Kg	10	10/25/2006 11:25:47 AM
Silver	ND	0.25		mg/Kg	1	10/25/2006 10:33:03 AM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	ND	0.50		mg/Kg	10	10/24/2006
Toluene	0.62	0.50		mg/Kg	10	10/24/2006
Ethylbenzene	ND	0.50		mg/Kg	10	10/24/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	10/24/2006
1,2,4-Trimethylbenzene	0.86	0.50		mg/Kg	10	10/24/2006
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/24/2006
Naphthalene	2.3	1.0		mg/Kg	10	10/24/2006
1-Methylnaphthalene	26	2.0		mg/Kg	10	10/24/2006
2-Methylnaphthalene	23	2.0		mg/Kg	10	10/24/2006
Acetone	ND	7.5		mg/Kg	10	10/24/2006
Bromobenzene	ND	0.50		mg/Kg	10	10/24/2006
Bromochloromethane	ND	0.50		mg/Kg	10	10/24/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	10/24/2006
Bromoform	ND	0.50		mg/Kg	10	10/24/2006
Bromomethane	ND	1.0		mg/Kg	10	10/24/2006
2-Butanone	ND	5.0		mg/Kg	10	10/24/2006
Carbon disulfide	ND	5.0		mg/Kg	10	10/24/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/24/2006
Chlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
Chloroethane	ND	1.0		mg/Kg	10	10/24/2006
Chloroform	ND	0.50		mg/Kg	10	10/24/2006
Chloromethane	ND	0.50		mg/Kg	10	10/24/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/24/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/24/2006
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/24/2006

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
 E Value above quantitation range H Holding times for preparation or analysis exceeded
 J Analyte detected below quantitation limits MCL Maximum Contaminant Level
 ND Not Detected at the Reporting Limit RL Reporting Limit
 S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT: Giant Refining Co

Client Sample ID: FCC Clean up

Lab Order: 0610223

Collection Date: 10/19/2006 11:30:00 AM

Project: Main Col. Btm. Solids + Desalter Solids

Date Received: 10/19/2006

Lab ID: 0610223-03

Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/24/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	10/24/2006
Dibromomethane	ND	1.0		mg/Kg	10	10/24/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/24/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/24/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/24/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/24/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/24/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	10/24/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/24/2006
2-Hexanone	ND	5.0		mg/Kg	10	10/24/2006
Isopropylbenzene	ND	0.50		mg/Kg	10	10/24/2006
4-Isopropyltoluene	0.95	0.50		mg/Kg	10	10/24/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/24/2006
Methylene chloride	ND	1.5		mg/Kg	10	10/24/2006
n-Butylbenzene	ND	0.50		mg/Kg	10	10/24/2006
n-Propylbenzene	ND	0.50		mg/Kg	10	10/24/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	10/24/2006
Styrene	ND	0.50		mg/Kg	10	10/24/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/24/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/24/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/24/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/24/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/24/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/24/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/24/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/24/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/24/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/24/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/24/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/24/2006
Vinyl chloride	ND	0.50		mg/Kg	10	10/24/2006
Xylenes, Total	ND	1.0		mg/Kg	10	10/24/2006
Surr: 1,2-Dichloroethane-d4	90.5	62-127		%REC	10	10/24/2006

Qualifiers: * Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT: Giant Refining Co

Client Sample ID: FCC Clean up

Lab Order: 0610223

Collection Date: 10/19/2006 11:30:00 AM

Project: Main Col. Btm. Solids + Desalter Solids

Date Received: 10/19/2006

Lab ID: 0610223-03

Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Surr: 4-Bromofluorobenzene	102	75.2-127		%REC	10	10/24/2006
Surr: Dibromofluoromethane	89.8	68.1-120		%REC	10	10/24/2006
Surr: Toluene-d8	102	74-119		%REC	10	10/24/2006

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

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Main Col. Btm. Solids + Desalter Solids

Work Order: 0610223

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Method: SW7471

Sample ID: MB-11561 MBLK Batch ID: 11561 Analysis Date: 10/24/2006

Mercury ND mg/Kg 0.033

Sample ID: MB-11584 MBLK Batch ID: 11584 Analysis Date: 10/26/2006

Mercury ND mg/Kg 0.033

Sample ID: LCS-11561 LCS Batch ID: 11561 Analysis Date: 10/24/2006

Mercury 0.1780 mg/Kg 0.033 107 80 120

Sample ID: LCS-11584 LCS Batch ID: 11584 Analysis Date: 10/26/2006

Mercury 0.1727 mg/Kg 0.033 104 80 120

Method: SW6010A

Sample ID: MB-11559 MBLK Batch ID: 11559 Analysis Date: 10/25/2006 9:40:55 AM

Arsenic ND mg/Kg 2.5

Barium ND mg/Kg 0.10

Cadmium ND mg/Kg 0.10

Chromium ND mg/Kg 0.30

Lead ND mg/Kg 0.25

Selenium ND mg/Kg 2.5

Silver ND mg/Kg 0.25

Sample ID: LCS-11559 LCS Batch ID: 11559 Analysis Date: 10/25/2006 9:44:01 AM

Arsenic 23.83 mg/Kg 2.5 95.3 80 120

Barium 22.76 mg/Kg 0.10 91.1 80 120

Cadmium 23.07 mg/Kg 0.10 92.1 80 120

Chromium 23.26 mg/Kg 0.30 93.1 80 120

Lead 22.52 mg/Kg 0.25 89.4 80 120

Selenium 21.13 mg/Kg 2.5 84.5 80 120

Silver 23.17 mg/Kg 0.25 92.7 80 120

Qualifiers:

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Main Col. Btm. Solids + Desalter Solids

Work Order: 0610223

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Method: SW8260B

Sample ID: MB-11543

MBLK

Batch ID: 11543 Analysis Date: 10/23/2006

Benzene	ND	mg/Kg	0.050
Toluene	ND	mg/Kg	0.050
Ethylbenzene	ND	mg/Kg	0.050
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050
Naphthalene	ND	mg/Kg	0.10
1-Methylnaphthalene	ND	mg/Kg	0.20
2-Methylnaphthalene	ND	mg/Kg	0.20
Acetone	ND	mg/Kg	0.75
Bromobenzene	ND	mg/Kg	0.050
Bromochloromethane	ND	mg/Kg	0.050
Bromodichloromethane	ND	mg/Kg	0.050
Bromoform	ND	mg/Kg	0.050
Bromomethane	ND	mg/Kg	0.10
2-Butanone	ND	mg/Kg	0.50
Carbon disulfide	ND	mg/Kg	0.50
Carbon tetrachloride	ND	mg/Kg	0.10
Chlorobenzene	ND	mg/Kg	0.050
Chloroethane	ND	mg/Kg	0.10
Chloroform	ND	mg/Kg	0.050
Chloromethane	ND	mg/Kg	0.050
2-Chlorotoluene	ND	mg/Kg	0.050
4-Chlorotoluene	ND	mg/Kg	0.050
cis-1,2-DCE	ND	mg/Kg	0.050
cis-1,3-Dichloropropene	ND	mg/Kg	0.050
1,2-Dibromo-3-chloropropane	ND	mg/Kg	0.10
Dibromochloromethane	ND	mg/Kg	0.050
Dibromomethane	ND	mg/Kg	0.10
1,2-Dichlorobenzene	ND	mg/Kg	0.050
1,3-Dichlorobenzene	ND	mg/Kg	0.050
1,4-Dichlorobenzene	ND	mg/Kg	0.050
Dichlorodifluoromethane	ND	mg/Kg	0.050
1,1-Dichloroethane	ND	mg/Kg	0.10
1,1-Dichloroethene	ND	mg/Kg	0.050
1,2-Dichloropropane	ND	mg/Kg	0.050
1,3-Dichloropropane	ND	mg/Kg	0.050
2,2-Dichloropropane	ND	mg/Kg	0.10
1,1-Dichloropropene	ND	mg/Kg	0.050
Hexachlorobutadiene	ND	mg/Kg	0.10
2-Hexanone	ND	mg/Kg	0.50
Isopropylbenzene	ND	mg/Kg	0.050

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Main Col. Btm. Solids + Desalter Solids

Work Order: 0610223

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Method: SW8260B

Sample ID: MB-11543

MBLK

Batch ID: 11543 Analysis Date: 10/23/2006

4-Isopropyltoluene	ND	mg/Kg	0.050
4-Methyl-2-pentanone	ND	mg/Kg	0.50
Methylene chloride	ND	mg/Kg	0.15
n-Butylbenzene	ND	mg/Kg	0.050
n-Propylbenzene	ND	mg/Kg	0.050
sec-Butylbenzene	ND	mg/Kg	0.050
Styrene	ND	mg/Kg	0.050
tert-Butylbenzene	ND	mg/Kg	0.050
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.050
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.050
Tetrachloroethene (PCE)	ND	mg/Kg	0.050
trans-1,2-DCE	ND	mg/Kg	0.050
trans-1,3-Dichloropropene	ND	mg/Kg	0.050
1,2,3-Trichlorobenzene	ND	mg/Kg	0.10
1,2,4-Trichlorobenzene	ND	mg/Kg	0.050
1,1,1-Trichloroethane	ND	mg/Kg	0.050
1,1,2-Trichloroethane	ND	mg/Kg	0.050
Trichloroethene (TCE)	ND	mg/Kg	0.050
Trichlorofluoromethane	ND	mg/Kg	0.050
1,2,3-Trichloropropane	ND	mg/Kg	0.10
Vinyl chloride	ND	mg/Kg	0.050
Xylenes, Total	ND	mg/Kg	0.10

Sample ID: LCS-11543

LCS

Batch ID: 11543 Analysis Date: 10/23/2006

Benzene	0.9974	mg/Kg	0.050	99.7	80.8	132
Toluene	0.9484	mg/Kg	0.050	94.8	72.1	126
Chlorobenzene	1.024	mg/Kg	0.050	102	75.4	140
1,1-Dichloroethene	1.119	mg/Kg	0.050	112	59	147
Trichloroethene (TCE)	0.9363	mg/Kg	0.050	93.6	63.5	123

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

10/19/2006

Work Order Number 0610223

Received by AT

Checklist completed by

Signature

Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☐

Not Shipped ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☐

Yes ☒

No ☐

Water - pH acceptable upon receipt?

Yes ☒

No ☐

N/A ☐

Container/Temp Blank temperature?

3°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Remarks:

CHAIN-OF-CUSTODY RECORD									
Client: <u>Exiant Refining Company - Cimiza</u> Address: <u>Route 3 Box 7</u> <u>Gallop, NM 87301</u>					QA/QC Package: Std ☐ Level 4 ☐				
Project Name: <u>gmain col - Btm - Solids + Desalter Solids</u>					Other:				
Project #:					Project Manager: <u>Steve Morris</u>				
Phone #: <u>505 722 3833</u>					Sampler: <u>Cheryl Johnson</u>				
Fax #: <u>505 722 9210</u>					Sample Temperature: <u>83°F</u>				
Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative		HEAL No.		
10/13/06	1140	Non Desalter aqueous solution	gmain col	Z	HgCl ₂	HNO ₃	0610223		
10/13/06	1210	"	gmain col	Z			-1		
			Btm Solids				-2		
10/19/06	1130		FCC Clean up	Z			-3		
Date:	Time:	Relinquished By: (Signature)		Received By: (Signature)		Date:			
10/19/06	1540	<u>Steve Morris</u>		<u>Cheryl Johnson</u>		10/19/06			
Date:	Time:	Relinquished By: (Signature)		Received By: (Signature)		Date:			
						1540			

COVER LETTER

Wednesday, July 05, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: Zinc Oxide Cat. Waste Determination

Order No.: 0606269

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 6/23/2006 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

AZ license # AZ0682
ORELAP Lab # NM100001



TRI ✓

Hall Environmental Analysis Laboratory, Inc.

Date: 05-Jul-06

CLIENT: Giant Refining Co
 Lab Order: 0606269
 Project: Zinc Oxide Cat. Waste Determination
 Lab ID: 0606269-01

Client Sample ID: Zinc Oxide Cat
 Collection Date: 6/22/2006 9:30:00 AM
 Date Received: 6/23/2006
 Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED						
Mercury	ND	0.020		mg/L	1	Analyst: CMC 6/29/2006
EPA METHOD 6010B: TCLP METALS						
Arsenic	ND	5.0		mg/L	1	Analyst: NMO 7/5/2006 10:46:11 AM
Barium	ND	100		mg/L	1	7/5/2006 10:46:11 AM
Cadmium	ND	1.0		mg/L	1	7/5/2006 10:46:11 AM
Chromium	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
Lead	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
Selenium	ND	1.0		mg/L	1	7/5/2006 11:59:42 AM
Silver	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
VOLATILES BY 8260B/1311						
Benzene	1.3 x 20	0.50		mg/L	1	Analyst: KTM 7/3/2006 3:54:35 PM
2-Butanone	ND	10		mg/L	1	7/3/2006 3:54:35 PM
Carbon Tetrachloride	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
Chlorobenzene	ND	100		mg/L	1	7/3/2006 3:54:35 PM
Chloroform	ND	6.0		mg/L	1	7/3/2006 3:54:35 PM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	7/3/2006 3:54:35 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
1,1-Dichloroethene	ND	0.70		mg/L	1	7/3/2006 3:54:35 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	7/3/2006 3:54:35 PM
Trichloroethene (TCE)	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
Vinyl chloride	ND	0.20		mg/L	1	7/3/2006 3:54:35 PM
Surr: 1,2-Dichloroethane-d4	105	69.9-130		%REC	1	7/3/2006 3:54:35 PM
Surr: 4-Bromofluorobenzene	104	71.2-123		%REC	1	7/3/2006 3:54:35 PM
Surr: Dibromofluoromethane	101	73.9-134		%REC	1	7/3/2006 3:54:35 PM
Surr: Toluene-d8	101	81.9-122		%REC	1	7/3/2006 3:54:35 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

QA/QC SUMMARY REPORT



Project:

Giant Refining Co
Zinc Oxide Cat. Waste Determination

Work Order: 0606269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW7470									
Sample ID: MB-10721		MBLK				Batch ID: 10721	Analysis Date:		6/29/2006
Mercury	ND	mg/L	0.020						
Sample ID: LCS-10721		LCS				Batch ID: 10721	Analysis Date:		6/29/2006
Mercury	0.004770	mg/L	0.0020	95.4	80	120			
Method: SW1311/6010									
Sample ID: MB-10728		MBLK				Batch ID: 10728	Analysis Date:		7/5/2006 10:30:12 AM
Arsenic	ND	mg/L	5.0						
Barium	ND	mg/L	100						
Cadmium	ND	mg/L	1.0						
Chromium	ND	mg/L	5.0						
Lead	ND	mg/L	5.0						
Silver	ND	mg/L	5.0						
Sample ID: MB-10728		MBLK				Batch ID: 10728	Analysis Date:		7/5/2006 11:49:27 AM
Selenium	ND	mg/L	1.0						
Sample ID: LCS-10728		LCS				Batch ID: 10728	Analysis Date:		7/5/2006 10:34:30 AM
Arsenic	0.5912	mg/L	0.20	118	80	120			
Barium	0.5011	mg/L	0.20	99.9	80	120			
Cadmium	0.5239	mg/L	0.20	105	80	120			
Chromium	0.5022	mg/L	0.20	100	80	120			
Lead	0.5182	mg/L	0.20	104	80	120			
Silver	0.5395	mg/L	0.20	107	80	120			
Sample ID: LCS-10728		LCS				Batch ID: 10728	Analysis Date:		7/5/2006 11:52:01 AM
Selenium	0.5370	mg/L	0.20	107	80	120			

Qualifiers:

E Value above quantitation range
 J Analyte detected below quantitation limits
 R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 S Spill recovery outside accepted recovery limits

2/4

QA/QC SUMMARY REPORT



Giant Refining Co
Zinc Oxide Cat. Waste Determination

Work Order: 0606269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	------	----------	-----------	------	----------	------

Method: SW8260B

Sample ID: MB-10678

MBLK

Batch ID: 10678 Analysis Date: 7/3/2006 5:04:23 PM

benzene	ND	mg/L	0.50
Butanone	ND	mg/L	10
Carbon Tetrachloride	ND	mg/L	0.50
Chlorobenzene	ND	mg/L	100
Chloroform	ND	mg/L	6.0
4-Dichlorobenzene	ND	mg/L	7.5
2-Dichloroethane (EDC)	ND	mg/L	0.50
1,1-Dichloroethene	ND	mg/L	0.70
Hexachlorobutadiene	ND	mg/L	0.50
Trichloroethene (PCE)	ND	mg/L	0.70
Trichloroethene (TCE)	ND	mg/L	0.50
Vinyl chloride	ND	mg/L	0.20

Sample ID: LCS-10678

LCS

Batch ID: 10678 Analysis Date: 7/3/2006 4:29:26 PM

benzene	30.06	mg/L	0.50	150	51.1	171
Chlorobenzene	ND	mg/L	100	147	36.1	191
1,1-Dichloroethene	25.57	mg/L	0.70	128	49.1	162
Trichloroethene (TCE)	29.98	mg/L	0.50	150	41.2	166



Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spi 3/4 very outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTRERFIN

Date and Time Received:

6/23/2006

Work Order Number 0606269

Received by AT

Checklist completed by

Signature

Date

6/23/06

Matrix

Carrier name FedEx

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

Container/Temp Blank temperature?

3°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87106
Tel. 505.345.3975 Fax 505.345.3976
www.hallenvironmental.com

QA/QC Package:

Std ☐ Level 4 ☐

Other:

Project Name: Zinc Oxide Cat.

Waste Determination

Project #:

Project Manager:

S. K. S. S. S.

Sampler: Steve Gaboriz

Sample Temperature:

Phone #: 595 7223033

Fax #: 505-722-0210

Date _____

Time

Matrix

Sample I.D. No.

Number/Volume:

HEAL No

[illegible]

2

109-1

Date: _____

Time:

Relinquished By: (Signature)

Received By: *[Signature]* (22-162)

Date:

Time:

Relinquished By: (Signature)

Received By: (Signature)

Remarks:

ANALYSIS REQUEST

BTEX + MTBE + TMB's (8021)

BTEX + MTBE + TPH (Gasoline On

IPH Method 8015B (Gas/Liessell)

PH (INVERTED 418.1)

11700 2340011 0575

8081 Pesticides / PCB's (8082)

82608 (VOA)

82270 (Sem!-VOA)

TCLP 02/01/2010

ICLP Moha

Air Bubbles or Headspace (Y or N)

COVER LETTER

Wednesday, December 13, 2006

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

RE: Desalter & Main Column Sludge

Order No.: 0612129

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 12/8/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

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



Hall Environmental Analysis Laboratory, Inc.

Date: 13-Dec-06

CLIENT: Giant Refining Co
Project: Desalter & Main Column Sludge**Lab Order:** 0612129**Lab ID:** 0612129-01
Client Sample ID: Desalter Sludge**Collection Date:** 12/7/2006 1:00:00 PM**Matrix:** SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	------	-------	----	---------------

EPA METHOD 9056A: ANIONS

Analyst: TES

Fluoride	2.0	1.5		mg/Kg	5	12/12/2006 3:51:40 PM
----------	-----	-----	--	-------	---	-----------------------

Lab ID: 0612129-02
Client Sample ID: Main Col Sludge**Collection Date:** 12/7/2006 1:15:00 PM**Matrix:** SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
----------	--------	-----	------	-------	----	---------------

EPA METHOD 9056A: ANIONS

Analyst: TES

Fluoride	ND	1.5		mg/Kg	5	12/12/2006 4:09:04 PM
----------	----	-----	--	-------	---	-----------------------

Qualifiers:

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

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Desalter & Main Column Sludge

Work Order: 0612129

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: 0612129-02AMSD		MSD							
Fluoride	2.190	mg/Kg	1.5	67.0	80	120	12.2	20	S
Sample ID: MB-11958		MBLK							
Fluoride	ND	mg/Kg	0.30						
Sample ID: LCS-11958		LCS							
Fluoride	1.545	mg/Kg	0.30	103	90	110			
Sample ID: 0612129-02AMS		MS							
Fluoride	2.475	mg/Kg	1.5	86.0	80	120			

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

12/8/2006

Work Order Number 0612129

Received by AT

Checklist completed by

Signature

Date

12/18/06

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☐

Not Shipped ☒

Custody seals intact on sample bottles?

Yes ☐

No ☒

N/A ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

4°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

COVER LETTER

Monday, October 09, 2006

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

RE: FCC Refractory From Regenerator

Order No.: 0609376

Dear Steve Morris:

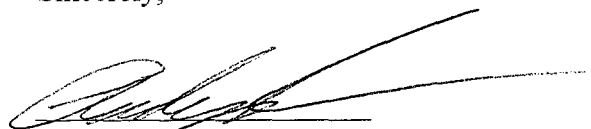
Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 9/29/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

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



Hall Environmental Analysis Laboratory, Inc.

Date: 09-Oct-06

CLIENT: Giant Refining Co**Client Sample ID:** FCC Refractory**Lab Order:** 0609376**Collection Date:** 9/28/2006 9:30:00 AM**Project:** FCC Refractory From Regenerator**Date Received:** 9/29/2006**Lab ID:** 0609376-01**Matrix:** SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED						
Mercury	ND	0.020		mg/L	1	Analyst: MAP 10/6/2006
EPA METHOD 6010B: TCLP METALS						
Arsenic	ND	5.0		mg/L	1	Analyst: CMC 10/5/2006 4:56:33 PM
Barium	ND	100		mg/L	1	10/5/2006 4:56:33 PM
Cadmium	ND	1.0		mg/L	1	10/5/2006 4:56:33 PM
Chromium	ND	5.0		mg/L	1	10/5/2006 4:56:33 PM
Lead	ND	5.0		mg/L	1	10/5/2006 4:56:33 PM
Selenium	ND	1.0		mg/L	1	10/5/2006 4:56:33 PM
Silver	ND	5.0		mg/L	1	10/5/2006 4:56:33 PM

Qualifiers:

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

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: FCC Refractory From Regenerator

Work Order: 0609376

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	------	----------	-----------	------	----------	------

Method: SW7470

Sample ID: MB-11439

MBLK

Batch ID: 11439 Analysis Date: 10/6/2006

Mercury ND mg/L 0.020

Sample ID: LCS-11439

LCS

Batch ID: 11439 Analysis Date: 10/6/2006

Mercury 0.005445 mg/L 0.0020 109 80 120

Method: SW1311/6010

Sample ID: 0609376-01A MSD

MSD

Batch ID: 11427 Analysis Date: 10/5/2006 5:06:25 PM

Barium 0.7008 mg/L 0.20 96.7 75 125 5.45 20

Cadmium 0.5177 mg/L 0.20 104 75 125 7.94 20

Lead 0.5643 mg/L 0.20 113 75 125 7.16 20

Selenium 0.4709 mg/L 0.20 94.2 75 125 7.44 20

Sample ID: MB-11427

MBLK

Batch ID: 11427 Analysis Date: 10/5/2006 4:42:11 PM

Arsenic ND mg/L 5.0

Barium ND mg/L 100

Cadmium ND mg/L 1.0

Chromium ND mg/L 5.0

Lead ND mg/L 5.0

Selenium ND mg/L 1.0

Silver ND mg/L 5.0

Sample ID: LCS-11427

LCS

Batch ID: 11427 Analysis Date: 10/5/2006 4:46:19 PM

Arsenic 0.5536 mg/L 0.20 111 80 120

Barium 0.4925 mg/L 0.20 98.1 80 120

Cadmium 0.5212 mg/L 0.20 104 80 120

Chromium 0.5024 mg/L 0.20 100 80 120

Lead 0.5057 mg/L 0.20 101 80 120

Selenium 0.4586 mg/L 0.20 91.7 80 120

Silver 0.5353 mg/L 0.20 104 80 120

Sample ID: 0609376-01A MS

MS

Batch ID: 11427 Analysis Date: 10/5/2006 5:00:28 PM

Barium 0.6637 mg/L 0.20 89.2 75 125

Cadmium 0.4782 mg/L 0.20 95.6 75 125

Lead 0.5252 mg/L 0.20 105 75 125

Selenium 0.4371 mg/L 0.20 87.4 75 125

Qualifiers:

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

9/29/2006

Work Order Number 0609376

Received by AT

Checklist completed by

Signature

Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☐

Not Shipped ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

2°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 802.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F ⁻ , Cl ⁻ , NO ₃ ⁻ , PO ₄ ³⁻ , SO ₄ ²⁻)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	TC 17-PC 84M	Air Bubbles or Headspace (Y or N)
-------------------------------	--------------------	--------------------	--------------------	-------------------	---------------	---	--------------------------------	-------------	-----------------	--------------	-----------------------------------

Remarks:

[illegible]

Hall Environmental Analysis Laboratory, Inc.

Date: 05-Jul-06

CLIENT: Giant Refining Co
 Lab Order: 0606269
 Project: Zinc Oxide Cat. Waste Determination
 Lab ID: 0606269-01

Client Sample ID: Zinc Oxide Cat
 Collection Date: 6/22/2006 9:30:00 AM
 Date Received: 6/23/2006
 Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED						
Mercury	ND	0.020		mg/L	1	Analyst: CMC 6/29/2006
EPA METHOD 6010B: TCLP METALS						
Arsenic	ND	5.0		mg/L	1	Analyst: NMO 7/5/2006 10:46:11 AM
Barium	ND	100		mg/L	1	7/5/2006 10:46:11 AM
Cadmium	ND	1.0		mg/L	1	7/5/2006 10:46:11 AM
Chromium	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
Lead	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
Selenium	ND	1.0		mg/L	1	7/5/2006 11:59:42 AM
Silver	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
VOLATILES BY 8260B/1311						
Benzene	1.3	0.50		mg/L	1	Analyst: KTM 7/3/2006 3:54:35 PM
2-Butanone	ND	10		mg/L	1	7/3/2006 3:54:35 PM
Carbon Tetrachloride	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
Chlorobenzene	ND	100		mg/L	1	7/3/2006 3:54:35 PM
Chloroform	ND	6.0		mg/L	1	7/3/2006 3:54:35 PM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	7/3/2006 3:54:35 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
1,1-Dichloroethene	ND	0.70		mg/L	1	7/3/2006 3:54:35 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	7/3/2006 3:54:35 PM
Trichloroethene (TCE)	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
Vinyl chloride	ND	0.20		mg/L	1	7/3/2006 3:54:35 PM
Surr: 1,2-Dichloroethane-d4	105	69.9-130		%REC	1	7/3/2006 3:54:35 PM
Surr: 4-Bromofluorobenzene	104	71.2-123		%REC	1	7/3/2006 3:54:35 PM
Surr: Dibromofluoromethane	101	73.9-134		%REC	1	7/3/2006 3:54:35 PM
Surr: Toluene-d8	101	81.9-122		%REC	1	7/3/2006 3:54:35 PM

$$1.3/20 = 0.065 < 0.5 \text{ mg/L}$$

non-hazardous

Qualifiers: * Value exceeds Maximum Contaminant Level
 E Value above quantitation range
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Zinc Oxide Cat. Waste Determination

Work Order: 0606269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	------	----------	-----------	------	----------	------

Method: SW7470

Sample ID: MB-10721

MBLK

Batch ID: 10721

Analysis Date:

6/29/2006

Mercury

ND

mg/L

0.020

Sample ID: LCS-10721

LCS

Batch ID: 10721

Analysis Date:

6/29/2006

Mercury

0.004770

mg/L

0.0020

95.4

80

120

Method: SW1311/6010

Sample ID: MB-10728

MBLK

Batch ID: 10728

Analysis Date:

7/5/2006 10:30:12 AM

Arsenic

ND

mg/L

5.0

Barium

ND

mg/L

100

Cadmium

ND

mg/L

1.0

Chromium

ND

mg/L

5.0

Lead

ND

mg/L

5.0

Silver

ND

mg/L

5.0

Sample ID: MB-10728

MBLK

Batch ID: 10728

Analysis Date:

7/5/2006 11:49:27 AM

Selenium

ND

mg/L

1.0

Sample ID: LCS-10728

LCS

Batch ID: 10728

Analysis Date:

7/5/2006 10:34:30 AM

Arsenic

0.5912

mg/L

0.20

118

80

120

Barium

0.5011

mg/L

0.20

99.9

80

120

Cadmium

0.5239

mg/L

0.20

105

80

120

Chromium

0.5022

mg/L

0.20

100

80

120

Lead

0.5182

mg/L

0.20

104

80

120

Silver

0.5395

mg/L

0.20

107

80

120

Sample ID: LCS-10728

LCS

Batch ID: 10728

Analysis Date:

7/5/2006 11:52:01 AM

Selenium

0.5370

mg/L

0.20

107

80

120

Qualifiers:

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Sp^{2/4} recovery outside accepted recovery limits

COVER LETTER

Thursday, November 30, 2006

Cheryl Johnson
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833

FAX (505) 722-0210

RE: T-344 Spill

Order No.: 0611210

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/16/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

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



Hall Environmental Analysis Laboratory, Inc.

Date: 30-Nov-06

CLIENT: Giant Refining Co
Lab Order: 0611210
Project: T-344 Spill
Lab ID: 0611210-01

Client Sample ID: T 344
Collection Date: 11/16/2006 10:10:00 AM
Date Received: 11/16/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.50		mg/Kg	10	11/28/2006 10:46:03 AM
Toluene	2.4	0.50		mg/Kg	10	11/28/2006 10:46:03 AM
Ethylbenzene	1.5	0.50		mg/Kg	10	11/28/2006 10:46:03 AM
Xylenes, Total	15	1.5		mg/Kg	10	11/28/2006 10:46:03 AM
Surr: 4-Bromofluorobenzene	98.9	68.2-109		%REC	10	11/28/2006 10:46:03 AM

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

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: T-344 Spill

Work Order: 0611210

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	------	----------	-----------	------	----------	------

Method: SW8021

Sample ID: MB-11794

MBLK

Batch ID: 11794 Analysis Date: 11/27/2006 5:56:02 PM

Benzene	ND	mg/Kg	0.050
Toluene	ND	mg/Kg	0.050
Ethylbenzene	ND	mg/Kg	0.050
Xylenes, Total	ND	mg/Kg	0.15

Sample ID: LCS-11794

LCS

Batch ID: 11794 Analysis Date: 11/27/2006 6:26:31 PM

Benzene	0.2577	mg/Kg	0.050	80.5	62.7	114
Toluene	1.719	mg/Kg	0.050	86.0	68.2	121
Ethylbenzene	0.3347	mg/Kg	0.050	85.8	71.4	115
Xylenes, Total	1.961	mg/Kg	0.15	93.4	65	135

Sample ID: LCSD-11794

LCSD

Batch ID: 11794 Analysis Date: 11/27/2006 6:57:05 PM

Benzene	0.2690	mg/Kg	0.050	84.1	62.7	114	4.29	27
Toluene	1.808	mg/Kg	0.050	90.4	68.2	121	5.02	19
Ethylbenzene	0.3538	mg/Kg	0.050	90.7	71.4	115	5.55	10
Xylenes, Total	2.048	mg/Kg	0.15	97.5	65	135	4.37	13

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANT REFINERY BLOOM

Date and Time Received:

11/16/2006

Work Order Number 0611210

Received by AMF

Checklist completed by

Signature

Date

Matrix

Carrier name

Client drop-off

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☐

Not Shipped ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☐

Yes ☒

No ☐

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

5°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action

COVER LETTER

Friday, October 27, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: Post Alky Fire Soil Samples 10-25-06

Order No.: 0610285

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 10/25/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

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



Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT: Giant Refining Co**Client Sample ID:** Alky SE**Lab Order:** 0610285**Collection Date:** 10/25/2006 12:35:00 PM**Project:** Post Alky Fire Soil Samples 10-25-06**Date Received:** 10/25/2006**Lab ID:** 0610285-01**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: TES
Fluoride	33	1.5		mg/Kg	5	10/26/2006 12:55:35 PM
Chloride	1900	6.0		mg/Kg	20	10/26/2006 2:22:36 PM
EPA METHOD 150.1: PH						Analyst: CMC
pH	7.64	0.010		pH Units	1	10/26/2006

Qualifiers: * Value exceeds Maximum Contaminant Level

E Value above quantitation range

J Analyte detected below quantitation limits

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Hall Environmental Analysis Laboratory, Inc.

Date: 27-Oct-06

CLIENT: Giant Refining Co

Client Sample ID: Alky NE

Lab Order: 0610285

Collection Date: 10/25/2006 12:50:00 PM

Project: Post Alky Fire Soil Samples 10-25-06

Date Received: 10/25/2006

Lab ID: 0610285-02

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: TES
Fluoride	86	3.0		mg/Kg	10	10/27/2006 12:08:20 PM
Chloride	350	1.5		mg/Kg	5	10/26/2006 1:12:59 PM
EPA METHOD 150.1: PH						Analyst: CMC
pH	8.53	0.010		pH Units	1	10/26/2006

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

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Post Alky Fire Soil Samples 10-25-06

Work Order: 0610285

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: MB-11576		<i>MBLK</i>			Batch ID: 11576	Analysis Date: 10/27/2006 9:49:05 AM			
Fluoride	ND	mg/Kg	0.30						
Chloride	ND	mg/Kg	0.30						
Sample ID: LCS-11576		<i>LCS</i>			Batch ID: 11576	Analysis Date: 10/26/2006 11:57:08 PM			
Fluoride	1.506	mg/Kg	0.30	100	90	110			
Chloride	14.94	mg/Kg	0.30	99.6	90	110			
Method: SW9045B									
Sample ID: 0610285-01ADUP		<i>DUP</i>			Batch ID: R21176	Analysis Date: 10/26/2006			
pH	7.600	pH Units	0.010						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	3 / 4 recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

10/25/2006

Work Order Number 0610285

Received by AT

Checklist completed by

D. Schlype
Signature

10-25-06
Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☐

Not Shipped ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

5°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

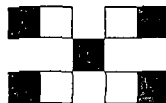
Regarding

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.hallenvironmental.com



ANALYSIS REQUEST

CHAIN-OF-CUSTODY RECORD					QA / QC Package:		
					Std ☐	Level 4 ☐	
					Other:		
Client: Giant Refining					Project Name: Post Alky Fire		
Company: Cimiga					Soil Sample 10-25-2006		
Address: Route 3 Box 7					Project #:		
Gallup, NM 87301					Project Manager:		
					Steve Morris		
Phone #: 505 722 3833					Sampler: Steve Morris		
Fax #: 505 722 0210					Sample Temperature: 5		
Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative		HEAL No.
10/25/06	1235	Soil	Alky SE		HgCl ₂	HNO ₃	0610295
"	1250	"	Alky NE				1
							2
Date: 10/25/06	Time: 1600	Relinquished By: (Signature) Steve Morris		Received By: (Signature)	10/25/06		
Date:	Time:	Relinquished By: (Signature)		Received By: (Signature)	11/06/06		

COVER LETTER

Friday, November 10, 2006

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

RE: Post Alky Fire Soil Samples 10-25-06

Order No.: 0610285

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 10/25/2006 for the analyses presented in the following report.

This report is an addendum to the report dated October 27, 2006. Na and K have been added to this report. Please don't hesitate to contact us for any additional information or clarifications.

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager



Hall Environmental Analysis Laboratory, Inc.

Date: 10-Nov-06

CLIENT: Giant Refining Co**Client Sample ID:** Alky SE**Lab Order:** 0610285**Collection Date:** 10/25/2006 12:35:00 PM**Project:** Post Alky Fire Soil Samples 10-25-06**Date Received:** 10/25/2006**Lab ID:** 0610285-01**Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: TES
Fluoride	33	1.5		mg/Kg	5	10/26/2006 12:55:35 PM
Chloride	1900	6.0		mg/Kg	20	10/26/2006 2:22:36 PM
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Potassium	1200	100		mg/Kg	2	11/9/2006 11:14:45 AM
Sodium	1100	50		mg/Kg	2	11/9/2006 11:14:45 AM
EPA METHOD 150.1: PH						Analyst: CMS
pH	7.64	0.010		pH Units	1	10/26/2006

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 10-Nov-06

CLIENT: Giant Refining Co

Client Sample ID: Alky NE

Lab Order: 0610285

Collection Date: 10/25/2006 12:50:00 PM

Project: Post Alky Fire Soil Samples 10-25-06

Date Received: 10/25/2006

Lab ID: 0610285-02

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: TES
Fluoride	86	3.0		mg/Kg	10	10/27/2006 12:08:20 PM
Chloride	350	1.5		mg/Kg	5	10/26/2006 1:12:59 PM
EPA METHOD 150.1: PH						Analyst: CMS
pH	8.53	0.010		pH Units	1	10/26/2006

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

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Post Alky Fire Soil Samples 10-25-06

Work Order: 0610285

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
---------	--------	-------	-----	------	----------	-----------	------	----------	------

Method: SW9056A

Sample ID: MB-11576

MBLK

Batch ID: 11576 Analysis Date: 10/27/2006 9:49:05 AM

Fluoride ND mg/Kg 0.30

Chloride ND mg/Kg 0.30

Sample ID: LCS-11576

LCS

Batch ID: 11576 Analysis Date: 10/26/2006 11:57:08 PM

Fluoride 1.506 mg/Kg 0.30 100 90 110

Chloride 14.94 mg/Kg 0.30 99.6 90 110

Method: SW6010A

Sample ID: MB-11677

MBLK

Batch ID: 11677 Analysis Date: 11/9/2006 10:31:33 AM

Potassium ND mg/Kg 50

Sodium ND mg/Kg 25

Sample ID: LCS-11677

LCS

Batch ID: 11677 Analysis Date: 11/9/2006 10:22:40 AM

Potassium 2644 mg/Kg 50 106 80 120

Sodium 2641 mg/Kg 25 106 80 120

Qualifiers:

E Value above quantitation range

J Analyte detected below quantitation limits

R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

S Spike recovery outside accepted recovery limits

**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

Address:	Route 3 Box 7	Project #:
	Gallup, NM 87301	
		Project Manager:

Date	Time	Matrix	Sample I.D. No.	Number/Volume	HgCl ₂	HNO ₃	HEAL No.
5/06	1235	Soil	Alky SE				0610235
"	1259	"	Alky NE				1
							2

Date: 05/06	Time: 1600	Relinquished By: (Signature) <i>Steve Glavin</i>	Received By: (Signature) <i>[Signature]</i>	10/25/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	11/06/0

QA/QC Package: ☐ Level 4 ☐

Other:

Project Name: Post Alley Fire
Soil Sample 10-25-2008

Project #:

Project Manager:

Sampler:

Sample Temperature:

Number/Volume

Preservative

$$\text{HgCl}_2 \quad | \quad \text{HNO}_3$$

HEAL No.

0610285

1	2
---	---

Received By: (Signature)  10/10/10

Received By: (Signature)

Relinquished By: (Signature) / -

Belinquished By: (Signature)

Date:	Time:
-------	-------

Date:	Time:
-------	-------

0-20

ANALYSIS REQUEST

[illegible]

Remarks:	
----------	--

Rust

44 Na + K moved ~~to~~ to Alky SE
acid on S. 11/6/06

COVER LETTER

Tuesday, November 21, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: Post Alky Fire Soil Samples Phase 2. 11-7-2

Order No.: 0611098

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 8 sample(s) on 11/8/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,



Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

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



Hall Environmental Analysis Laboratory, Inc.

Date: 21-Nov-06

CLIENT:	Giant Refining Co	Client Sample ID:	PAF-1A
Lab Order:	0611098	Collection Date:	11/7/2006 10:30:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	Date Received:	11/8/2006
Lab ID:	0611098-01	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						
Chloride	42	1.5		mg/Kg	5	Analyst: TES 11/14/2006 9:41:40 AM
EPA METHOD 6010B: SOIL METALS						
Sodium	300	25		mg/Kg	1	Analyst: NMO 11/17/2006 12:21:24 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 21-Nov-06

CLIENT:	Giant Refining Co	Client Sample ID:	PAF-1B
Lab Order:	0611098	Collection Date:	11/7/2006 10:35:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	Date Received:	11/8/2006
Lab ID:	0611098-02	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						
Chloride	31	1.5		mg/Kg	5	Analyst: TES 11/14/2006 9:59:05 AM
EPA METHOD 6010B: SOIL METALS						
Sodium	210	50		mg/Kg	2	Analyst: NMO 11/17/2006 12:55:00 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 21-Nov-06

CLIENT:	Giant Refining Co	Client Sample ID:	PAF-2A
Lab Order:	0611098	Collection Date:	11/7/2006 10:45:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	Date Received:	11/8/2006
Lab ID:	0611098-03	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						
Chloride	75	1.5		mg/Kg	5	Analyst: TES 11/14/2006 10:16:29 AM
EPA METHOD 6010B: SOIL METALS						
Sodium	420	25		mg/Kg	1	Analyst: NMO 11/17/2006 12:28:10 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 21-Nov-06

CLIENT:	Giant Refining Co	Client Sample ID:	PAF-2B
Lab Order:	0611098	Collection Date:	11/7/2006 10:50:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	Date Received:	11/8/2006
Lab ID:	0611098-04	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						
Chloride	40	1.5		mg/Kg	5	Analyst: TES 11/14/2006 10:33:54 AM
EPA METHOD 6010B: SOIL METALS						
Sodium	380	25		mg/Kg	1	Analyst: NMO 11/17/2006 12:30:25 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 21-Nov-06

CLIENT: Giant Refining Co **Client Sample ID:** PAF-3A
Lab Order: 0611098 **Collection Date:** 11/7/2006 11:00:00 AM
Project: Post Alky Fire Soil Samples Phase 2. 11-7-2006 **Date Received:** 11/8/2006
Lab ID: 0611098-05 **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: TES
Chloride	35	1.5		mg/Kg	5	11/14/2006 10:51:19 AM
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Sodium	310	25		mg/Kg	1	11/17/2006 12:32:39 PM

Qualifiers: * Value exceeds Maximum Contaminant Level B Analyte detected in the associated Method Blank
E Value above quantitation range H Holding times for preparation or analysis exceeded
J Analyte detected below quantitation limits MCL Maximum Contaminant Level
ND Not Detected at the Reporting Limit RL Reporting Limit
S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: 21-Nov-06

CLIENT:	Giant Refining Co	Client Sample ID:	PAF-3B
Lab Order:	0611098	Collection Date:	11/7/2006 11:05:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	Date Received:	11/8/2006
Lab ID:	0611098-06	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						
Chloride	43	1.5		mg/Kg	5	Analyst: TES 11/14/2006 11:08:44 AM
EPA METHOD 6010B: SOIL METALS						
Sodium	420	25		mg/Kg	1	Analyst: NMO 11/17/2006 12:34:07 PM

Qualifiers:

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 21-Nov-06

CLIENT: Giant Refining Co

Client Sample ID: PAF-4A

Lab Order: 0611098

Collection Date: 11/7/2006 11:15:00 AM

Project: Post Alky Fire Soil Samples Phase 2. 11-7-2006

Date Received: 11/8/2006

Lab ID: 0611098-07

Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: TES
Chloride	260	1.5		mg/Kg	5	11/17/2006 9:41:59 PM
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Sodium	450	25		mg/Kg	1	11/17/2006 12:41:41 PM

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

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

Hall Environmental Analysis Laboratory, Inc.

Date: 21-Nov-06

CLIENT:	Giant Refining Co	Client Sample ID:	PAF-4B
Lab Order:	0611098	Collection Date:	11/7/2006 11:20:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	Date Received:	11/8/2006
Lab ID:	0611098-08	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						
Chloride	240	1.5		mg/Kg	5	Analyst: TES 11/17/2006 9:59:23 PM
EPA METHOD 6010B: SOIL METALS						
Sodium	450	25		mg/Kg	1	Analyst: NMO 11/17/2006 12:43:55 PM

Qualifiers:	* Value exceeds Maximum Contaminant Level	B Analyte detected in the associated Method Blank
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	MCL Maximum Contaminant Level
	ND Not Detected at the Reporting Limit	RL Reporting Limit
	S Spike recovery outside accepted recovery limits	

QA/QC SUMMARY REPORT

Client: Giant Refining Co
 Project: Post Alky Fire Soil Samples Phase 2. 11-7-2006

Work Order: 0611098

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: MB-11734		MBLK				Batch ID: 11734	Analysis Date: 11/14/2006 4:10:55 AM		
Chloride	ND	mg/Kg	0.30						
Sample ID: MB-11756		MBLK				Batch ID: 11756	Analysis Date: 11/15/2006 11:30:14 PM		
Chloride	ND	mg/Kg	0.30						
Sample ID: LCS-11734		LCS				Batch ID: 11734	Analysis Date: 11/14/2006 4:28:20 AM		
Chloride	15.05	mg/Kg	0.30	100	90	110			
Sample ID: LCS-11756		LCS				Batch ID: 11756	Analysis Date: 11/15/2006 11:47:39 PM		
Chloride	14.85	mg/Kg	0.30	99.0	90	110			
Method: SW6010A									
Sample ID: 0611098-08B MSD		MSD				Batch ID: 11749	Analysis Date: 11/17/2006 12:48:33 PM		
Sodium	2796	mg/Kg	25	94.1	75	125	6.95	30	
Sample ID: MB-11749		MBLK				Batch ID: 11749	Analysis Date: 11/17/2006 12:12:53 PM		
Sodium	ND	mg/Kg	25						
Sample ID: LCS-11749		LCS				Batch ID: 11749	Analysis Date: 11/17/2006 12:15:33 PM		
Sodium	2838	mg/Kg	25	114	80	120			
Sample ID: 0611098-08B MS		MS				Batch ID: 11749	Analysis Date: 11/17/2006 12:46:08 PM		
Sodium	2608	mg/Kg	25	87.1	75	125			

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

11/8/2006

Work Order Number 0611098

Received by AT

Checklist completed by

[Signature]
Signature

11-8-06
Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☐

No ☐

Not Present ☐

Not Shipped ☒

Custody seals intact on sample bottles?

Yes ☐

No ☐

N/A ☒

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Water - VOA vials have zero headspace?

No VOA vials submitted ☒

Yes ☐

No ☐

Water - pH acceptable upon receipt?

Yes ☐

No ☐

N/A ☒

Container/Temp Blank temperature?

4°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

Corrective Action



COVER LETTER

Thursday, February 09, 2006

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

RE: AL-2 To EP-1 Week of 1-27-2006

Order No.: 0601271

Dear Johnny Sanchez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/27/2006 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

AZ license # AZ0682
ORELAP Lab # NM100001



Hall Environmental Analysis Laboratory

Date: 09-Feb-06

CLIENT: Giant Refining Co
Lab Order: 0601271
Project: AL-2 To EP-1 Week of 1-27-2006
Lab ID: 0601271-01

Client Sample ID: AL-2 to EP-1
Collection Date: 1/26/2006 8:30:00 AM
Date Received: 1/27/2006
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	6.0	3.0		mg/L	1	2/6/2006 7:51:13 PM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	2/6/2006 7:51:13 PM
Surr: DNOP	139	58-140		%REC	1	2/6/2006 7:51:13 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	2.0	0.50		mg/L	10	1/31/2006 6:08:47 PM
Surr: BFB	106	79.7-118		%REC	10	1/31/2006 6:08:47 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	430	25		µg/L	10	1/31/2006 6:08:47 PM
Benzene	180	10		µg/L	10	1/31/2006 6:08:47 PM
Toluene	230	10		µg/L	10	1/31/2006 6:08:47 PM
Ethylbenzene	20	10		µg/L	10	1/31/2006 6:08:47 PM
Xylenes, Total	150	30		µg/L	10	1/31/2006 6:08:47 PM
Surr: 4-Bromofluorobenzene	105	82.2-119		%REC	10	1/31/2006 6:08:47 PM
EPA METHOD 7470: MERCURY						Analyst: CMC
Mercury	0.0048	0.00020		mg/L	1	2/2/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	1/30/2006 10:12:56 AM
Barium	0.11	0.020		mg/L	1	1/30/2006 10:12:56 AM
Cadmium	ND	0.0020		mg/L	1	1/30/2006 10:12:56 AM
Chromium	0.0072	0.0060		mg/L	1	1/30/2006 10:12:56 AM
Lead	ND	0.0050		mg/L	1	1/30/2006 10:12:56 AM
Selenium	ND	0.050		mg/L	1	1/30/2006 10:12:56 AM
Silver	ND	0.0050		mg/L	1	1/30/2006 10:12:56 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

Explanation of codes	
B	Analyte Detected in Method Blank
E	Result is Estimated
H	Analyzed Out of Hold Time
N	Tentatively Identified Compound
S	Subcontracted
1-9	See Footnote

STANDARD

Assagai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0601271
Order: 0601599 HAL03 Receipt: 01-27-06

William P. Biava: President of Assagai Analytical Laboratories, Inc.

Sample: AL-2 TO EP-1 Collected: 01-26-06 8:30:00 By:
Matrix: AQUEOUS

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0601599-0001A			EPA 405.1 Biochemical Oxygen Demand					By: MKM		
BOD06013	WC.2006.260.14	10-26-4	Biochemical Oxygen Demand	594	mg/L	1	2		01-27-06	02-01-06

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Hall Environmental Analysis Laboratory

Date: 09-Feb-06

CLIENT: Giant Refining Co

Work Order: 0601271

Project: AL-2 To EP-1 Week of 1-27-2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: MB-9682	SampType: MBLK	TestCode: 8015DRO_W	Units: mg/L	Prep Date: 1/31/2006	RunNo: 18151						
Client ID: ZZZZZ	Batch ID: 9682	TestNo: SW8015		Analysis Date: 2/6/2006	SeqNo: 447798						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: LCS-9682	SampType: LCS	TestCode: 8015DRO_W	Units: mg/L	Prep Date: 1/31/2006	RunNo: 18151						
Client ID: ZZZZZ	Batch ID: 9682	TestNo: SW8015		Analysis Date: 2/6/2006	SeqNo: 447799						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.643	1.0	5	0	113	81.2	149				

Sample ID: LCSD-9682	SampType: LCSD	TestCode: 8015DRO_W	Units: mg/L	Prep Date: 1/31/2006	RunNo: 18151						
Client ID: ZZZZZ	Batch ID: 9682	TestNo: SW8015		Analysis Date: 2/6/2006	SeqNo: 447800						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.624	1.0	5	0	112	81.2	149	5.643	0.337		23

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

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
 Work Order: 0601271
 Project: AL-2 To EP-1 Week of 1-27-2006

TestCode: 8015GRO_W

Sample ID: 5ML RB	SampType: MBLK	TestCode: 8015GRO_W	Units: mg/L	Prep Date:	RunNo: 18110						
Client ID: ZZZZZ	Batch ID: R18110	TestNo: SW8015		Analysis Date: 1/31/2006	SeqNo: 446513						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2.5UG GRO LCS	SampType: LCS	TestCode: 8015GRO_W	Units: mg/L	Prep Date:	RunNo: 18110						
Client ID: ZZZZZ	Batch ID: R18110	TestNo: SW8015		Analysis Date: 1/31/2006	SeqNo: 446514						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2.5UG GRO LCSD	SampType: LCSD	TestCode: 8015GRO_W	Units: mg/L	Prep Date:	RunNo: 18110						
Client ID: ZZZZZ	Batch ID: R18110	TestNo: SW8015		Analysis Date: 2/1/2006	SeqNo: 446515						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

48

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

CLIENT: Giant Refining Co
Work Order: 0601271
Project: AL-2 To EP-1 Week of 1-27-2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_W

Sample ID: 5ML RB	SampType: MBLK	TestCode: 8021BTEX_W	Units: µg/L	Prep Date:	RunNo: 18110						
Client ID: ZZZZZ	Batch ID: R18110	TestNo: SW8021		Analysis Date: 1/31/2006	SeqNo: 446495						
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	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Xylenes, Total	ND	3.0									

Sample ID: 100NG BTEX LCS	SampType: LCS	TestCode: 8021BTEX_W	Units: µg/L	Prep Date:	RunNo: 18110						
Client ID: ZZZZZ	Batch ID: R18110	TestNo: SW8021		Analysis Date: 1/31/2006	SeqNo: 446496						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methyl tert-butyl ether (MTBE)	19.75	2.5	20	0	98.8	64.5	133				
Benzene	19.36	1.0	20	0	96.8	88.5	114				
Toluene	19.02	1.0	20	0	95.1	87.2	114				
Ethylbenzene	19.36	1.0	20	0	96.8	88.6	113				
Xylenes, Total	39.77	3.0	40	0	99.4	83.3	114				

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co

Work Order: 0601271

Project: AL-2 To EP-1 Week of 1-27-2006

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTW

Sample ID: MB-9703	SampType: MBLK	TestCode: HG_CTW	Units: mg/L	Prep Date: 2/2/2006	RunNo: 18136						
Client ID: ZZZZZ	Batch ID: 9703	TestNo: SW7470	(SW7470)	Analysis Date: 2/2/2006	SeqNo: 447052						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: LCS-9703	SampType: LCS	TestCode: HG_CTW	Units: mg/L	Prep Date: 2/2/2006	RunNo: 18136						
Client ID: ZZZZZ	Batch ID: 9703	TestNo: SW7470	(SW7470)	Analysis Date: 2/2/2006	SeqNo: 447053						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004489	0.00020	0.005	0	89.8	80	120				

Sample ID: LCSD-9703	SampType: LCSD	TestCode: Hg_CTW	Units: mg/L	Prep Date: 2/2/2006	RunNo: 18136						
Client ID: ZZZZZ	Batch ID: 9703	TestNo: SW7470	(SW7470)	Analysis Date: 2/2/2006	SeqNo: 447071						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004458	0.00020	0.005	0	89.2	80	120	0.004489	0.697	0	

6/8

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

CLIENT: Giant Refining Co

Work Order: 0601271

Project: AL-2 To EP-1 Week of 1-27-2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: MB-9665	SampType: MBLK	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/27/2006	RunNo: 18082						
Client ID: ZZZZZ	Batch ID: 9665	TestNo: SW6010A		Analysis Date: 1/30/2006	SeqNo: 445679						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: LCS-9665	SampType: LCS	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/27/2006	RunNo: 18082						
Client ID: ZZZZZ	Batch ID: 9665	TestNo: SW6010A		Analysis Date: 1/30/2006	SeqNo: 445680						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	0.5067	0.020	0.5	0.01183	99.0	80	120				
Barium	0.4787	0.020	0.5	0	95.7	80	120				
Cadmium	0.4827	0.0020	0.5	0	96.5	80	120				
Chromium	0.4856	0.0060	0.5	0	97.1	80	120				
Lead	0.4888	0.0050	0.5	0	97.8	80	120				
Selenium	0.4637	0.050	0.5	0	92.7	80	120				

Sample ID: LCSD-9665	SampType: LCSD	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/27/2006	RunNo: 18082						
Client ID: ZZZZZ	Batch ID: 9665	TestNo: SW6010A		Analysis Date: 1/30/2006	SeqNo: 445681						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	0.5096	0.020	0.5	0.01183	99.5	80	120	0.5067	0.558	20	
Barium	0.4787	0.020	0.5	0	95.7	80	120	0.4787	0.00151	20	
Cadmium	0.4865	0.0020	0.5	0	97.3	80	120	0.4827	0.786	20	
Chromium	0.4868	0.0060	0.5	0	97.4	80	120	0.4856	0.231	20	
Lead	0.4925	0.0050	0.5	0	98.5	80	120	0.4888	0.758	20	
Selenium	0.4670	0.050	0.5	0	93.4	80	120	0.4637	0.693	20	

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

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

1/27/2006

Work Order Number 0601271

Received by LMM

Checklist completed by Lisa Haddock 1/27/06
Signature Date

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?	3°	4° C ± 2 Acceptable If given sufficient time to cool.	

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____



COVER LETTER

Wednesday, February 01, 2006

Johnny Sanchez
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833

FAX (505) 722-0210

RE: AL-2 to EP-1 Week of 1/20/2006

Order No.: 0601205

Dear Johnny Sanchez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/20/2006 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

AZ license # AZ0682
ORELAP Lab # NM100001





Hall Environmental Analysis Laboratory

Date: 01-Feb-06

CLIENT: Giant Refining Co
Lab Order: 0601205
Project: AL-2 to EP-1 Week of 1/20/2006
Lab ID: 0601205-01

Client Sample ID: AL-2 to EP-1
Collection Date: 1/18/2006 2:30:00 PM
Date Received: 1/20/2006
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	180	3.0		mg/L	1	1/24/2006 7:47:17 PM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	1/24/2006 7:47:17 PM
Surr: DNOP	125	58-140		%REC	1	1/24/2006 7:47:17 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	0.46	0.25		mg/L	5	1/30/2006 2:01:56 PM
Surr: BFB	122	79.7-118	S	%REC	5	1/30/2006 2:01:56 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	42	12		µg/L	5	1/30/2006 2:01:56 PM
Benzene	16	5.0		µg/L	5	1/30/2006 2:01:56 PM
Toluene	29	5.0		µg/L	5	1/30/2006 2:01:56 PM
Ethylbenzene	ND	5.0		µg/L	5	1/30/2006 2:01:56 PM
Xylenes, Total	29	15		µg/L	5	1/30/2006 2:01:56 PM
Surr: 4-Bromofluorobenzene	104	82.2-119		%REC	5	1/30/2006 2:01:56 PM
EPA METHOD 7470: MERCURY						Analyst: CMC
Mercury	0.0041	0.00020		mg/L	1	1/24/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	1/25/2006 9:43:22 AM
Barium	0.14	0.020		mg/L	1	1/25/2006 9:43:22 AM
Cadmium	ND	0.0020		mg/L	1	1/25/2006 9:43:22 AM
Chromium	0.0069	0.0060		mg/L	1	1/25/2006 9:43:22 AM
Lead	ND	0.0050		mg/L	1	1/25/2006 9:43:22 AM
Selenium	ND	0.050		mg/L	1	1/25/2006 9:43:22 AM
Silver	ND	0.0050		mg/L	1	1/25/2006 9:43:22 AM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: 01-Feb-06

CLIENT: Giant Refining Co

Work Order: 0601205

Project: AL-2 to EP-1 Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: MB-9636	SampType: MBLK	TestCode: 8015DRO_W	Units: mg/L	Prep Date: 1/24/2006	RunNo: 17998
Client ID: ZZZZZ	Batch ID: 9636	TestNo: SW8015		Analysis Date: 1/24/2006	SeqNo: 444110
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Diesel Range Organics (DRO) ND 1.0
Motor Oil Range Organics (MRO) ND 5.0

Sample ID: LCS-9636	SampType: LCS	TestCode: 8015DRO_W	Units: mg/L	Prep Date: 1/24/2006	RunNo: 17998
Client ID: ZZZZZ	Batch ID: 9636	TestNo: SW8015		Analysis Date: 1/24/2006	SeqNo: 444111
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Diesel Range Organics (DRO) 5.020 1.0 5 0 81.2 149

Sample ID: LCSD-9636	SampType: LCSD	TestCode: 8015DRO_W	Units: mg/L	Prep Date: 1/24/2006	RunNo: 17998
Client ID: ZZZZZ	Batch ID: 9636	TestNo: SW8015		Analysis Date: 1/24/2006	SeqNo: 444112
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Diesel Range Organics (DRO) 4.355 1.0 5 0 87.1 149 5.02 14.2 23

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601205
Project: AL-2 to EP-1 Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: 5ML RB	SampType: MBLK	TestCode: 8015GRO_W	Units: mg/L	Prep Date:	RunNo: 18092						
Client ID: ZZZZZ	Batch ID: R18092	TestNo: SW8015		Analysis Date: 1/30/2006	SeqNo: 445964						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2.5UG GRO LCS	SampType: LCS	TestCode: 8015GRO_W	Units: mg/L	Prep Date:	RunNo: 18092						
Client ID: ZZZZZ	Batch ID: R18092	TestNo: SW8015		Analysis Date: 1/30/2006	SeqNo: 445965						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 2.5UG GRO LCSD	SampType: LCSD	TestCode: 8015GRO_W	Units: mg/L	Prep Date:	RunNo: 18092						
Client ID: ZZZZZ	Batch ID: R18092	TestNo: SW8015		Analysis Date: 1/30/2006	SeqNo: 445966						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601205
Project: AL-2 to EP-1 Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_W

Sample ID: 5ML RB	SampType: MBLK	TestCode: 8021BTEX_W	Units: µg/L	Prep Date:	RunNo: 18092						
Client ID: ZZZZZ	Batch ID: R18092	TestNo: SW8021		Analysis Date: 1/30/2006	SeqNo: 445946						
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	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Xylenes, Total	ND	3.0									

Sample ID: 100NG BTEX LCS	SampType: LCS	TestCode: 8021BTEX_W	Units: µg/L	Prep Date:	RunNo: 18092						
Client ID: ZZZZZ	Batch ID: R18092	TestNo: SW8021		Analysis Date: 1/30/2006	SeqNo: 445947						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methyl tert-butyl ether (MTBE)	18.63	2.5	20	0	93.1	64.5	133				
Benzene	19.75	1.0	20	0	98.8	88.5	114				
o-luene	19.74	1.0	20	0	98.7	87.2	114				
m-thylbenzene	20.13	1.0	20	0	101	88.6	113				
Xylenes, Total	40.89	3.0	40	0	102	83.3	114				

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT:

Giant Refining Co

Work Order:

0601205

Project:

AL-2 to EP-1 Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: Hg_CTW

Sample ID: MB-9640	SampType: MBLK	TestCode: Hg_CTW	Units: mg/L	Prep Date: 1/24/2006	RunNo: 18026
Client ID: ZZZZZ	Batch ID: 9640	TestNo: SW7470	(SW7470)	Analysis Date: 1/24/2006	SeqNo: 444078
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	ND	0.00020			

Sample ID: LCS-9640	SampType: LCS	TestCode: Hg_CTW	Units: mg/L	Prep Date: 1/24/2006	RunNo: 18026
Client ID: ZZZZZ	Batch ID: 9640	TestNo: SW7470	(SW7470)	Analysis Date: 1/24/2006	SeqNo: 444079
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	0.004155	0.00020	0.005	0	83.1 80 120

Sample ID: LCSD-9640	SampType: LCSD	TestCode: Hg_CTW	Units: mg/L	Prep Date: 1/24/2006	RunNo: 18026
Client ID: ZZZZZ	Batch ID: 9640	TestNo: SW7470	(SW7470)	Analysis Date: 1/24/2006	SeqNo: 444089
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	0.004467	0.00020	0.005	0	89.3 80 120 0.004155 7.23 0

51/88

Qualifiers:

E Value above quantitation range

ND Not Detected at the Reporting Limit

H

Holding times for preparation or analysis exceeded

R RPD outside accepted recovery limits

J

Analyte detected below quantitation limits

S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
 Work Order: 0601205
 Project: AL-2 to EP-1 Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: MB-9629	SampType: MBLK	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/23/2006	RunNo: 18037
Client ID: ZZZZZ	Batch ID: 9629	TestNo: SW6010A		Analysis Date: 1/25/2006	SeqNo: 444662
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Barium	ND	0.020			
Cadmium	ND	0.0020			
Chromium	ND	0.0060			
Lead	ND	0.0050			
Selenium	ND	0.050			
Silver	ND	0.0050			

Sample ID: MB-9629	SampType: MBLK	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/23/2006	RunNo: 18037
Client ID: ZZZZZ	Batch ID: 9629	TestNo: SW6010A		Analysis Date: 1/25/2006	SeqNo: 444679
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Arsenic	ND	0.020			
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Sample ID: LCS-9629	SampType: LCS	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/23/2006	RunNo: 18037
Client ID: ZZZZZ	Batch ID: 9629	TestNo: SW6010A		Analysis Date: 1/25/2006	SeqNo: 444663
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Barium	0.4498	0.020	0.5	0	90.0	80	120
Cadmium	0.4478	0.0020	0.5	0.000571	89.5	80	120
Chromium	0.4627	0.0060	0.5	0.0006937	92.4	80	120
Lead	0.4351	0.0050	0.5	0	87.0	80	120
Selenium	0.4084	0.050	0.5	0	81.7	80	120
Silver	0.4570	0.0050	0.5	0.002855	90.8	80	120

Sample ID: LCS-9629	SampType: LCS	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/23/2006	RunNo: 18037
Client ID: ZZZZZ	Batch ID: 9629	TestNo: SW6010A		Analysis Date: 1/25/2006	SeqNo: 444680
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Arsenic	0.4862	0.020	0.5	0	97.2	80	120
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Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit
 H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
 Work Order: 0601205
 Project: AL-2 to EP-1 Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: LCSD-9629	SampType: LCSD	TestCode: METALS_TOTAL	Units: mg/L	Prep Date: 1/23/2006	RunNo: 18037						
Client ID: ZZZZZ	Batch ID: 9629	TestNo: SW6010A		Analysis Date: 1/25/2006	SeqNo: 444664						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.4638	0.020	0.5	0	92.8	80	120	0.4498	3.05	20	
Cadmium	0.4579	0.0020	0.5	0.000571	91.5	80	120	0.4478	2.21	20	
Chromium	0.4720	0.0060	0.5	0.0006937	94.3	80	120	0.4627	2.00	20	
Lead	0.4458	0.0050	0.5	0	89.2	80	120	0.4351	2.44	20	
Selenium	0.4230	0.050	0.5	0	84.6	80	120	0.4084	3.53	20	
Silver	0.4701	0.0050	0.5	0.002855	93.4	80	120	0.457	2.82	20	

Sample ID: LCSD-9629	SampType: LCSD	TestCode: METALS_TOTAL	Units: mg/L	Prep Date: 1/23/2006	RunNo: 18037						
Client ID: ZZZZZ	Batch ID: 9629	TestNo: SW6010A		Analysis Date: 1/25/2006	SeqNo: 444681						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4915	0.020	0.5	0	98.3	80	120	0.4862	1.10	20	

7/8

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

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Receive

1/20/2006

Work Order Numbe 0601205

Received by AT

Checklist completed by

Signature

Date

Reviewed by

Initials

Date

Matrix

Carrier name UPS

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Presen ☐
Custody seals intact on shipping container/cooler?	Yes ☒	No ☐	Not Presen ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☒
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 ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☒	No ☐
Water - pH acceptable upon receipt?	Yes ☒	No ☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

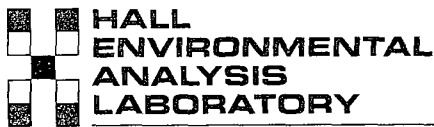
Corrective Action _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY

4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenviro.com

ANALYSIS REQUEST

CHAIN-OF-CUSTODY RECORD					QA / QC Package:		
					Std ☐	Level 4 ☐	Other:
Client: <u>Giant Refining</u>					Project Name: <u>AL-2 to EP-1</u>		
Company: <u>Ciniza</u>					Week of <u>1-20-2006</u>		
Address: <u>Route 3 Box 7</u>					Project #:		
<u>Gallop, NM 87301</u>					Project Manager: <u>Johnny Sanchez</u>		
Phone #: <u>505 722 3833</u>					Sampler: <u>Johnny Sanchez</u>		
Fax #: <u>505 722 0210</u>					Sample Temperature: <u>2</u>		
Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl ₂ HNO ₃		HEAL No.
1-18-06	1430	H ₂ O	AL-2 to EP-1				1001205-1
Date: <u>1-19-06</u>	Time: <u>0900</u>	Relinquished By: (Signature) <u>[Signature]</u>		Relinquished By: (Signature) <u>[Signature]</u>		Received By: (Signature) <u>[Signature]</u>	
Date:	Time:	Relinquished By: (Signature)		Relinquished By: (Signature)		Received By: (Signature)	



COVER LETTER

Tuesday, January 31, 2006

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-3833
FAX (505) 722-0210

RE: AL-2 to EP-1 Week of 1/13/2006

Order No.: 0601120

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/13/2006 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

AZ license # AZ0682
ORELAP Lab # NM100001



Hall Environmental Analysis Laboratory

Date: 31-Jan-06

CLIENT: Giant Refining Co
Lab Order: 0601120
Project: AL-2 to EP-1 Week of 1/13/2006
Lab ID: 0601120-01

Client Sample ID: AL-2 to EP-1
Collection Date: 1/11/2006 2:00:00 PM
Date Received: 1/13/2006
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	78	3.0		mg/L	1	1/17/2006 10:13:22 AM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	1/17/2006 10:13:22 AM
Surr: DNOP	129	58-140		%REC	1	1/17/2006 10:13:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	1.0		mg/L	20	1/23/2006 2:20:52 PM
Surr: BFB	113	79.7-118		%REC	20	1/23/2006 2:20:52 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	20	1/23/2006 2:20:52 PM
Benzene	ND	20		µg/L	20	1/23/2006 2:20:52 PM
Toluene	21	20		µg/L	20	1/23/2006 2:20:52 PM
Ethylbenzene	ND	20		µg/L	20	1/23/2006 2:20:52 PM
Xylenes, Total	ND	60		µg/L	20	1/23/2006 2:20:52 PM
Surr: 4-Bromofluorobenzene	107	82.2-119		%REC	20	1/23/2006 2:20:52 PM
EPA METHOD 7470: MERCURY						Analyst: CMC
Mercury	0.0053	0.00020		mg/L	1	1/20/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	1/20/2006 10:31:27 AM
Barium	0.11	0.020		mg/L	1	1/20/2006 10:31:27 AM
Cadmium	ND	0.0020		mg/L	1	1/20/2006 10:31:27 AM
Chromium	0.0092	0.0060		mg/L	1	1/20/2006 10:31:27 AM
Lead	0.0073	0.0050		mg/L	1	1/20/2006 10:31:27 AM
Selenium	ND	0.050		mg/L	1	1/20/2006 10:31:27 AM
Silver	ND	0.0050		mg/L	1	1/20/2006 10:31:27 AM

Qualifiers:

* Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit

CLIENT: Giant Refining Co

Work Order: 0601120

Project: AL-2 to EP-1 Week of 1/13/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: LCS-9583	SampType: LCS	TestCode: 8015DRO_W	Units: mg/L	Prep Date: 1/16/2006	RunNo: 17928						
Client ID: ZZZZZ	Batch ID: 9583	TestNo: SW8015		Analysis Date: 1/16/2006	SeqNo: 440598						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: LCSD-9583	SampType: LCSD	TestCode: 8015DRO_W	Units: mg/L	Prep Date: 1/16/2006	RunNo: 17928						
Client ID: ZZZZZ	Batch ID: 9583	TestNo: SW8015		Analysis Date: 1/16/2006	SeqNo: 440599						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.779	1.0	5	0	116	81.2	149	5.618	2.82	23	
Motor Oil Range Organics (MRO)	ND	5.0						0	0	0	

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601120
Project: AL-2 to EP-1 Week of 1/13/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: 5ML RB	SampType: MBLK	TestCode: 8015GRO_W	Units: mg/L	Prep Date:	RunNo: 18017						
Client ID: ZZZZZ	Batch ID: R18017	TestNo: SW8015		Analysis Date: 1/23/2006	SeqNo: 443323						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: 2.5UG GRO LCS	SampType: LCS	TestCode: 8015GRO_W	Units: mg/L	Prep Date:	RunNo: 18017						
Client ID: ZZZZZ	Batch ID: R18017	TestNo: SW8015		Analysis Date: 1/23/2006	SeqNo: 443324						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4740	0.050	0.5	0	94.8	82.6	114				

Sample ID: 2.5UG GRO LCSD	SampType: LCSD	TestCode: 8015GRO_W	Units: mg/L	Prep Date:	RunNo: 18017						
Client ID: ZZZZZ	Batch ID: R18017	TestNo: SW8015		Analysis Date: 1/23/2006	SeqNo: 443349						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4840	0.050	0.5	0	96.8	82.6	114	0.474	2.09	8.39	

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

CLIENT: Giant Refining Co
Work Order: 0601120
Project: AL-2 to EP-1 Week of 1/13/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_W

Sample ID: 5ML RB	SampType: MBLK	TestCode: 8021BTEX_W	Units: µg/L	Prep Date:	RunNo: 18017						
Client ID: ZZZZZ	Batch ID: R18017	TestNo: SW8021		Analysis Date: 1/23/2006	SeqNo: 443231						
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	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Xylenes, Total	ND	3.0									

Sample ID: 100NG BTEX LCS	SampType: LCS	TestCode: 8021BTEX_W	Units: µg/L	Prep Date:	RunNo: 18017						
Client ID: ZZZZZ	Batch ID: R18017	TestNo: SW8021		Analysis Date: 1/23/2006	SeqNo: 443265						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methyl tert-butyl ether (MTBE)	17.80	2.5	20	0	89.0	64.5	133				
Benzene	20.29	1.0	20	0	101	88.5	114				
Toluene	20.07	1.0	20	0	100	87.2	114				
Ethylbenzene	20.52	1.0	20	0	103	88.6	113				
Xylenes, Total	41.52	3.0	40	0	104	83.3	114				

Sample ID: 100NG BTEX LCSD	Samp Type: LCSD	TestCode: 8021BTEX_W	Units: µg/L	Prep Date:	RunNo: 18017						
Client ID: ZZZZZ	Batch ID: R18017	TestNo: SW8021		Analysis Date: 1/23/2006	SeqNo: 443266						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Methyl tert-butyl ether (MTBE)	18.37	2.5	20	0	91.9	64.5	133	17.8	3.15	28	
Benzene	20.73	1.0	20	0	104	88.5	114	20.29	2.13	27	
Toluene	20.12	1.0	20	0	101	87.2	114	20.07	0.249	19	
Ethylbenzene	20.39	1.0	20	0	102	88.6	113	20.52	0.636	10	
Xylenes, Total	41.56	3.0	40	0	104	83.3	114	41.52	0.106	13	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601120
Project: AL-2 to EP-1 Week of 1/13/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: Hg_CTW

Sample ID: MB-9625	SampType: MBLK	TestCode: Hg_CTW	Units: mg/L	Prep Date: 1/20/2006	RunNo: 17989						
Client ID: ZZZZZ	Batch ID: 9625	TestNo: SW7470	(SW7470)	Analysis Date: 1/20/2006	SeqNo: 442366						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: LCS-9625	SampType: LCS	TestCode: Hg_CTW	Units: mg/L	Prep Date: 1/20/2006	RunNo: 17989						
Client ID: ZZZZZ	Batch ID: 9625	TestNo: SW7470	(SW7470)	Analysis Date: 1/20/2006	SeqNo: 442367						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004124	0.00020	0.005	0	82.5	80	120				

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

CLIENT: Giant Refining Co

Work Order: 0601120

Project: AL-2 to EP-1 Week of 1/13/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: MB-9615	SampType: MBLK	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/19/2006	RunNo: 17983						
Client ID: ZZZZZ	Batch ID: 9615	TestNo: SW6010A		Analysis Date: 1/20/2006	SeqNo: 442110						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: LCS-9615	SampType: LCS	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/19/2006	RunNo: 17983						
Client ID: ZZZZZ	Batch ID: 9615	TestNo: SW6010A		Analysis Date: 1/20/2006	SeqNo: 442101						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	0.4712	0.020	0.5	0	94.2	80	120				
Barium	0.4652	0.020	0.5	0	93.0	80	120				
Cadmium	0.4572	0.0020	0.5	0	91.4	80	120				
Chromium	0.4752	0.0060	0.5	0	95.0	80	120				
Lead	0.4433	0.0050	0.5	0	88.7	80	120				
Selenium	0.4317	0.050	0.5	0	86.3	80	120				
Silver	0.4764	0.0050	0.5	0	95.3	80	120				

Sample ID: LCSD-9615	SampType: LCSD	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/19/2006	RunNo: 17983						
Client ID: ZZZZZ	Batch ID: 9615	TestNo: SW6010A		Analysis Date: 1/20/2006	SeqNo: 442102						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	0.4736	0.020	0.5	0	94.7	80	120	0.4712	0.500	20	
Barium	0.4662	0.020	0.5	0	93.2	80	120	0.4652	0.211	20	
Cadmium	0.4649	0.0020	0.5	0	93.0	80	120	0.4572	1.65	20	
Chromium	0.4763	0.0060	0.5	0	95.3	80	120	0.4752	0.235	20	
Lead	0.4476	0.0050	0.5	0	89.5	80	120	0.4433	0.956	20	
Selenium	0.4415	0.050	0.5	0	88.3	80	120	0.4317	2.24	20	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
 Work Order: 0601120
 Project: AL-2 to EP-1 Week of 1/13/2006
 ANALYTICAL QC SUMMARY REPORT
 TestCode: METALS_TOTAL

Sample ID: LCSD-9615	Sample Type: LCSD	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/19/2006	RunNo: 17983						
Client ID: ZZZZZ	Batch ID: 9615	TestNo: SW6010A		Analysis Date: 1/20/2006	SeqNo: 442102						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.4772	0.0050	0.5	0	95.4	80	120	0.4764	0.179	20	

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

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

1/13/2006

Work Order Number 0601120

Received by LMM

Checklist completed by

Lisa Halverson
Signature

1/13/06
Date

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?

7°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person 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 505.345.3976
www.hallenvironmental.com

ANALYSIS REQUEST

QA/QC Package:

Std Level 4

Other:

Project Name: 4174 EPI

Week of 1-13-06

Project #:

Project Manager:

ED RIEGL

Sampler:

~~Sample Tem~~

Date _____

Time

Matrix

Sample / D. No.

Number/Volume

HEAL No

Preservative

HgCl ₂	HNO ₃
-------------------	------------------

$$\frac{1}{2} \text{HNO}_3$$

1-11-06 Z. Pop H₂O AL-26 EP-1

5

Date: _____

Time:

Relinquished By: (Signature)

Received By: (Signature)

01711

Date: _____

Time:

Delivered By: (Signature)

Received By: (Signature)



COVER LETTER

Wednesday, January 18, 2006

Ed Riege
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 1/6/2006

Order No.: 0601058

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/6/2006 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

AZ license # AZ0682
ORELAP Lab # NM100001



Hall Environmental Analysis Laboratory

Date: 18-Jan-06

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order: 0601058

Collection Date: 1/4/2006 3:00:00 PM

Project: AL-2 to EP-1 Week of 1/6/2006

Date Received: 1/6/2006

Lab ID: 0601058-01A

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	570	30		mg/L	10	1/13/2006 4:06:26 PM
Motor Oil Range Organics (MRO)	ND	150		mg/L	10	1/13/2006 4:06:26 PM
Surr: DNOP	105	58-140		%REC	10	1/13/2006 4:06:26 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	1.0		mg/L	20	1/12/2006 5:46:16 PM
Surr: BFB	110	79.7-118		%REC	20	1/12/2006 5:46:16 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	66	50		µg/L	20	1/12/2006 5:46:16 PM
Benzene	22	20		µg/L	20	1/12/2006 5:46:16 PM
Toluene	45	20		µg/L	20	1/12/2006 5:46:16 PM
Ethylbenzene	ND	20		µg/L	20	1/12/2006 5:46:16 PM
Xylenes, Total	67	60		µg/L	20	1/12/2006 5:46:16 PM
Surr: 4-Bromofluorobenzene	110	82.2-119		%REC	20	1/12/2006 5:46:16 PM

Qualifiers: * Value exceeds Maximum Contaminant Level
E Value above quantitation range
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit



Hall Environmental Analysis Laboratory

Date: 18-Jan-06

CLIENT: Giant Refining Co

Client Sample ID: AL-2 to EP-1

Lab Order: 0601058

Collection Date: 1/4/2006 3:00:00 PM

Project: AL-2 to EP-1 Week of 1/6/2006

Date Received: 1/6/2006

Lab ID: 0601058-01B

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: CMC
Mercury	0.0040	0.00020		mg/L	1	1/9/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: CMC
Arsenic	ND	0.020		mg/L	1	1/16/2006 2:26:13 PM
Barium	0.11	0.020		mg/L	1	1/16/2006 2:26:13 PM
Cadmium	ND	0.0020		mg/L	1	1/16/2006 2:26:13 PM
Chromium	0.0061	0.0060		mg/L	1	1/16/2006 2:26:13 PM
Lead	0.0064	0.0050		mg/L	1	1/16/2006 2:26:13 PM
Selenium	ND	0.050		mg/L	1	1/16/2006 2:26:13 PM
Silver	ND	0.0050		mg/L	1	1/16/2006 2:26:13 PM



Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

CLIENT: Giant Refining Co

Work Order: 0601058

Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: MB-9535	SampType: MBLK	TestCode: 8015DRO_W	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17852						
Client ID: ZZZZZ	Batch ID: 9535	TestNo: SW8015		Analysis Date: 1/9/2006	SeqNo: 438884						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0									
Motor Oil Range Organics (MRO)	ND	5.0									
Surr: DNOP	1.156	0	1	0	116	58	140				

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT:

Giant Refining Co

Work Order:

0601058

Project:

AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: Reagent Blank 5ml	SampType: MBLK	TestCode: 8015GRO_W	Units: mg/L	Prep Date:	RunNo: 17890						
Client ID: ZZZZZ	Batch ID: R17890	TestNo: SW8015		Analysis Date: 1/12/2006	SeqNo: 439931						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									
Surr: BFB	20.34	0	20	0	102	79.7	118				

Qualifiers:

E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
 Work Order: 0601058
 Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_W

Sample ID: Reagent Blank 5ml	SampType: MBLK	TestCode: 8021BTEX_W	Units: µg/L	Prep Date:	RunNo: 17890						
Client ID: ZZZZZ	Batch ID: R17890	TestNo: SW8021		Analysis Date: 1/12/2006	SeqNo: 439913						
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	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Xylenes, Total	ND	3.0									
Surr: 4-Bromofluorobenzene	20.16	0	20	0	101	82.2	119				

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTW

Sample ID: MB-9544	SampleType: MBLK	TestCode: HG_CTW	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17848						
Client ID: ZZZZZ	Batch ID: 9544	TestNo: SW7470	(SW7470)	Analysis Date: 1/9/2006	SeqNo: 438823						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co

Work Order: 0601058

Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: MB-9536	SampType: MBLK	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17885						
Client ID: ZZZZZ	Batch ID: 9536	TestNo: SW6010A		Analysis Date: 1/12/2006	SeqNo: 439739						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

7/16

Sample ID: MB-9536	SampType: MBLK	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17932						
Client ID: ZZZZZ	Batch ID: 9536	TestNo: SW6010A		Analysis Date: 1/16/2006	SeqNo: 440773						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

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

CLIENT: Giant Refining Co

Work Order: 0601058

Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTW

Sample ID: 0601064-04D DUP	SampType: DUP	TestCode: HG_CTW	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17848						
Client ID: ZZZZZ	Batch ID: 9544	TestNo: SW7470	(SW7470)	Analysis Date: 1/9/2006	SeqNo: 438841						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020						0	0	20	

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
 Work Order: 0601058
 Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: 0601065-04A DUP		SampType: DUP	TestCode: METALS_TO		Units: mg/L	Prep Date: 1/9/2006	RunNo: 17932				
Client ID: ZZZZZ		Batch ID: 9536	TestNo: SW6010A			Analysis Date: 1/16/2006	SeqNo: 440787				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020						0	0	30	
Barium	0.5651	0.020						0.565	0.0205	30	
Cadmium	ND	0.0020						0	0	30	
Chromium	ND	0.0060						0	0	30	
Lead	ND	0.0050						0.004291	0	30	
Selenium	ND	0.050						0	0	30	
Silver	ND	0.0050						0	0	30	

Qualifiers: E Value above quantitation range
 ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Date: 18-Jan-06

CLIENT: Giant Refining Co

Work Order: 0601058

Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: LCS-9535	SampType: LCS	TestCode: 8015DRO_W	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17852						
Client ID: ZZZZZ	Batch ID: 9535	TestNo: SW8015		Analysis Date: 1/9/2006	SeqNo: 438885						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: LCSD-9535	SampType: LCSD	TestCode: 8015DRO_W	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17852						
Client ID: ZZZZZ	Batch ID: 9535	TestNo: SW8015		Analysis Date: 1/9/2006	SeqNo: 438886						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT:

Giant Refining Co

Work Order:

0601058

Project:

AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: GRO lcs 2.5ug	SampType: LCS	TestCode: 8015GRO_W	Units: mg/L	Prep Date:	RunNo: 17890						
Client ID: ZZZZZ	Batch ID: R17890	TestNo: SW8015		Analysis Date: 1/13/2006	SeqNo: 439932						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4586	0.050	0.5	0	91.7	82.6	114				

Qualifiers:

E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_W

Sample ID: BTEX lcs 100ng	SampType: LCS	TestCode: 8021BTEX_W	Units: µg/L	Prep Date:	RunNo: 17890						
Client ID: ZZZZZ	Batch ID: R17890	TestNo: SW8021		Analysis Date: 1/12/2006	SeqNo: 440002						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	20.00	2.5	20	0	100	64.5	133				
Benzene	18.85	1.0	20	0	94.2	88.5	114				
Toluene	19.12	1.0	20	0	95.6	87.2	114				
Ethylbenzene	19.76	1.0	20	0	98.8	88.6	113				
Xylenes, Total	39.56	3.0	40	0	98.9	83.3	114				

Qualifiers: E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTW

Sample ID: LCS-9544	SampType: LCS	TestCode: HG_CTW	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17848						
Client ID: ZZZZZ	Batch ID: 9544	TestNo: SW7470	(SW7470)	Analysis Date: 1/9/2006	SeqNo: 438824						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004253	0.00020	0.005	0	85.1	80	120				

Sample ID: LCSD-9544	SampType: LCSD	TestCode: HG_CTW	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17848						
Client ID: ZZZZZ	Batch ID: 9544	TestNo: SW7470	(SW7470)	Analysis Date: 1/9/2006	SeqNo: 438848						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004311	0.00020	0.005	0	86.2	80	120	0.004253	1.35	0	

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

CLIENT: Giant Refining Co
 Work Order: 0601058
 Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: LCS-9536	SampType: LCS	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17885						
Client ID: ZZZZZ	Batch ID: 9536	TestNo: SW6010A		Analysis Date: 1/12/2006	SeqNo: 439740						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.4894	0.0050	0.5	0	97.9	80	120				

Sample ID: LCS-9536	SampType: LCS	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17932						
Client ID: ZZZZZ	Batch ID: 9536	TestNo: SW6010A		Analysis Date: 1/16/2006	SeqNo: 440774						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4853	0.020	0.5	0	97.1	80	120				
Barium	0.4613	0.020	0.5	0	92.3	80	120				
Cadmium	0.4680	0.0020	0.5	0	93.6	80	120				
Chromium	0.4714	0.0060	0.5	0	94.3	80	120				
Lead	0.4601	0.0050	0.5	0	92.0	80	120				
Selenium	0.4684	0.050	0.5	0	93.7	80	120				
Silver	0.4791	0.0050	0.5	0.001109	95.6	80	120				

19

Sample ID: LCSD-9536	SampType: LCSD	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17885						
Client ID: ZZZZZ	Batch ID: 9536	TestNo: SW6010A		Analysis Date: 1/12/2006	SeqNo: 439741						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.4769	0.0050	0.5	0	95.4	80	120	0.4894	2.60	20	

Sample ID: LCSD-9536	SampType: LCSD	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17932						
Client ID: ZZZZZ	Batch ID: 9536	TestNo: SW6010A		Analysis Date: 1/16/2006	SeqNo: 440775						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4891	0.020	0.5	0	97.8	80	120	0.4853	0.775	20	
Barium	0.4627	0.020	0.5	0	92.5	80	120	0.4613	0.308	20	
Cadmium	0.4676	0.0020	0.5	0	93.5	80	120	0.468	0.0760	20	
Chromium	0.4741	0.0060	0.5	0	94.8	80	120	0.4714	0.582	20	
Lead	0.4560	0.0050	0.5	0	91.2	80	120	0.4601	0.907	20	
Selenium	0.4633	0.050	0.5	0	92.7	80	120	0.4684	1.11	20	

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

CLIENT:

Giant Refining Co

Work Order:

0601058

Project:

AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: LCSD-9536	SampType: LCSD	TestCode: METALS_TO	Units: mg/L	Prep Date: 1/9/2006	RunNo: 17932						
Client ID: ZZZZZ	Batch ID: 9536	TestNo: SW6010A		Analysis Date: 1/16/2006	SeqNo: 440775						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.4795	0.0050	0.5	0.001109	95.7	80	120	0.4791	0.0776		20

Qualifiers:

E Value above quantitation range
ND Not Detected at the Reporting Limit

H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits

J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

1/6/2006

Work Order Number 0601058

Received by AT

Checklist completed by

Signature

Date

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?

7°

4° C ± 2 Acceptable

If given sufficient time to cool.

COMMENTS:

Client contacted

Date contacted:

Person 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.hallenvironmental.com

QA/QC Package:

Std ☐ Level 4 ☐

Other:

Project Name: AL-2 to EP-1

Week of 1-6-2006

Project #:

Project Manager:

Sampler:

Sample Temperature:

7

Date _____

Time

Matrix

Sample I.D. No.

Number/Volume

Preservative

HgCl_2	HNO_3
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HEAL No.

1-4-06	1500	H ₂ O	AL-2 to EPI	5				0001058-1
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Date: _____

Time:

Relinquished By: (Signature)

Received By: (Signature)

Demander:

Date:

Time:

Relinquished By: (Signature)

Received By: (Signature)

ANALYSIS REQUEST

BTX + MTBE + MTBE's (8021)	BTX + MTBE + TPH (Gasoline Or
TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)
EDB (Method 504.1)	EDC (Method 8021)
8310 (PNA or PAH)	RCRA 8 Metals
<i>Total</i>	Anions (F, Cl, NO ₂ , NO ₃ , PO ₄ , SO ₄)
8081 Pesticides / PCB's (8082)	8260B (VOA)
8270 (Semi-VOA)	

Date: -5-6-09	Time: 0900	Relinquished By: (Signature) <i>F. Sanchez</i>	Relinquished By: (Signature)	Received By: (Signature) <i>D. Chlope</i>	Received By: (Signature)
					1/6/0600 1340

OCD Permit Condition 21:

c. Waste and Wastewater Disposal Summary and Pond Evaporation Balance

2006 WASTE WATER SUMMARY

DATE	TRAVEL CENTER TO PONDS			TOTAL FLOW TO PONDS			RAIN GAUGE INCHES	FREEBOARD AT PONDS											
	TEMP	60 DEGREE V NOTCH "INCHES"	FLOW GPM	TEMP	90 DEGREE V NOTCH "INCHES"	FLOW GPM		2	3	4	5	6	8	7	11	12a	12b	9	Comments
1/3/2006	42	2	7.16	40	6	193		1.58	BM	BM	2.42	0.25	BM	BM	2	2.5	1.08	BM	
1/4/2006	42	2	7.16	40	6	193		1.58	BM	BM	2.42	0.25	BM	BM	2	2.5	1.08	BM	
1/5/2006	44	2	7.16	42	5	123		1.58	BM	BM	2.42	0.25	BM	BM	2	2.5	1.08	BM	
1/6/2006	41	2	7.16	40	5	123		1.58	BM	BM	2.42	0.25	BM	BM	2.17	2.5	1.08	BM	
1/9/2006	38	2	7.16	36	5	123		1.58	BM	BM	2.5	0.33	BM	BM	2	2.5	1.08	BM	
1/10/2006	37	2	7.16	36	5	123		1.58	BM	BM	2.5	0.33	BM	BM	2	2.5	1.08	BM	
1/11/2006	38	2	7.16	38	5	123		1.58	BM	BM	2.5	0.33	BM	BM	2	2.5	1.08	BM	
1/12/2006	39	2	7.16	38	5	123		1.58	BM	BM	2.5	0.33	BM	BM	2	2.5	1.08	BM	
1/16/2006	39	2	7.16	38	5	123		1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1.08	BM	
1/17/2006	32	2 1/2	12.5	30	5	123		1.58	BM	BM	BM	0.5	BM	BM	2	2.5	1.08	BM	
1/18/2006	33	2	7.16	30	5	123		1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1.08	BM	
1/19/2006	32	2	7.16	30	5	123		1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1.08	BM	
1/23/2006	30	2	7.16	28	5	123		1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1.08	BM	
1/24/2006	30	2	7.16	26	5	123		1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1.08	BM	
1/25/2006	30	2	7.16	26	5	123		1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1	BM	
1/26/2006	32	2	7.16	30	6	193	0.2	1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1	BM	
1/30/2006	32	2	7.16	29	5 1/2	156		1.58	BM	BM	2.5	0.5	BM	BM	1.75	2.5	1	BM	
1/31/2006	33	2	7.16	30	5	123		1.58	BM	BM	2.5	0.5	BM	BM	1.75	2.5	1	BM	
2/1/2006	32	2	7.16	28	5	123		1.58	BM	BM	2.5	0.5	BM	BM	1.75	2.5	1	BM	
2/2/2006	34	2	7.16	31	5	123		1.58	BM	BM	BM	0.58	BM	BM	1.67	2.42	1	BM	
2/6/2006	37	3	19.7	34	6	193		1.58	BM	BM	BM	0.5	BM	BM	1.67	2.5	1	BM	
2/7/2006	36	2	7.16	34	5	123		1.58	BM	BM	BM	0.58	BM	BM	1.67	2.5	1	BM	
2/8/2006	36	3	19.7	33	5	123		1.58	BM	BM	BM	0.58	BM	BM	1.67	2.5	1	BM	
2/9/2006	35	2	7.16	33	6	193		1.58	BM	BM	BM	0.58	BM	BM	1.67	2.5	1	BM	
2/13/2006	34	2	7.16	30	5	123		1.58	BM	BM	BM	0.67	BM	BM	1.67	2.58	1	BM	
2/14/2006	33	2	7.16	30	5	123		1.58	BM	BM	BM	0.67	BM	BM	1.67	2.58	1	BM	
2/15/2006	34	2	7.16	32	5	123		1.58	BM	BM	BM	BM	BM	BM	1.67	2.58	1	BM	
2/16/2006	34	3	19.7	32	5	123		1.58	BM	BM	BM	BM	BM	BM	1.67	2.58	1	BM	
2/21/2006	38	2	7.16	36	5 1/2	156		1.67	BM	BM	BM	0.67	BM	3	1.58	2.58	1	BM	
2/22/2006	36	2	7.16	34	5	123		1.67	BM	BM	BM	0.67	BM	3	1.58	2.58	1	BM	
2/23/2006	37	2	7.16	34	5	123		1.67	BM	BM	BM	0.67	BM	3	1.58	2.58	1	BM	
2/27/2006	38	3	19.7	35	6	193		1.67	BM	BM	BM	0.67	BM	3	1.58	2.67	1.08	BM	
2/28/2006	38	2	7.16	36	5	123		1.67	BM	BM	BM	0.67	BM	3	1.58	2.67	1.08	BM	
3/1/2006	39	2	7.16	37	5	123		1.67	BM	BM	BM	0.67	BM	3	1.58	2.67	1.08	BM	

2006 WASTE WATER SUMMARY

DATE	TRAVEL CENTER TO PONDS				TOTAL FLOW TO PONDS				RAIN GAUGE INCHES	FREEBOARD AT PONDS									Comments
	TEMP	60 DEGREE V NOTCH "INCHES"	FLOW GPM	TEMP	90 DEGREE V NOTCH "INCHES"	FLOW GPM	feet	feet		feet	feet	feet	feet	feet	feet				
3/2/2006	38	2	7.16	36	5	123		1.67	BM	BM	BM	0.67	BM	3	1.58	2.67	1.08	BM	
3/6/2006	38	2	7.16	35	6	193		1.67	1.75	1.83	BM	BM	BM	3	1.75	BM	1.17	BM	
3/7/2006	38	2	7.16	34	5	123		1.67	1.75	1.83	BM	BM	BM	3	1.75	BM	1.17	BM	
3/8/2006	38	2	7.16	34	5	123		1.67	1.67	1.75	2.5	BM	BM	3	1.75	BM	1.25	BM	
3/9/2006	38	2	7.16	34	5	123		1.67	1.67	1.75	2.5	BM	BM	3	1.75	BM	1.25	BM	
3/13/2006	32	2	7.16	29	5	123	0.3	1.67	1.5	1.58	2.33	BM	BM	3	1.75	BM	1.25	BM	
3/14/2006	32	2	7.16	29	5	123		1.67	1.5	1.58	2.33	BM	BM	3	1.75	BM	1.25	BM	
3/15/2006	32	2	7.16	29	5	123		1.67	1.5	1.58	2.92	BM	BM	3	1.75	BM	1.25	BM	
3/16/2006	34	2	7.16	31	5	123		1.67	1.5	1.58	2.92	BM	BM	3	1.75	BM	1.25	BM	
3/20/2006	37	2	7.16	34	6	193	0.02	1.67	1.67	1.75	2.25	0.5	BM	3	1.75	BM	1.17	BM	
3/21/2006	36	2	7.16	34	6	193		1.67	1.67	1.75	2.25	0.5	BM	3	1.75	BM	1.17	BM	
3/22/2006	38	2	7.16	35	6	193		1.67	1.67	1.75	2.25	0.5	BM	3	1.75	BM	1.17	BM	
3/23/2006	38	2	7.16	36	5	123		1.67	1.67	1.75	2.25	0.5	BM	3	1.75	BM	1.17	BM	
3/27/2006	37	0		35	5	123	0.1	1.67	1.83	1.83	2.33	0.5	BM	3	1.75	BM	1	BM	
3/28/2006	37	2	7.16	35	5	123		1.67	1.83	1.83	2.33	0.5	BM	3	1.75	BM	1	BM	
3/29/2006	36	2	7.16	35	5	123		1.67	1.83	1.83	2.33	0.5	BM	3	1.75	BM	1	BM	
3/30/2006	34	2	7.16	32	5	123		1.67	1.83	1.83	2.33	0.5	BM	3	1.67	BM	1	BM	
4/3/2006	38	2	7.16	35	5	123	0.1	1.67	1.75	1.83	2.17	0.5	BM	3	1.67	BM	1.25	BM	
4/4/2006	38	2	7.16	36	5	123		1.67	1.75	1.83	2.17	0.5	BM	3	1.67	BM	1.25	BM	
4/5/2006	36	2	7.16	34	5	123		1.67	1.75	1.83	2.25	0.5	BM	3	1.67	BM	1.25	BM	
4/6/2006	33	3	19.7	30	5	123	0.2	1.67	1.67	1.75	2.08	0.42	BM	3	1.67	BM	1.17	BM	
4/10/2006	38	2	7.16	26	5	123		1.67	1.5	1.67	2	0.42	BM	3	1.75	BM	1.33	BM	
4/11/2006	37	5	123	34	5	123		1.67	1.5	1.67	2	0.42	BM	3	1.75	BM	1.33	BM	
4/12/2006	38	3	19.7	36	5	123		1.67	1.5	1.67	2	0.42	BM	3	1.75	BM	1.33	BM	
4/13/2006	38	2	7.16	36	5	123		1.67	1.5	1.67	2	0.42	BM	3	1.75	BM	1.33	BM	
4/17/2006	40	0		37	5	123		1.67	BM	BM	2.25	0.5	BM	3	1.83	BM	1.25	BM	
4/18/2006	38	0		35	5	123		1.67	BM	BM	2.25	0.5	BM	3	1.83	BM	1.25	BM	
4/19/2006	38	1	1.27	35	5	123		1.67	BM	BM	2.33	0.5	BM	3	1.83	BM	1.25	BM	
4/20/2006	38	2	7.16	34	5	123		1.67	BM	BM	2.33	0.5	BM	3	1.83	BM	1.17	BM	
4/24/2006	39	1	1.27	36	5	123		1.67	BM	BM	2.17	0.5	BM	3	2	BM	1.25	BM	
4/25/2006	39	2	7.16	36	5	123		1.67	BM	BM	2.17	0.5	BM	3	2	BM	1.25	BM	
4/26/2006	38	2	7.16	35	5	123		1.67	BM	BM	2.17	0.5	BM	3	2	BM	1.25	BM	
4/27/2006	40	1	1.27	36	5	123		1.67	BM	BM	2.17	0.5	BM	3	2	BM	1.25	BM	
5/1/2006	42	2	7.16	38	5	123		1.67	1.08	1.92	2.42	0.67	BM	3.33	2.25	BM	1.25	BM	

2006 WASTE WATER SUMMARY

DATE	TRAVEL CENTER TO PONDS				TOTAL FLOW TO PONDS				RAIN GAUGE INCHES	FREEBOARD AT PONDS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	TEMP	60 DEGREE V NOTCH "INCHES"	FLOW GPM	TEMP	90 DEGREE V NOTCH "INCHES"	FLOW GPM	2	3		4	5	6	7	8	9	10	11	12a	12b	13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
5/2/2006	42	1	1.27	38	5	123																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</

2006 WASTE WATER SUMMARY

TRAVEL CENTER TO PONDS				TOTAL FLOW TO PONDS				RAIN GAUGE INCHES	FREEBOARD AT PONDS											
DATE	TEMP	60 DEGREE V NOTCH "INCHES"	FLOW GPM	TEMP	90 DEGREE V NOTCH "INCHES"	FLOW GPM			2	3	4	5	6	8	7	11	12a	12b	9	Comments
									feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	
7/12/2006	60	1	1.27	58	5	123			1.67	1.58	1.58	1.58	BM	BM	BM	BM	BM	1.17	BM	
7/13/2006	61	2	7.16	58	5	123			1.67	1.58	1.58	1.58	BM	BM	BM	BM	BM	1.08	BM	
7/17/2006	62	0		59	5	123			1.67	BM	BM	2	BM	BM	BM	BM	BM	1.08	BM	
7/18/2006	62	0		59	5	123			1.67	BM	BM	2	BM	BM	BM	BM	BM	1.08	BM	
7/19/2006	62	0		60	5	123			1.67	BM	BM	2.33	BM	BM	BM	BM	BM	1.08	BM	
7/20/2006	63	0		60	5	123			1.67	BM	BM	2.08	BM	BM	BM	BM	BM	1.08	BM	
7/24/2006	60	2	7.16	58	5	123	0.4		1.67	1.75	1.83	2	BM	BM	BM	BM	BM	1.17	BM	
4/25/2006	60	0		58	5	123			1.67	1.75	1.83	2	BM	BM	BM	BM	BM	1.17	BM	
7/26/2006	60	2	7.16	58	5	123			1.67	1.75	1.83	2	BM	BM	BM	BM	BM	1.17	BM	
7/27/2006	60	2	7.16	58	5	123			1.67	1.83	1.92	2	BM	BM	BM	BM	BM	1.17	BM	
7/31/2006	58	1	1.27	56	4	70.2	0.3		1.67	1.83	1.83	2	BM	BM	BM	BM	BM	1.08	BM	
8/1/2006	56	2	7.16	53	4	70.2	0.1		1.67	1.83	1.92	2	BM	BM	BM	BM	BM	1.08	BM	
8/2/2006	56	1	1.27	53	5	123			1.67	1.83	1.92	2	BM	BM	BM	BM	BM	1.08	BM	
8/3/2006	57	2	7.16	54	5	123			1.67	1.83	1.92	2	BM	BM	BM	BM	BM	1.08	BM	
8/7/2006	56	0		52	5	123	0.35		1.67	1.75	1.75	2	BM	BM	BM	BM	BM	1.08	BM	
8/8/2006	58	2	7.16	54	5	123			1.67	1.75	1.75	2	BM	BM	BM	BM	BM	1.08	BM	
8/9/2006	58	2	7.16	54	5	123	0.2		1.67	1.75	1.75	2	BM	BM	BM	BM	BM	1.08	BM	
8/10/2006	56	4	40.5	52	5	123	0.3		1.67	1.83	1.83	2	BM	BM	BM	BM	BM	1.08	BM	
8/14/2006	56	2	7.16	53	5	123	0.5		1.67	1.25	1.5	1.75	BM	BM	BM	BM	BM	1.08	BM	
8/15/2006	52	2	7.16	49	5	123	0.2		1.67	1.25	1.5	1.75	BM	BM	BM	BM	BM	1.08	BM	
8/16/2006	54	0		52	5	123	0.1		1.67	1.25	1.42	1.58	BM	BM	BM	BM	BM	1.08	BM	
8/17/2006	54	2	7.16	52	5	123			1.67	1.25	1.42	1.58	BM	BM	BM	BM	BM	1.08	BM	
8/21/2006	52	5.5	89.9	49	5	123	0.3		1.67	1.67	1.75	1.83	BM	BM	BM	BM	2.58	1.08	BM	
8/22/2006	52	0	0	48	5	123	0.1		1.67	1.67	1.75	1.75	BM	BM	BM	BM	2.58	1.08	BM	
8/23/2006	53	0	0	50	6	193	1.4		1.67	1.5	1.67	1.67	BM	BM	BM	2.75	2.42	1.08	BM	
8/24/2006	54	2	7.16	50	5	123	0.1		1.67	1.5	1.67	1.67	BM	BM	BM	2.75	2.42	1.08	BM	
8/25/2006	52	2	7.16	48	6	193	1		1.67	1.5	1.58	1.67	BM	BM	BM	2.67	2.5	1	BM	
8/28/2006	54	0	0	50	5	123	0.1		1.67	1.58	1.67	1.25	BM	BM	BM	2.5	2.5	1.08	BM	
8/29/2006	52	2	7.16	48	5	123			1.67	1.58	1.67	1.25	BM	BM	BM	2.5	2.5	1.08	BM	
8/30/2006	52	1	1.27	48	5	123			1.67	1.58	1.67	1.25	BM	BM	BM	2.5	2.5	1.08	BM	
8/31/2006	51	2	7.16	48	5	123	0.1		1.67	1.58	1.67	1.25	BM	BM	BM	2.5	2.5	1.08	BM	
9/5/2006	50	0	0	47	5	123	0.2		1.67	BM	BM	1.25	BM	BM	BM	2.25	BM	1.08	BM	
9/6/2006	51	2	7.16	48	5	123			1.67	BM	BM	1.25	BM	BM	BM	2.25	BM	1.08	BM	
9/7/2006	52	2	7.16	48	5	123	0.1		1.67	BM	BM	1.25	BM	BM	BM	2.25	BM	1.08	BM	

2006 WASTE WATER SUMMARY

TRAVEL CENTER TO PONDS				TOTAL FLOW TO PONDS				RAIN GAUGE INCHES		FREEBOARD AT PONDS									
DATE	TEMP	60 DEGREE V NOTCH "INCHES"	FLOW GPM	TEMP	90 DEGREE V NOTCH "INCHES"	FLOW GPM	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	Comments
9/11/2006	50	3	19.7	46	5	123	0.15	1.67	2	BM	1.25	BM	2	BM	1.08	BM			
9/12/2006	48	2	7.16	45	5	123		1.67	2	BM	1.25	BM	2	BM	1.08	BM			
9/13/2006	48	0		44	5	123		1.67	2	BM	1.25	BM	2	BM	1.08	BM			
9/14/2006	48	2	7.16	44	5	123		1.67	2	BM	1.25	BM	2	BM	1.08	BM			
9/15/2006							1												
9/18/2006	46	2	7.16	42	6	193	0.1	1.67	1.58	1.67	1.08	BM	2	BM	1.25	BM			muddy
9/19/2006	42	1	1.27	39	5	123		1.67	1.58	1.68	1.08	BM	2	BM	1.25	BM			
9/20/2006	42	2	7.16	38	5	123		1.67	1.58	1.67	1.08	BM	2	BM	1.25	BM			
9/21/2006	40	0		37	5	123	0.5	1.67	1.58	1.67	1.08	BM	2	BM	1.17	BM			
9/25/2006	38	2	7.16	34	5	123	0.1	1.67	1.58	1.67	1.08	BM	2	BM	1.17	BM			
9/26/2006	38	0		34	5	123		1.67	1.58	1.75	1.08	BM	2.08	BM	1.17	BM			
9/27/2006	38	0		34	5	123		1.67	1.58	1.75	1.08	BM	2.08	BM	1.17	BM			
10/2/2006	42	2	7.16	38	5	123		1.67	1.58	1.75	1	BM	2.25	BM	1.42	BM			
10/3/2006	42	0		38	5	123		1.67	1.58	1.75	1.08	BM	2.17	BM	1.17	BM			
10/4/2006	40	1	1.27	38	5	123		1.67	1.58	1.75	1.08	BM	2.17	BM	1.17	BM			
10/5/2006	40	2	7.16	37	5	123		1.67	1.58	1.75	1.08	BM	2.17	BM	1.17	BM			
10/5/2006	42	2	7.16	37	5	123	1.3	1.67			1.08	BM	2.17	BM	1.17	BM			too muddy
10/10/2006	40	2	7.16	36	5	123		1.67	1.5	1.67	1.75	1	BM	2.25	BM	1.33	BM		
10/11/2006	40	1	1.27	36	5	123		1.67	1.5	1.67	1.75	1	BM	2.25	BM	1.33	BM		
10/12/2006	36	0		32	6	193		1.67	1.5	1.67	1.75	1	BM	2.25	BM	1.33	BM		
10/16/2006	36	2	7.16	32	5	123	0.3	1.58	1.33	1.5	1.75	4	BM	2.25	BM	1.33	BM		
10/17/2006	36	2	7.16	32	5	123		1.58	1.33	1.5	1.75	4	BM	2.25	BM	1.33	BM		
10/18/2006	36	1	1.27	31	6	193	0.2	1.58	1.75	1.83	2	4	BM	2.25	BM	1.08	BM		
10/19/2006	34	1	1.27	30	5	123		1.58	1.75	1.83	2	4	BM	2.25	BM	1.08	BM		
10/23/2006	34	2	7.16	30	5	123		1.58	BM	BM	2.25	4	BM	2.25	BM	1.08	BM		
10/24/2006	36	1	1.27	32	5	123		1.58	BM	BM	2.25	4	BM	2.25	BM	1.08	BM		
10/25/2006	36	0		32	5	123	0.2	1.58	BM	BM	2.33	4	BM	2.25	BM	1.08	BM		
10/26/2006	34	2	7.16	30	5	123		1.58	BM	BM	2.33	4	BM	2.25	BM	1.08	BM		
10/30/2006	34	2	7.16	30	5	123		1.58	BM	BM	2.33	4	BM	2.25	BM	1.08	BM		
10/31/2006	35	1	1.27	32	5	123		1.58	BM	BM	2.33	4	BM	2.25	BM	1.17	BM		
11/1/2006	36	0		32	5	123		1.58	BM	BM	2.33	4	BM	2.25	BM	1.17	BM		
11/2/2006	33	2	7.16	34	5	123		1.58	BM	BM	2.33	4	BM	2.25	BM	1.17	BM		
11/6/2006	37	0		34	5	123		1.58	BM	BM	2.33	4	BM	1.75	BM	1.25	BM		
11/7/2006	35	2	7.16	32	5	123		1.58	BM	BM	2.33	4	BM	1.75	BM	1.25	BM		

50

* BM denotes Below Marker (Marker ~ 3 Feet)

Waste Water Summary 1-06 TO BE CONTINUED

2006 WASTE WATER SUMMARY

DATE	TRAVEL CENTER TO PONDS			TOTAL FLOW TO PONDS			RAIN GAUGE INCHES	FREEBOARD AT PONDS													
	TEMP	60 DEGREE V NOTCH "INCHES"	FLOW GPM	TEMP	90 DEGREE V NOTCH "INCHES"	FLOW GPM		2	3	4	5	6	7	8	9	10	11	12a	12b	13	

SNOW MACHINES									
#1 North Z-84-P25 4754 Hrs.					#2 South Z-84-B24 4839 Hrs.				
Evaporation rate for each is 40gpm									
Snow machines were not operated in 2006									
	Hours	Total hours	Hours	Total Hours					
2006	0		0						
2006	0	0	0	0					
							</		

2006 POND WATER SALES
 WW CONSTRUCTION
 0 Dollars x 4000gals/dollar = 0gals

CINIZA REFINERY

2006 Waste Water Balance/Evaporation Pond Rates

	GALLONS
Discharged to Ponds (measured at V notch	65,836,656
Rainfall to Ponds	38,242,173
Total to Ponds	104,078,829
Pond Evaporation (150 gpm)	78,840,000
Snow Machines Evaporation(80gpm)	0
Water Sold to WW Construction	0
Total Balance in Ponds	25,238,829

OCD Permit Condition 21:

d. Sump and Underground Lines Tested

UNDERGROUND PROCESS AND WASTEWATER LINES

CRUDE UNIT Update to 7/24/07

Re-test on or before due date	ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature/ Test Performed	Investigation Results	Prior Repairs
7/1/2010	C-1	P-2 (From Plat Unit) to C-1	1957	EC-09-125 & EP-09-102	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010	C-2	C-1 to C-2	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		C-V2 to C-2	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		C-P4 to C-P3B to C-2	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		C-P10B to C-P5A to C-2	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010	C-3	C-2 to C-3	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		C-P10A to C-P9A to C-P9B to C-3	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		C-P8 to C-3	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010	C-4	to C-4	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		C-E8 to C-4	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		C-24A to C-24B to C-P7 to C-4	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010	C-5	C-4 to C-5	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		C-P1B to C-P3 to C-5	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		N 26+11'-6" W 64+56'-9" (C-PV109) to C-5	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010	C-6	C-P23A to C-P23B to C-6	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		C-V10 to C-6	1957	EC-09-125	N/A	N/A	N/A	N/A	N/A	Capped	
7/1/2010		A to C-P21 to C-P16A to C-P15 to C-P14B to C-P14A to C-6	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		C-V13 Drain to Pipe Between C-6 & C-7	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		C-P13A to C-P13B to C-6	1957	EC-09-125	07/19/05	Pass	3	60	L. Jeff & A. Becenti		
7/1/2010	C-7	C-6 to C-7	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		C-E11 to C-7	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
12/1/2007	C-8	FCC Sewer Box N2461.57 W546.5 To C-8	1969	EC-09-125 & EF-09-102 SH.2	07/31/02	Pass	4	25	B. Loos		
12/1/2007		F-E10 to C-8	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos		
12/1/2007		F-11B to F-11A to C-8	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos		
12/1/2007		F-C1 N251511" W590' 0" To C-8	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos		
12/1/2007		F-C1 N2496' 8" W594' 3" To C-8	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos		
12/1/2007		F-P12B To FIELD MITER To C-8	1957	EC-09-125	07/13/02	Pass	4	25	B. Loos		
12/1/2007		FE-9 To N24+93-0" W6+56' 11" To C-8	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos		
12/1/2007		to C-8	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos		
7/1/2010	C-9	C-7 to C-9	1957	EC-09-125	07/20/05	Pass	4	30	A. Becenti		

UNDERGROUND PROCESS AND WASTEWATER LINES

CRUDE UNIT Update to 7/24/07

Re-test on or before due date	ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature/ Test Performed	Investigation Results	Prior Repairs
7/1/2010		C-8 to C-9	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
12/1/2007		F-3 to C-9	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos		
12/1/2007		F-V14 To C-9	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos		
12/1/2007		C-V6 To C-9	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos		
12/1/2011		C-P11A To C-P11B To C-9 (C-P37A to C-P37B)	1957	EC-09-125	12/19/06	Pass	4 ft	30	Rmartinez	12-19-06: C-9 Box needs repair.	WO46749 Cup Repaired 10/23/02
7/1/2010	C-10	C-10	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
12/1/2011		F4 W. to C-10	1957	EC-09-125 & EF-09-102	12/19/06	Pass	4 ft	30	Rmartinez		
		C-9 N. to C-10	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
12/1/2007		C-5 E. to C-10	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos		
12/1/2011		C-P1A to C-P2 to C-10	1957	EC-09-125	12/19/06	Pass	4	30 ft	Rmartinez	WO481143 Cup Repaired 11/18/02	
7/1/2010	C-11	C-10 N. to C-11	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
		N.26+14+2" W.6+45+0" to C-11	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
7/1/2010		N.26+45+8" W.6+44+3.5" to C11	1957	EC-09-125	07/20/05	Pass	4	30	L. Jeff & A. Becenti		
12/1/2011	From Neutralizing Pit Drains Toward NW To Catch Basin CBZ-25 by Treating Unit		1957	EZ-80-09-510EP	12/20/2006	Pass	4 ft	1/30/1900	Rmartinez	End of Alky Unit from ASOPit to CBZ-25	
	C-11 flows N. to CBZ-24			EC-09-125 & EZ-80-09-510EP							
	AT DHT, CBZ-24 2687N 632W	C-11 N to CBZ-24	1957	EZ-80-09-510EP	12/20/06	Pass	4 ft	30	Rmartinez	(DHT) All branch lines going into CBZ-24 needs piping & elbows replaced. CBZ 24 box needs to be repaired	
12/1/2011	AT DHT, CBZ-23 2729.63N 632W	CBZ-25 W to CBZ-24 CBZ-24 N to CBZ-23	1957	EZ-80-09-510EP	12/20/06	Pass	4 ft	30	Rmartinez	DHT Unit	
		Q-1 (Treaters) W to CBZ-23	1957	EZ-80-09-510EP	12/20/06	Pass	4 ft	30	Rmartinez	DHT Unit	
		Drain Hub (Treaters) 2785.42N 524.00W to CBZ-23	1957	EZ-80-09-510EP	12/20/06	Pass	4 ft	30	Rmartinez	Treaters to CBZ-23 at DHT Unit	
	AT SRU CBZ-22 2900N 632W	CBZ-25 N to CBZ-22 (now CBZ-A)	1957	EZ-80-09-510EP	12/20/06	Pass	4 ft	30	Rmartinez	Treaters to CBZ-23 at DHT Unit	
		Drain 2872.50N 574.17W to CBZ-22 (now CBZ-A) Just S. of CWT	1957	EZ-80-09-510EP	Re-routed to main sewer - unable to test 12/06					DHT to SRU	
	CBZ-21 2980N 632W	CBZ-22 (now CBZ-A) flows N to CBZ-21 (now CBZ-B)	1957	EZ-80-09-510EP	Re-routed to main sewer - unable to test 12/06					DHT to SRU	
		Cooling Tower Drain 2900N 582.92W to EZ-80-09-509EP (runs to CBZ-A)	1957	EZ-80-09-509EP	Re-routed to main sewer - unable to test 12/06						
	CBZ-20 3073N 632W	CBZ-21 flows N under road to start of tank farm to CBZ-20 CBZ-21 flows to main sewer box CBZ-A	1957	EZ-80-509-EP	CBZ-20 - out of service						
					Re-routed to main sewer - unable to test 12/06						

UNDERGROUND PROCESS AND WASTEWATER LINES

Treaters

Re-test on or before due date	ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results
7/1/2008	Q-1 N2729.63' W582.0'	Q-3 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008		Q-T2 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008		Q-V6 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008		Q-V5 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008		Q-V4 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008		Q-V1 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008		Q-2 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008	Q-1 West to CBZ-23	Q-1 (Treaters) W to CBZ-23	1957	EQ-09-101 SH.1 EZ-80-09-510EP	12/20/06	pass	4	30	Rmartinez	Treaters to CBZ-23 at DHT Unit
7/1/2008	Q-2 N2714.75' W585.33'	Q-T1 to Q-2	1957	EQ-09-101 SH.1	4/2/2003	Pass	1+	30	Philbert Brown	
7/1/2008		Inhibitor Pump House to Q-2	1957	EQ-09-101 SH.1	4/2/2003	Pass	1+	30	Philbert Brown	
7/1/2008		N2709'-3" W585.33' to Q-2	1957	EQ-09-101 SH.1	4/2/2003	Pass	1+	30	Philbert Brown	
7/1/2008		Q-V3A/Q-V3B to Q-2	1957	EQ-09-101 SH.1	4/2/2003	Pass	1+	30	Philbert Brown	
7/1/2008		Q-V2 to Q-2	1957	EQ-09-101 SH.1	4/2/2003	Pass	1+	30	Philbert Brown	
7/1/2008	Q-3 N2760.67' W576.00'	Q-V13 to Q-V12 to Q-3	1957	EQ-09-101 SH.1	4/3/2003	Pass	2.5+	30	Philbert Brown	
7/1/2008		Q-V11 to Q-3	1957	EQ-09-101 SH.1	4/3/2003	Pass	2.5+	30	Philbert Brown	
7/1/2008		Q-V17 to Q-V16 to Q-V9 to Q-V7 to Q-V14 to Q-3	1957	EQ-09-101 SH.2	4/3/2003	Pass	2.5+	30	Philbert Brown	
7/1/2008		Q-T6/Q-P10 to Q-3	1957	EQ-09-101 SH.2	4/3/2003	Pass	2.5+	30	Philbert Brown	
7/1/2008		Q-V15 to Q-3	1957	EQ-09-101 SH.2	4/3/2003	Pass	2.5+	30	Philbert Brown	
NOTE TO SHEET: TREATER DRAINS ARE ALSO KNOWN AS THE FOLLOWING FROM BI-MONTHLY DRAIN SEAL INSPECTION SHEETS: 2006										
	DRAIN #	LOCATION								
	1	South of Q-V14								
	2	West of Q-V14								
	3	Near Q-V7								

[illegible]

UNDERGROUND PROCESS AND WASTEWATER LINES

TANK FARM Update 7/24/07

Re-test on or before due date	ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature / Performed Test	Investigation Results
	CBZ-20 3073N 632W	CBZ-21 flows N under road to start of tank farm to CBZ-20	1957	EZ-80-509-EP		CBZ-20 - out of service				
12/1/2011	CBZ-19 3073N 935W	CBZ-19 flows W to CBZ-18	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/17/06	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 453 drain flows S connects to Y from Tk 452 continues to Y from Tk 451 to CBZ-19	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/17/06	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-18 3073N 1118W	CBZ-19 flows W to CBZ-18 (See EZ-80-09-514EP)	1957	EZ-80-509-EP, EZ-80-09-514EP, 95103-CC-104, & Z-01-100	11/17/2006	Pass	8 ft	60	Rmartinez/Pmartinez	CBZ-18 was water washed during inspection
12/1/2011		Tk 227 drain flows S to join Tk 228 drain SW to CBZ-18	1957	EZ-80-509-EP, EZ-80-09-514EP, & Z-01-100	11/17/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 342 flows S to join Tk 343 drain S to CBZ-18	1957	EZ-80-509-EP, & Z-01-100	11/17/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		CBZ-18 flows west to CBZ-17	1957		11/17/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-17 3073N 1260W	Tk 107 flows S to join Tk 108 drain onto S to CBZ-17	1957	EZ-80-09-514EP, & Z-01-100	11/20/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
	CBZ-28 2993.5N 1182.5W	CBZ-28 flows NW to CBZ-17 Sump B-6 (Boilerhouse) flows N to CBZ-28	1957	EZ-80-09-514EP, EZ-80-09-513EP, EZ-80-09-514EP, & EZ-81-09-102EP	OOS OOS				Out of Service Out of Service	
12/1/2011	CBZ-16 3073N 1350W	CBZ-17 flows W to CBZ-16	1957	EZ-80-09-514EP, & Z-01-100	11/20/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 321 drain flows S to join Tk 232 drain onto CBZ-16	1957	EZ-80-09-514EP, & Z-01-100	11/20/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-15 3073N 1440W	CBZ-16 flows W to CBZ-15	1957	EZ-80-09-514EP, & Z-01-100	11/20/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 235 drain flows S to join Tk 106 onto CBZ-15	1957	EZ-80-09-514EP, & Z-01-100	11/20/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-14 3073N 1493W	CBZ-15 flows W to CBZ-14	1957	EZ-80-09-514EP, & Z-01-100	11/20/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
		CBZ-30 flows N to CBZ-14	1957	EZ-80-09-513EP & EZ-80-09-514EP	CBZ-14 Main sewer line 24" - unable to test - not authorized (12/06)					
12/1/2011	CBZ-1 3480N 380W	Start Tk 568 drain flows N and W to CBZ-1	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/20/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		T716 flows North to T568 to CBZ-1	2006		11/15/2006	Pass	6 ft	60	IMI Contractor	
12/1/2011		Tk 570 drain flows N to Y from Tk 569 & onto CBZ-1	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/27/2006	Pass	6 ft	60	Rmartinez/Pmartinez	

UNDERGROUND PROCESS AND WASTEWATER LINES

TANK FARM Update 7/24/07

Re-test on or before due date	ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature / Performed Test	Investigation Results
12/1/2011	CBZ-2 3480N 782W	CBZ-1 flows W to CBZ-2	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/27/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 572 drain flows N to join Y from Tk 571 drain to CBZ-2	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/27/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		CBZ-2 flows west to CBZ-3	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/27/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-3 3480N 931.5W	Tk 112 drain flows N to join Y from Tk 111 to CBZ-3	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 226 drain flows into old box and S to CBZ-3	1957	EZ-80-508EP, EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	Underground "T" 3480N 1026W	CBZ-3 flows W to "T"	1957	EZ-80-09-509EP & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 116 drain flows N to join Y from Tk 115 drain to "T"	1957	EZ-80-09-509EP & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-4 3480N 1233W	CBZ-3 through "T" to CBZ-4	1957	EZ-80-09-509EP, EZ-80-09-514EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 567 drain flows N to CBZ-4	???	EZ-80-09-514EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 225 drain flows S to CBZ-4	1957	EZ-80-09-514EP, EZ-80-09-515EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-5 3480N 1325W	CBZ-4 flows W to CBZ-5	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
		Tk 338 flows N to CBZ-5	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
		Tk 339 flows S to CBZ-5	1957	EZ-80-09-514EP, EZ-80-09-515EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
	CBZ-6 3480N 1493W	CBZ-5 flows W to CBZ-6	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006 CBZ-6 main sewer line - unable to test - not authorized					
		Drain fr cone floor for booster & charge pumps flows S to CBZ-6	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
		CBZ-14 flows N to CBZ-6	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006 CBZ-6 main sewer line - unable to test - not authorized					
	CBZ-26 3480N 1750W	CBZ-6 flows W to CBZ-26	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006 CBZ-6 main sewer line - unable to test - not authorized					

UNDERGROUND PROCESS AND WASTEWATER LINES

TANK FARM Update 7/24/07

Re-test on or before due date	ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature / Performed Test	Investigation Results
12/1/2011		Tk 101 drain flows N to CBZ-26	1957	EZ-80-09-514EP, & Z-01-100	11/29/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 102 drain flows N to join Tk 101 drain onto CBZ-26	Prior 1957	EZ-80-514EP, 95103-CC-104, & Z-01-100	11/29/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		CBZ-13 flows S to CBZ-26	1957	EZ-80-09-514EP, EZ-80-09-515EP, & Z-01-100	11/29/2006	Pass	8 ft	60	Rmartinez/Pmartinez	11/26/06: Unable to test - main sewer line
12/1/2011	CBZ-27 3480N 1850W	CBZ-26 flows W to CBZ-27	1957	EZ-80-09-514EP, & Z-01-100	11/29/2006	Pass	8 ft	60	Rmartinez/Pmartinez	11/26/06: Not permitted to test
12/1/2011	API Separator	CBZ-27 flows N NW to API Separator	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006	Unable to test - not authorized				Now flows to New API Pit (2004)
12/1/2011	CBZ-7 3745N 370W	Catch Basin at RRR pumped up to CBZ-7		95103-CC-104	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	Sewer Box needs repair
12/1/2011		Tk 582 drain flows N to CBZ-7	1957	EZ-80-09-508EP, & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-8 3745N 675W	CBZ-7 flows W to CBZ-8	1957	EZ-80-09-508EP, & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 581 drain flows NW to CBZ-8	1957	EZ-80-09-508EP, & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	Sewer Box needs repair
12/1/2011		Tk 575 drain flows N to join Tk 577 drain to NE to CBZ-8	1957	EZ-80-09-508EP, & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-9 3985N 675W	CBZ-31 uses pump to pump to CBZ-9	1957	EZ-80-09-508EP, & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-31 3959N 460W	Drain N3850 W460 flow N to join "Y" from Tk 574 drain to CBZ-31	1957	EZ-80-09-508EP, & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		CBZ-32 flows W to CBZ-31	1957	EZ-80-09-508EP, & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-32 3959N 425W	Tk 576 drain flows NW to CBZ-32	1957	EZ-80-09-508EP, & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-10 3985N 780W	CBZ-9 flows W to CBZ-10	1957	EZ-80-09-508EP, & Z-01-100	12/1/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 579 drain flows W to CBZ-10	1957	EZ-80-09-508EP, & Z-01-100	12/1/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-11 3985N 1136W	CBZ-10 flows W to CBZ-11	1957	EZ-80-09-508EP, EZ-80-09-515EP, & Z-01-100	12/1/2006	Pass	9 ft	60	Rmartinez/Pmartinez	
12/1/2011		T583 flows north to CBZ-11			12/1/2006	Pass	9	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-12 3985N 1492W	CBZ-11 flows W to CBZ-12	1957	EZ-80-09-515EP, & Z-01-100	12/1/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 343, Tk344 & Tk 337 drains to CBZ-12	AFTER 1957	NO Drawing	12/1/2006	Pass	8 ft	60	Rmartinez/Pmartinez	

UNDERGROUND PROCESS AND WASTEWATER LINES

TANK FARM Update 7/24/07

Re-test on or before due date	ID Number (Sewer Box or Catch Basin)	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/ Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature / Performed Test	Investigation Results
12/1/2011	CBZ-13 3985N 1750W	CBZ-12 flows W to CBZ-13	1957	EZ-80-09-513EP & Z-01-100	12/1/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-50 2931.17N 1485.50W	Mkt 4 drain N to Mkt 1 drain to Mkt 2 drain to Mkt 3 drain E & NE to CBZ-30	1957	EZ-80-09-513EP	11/13/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-29	CBZ-29 N to CBZ-30	1957	EZ-80-09-513EP	11/9/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	2737.82N 1485.50W	Drains fr old Fuel Oil Loading N2618.82 W1619.75 & N2649.94 W1595.0 flow NW to CBZ-29	1957	EZ-80-09-513EP	11/8/2006	Pass	6 ft	30	Rmartinez/Pmartinez	
12/1/2011		2781.17N drain pipe to CBZ-29	1957	EZ-80-09-513EP	11/8/2006	Pass	6 ft	30	Rmartinez/Pmartinez	I & E Shop now
12/1/2011		2756.17N drain pipe to CBZ-29	1957	EZ-80-09-513EP	11/8/2006	Pass	6 ft	30	Rmartinez/Pmartinez	I & E Shop now
12/1/2011		2731.17N drain pipe to CBZ-29	1957	EZ-80-09-513EP	11/8/2006	Pass	6 ft	30	Rmartinez/Pmartinez	I & E Shop now
12/1/2011		Truck Loading, 3 Area Drains flow to sump, then sump flows to CBZ-29	1957	EZ-80-09-513EP	11/13/2006	Pass	5 ft	60	Rmartinez/Pmartinez	
		4" Oily & Acid Drain from Lab Sinks & Floor to tie in between Truck Loading Sump and CBZ-29	1957	EZ-80-09-513EP, & EZ-09-250EP & EZ- 09-174	11-13-06: Unable to test - line plugged from Lab building to CBZ-29.					
12/1/2010	C.B. No. 5 -3590N 112.35W	RRR Drains L S (Loading Spot) #13 to LS #12 to LS #11 to LS #10 to CB #5	1957	EZ-80-09-504EP EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
12/1/2010	C.B. No. 4	LS #9, LS #8, LS #7, & LS #6 "T" into C. B. No.5 to C.B. No.4	1957	EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
12/1/2010	C.B. No. 3	C.B. No.4 to C.B. No.3	1957	EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
12/1/2010	C.B. No. 2 3870N 112.35W	LS#5, LS#4, & LS#3 "T" in C.B. No.3 to C.B. No.2	1957	EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
12/1/2010	C.B. No. 1	LS #2 & LS #1 "T" to C.B. No.2 to C.B. No. 1	1957	EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
	C.B. No.1 to Sewerage Basin		1957	EZ-80-09-506EP		Made area where MH No. 8 was to a large concrete containment, sewage basin taken out of service				
12/1/2010	MH No.9 3394N 162W	MH No. 10 3394N 210.32W connects to MH No.9	1957	EZ-80-09-504EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
12/1/2010	MH No.6 3606N 162W	MH No.9 to MH No.6	1957	EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
12/1/2010	MH No.7 3739.58N 137.00W	MH No.6 to MH No. 7	1957	EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
	MH No.8 4089.58N 137.00W	MH No.7 N to MH No.8	1957	EZ-80-09-505EP		Made area where MH No. 8 was to a large concrete containment, sewage basin taken out of service				
	MH No.8 to Sewerage Basin		1957	EZ-80-09-505EP EZ-80-09-506EP		Made area where MH No. 8 was to a large concrete containment, sewage basin taken out of service				

Boiler Plant

1 of 1

OCD Permit Condition 21:

e. Summary of All Leaks, Spills, and Releases and Corrective Actions

OCD Permit Condition 21. 3.e.
Summary of All Spills and Releases
Giant Refining - Ciniza Refinery

Spill/Release	Date	Spilled Material	Volume (barrels)	Volume (gallons)	Corrective Action
Marketing Tank No. 6 MTBE	2/12/2006	MTBE	3	126	soils disposed at Painted Desert LF
Sewer line Leak at PDA/SRU	2/24/2006	slop oil	40	1680	soils disposed at Painted Desert LF
Tank 563 overfill	4/20/2006	natural gasoline	2	84	area cleaned up
Distillate/kerosene spill under pipeway	6/7/2006	distillate/kerosene	2.1	90	remediate in place
Pilot sewer water pipe leak	8/8/2006	sanitary water	33.3	1400	pipe repaired, soil put back in place
Slop line from units to Tank 107	8/9/2006	slop oil	0.5	20	area cleaned up
Tank 334 Sour naptha Spill	9/9/2006	sour naptha	4	168	area cleaned up
API Weir Box spill	9/17/2006	wastewater	1	42	area cleaned up
Sour naptha Rundown Leak	9/17/2006	sour naptha	3	126	area cleaned up
Alky Fire	10/5/2006	mostly water	0.8	34.3	removed soil placed on landfarm
tank 107 Spill	10/8/2006	slop oil	2	84	area cleaned up
Fuel Oil loading Rack	10/9/2006	fuel oil	0.1	3	area cleaned up
DH2 Fire Spill	12/27/2006	diesel	4.8	200	not necessary-no release to soil
Tank 102 Spill	12/31/2006	crude	50	2100	area cleaned up

OCD Permit Condition 21:

f. Summary of Discovery of New Groundwater Contamination

Some arsenic did show up in GWM-1 in 2006 sampling at 0.077 mg/l which exceeds the NMWQS of 0.05 mg/l. Other parameters are generally similar to previous years sampling.

OCD Permit Condition 21:

g. Summary and Copies of All EPA-NMED RCRA Activity

The following items are included in this section:

2006 Land Treatment Unit Inspection Summary

2006 Annual Hazardous Waste Fee Report

NMED-HWB Contained-In Determination for Banks Cleanup Soil

OCD Approval for Gandy-Marley

2006 Land Treatment Unit Inspections Log

Date of Inspection	Inspector's Name	Findings
1/4/2006	Johnny Sanchez	OK/Good
1/6/2006	Kent McKinney	OK/Good
1/10/2006	Johnny Sanchez	OK/Good
1/12/2006	Johnny Sanchez	OK/Good
1/18/2006	Kent McKinney	OK/Good
1/19/2006	Kent McKinney	OK/Good
1/24/2006	Johnny Sanchez	OK/Good
1/26/2006	Kent McKinney	OK/Good
1/30/2006	Johnny Sanchez	OK/Good
2/2/2006	Kent McKinney	OK/Good
2/6/2006	Johnny Sanchez	OK/Good
2/9/2006	Kent McKinney	OK/Good
2/15/2006	Johnny Sanchez	OK/Good
2/16/2006	Kent McKinney	OK/Good
2/22/2006	Johnny Sanchez	OK/Good
2/23/2006	Kent McKinney	OK/Good
3/1/2006	Jim Lieb	OK/Good
3/2/2006	Kent McKinney	OK/Good
3/6/2006	Johnny Sanchez	OK/Good
3/9/2006	Kent McKinney	OK/Good
3/16/2006	Johnny Sanchez	OK/Good
3/20/2006	Johnny Sanchez	OK/Good
3/23/2006	Kent McKinney	OK/Good
3/29/2006	Johnny Sanchez	OK/Good
3/30/2006	Kent McKinney	OK/Good
4/3/2006	Johnny Sanchez	OK/Good
4/6/2006	Kent McKinney	OK/Good
4/10/2006	Johnny Sanchez	OK/Good
4/13/2006	Kent McKinney	OK/Good
4/17/2006	Johnny Sanchez	OK/Good
4/20/2006	Kent McKinney	OK/Good
4/25/2006	Johnny Sanchez	OK/Good
4/27/2006	Kent McKinney	OK/Good
5/2/2006	Johnny Sanchez	OK/Good
5/4/2006	Kent McKinney	OK/Good
5/9/2006	Johnny Sanchez	OK/Good
5/11/2006	Kent McKinney	OK/Good
5/17/2006	Johnny Sanchez	OK/Good
5/24/2006	Johnny Sanchez	OK/Good
5/25/2006	Kent McKinney	OK/Good
5/30/2006	Johnny Sanchez	OK/Good
6/5/2006	Johnny Sanchez	OK/Good
6/8/2006	Kent McKinney	OK/Good
6/12/2006	Johnny Sanchez	OK/Good
6/15/2006	Kent McKinney	OK/Good
6/19/2006	Johnny Sanchez	OK/Good
6/22/2006	Kent McKinney	OK/Good
6/26/2006	Johnny Sanchez	OK/Good

6/27/2006	Kent McKinney	OK/Good
6/29/2006	Kent McKinney	OK/Good
7/3/2006	Johnny Sanchez	OK/Good
7/10/2006	Johnny Sanchez	OK/Good
7/13/2006	Kent McKinney	OK/Good
7/18/2006	Johnny Sanchez	OK/Good
7/20/2006	Kent McKinney	OK/Good
7/24/2006	Johnny Sanchez	OK/Good
7/31/2006	Cheryl Johnson	OK/Good
8/3/2006	Kent McKinney	OK/Good
8/9/2006	Cheryl Johnson	OK/Good
8/16/2006	Cheryl Johnson	OK/Good
8/17/2006	Kent McKinney	OK/Good
8/22/2006	Cheryl Johnson	OK/Good
8/24/2006	Kent McKinney	OK/Good
8/28/2006	Cheryl Johnson	OK/Good
8/31/2006	Kent McKinney	OK/Good
9/6/2006	Cheryl Johnson	OK/Good
9/7/2006	Cheryl Johnson	OK/Good
9/11/2006	Cheryl Johnson	OK/Good
9/14/2006	Kent McKinney	OK/Good
9/18/2006	Cheryl Johnson	OK/Good
9/21/2006	Kent McKinney	OK/Good
9/25/2006	Cheryl Johnson	OK/Good
9/28/2006	Kent McKinney	OK/Good
10/2/2006	Steve Morris	OK/Good
10/3/2006	Kent McKinney	OK/Good
10/10/2006	Cheryl Johnson	OK/Good
10/12/2006	Kent McKinney	OK/Good
10/17/2006	Cheryl Johnson	OK/Good
10/19/2006	Kent McKinney	OK/Good
10/23/2006	Cheryl Johnson	OK/Good
10/26/2006	Kent McKinney	OK/Good
10/31/2006	Cheryl Johnson	OK/Good
11/2/2006	Kent McKinney	OK/Good
11/6/2006	Cheryl Johnson	OK/Good
11/9/2006	Kent McKinney	OK/Good
11/13/2006	Cheryl Johnson	OK/Good
11/16/2006	Kent McKinney	OK/Good
11/21/2006	Cheryl Johnson	OK/Good
11/30/2006	Kent McKinney	OK/Good
12/7/2006	Kent McKinney	OK/Good
12/12/2006	Cheryl Johnson	OK/Good
12/14/2006	Kent McKinney	OK/Good
12/20/2006	Cheryl Johnson	OK/Good
12/29/2006	Jim Lieb	OK/Good

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing? *SOME*
Wet or Dry? *SNOW*
Odor?
Erosion?
Is vegetation growing?

☒	Yes
☒	Yes
☐	Yes
☐	Yes
☒	Yes

☐	No
☐	No
☒	No
☒	No
☐	No

Monitoring Wells

Condition:

O.K.

Caps and Locks:

Dikes/Berms

Condition:

Water Standing? *SOME*
Wet or Dry? *SCATTERED*

☒	Yes
☒	Yes

☐	No
☐	No

Vehicle, Fence, and Locks

Condition:

OK

Signs (8)

Condition:

In Place?
Legible?

☒	Yes
☒	Yes

☐	No
☐	No

Repairs Needed

NONE

Time of Day:

1:00 PM

☐ AM

☒ PM

Date:

12/29/06

Name of Inspector:

JM LEB

Repairs Completed

Signature:

[Signature]

Date:

12/29/06

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing? SNOW
Wet or Dry?
Odor?
Erosion?
Is vegetation growing?

☒	Yes
☒	Yes
☐	Yes
☐	Yes
☒	Yes

☐	No
☐	No
☒	No
☒	No
☐	No

Monitoring Wells

Condition:

OK

Caps and Locks:

Dikes/Berms

Condition:

Water Standing? SNOW
Wet or Dry?

☒	Yes
☒	Yes

☐	No
☐	No

Vehicle, Fence, and Locks

Condition:

OK

Signs (8)

Condition:

In Place?
Legible?

☒	Yes
☒	Yes

☐	No
☐	No

Repairs Needed

Time of Day:

2:00

☐ AM

☒ PM

Date:

12/20/00

Name of Inspector:

Chris Johnson

Repairs Completed

Signature: _____

Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:	Water Standing?	☐	Yes	☒	No
	Wet or <u>Dry</u> ?	☒	Yes	☐	No
	Odor?	☐	Yes	☒	No
	Erosion?	☐	Yes	☒	No
	Is vegetation growing?	☒	Yes	☐	No

Monitoring Wells

Condition: OK

Caps and Locks:

Dikes/Berms

Condition:	Water Standing?	☐	Yes	☒	No
	Wet or <u>Dry</u> ?	☒	Yes	☐	No

Vehicle, ~~Engine~~, and Locks

Condition: OK

Signs (8)

Condition:	In Place?	☒	Yes	☐	No
	Legible?	☒	Yes	☐	No

Repairs Needed

Time of Day: 0930 ☒ AM ☐ PM Date: 1-10-06

Name of Inspector: Johnny Smith

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface		
Condition:	Water Standing? Wet or Dry? Odor? Erosion? Is vegetation growing?	☐ Yes ☒ No ☒ Yes ☐ No ☐ Yes ☒ No ☐ Yes ☒ No ☒ Yes ☐ No
Monitoring Wells		
Condition: <u>OK</u>		
Caps and Locks: <u>yes</u>		
Dikes/Berms		
Condition:	Water Standing? Wet or Dry?	☐ Yes ☒ No ☒ Yes ☐ No
Vehicle, Fence, and Locks		
Condition: <u>OK</u>		
Signs (8)		
Condition:	In place? Legible?	☒ Yes ☐ No ☒ Yes ☐ No
Repairs Needed		
Time of day: <u>0730</u> ☒ AM ☐ PM Date: <u>01-06-06</u> Name of Inspector: <u>[Signature]</u>		
Repairs Completed		
Signature: _____ Date: _____		

Figure F-1. Land Treatment Unit Inspection Checklist

OCD LANDFARM TILLING RECORDS SUMMARY 2006

File: OCD 17.C.

DATE	NAME	DESCRIPTION
January 11, 2006	Mack McKinney	Plowed Landfarm
February 6, 2006	Mack McKinney	Disk Landfarm
March 2, 2006	Mack McKinney	Plowed Landfarm
March 27, 2006	Mack McKinney	Disk & Plowed
April 26, 2006	Mack McKinney	Disc
May 31, 2006	Mack McKinney	Plow
June 22, 2006	Mack McKinney	Disc
July 25, 2006	Mack McKinney	Plowed Landfarm
Aug 31, 2006	Mack McKinney	Unable to disc - too wet
September 27, 2006	Mack McKinney	Unable to disc/till too wet, standing water in NE corner
October 25, 2006	Mack McKinney	Partially plowed, still too wet
November 27, 2006	Mack McKinney	Plowed Landfarm
12/5/2006	Mack McKinney	Plowed Landfarm



NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS WASTE BUREAU

Report # NMD000 333 211-2401

2006 ANNUAL HAZARDOUS WASTE FEE REPORT

Note: Complete and return this report with your invoice and payment

SECTION I: FACILITY INFORMATION AND IDENTIFICATION

Facility Name: Giant Refining Company- Gallup Refinery

EPA Identification Number: NMD000333211 Phone: 505-722-0217

Facility Address: Interstate 40, Exit 39, 17 miles East of Gallup, Jamestown NM 87347

Mailing Address: Route 3 Box 7, Gallup NM 87301

Facility Contact: Ed Riege

Title: Environmental Superintendent

Reporting Date: 8/20/2007

The New Mexico Hazardous Waste Generation Fee is comprised of two parts: a Business Fee and a Generation Fee. The Business Fee is determined by your generator status and the Generation Fee is determined by the amount of non-recycled hazardous waste, which is generated by the facility. It is important to note that your generator status is determined by adding the recycled and non-recycled hazardous waste generated by your facility each month.

Detailed regulations covering the annual hazardous waste fees are defined at 20.4.3 NMAC.

SECTION II: ANNUAL GENERATION CALCULATIONS

To calculate the annual waste generation amounts, use the schedule below. Enter the total pounds of hazardous waste generated per month and then subtract the pounds of recycled hazardous waste per month. The difference is the amount of non-recycled hazardous waste generated.

Calendar Year: <u>2006</u>					
Month	Total Hazardous Waste (lb)		Recycled (lb)	=	Non-Recycled (lb)
January	15669	-	0	=	15669
February	3141	-	0	=	3141
March		-		=	
April	52424	-	0	=	52424
May		-		=	
June	47118	-	0	=	47118
July		-		=	
August		-		=	
September	50150	-		=	50150
October	55360	-	55360	=	0
November		-		=	
December	39995	-	0	=	39995
Annual Totals	263857	-	55360	=	208497

SECTION III: GENERATION STATUS DETERMINATION

Determine your generator status using the largest amount of total hazardous waste generated during any one calendar month (from first column in Section II).

GENERATOR STATUS:

- * If you generate 220 lbs (100 kg) or less of hazardous waste (recycled and non-recycled) in any one month, you are a Conditionally Exempt Small Quantity Generator (CESQG).
- * If you generate more than 220 lbs (100 kg) but less than 2,206 lbs (1,000 kg) of hazardous waste (recycled and non-recycled) in any one month, you are a Small Quantity Generator (SQG).
- * If you generate more than 2,205 lbs (1,000 kg) of hazardous waste (recycled and non-recycled) in any one month, you are a Large Quantity Generator (LQG).

NOTE: IF YOU ARE A CESQG, YOU DO NOT OWE ANY FEES. PLEASE COMPLETE THE CERTIFICATION SECTION OF THIS FORM AND RETURN TO OUR OFFICE.

SECTION IV: BUSINESS FEES

Based on the generator status determined from Section III, check the appropriate category for this facility and pay the appropriate Business Fee.

Conditional Exempt Small Quantity Generator	no fees due
Small Quantity Generator	\$ 200.00
Large Quantity Generator	\$2,500.00

SECTION V: ANNUAL GENERATION FEES

1. Conditionally Exempt Small Quantity Generators do not owe any annual generator fees.
2. Small Quantity Generators shall pay the following fees based on the average monthly amount of non-recycled hazardous waste generated.

Annual total non-recycled hazardous waste from Section II divided by twelve equals monthly average

_____ lb / 12 = _____ pounds per month

1 - 500 pounds/month	\$ 35.00
501 - 1,000 pounds/month	\$ 100.00
1,001 - 2,205 pounds/month	\$ 250.00

If < 2,206 pounds/month, enter appropriate fee: \$ _____

3. Large Quantity Generators at a site shall pay the following fees for non-recycled hazardous waste generated for the reporting year, if both hazardous waste and hazardous wastewater were generated at the site, the generator must determine the amounts for each to calculate the fee. Use the following fee schedules for these calculations.

- a. \$ 0.01 per pound of non-recycled hazardous waste generated at the site.

_____ 208497 _____ pounds for the reporting year X \$ 0.01 = \$ _____ 2084.97

and

- b. \$ 0.01 per ton of wastewater designated a hazardous waste solely because it exhibits a hazardous characteristic.

_____ tons for reporting year X \$ 0.01 = \$ _____

Total LQG annual fee (a + b) = \$ _____ 2084.97

SECTION VI: PAST DUE FEES

Fees owed for previous years are calculated the same as above and are then multiplied by 1%. The **sum** of the annual business fee (Section IV) and the generation fee (Section V) are **multiplied** by the number of months that the fee is past due:

$$\text{Business Fee} + \text{Generation} \times 1\% \times \text{Number of months past due} = \text{Late Fee}$$

$$\text{Example: } (\$200 + \$35) \times 0.01 \times 10 \text{ Months} = \$23.50$$

$$\text{Example: } (\$200 + \$35) \times 0.01 \times 10 \text{ Months} = \$23.50$$

This late fee is added to the business fee, the generation fee, and the administration charge of \$100 to determine the total past due fee owed for that year:

$$\text{Business Fee} + \text{Generation} + \text{Late Fee} + \$100 = \text{Total Past Due Fee}$$

$$\text{Example: } \$200.00 + \$35.00 + \$23.50 + \$100.00 = \$358.50$$

If you are paying past due fees for multiple years, you pay the administration charge one time only. The fees for each year are due on August 1st of the following year.

Example: Fees for 2005 were due on August 1, 2006. Please calculate past due fees and enter them below:

2002 Fees		\$	_____
2003 Fees		\$	_____
2004 Fees		\$	_____
2005 Fees		\$	_____
Administrative Fee		\$	100.00
Total Past Due Fees Owed		\$	_____

SECTION VII: CAP FEES

CAP Fees: The aggregate amount of annual generation and business fees to be paid per person [as defined at 20.4.3.107(B)(12) NMAC] for any year based on this Part (20.4.3 NMAC) shall be limited to:

One facility		\$35,000.00
Two facilities		\$50,000.00
Three or more facilities		\$65,000.00

If your facility generates non-recycled hazardous waste in amounts which will result in a total fee greater than the amounts given in the above table, you only pay the CAP Fee indicated. These CAP Fees does not apply to late fees.

SECTION VIII: TOTAL FEES DUE

Total Fees (Business Fees, Generation Fees)	4584.97
Owed for Current Calendar Year	_____
Total Past Due Fees Owed (if applicable)	_____
TOTAL FEES	\$4,584.97

SECTION IX: CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents. I hereby certify that either based on my personal knowledge or my inquiry of those individuals immediately responsible for obtaining the information, the submitted information is true, accurate and complete. I hereby acknowledge that any person who knowingly omits information from or makes any false statement or representation in a fee report may be subject to criminal penalties under the Act.

ED RIGGS
Name (printed or typed)

Refinery Manager
Title

Signature

[Signature]

Date

August 21, 2007

This report must be completed and returned to the address listed below. Make your cashiers check or money order for the full amount due payable to the NMED Hazardous Waste Fund and mail it to:

**NMED - Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe, New Mexico 87505**

RECEIVED AUG 23 2007



23733 N. Scottsdale Rd.
Scottsdale, AZ
85255-9969
480
585-8888

Page: 1

Check #:301221

Vendor #:76707

Check Date:08/22/07

Invoice Number	Inv. Date	Description	Gross	Discount	Net
CKRQ-08-21-07	08/21/07		4,584.97		4,584.97
			4,584.97		4,584.97

THE FACE OF THIS CHECK IS PRINTED BLUE - THE BACK CONTAINS A SIMULATED WATERMARK

GIANT INDUSTRIES, INC.

23733 N. Scottsdale Rd.
Scottsdale, AZ
85255-9969

480
585-8888

Date: 08/22/07

Check No. 301221

Bank of America
Bank of America
North Carolina

66-19
530

Valid for 180 days From Date of Issue

\$ 4,584.97

Amount

FOUR THOUSAND FIVE HUNDRED EIGHTY FOUR AND 97/100

To the Order of

NMED/HRMB
Hazardous Waste Bureau
2905 Rodeo Park Dr E Bldg 1
PO Box 26110
Santa Fe NM 87502

M. M. M.



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

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

June 29, 2006

Mr. Ed Riege
Environmental Superintendent
Giant Refining Company
Route 3 Box 7
Gallup, New Mexico 87301

**SUBJECT: "CONTAINED-IN" DETERMINATION APPROVAL REGARDING
CONTAMINATED SOIL REMOVED FROM THE AERATION
LAGOONS AND EVAPORATION PONDS
AUGUST 2005 API SEPARATOR RELEASE
GIANT REFINING COMPANY, CINIZA REFINERY
EPA ID NO. NMD000333211
HWB-GRCC-MISC**

Dear Mr. Riege:

The New Mexico Environment Department (NMED) is in receipt of Giant Refining Company, Ciniza Refinery's (the Permittee) letter titled *Request For Waste Determination At The Giant Ciniza Refinery* dated June 15, 2006. This letter requests a "contained-in" determination for petroleum contaminated soil excavated from the banks of Aeration Lagoons (AL) No. 1 and No. 2 and Evaporation Ponds (EP) No. 1 and No. 2. The soil was contaminated, in part, by API separator releases that occurred on August 3 and 15, 2005. Oily wastewater containing benzene (D018) and F037/F038-listed waste was released from the API separator, entered the ALs and EPs and was eventually deposited on the banks of the ponds. Six composite and six discrete soil samples were obtained from excavated soils removed from the banks of the ALs and EPs. The discrete samples were analyzed in a laboratory for volatile organic compounds (VOCs). The composite samples were analyzed in a laboratory for semi-volatile organic compounds (SVOCs),

Mr. Ed Riege
Giant Ciniza Refining Company
June 29, 2006
Page 2 of 2

toxicity characteristic leaching procedure (TCLP) metals, reactivity, ignitability, corrosivity, diesel range organics (DRO) and gasoline range organics (GRO).

NMED has determined that the Permittee is not required to manage the soils excavated from around the banks of the ALs and EPs as hazardous waste. This determination is based on analytical data indicating concentrations of all detected constituents were below the residential NM SSLs and EPA Region 6 Residential standards. As part of this approval, the Permittee must dispose of the soil in an appropriate landfill or on-site in a designated Oil Conservation Division (OCD) landfarm, if approved by OCD. If the excavated soil is not disposed of in the OCD landfarm, the Permittee must obtain approval for final disposal from both NMED and OCD.

If you have questions regarding this approval please contact Hope Monzeglio of my staff at 505-428-2545.

Sincerely,



James P. Bearzi
Chief
Hazardous Waste Bureau

JPB:hm

cc: J. Kieling, NMED HWB
D. Cobrain, NMED HWB
H. Monzeglio, NMED HWB
W. Price, NMEMNRD OCD
S. Morris, GRCC
J. Lieb, GRCC

File: Reading GRCC 2006

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

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-1
Revised June 10, 20

Submit Original
Plus 1 Copy
to Appropriate
District Office

2006 DEC 26 PM 1:13
REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☒ Non-Exempt: ☐ ☐ Verbal Approval Received: Yes ☐ No ☐	4. Generator <u>Giant Industries</u>
2. Management Facility Destination <u>Gandy Marley</u>	5. Originating Site <u>Civica Refinery</u>
3. Address of Facility Operator <u>US 380 E Roswell NM</u>	6. Transporter <u>not sure</u>
7. Location of Material (Street Address or ULSTR) <u>Exit 39 I-40</u>	8. State <u>Amestown NM</u>
9. Circle One: A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved. All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

300 yd of oil impacted soil from clean up of lagoon and pond banks

Estimated Volume 300 cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE Bill Marley TITLE: VP DATE: 12/13/06
Waste Management Facility Authorized Agent
TYPE OR PRINT NAME: Bill Marley TELEPHONE NO. 505-347-0434
E-MAIL ADDRESS GMI@DFN.COM

(This space for State Use)
APPROVED BY: [Signature] TITLE: ENVIED ENGR DATE: 12/28/06
APPROVED BY: _____ TITLE: _____ DATE: _____

GANDY MARLEY, INC.
P. O. BOX 827
TATUM, NEW MEXICO 88267
TATUM, NEW MEXICO ROSWELL, NEW MEXICO

CERTIFICATE OF WASTE STATUS
OILFIELD EXEMPT WASTE MATERIAL

Originating Location: Giant Industries
Ciniza Refinery Exit 39 I-40 Jamestown NM
Source: Cleanup of Leagues + Pond
Disposal Location: Gandy Marley Landfill

"As a condition of acceptance for disposal, I hereby certify that this waste is an exempt waste as defined by the Environmental Protection Agency's (EPA) July 1980 Regulatory Determination. To my knowledge, this waste will be analyzed pursuant to the provisions of 40 CFR Part 261 to verify the nature as non-hazardous. I further certify that to my knowledge no "hazardous or listed waste" pursuant to the provisions of 40 CFR, Part 261, Subparts C and D, has been added or mixed with the waste so as to make the resultant mixture a "hazardous waste" pursuant to the provisions of 40 CFR, Section 261.3 (b)."

I, the undersigned as the agent for Giant Industries
concur with the status of the waste from the subject site.

PER the NMED'S
CONTAINED IN DETERMINATION
THE SOIL IS RCRA
NON-HAZARDOUS.

Name Ed Riege
Title/Agency Environmental Superintendent
Address Rt 3 Box 7
Gallup NM 87301
Signature [Signature]
Date 12-21-06