American Environmental Network, Inc.

Cinza Background Samples

AEN I.D. 705350

May 29 1997

GIANT REFINING CO.
RT. 3 BOX 7
GALLUP NM 87301

Project Name BCKGRD FOR RCRA LTA
Project Number (none)

Attention: STEVE MORRIS

On 5/19/97 American Environmental Network (NM), Inc. (ADHS License No. AZ0015), received a request to analyze **non-aq** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

pH analysis was performed by American Environmental Network (NM) Inc., Albuquerque, NM.

All other analyses were performed by American Environmental Network (FL) Inc., 11 East Olive Road, Pensacola, FL.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

Kimberly D. McNeill
Project Manager

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: mt

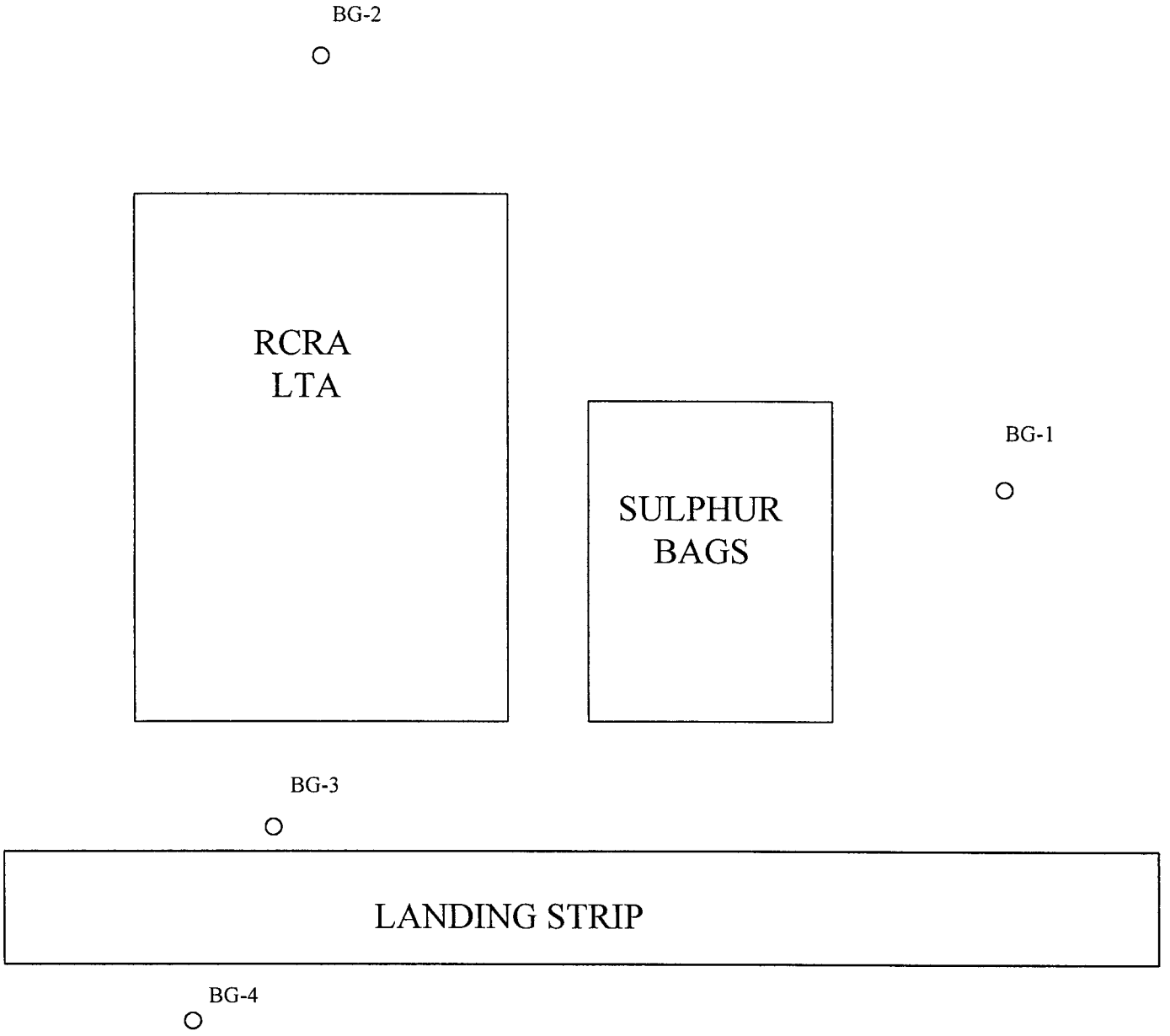
Enclosure

American Environmental Network Inc

CLIENT	: GIANT REFINING CO.	AEN I.D.	: 705350
PROJECT #	: (none)	DATE RECEIVED	: 5/19/97
PROJECT NAME	: BCKGRD FOR RCRA LTA	REPORT DATE	: 5/29/97

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	BG-1-51897	NA	5/18/97
02	BG-2-51897	NA	5/18/97
03	BG-3-51897	NA	5/18/97
04	BG-4-51897	NA	5/18/97

Background samples 5/18/97



American Environmental Network Inc

GENERAL CHEMISTRY RESULTS

CLIENT	: GIANT REFINING CO.	AEN I.D.	: 705350
PROJECT #	: (none)	DATE RECEIVED	: 5/19/97
PROJECT NAME	: BCKGRD FOR RCRA LTA		

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
01	BG-1-51897	NON-AQ	5/18/97	5/23/97
02	BG-2-51897	NON-AQ	5/18/97	5/23/97
03	BG-3-51897	NON-AQ	5/18/97	5/23/97

PARAMETER	UNITS	01	02	03
PH (SW846-9045B)	UNITS	8.79	9.04	8.94

CHEMIST NOTES:
N/A

American Environmental Network Inc

GENERAL CHEMISTRY RESULTS

CLIENT	: GIANT REFINING CO.	AEN I.D.	: 705350
PROJECT #	: (none)	DATE RECEIVED	: 5/19/97
PROJECT NAME	: BCKGRD FOR RCRA LTA		

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
04	BG-4-51897	NON-AQ	5/18/97	5/23/97

PARAMETER	UNITS	04
PH (SW846-9045B)	UNITS	8.70

CHEMIST NOTES:
N/A

American Environmental Network Inc

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT	: GIANT REFINING CO.	AEN I.D.	: 705350
PROJECT #	: (none)	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: BCKGRD FOR RCRA LTA		

PARAMETER	UNITS	AEN I.D.	SAMPLE RESULT	DUP. RESULT	% RPD
PH	UNITS	705350-01	8.79	8.86	0.8

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

American Environmental Network Inc

"FINAL REPORT FORMAT - MULTIPLE"

Accession: 705350
Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number: 705350
Project Name: GIANT REFINING
Project Location: N/S
Test: Group of Single Wetchem
QcLevel: II

Parameter:	Unit:	Result:	R.L:	Batch:	Q:
Client ID: 705350-01			Lab ID: 001		
WALKLEY BLACK TOC	%	0.29	0.05	WTS016	
Comments:					
Client ID: 705350-02			Lab ID: 002		
WALKLEY BLACK TOC	%	0.58	0.05	WTS016	
Comments:					
Client ID: 705350-03			Lab ID: 003		
WALKLEY BLACK TOC	%	0.58	0.05	WTS016	
Comments:					
Client ID: 705350-04			Lab ID: 004		
WALKLEY BLACK TOC	%	0.48	0.05	WTS016	
Comments:					

American Environmental Network Inc

"FINAL REPORT FORMAT - MULTIPLE"

Accession: 705350
Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number: 705350
Project Name: GIANT REFINING
Project Location: N/S
Test: Group of Single Wetchem

Client ID:	Lab Matrix: ID:	Date/Time Sampled:	Date Received:
705350-01	001 SOIL	18-MAY-97 0915	20-MAY-97
705350-02	002 SOIL	18-MAY-97 0935	20-MAY-97
705350-03	003 SOIL	18-MAY-97 0950	20-MAY-97
705350-04	004 SOIL	18-MAY-97 1010	20-MAY-97

American Environmental Network Inc

"Method Report Summary"

Accession Number: 705350
Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number: 705350
Project Name: GIANT REFINING
Project Location: N/S
Test: Group of Single Wetchem

Client Sample Id:	Parameter:	Unit:	Result:
705350-01	WALKLEY BLACK TOC	%	0.29
705350-02	WALKLEY BLACK TOC	%	0.58
705350-03	WALKLEY BLACK TOC	%	0.58
705350-04	WALKLEY BLACK TOC	%	0.48

American Environmental Network Inc

"WetChem Quality Control Report"

Parameter:	WALK TOC
Batch Id:	WTS016
Blank Result:	<0.05
Anal. Method:	WBTOC
Prep. Method:	N/A
Analysis Date:	23-MAY-97
Prep. Date:	23-MAY-97

Sample Duplication

Sample Dup:	705350-1
Rept Limit:	<0.05
Sample Result:	0.29
Dup Result:	0.29
Sample RPD:	0
Max RPD:	26
Dry Weight%	N/A

Matrix Spike

Sample Spiked:	705350-1
Rept Limit:	<0.05
Sample Result:	0.29
Spiked Result:	0.48
Spike Added:	0.26
% Recovery:	73
% Rec Limits:	59-127
Dry Weight%	N/A

ICV

ICV Result:	
True Result:	
% Recovery:	
% Rec Limits:	

LCS

LCS Result:	0.24
True Result:	0.26
% Recovery:	92
% Rec Limits:	80-120

----- Common Footnotes WetChem -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW AEN REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED.
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DISTILLATION) SPIKE IS REPORTED DUE TO PERCENT RECOVERY BEING OUTSIDE ACCEPTANCE LIMITS ON THE MATRIX (PRE-DISTILLATION) SPIKE.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE. (DILUTION PRIOR TO ANALYSIS)
@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX. (DILUTION PRIOR TO DIGESTION)
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
Z = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= SAMPLE AND / OR DUPLICATE RESULT IS BELOW 5 X AEN REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE AEN REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL". SAMPLE IS NON-HOMOGENEOUS.
(*) = DETECTION LIMITS RAISED DUE TO CLP METHOD NOT REQUIRING A CONCENTRATION STEP FOR CN.
(CA) = SEE CORRECTIVE ACTIONS FORM.
**= MATRIX INTERFERENCE
SW-846, 3rd Edition, latest EPA-approved edition.
EPA 600/4-79-020, Revised March 1983.
STANDARD METHODS, For the Examination of Water and Wastewater, latest EPA-approved edition.
NIOSH Manual of Analytical Methods, 4th Edition.
ANNUAL BOOK OF ASTM STANDARDS, VOLUMES 11.01 and 11.02, latest EPA-approved edition.
METHODS FOR THE DETERMINATION OF INORGANIC SUBSTANCES IN ENVIRONMENTAL SAMPLES, EPA600/R-93/100, AUGUST 1993
AEN-PN USES THE MOST CURRENT PROMULGATED METHODS FROM THE REFERENCES LISTED ABOVE.
METHODS FOR SOIL ANALYSIS, PART 2, CHEMICAL AND MICROBILOGICAL PROPERTIES, 2ND EDITION.

1. COLIFORM. COLIFORM PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE LOGARITHM OF COLONIES PER 100 MLS OF SAMPLE ON DUPLICATE PLATES.
2. PH. PH PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS.
3. FLASHPOINT. FLASHPOINT PRECISION IS MEASURED BY THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE ANALYSIS.

RPD = RELATIVE PERCENT DIFFERENCE (OR DEVIATION).
RPT LIMIT = REPORTING LIMITS BASED ON METHOD DETECTION LIMIT STUDIES.

DPH = DOLLY P. HWANG	RB = REBECCA BROWN	AB = ANDY BROTHERTON
JL = JAN LECLEAR	NSB = NANCY S. BUTLER	MM = MIKE MCKENZIE
ED = ESTHER DANTIN	LV = LASSANDRA VON APPEN	JTZ = JONATHAN T. ZIENTARSKI
PLD = PAULA L. DOUGHTY	RH = RICKY HAGENDORFER	

American Environmental Network Inc

"FINAL REPORT FORMAT - MULTIPLE"

Accession: 705350
Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number: 705350
Project Name: GIANT REFINING
Project Location: N/S
Test: RCRA METALS
QcLevel: II

Parameter:	Unit:	Result:	R.L:	Batch:	Q:
Client ID: 705350-01			Lab ID:001		
SILVER (6010)	MG/KG	ND	1	A6S054	
ARSENIC (6010)	MG/KG	ND	5	R6S054	
BARIUM (6010)	MG/KG	240	1	B6S054	
CADMIUM (6010)	MG/KG	ND	0.5	C6S054	
CHROMIUM (6010)	MG/KG	8	1	H6S054	
MERCURY (7471)	MG/KG	ND	0.02	M4S023	
LEAD (6010)	MG/KG	7	5	P6S054	
SELENIUM (6010)	MG/KG	ND	10	S6S054	
Comments:					
Client ID: 705350-02			Lab ID:002		
SILVER (6010)	MG/KG	ND	1	A6S054	
ARSENIC (6010)	MG/KG	ND	5	R6S054	
BARIUM (6010)	MG/KG	240	1	B6S054	
CADMIUM (6010)	MG/KG	ND	0.5	C6S054	
CHROMIUM (6010)	MG/KG	13	1	H6S054	
MERCURY (7471)	MG/KG	ND	0.02	M4S023	
LEAD (6010)	MG/KG	8	5	P6S054	
SELENIUM (6010)	MG/KG	ND	10	S6S054	
Comments:					
Client ID: 705350-03			Lab ID:003		
SILVER (6010)	MG/KG	ND	1	A6S054	
ARSENIC (6010)	MG/KG	ND	5	R6S054	
BARIUM (6010)	MG/KG	310	1	B6S054	
CADMIUM (6010)	MG/KG	ND	0.5	C6S054	
CHROMIUM (6010)	MG/KG	13	1	H6S054	
MERCURY (7471)	MG/KG	ND	0.02	M4S023	
LEAD (6010)	MG/KG	10	5	P6S054	
SELENIUM (6010)	MG/KG	ND	10	S6S054	
Comments:					
Client ID: 705350-04			Lab ID:004		
SILVER (6010)	MG/KG	ND	1	A6S054	
ARSENIC (6010)	MG/KG	ND	5	R6S054	
BARIUM (6010)	MG/KG	240	1	B6S054	
CADMIUM (6010)	MG/KG	ND	0.5	C6S054	
CHROMIUM (6010)	MG/KG	13	1	H6S054	
MERCURY (7471)	MG/KG	ND	0.02	M4S023	
LEAD (6010)	MG/KG	7	5	P6S054	
SELENIUM (6010)	MG/KG	ND	10	S6S054	
Comments:					

American Environmental Network Inc

"FINAL REPORT FORMAT - MULTIPLE"

Accession: 705350
Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number: 705350
Project Name: GIANT REFINING
Project Location: N/S
Test: RCRA METALS

Client Id:	Lab Id:	Matrix:	Date/Time Sampled:	Date Received:
705350-01	001	SOIL	18-MAY-97 0915	20-MAY-97
705350-02	002	SOIL	18-MAY-97 0935	20-MAY-97
705350-03	003	SOIL	18-MAY-97 0950	20-MAY-97
705350-04	004	SOIL	18-MAY-97 1010	20-MAY-97

American Environmental Network Inc

"Method Report Summary"

Accession Number: 705350
Client: AMERICAN ENVIRONMENTAL NETWORK (NEW MEXICO) INC.
Project Number: 705350
Project Name: GIANT REFINING
Project Location: N/S
Test: RCRA METALS

Client Sample Id:	Parameter:	Unit:	Result:
705350-01	BARIUM (6010)	MG/KG	240
	CHROMIUM (6010)	MG/KG	8
	LEAD (6010)	MG/KG	7
705350-02	BARIUM (6010)	MG/KG	240
	CHROMIUM (6010)	MG/KG	13
	LEAD (6010)	MG/KG	8
705350-03	BARIUM (6010)	MG/KG	310
	CHROMIUM (6010)	MG/KG	13
	LEAD (6010)	MG/KG	10
705350-04	BARIUM (6010)	MG/KG	240
	CHROMIUM (6010)	MG/KG	13
	LEAD (6010)	MG/KG	7

American Environmental Network Inc

"Metals Quality Control Report"

Parameter:	SILVER	ARSENIC	BARIUM	CADMIUM	CHROMIUM	MERCURY
Batch Id:	A6S054	R6S054	B6S054	C6S054	H6S054	M4S023
Blank Result:	<1	<5	<1	<0.5	<1	<0.02
Anal. Method:	6010	6010	6010	6010	6010	7471
Prep. Method:	3050	3050	3050	3050	3050	7471
Analysis Date:	22-MAY-97	22-MAY-97	22-MAY-97	22-MAY-97	22-MAY-97	23-MAY-97
Prep. Date:	21-MAY-97	21-MAY-97	21-MAY-97	21-MAY-97	21-MAY-97	23-MAY-97
Sample Duplication						
Sample Dup:	705350-1	705350-1	705350-1	705350-1	705350-1	705350-3
Rept Limit:	<1	<5	<1	<0.5	<1	<0.02
Sample Result:	160	180	440	180	200	0.40
Dup Result:	170	190	480	180	210	0.39
Sample RPD:	6	5	9	0	5	3
Max RPD:	20	20	20	20	20	20
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
Matrix Spike						
Sample Spiked:	705350-1	705350-1	705350-1	705350-1	705350-1	705350-3
Rept Limit:	<1	<5	<1	<0.5	<1	<0.02
Sample Result:	<1	<5	240	<0.5	8	<0.02
Spiked Result:	160	180	440	180	200	0.40
Spike Added:	200	200	200	200	200	0.42
% Recovery:	80	90	100	90	96	95
% Rec Limits:	75-125	75-125	75-125	75-125	75-125	75-125
Dry Weight%	N/A	N/A	N/A	N/A	N/A	N/A
ICV						
ICV Result:	2.5	4.9	5.0	4.8	5.0	0.0044
True Result:	2.5	5.0	5.0	5.0	5.0	0.0040
% Recovery:	100	98	100	96	100	110
% Rec Limits:	90-110	90-110	90-110	90-110	90-110	80-120
LCS						
LCS Result:	130	100	180	86	140	2.83
True Result:	117	103	170	88.8	133	2.86
% Recovery:	111	97	106	97	105	99
% Rec Limits:	72-178	71-129	74-126	75-125	78-122	64-135

American Environmental Network Inc

"Metals Quality Control Report"

Parameter:	LEAD	SELENIUM
Batch Id:	P6S054	S6S054
Blank Result:	<5	<10
Anal. Method:	6010	6010
Prep. Method:	3050	3050
Analysis Date:	22-MAY-97	22-MAY-97
Prep. Date:	21-MAY-97	21-MAY-97
Sample Duplication		
Sample Dup:	705350-1	705350-1
Rept Limit:	<5	<10
Sample Result:	190	190
Dup Result:	200	200
Sample RPD:	5	5
Max RPD:	20	20
Dry Weight%	N/A	N/A
Matrix Spike		
Sample Spiked:	705350-1	705350-1
Rept Limit:	<5	<10
Sample Result:	7	<10
Spiked Result:	190	190
Spike Added:	200	200
% Recovery:	92	95
% Rec Limits:	75-125	75-125
Dry Weight%	N/A	N/A
ICV		
ICV Result:	5.0	5.1
True Result:	5.0	5.0
% Recovery:	100	102
% Rec Limits:	90-110	90-110
LCS		
LCS Result:	83	140
True Result:	86.4	129
% Recovery:	96	109
% Rec Limits:	67-133	73-128

American Environmental Network Inc

"Quality Control Comments"

Batch Id:	Comments:
A6S054	ANALYST: GJ
A6S054	The results reported under "Sample Duplication" are the MS/MSD.
R6S054	ANALYST: GJ
R6S054	The results reported under "Sample Duplication" are the MS/MSD.
B6S054	ANALYST: GJ
B6S054	The results reported under "Sample Duplication" are the MS/MSD.
C6S054	ANALYST: GJ
C6S054	The results reported under "Sample Duplication" are the MS/MSD.
H6S054	ANALYST: GJ
H6S054	The results reported under "Sample Duplication" are the MS/MSD.
M4S023	ANALYST: LV
M4S023	The results reported under "Sample Duplication" are the MS/MSD.
P6S054	ANALYST: GJ
P6S054	The results reported under "Sample Duplication" are the MS/MSD.
S6S054	ANALYST: GJ
S6S054	The results reported under "Sample Duplication" are the MS/MSD.

----- Common Footnotes Metals -----

N/A = NOT APPLICABLE.
N/S = NOT SUBMITTED.
N/C = SAMPLE AND DUPLICATE RESULTS ARE AT OR BELOW ATI REPORTING LIMIT; THEREFORE, THE RPD IS "NOT CALCULABLE" AND NO CONTROL LIMITS APPLY.
N/D = NOT DETECTED.
DISS. OR D = DISSOLVED
T & D = TOTAL AND DISSOLVED
R = REACTIVE
T = TOTAL
G = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE SAMPLE AND DUPLICATE RESULT IS AT OR BELOW ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "IN CONTROL".
Q = THE ANALYTICAL (POST-DIGESTION) SPIKE IS REPORTED DUE TO PERCENT RECOVERY BEING OUTSIDE ACCEPTANCE LIMITS ON THE MATRIX (PRE-DIGESTION) SPIKE.
# = ELEVATED REPORTING LIMIT DUE TO INSUFFICIENT SAMPLE.
+ = ELEVATED REPORTING LIMIT DUE TO DILUTION INTO CALIBRATION RANGE.
* = ELEVATED REPORTING LIMIT DUE TO MATRIX INTERFERENCE. (DILUTION PRIOR TO ANALYSIS)
@ = ADJUSTED REPORTING LIMIT DUE TO SAMPLE MATRIX. (DILUTION PRIOR TO DIGESTION)
P = ANALYTICAL (POST DIGESTION) SPIKE.
I = DUPLICATE INJECTION.
& = AUTOMATED
F = SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
N/C+ = NOT CALCULABLE
N/C* = NOT CALCULABLE; SAMPLE SPIKED > 4 X SPIKE CONCENTRATION.
H = SAMPLE AND/OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL".
A = SAMPLE AND DUPLICATE RESULTS ARE "OUT OF CONTROL".
Z = THE SAMPLE RESULT FOR THE SPIKE IS BELOW THE REPORTING LIMIT. HOWEVER, THIS RESULT IS REPORTED FOR ACCURATE QC CALCULATIONS.
NH= SAMPLE AND / OR DUPLICATE RESULT IS BELOW 5 X ATI REPORTING LIMIT AND THE ABSOLUTE DIFFERENCE BETWEEN THE RESULTS EXCEEDS THE ATI REPORTING LIMIT; THEREFORE, THE RESULTS ARE "OUT OF CONTROL". SAMPLE IS NON-HOMOGENEOUS.
J = (FLORIDA DEP 'J' FLAG) - MATRIX SPIKE AND POST SPIKE RECOVERY IS OUT OF THE ACCEPTABLE RANGE. SEE OUT OF CONTROL EVENTS FORM.
U = (FLORIDA DEP 'U' FLAG) - THE COMPOUND WAS ANALYZED FOR, BUT NOT DETECTED.
S = METHOD OF STANDARD ADDITIONS (MSA) WAS PERFORMED ON THIS SAMPLE.

FROM ANALYSIS REPORT:
RL= REPORTING LIMIT BASED ON METHOD DETECTION LIMIT STUDIES.
Q= QUALIFIER (FOOTNOTE)

FROM QUALITY CONTROL REPORT:
RPD= RELATIVE PERCENT DEVIATION.
RPT LIMIT= REPORTING LIMIT BASED ON METHOD DETECTION LIMIT STUDIES.

NOTE: THE UNITS REPORTED ON THE QUALITY CONTROL REPORT ARE REPORTED ON AN AS RUN BASIS.

SW-846, 3rd Edition, latest revision.
EPA 600/4-79-020, Revised March 1983.
NIOSH Manual of Analytical Methods, 4th Edition.
Standard Methods For the Examination of Water and Wastewater, 18th Edition, 1992.
Methods For the Determination of Metals in Environmental Samples - Supplement I, EPA 600/R-94-111, May 1994.

GJ = GARY JACOBS
JLH = JAMES L. HERED
CD = CHRISTY DRAPER
JR = JOHN REED
LV = LASSANDRA VON APPEN

American Environmental Network (Arizona), Inc.

Background for RCRA LTA

CHAIN OF CUSTODY

DATE 5-18-97 PAGE 1 OF 1

AEN LAB I.D. 705350

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB USE ONLY.

REPORT: Attn. to:

COMPANY: GIANT Refining Co.
ADDRESS: Rt 3 Box 7
Gallup NM 87301
PHONE: 505 722 0258
FAX: 505 722 0210

BILL TO: SAME
COMPANY:
ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	COMPOSITE OR GRAB
BG-1-51897	5/18/97	0915	Soil	01	
BG-2-51897	"	0935	"	02	
BG-3-51897	"	0950	"	03	
BG-4-51897	"	1010	"	04	

ANALYSIS REQUEST

Petroleum Hydrocarbons (418.1)	Fuel Fingerprint (MOD.8015)	Diesel (BLS-191) (M8015)	Gas	BTXE/MTBE (8020/602)	Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020)	Volatiles 502.2 (SDWA/UST)	Pesticides/PCB (608/8080/505/508)	Herbicides (615/8150/515)	Semi-Volatiles GC/MS (Tics/No Tics)	Volatile Organics GC/MS (624/8240/8260)	Polynuclear Aromatics (610/8310)	Total Organic Carbons	PH	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)	NUMBER OF CONTAINERS
													X	X	X		
													X	X	X		
													X	X	X		
													X	X	X		

PROJECT INFORMATION

PROJ. NO.:
PROJ. NAME:
P.O. NO.:
SHIPPED VIA:

☐ UST (72 hr. ext.)
☐ NPDES
☐ SDWA
☒ RCRA
☐ OTHER

SAMPLE RECEIPT

NO. CONTAINERS	8
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	Y / N / NA
RECEIVED ICE 2°	Y / N / NA

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☒ 1 WEEK (NORMAL) ☐ 2 WEEKS

Comments:

Results need Tues 27th 1st Hiring in the Am

SAMPLED & RELINQUISHED BY: 1.	RELINQUISHED BY: 2.	RELINQUISHED BY: 3.
Signature: Steve Morris Time: 0850	Signature: Time:	Signature: Time:
Printed Name: Steve Morris Date: 5/19/97	Printed Name: Date:	Printed Name: Date:
Company: Phone:	Company:	Company:

RECEIVED BY: 1.	RECEIVED BY: 2.	RECEIVED BY: (LAB) 3.
Signature: Time:	Signature: Time:	Signature: Time: 750
Printed Name: Date:	Printed Name: Date:	Printed Name: Kim McNeill Date: 5/19
Company:	Company:	American Environmental Network

American Environmental Network
Albuquerque, New Mexico

Interlab Chain of Custody

DATE: 5-19-97 PAGE 1 OF 1

NETWORK PROJECT MANAGER: KIMBERLY D. McNEILL

COMPANY: American Environmental Network
ADDRESS: 2709-D Pan American Freeway, NE
Albuquerque, NM 87107

705350

CLIENT PROJECT MANAGER:

Kim McNeill

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
705350 - 01	5/18/97	9:15	NA	
- 02		9:35		
- 03		9:50		
- 04		10:10		

	Metals - TAL	Metals - PP List	Metals - RCRA by total digestion	RCRA Metals by TCLP (1311)			TOX	TOC	Gen Chemistry			Oil and Grease	BOD	COD	Pesticides/PCB (608/8080)	Herbicides (615/8150)	Base/Neutral Acid Compounds GC/MS (625/8270)	Volatile Organics GC/MS (624/8240)	Polynuclear Aromatics (610/8310)	8240 (TCLP 1311) ZHE	8270 (TCLP 1311)			TO-14	Gross Alpha/Beta				NUMBER OF CONTAINERS
705350 - 01			X					X																					
- 02			X					X																					
- 03			X					X																					
- 04			X					X																					

PROJECT INFORMATION

PROJECT NUMBER: 705350
PROJECT NAME: Giant - refining
QC LEVEL: (STD) IV
QC REQUIRED: MS MSD BLANK
TAT (STANDARD) RUSH!

DUE DATE: 5-23-97
RUSH SURCHARGE: _____
CLIENT DISCOUNT: _____
SPECIAL CERTIFICATION REQUIRED: ☐ YES ☐ NO

SAMPLE RECEIPT

TOTAL NUMBER OF CONTAINERS	
CHAIN OF CUSTODY SEALS	
INTACT?	
RECEIVED GOOD COND./COLD	
LAB NUMBER	

SAMPLES SENT TO:

SAN DIEGO	
Paragon	
RENTON	
PENSACOLA	X
PORTLAND	
PHOENIX	

RELINQUISHED BY: 1.
Signature: B P Time: 1700
Printed Name: Brian Price Date: 05-19-97
Albuquerque NM
Company:

RECEIVED BY: 1.
Signature: Linda L. Kitt Time: 0825
Printed Name: Linda L. Kitt Date: 5/20/97
Company: AEN171

RELINQUISHED BY: 2.
Signature Time
Printed Name Date
Company

RECEIVED BY: (LAB) 2.
Signature: Time:
Printed Name: Date:
Company:

American Environmental Network (Arizona), Inc.

background for RCRA LTA

CHAIN OF CUSTODY

DATE 5-18-97 PAGE 1 OF 1

AEN LAB I.D. 705350 / 705350

PLEASE FILL THIS FORM IN COMPLETELY. SHADED AREAS ARE FOR LAB

REPORT: Attn. to:

COMPANY: GIANT Refining Co.
ADDRESS: Rt 3 Box 7
Gallup NM 87301
PHONE: 505 722 0258
FAX: 505 722 0210

BILL TO: SAME
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	COMPOSITE OR GRAB	Petroleum Hydrocarbons (418.1)	Fuel Fingerprint (MOD.8015)	Gas (M8015) Diesel (BLS-191)	BTXE/MTBE (8020/602)	Chlorinated Hydrocarbons (601/8010)	Aromatic Hydrocarbons (602/8020)	Volatiles 502.2 (SDWA/UST)	Pesticides/PCB (608/8080/505/508)	Herbicides (615/8150/515)	Semi-Volatiles GC/MS (Tics/No Tics)	Volatile Organics GC/MS (624/8240/8260)	Polynuclear Aromatics (610/8310)	Total Organic Carbons PH	RCRA Metals by Total Digestion	RCRA Metals by TCLP (1311)	NUMBER OF CONTAINERS
BG-1-51897	5/18/97	0915	Soil	01														X	X	X	
BG-2-51897	"	0935	"	02														X	X	X	
BG-3-51897	"	0950	"	03														X	X	X	
BG-4-51897	"	1010	"	04														X	X	X	

PROJECT INFORMATION

PROJ. NO.
PROJ. NAME
P.O. NO.
QUOTED VIA

SAMPLE RECEIPT

[ ] UST (72 hr ext.) [ ] NPDES [ ] SDWA [X] RCRA [ ] OTHER

NO. CONTAINERS: 8
CUSTODY SEALS: Y / N / NA
RECEIVED INTACT: Y / N / NA
RECEIVED ICE: 20 Y / N / NA

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) [ ] 24hr [ ] 48hr [ ] 72hr [X] 1 WEEK (NORMAL) [ ] 2 WEEKS

SAMPLED & RELINQUISHED BY: 1.

Signature: Time: 0850
Printed Name: Date: 5/19/97
Company: Phone:

RELINQUISHED BY: 2.

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 3.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: 1.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: 2.

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY: (LAB) 3.

Signature: Time: 7:50
Printed Name: Date: 5/19
American Environmental Network

1st thing in the AM

7 • Columbia (410) 730-8525 • Pensacola (904) 474-1001 • Pleasant Hill (510) 930-9090 • Portland (503) 684-0447

DISTRIBUTION: White, Canary - AEN (Arizona), Inc. • Pink - ORIGINATOR

American Environmental Network of Florida
PROJECT SAMPLE INSPECTION FORM

Lab Accession #: 705350 Date Received: 20-May-97

1.	Was there a Chain of Custody?	(Yes)	No*		8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative except VOA vials that require zero headspace)*+	Yes	No* (N/A)
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*		9.	Is there sufficient volume for analysis requested?	(Yes)	No*
3.	Were samples received cold? (Criteria: 1° - 4°C: AEN-SOP 1055)	(Yes)	No*	N/A	10.	Were samples received within Holding Time? (REFER TO AEN-SOP 1040)	(Yes)	No*
4.	Were all samples properly labeled and identified?	(Yes)	No*		11.	Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section.	Yes*	No (N/A)
5.	Did samples require splitting? Req By: PM Client Other*	Yes*	(No)		12.	If sent, were matrix spike bottles returned?	Yes	No* (N/A)
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*		13.	Was Project Manager notified of problems? (initials:_____)	Yes	No* (N/A)
7.	Were all sample containers received intact?	(Yes)	No*					

Airbill Number(s): 185 9358 593 Shipped By: FedEx

Cooler Number(s): N/S Shipping Charges: N/A

Cooler Weight(s): N/A Cooler Temp(s) (°C): 4 °C

CCK 1
(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

(USE BACK OF PSIFFOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: D. Litt Date: 20-May-97 Logged By: D. Litt Date: 20-May-97

* *Note all Out-of-Control and/or questionable events on Comment Section of this form.*

◆ *Note who requested the splitting of samples on the Comment Section of this form.*

\+ *All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (AEN-SOP 938, section 2.2.9).*

* *According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, AEN makes it policy to record any headspace as out-of-control (AEN-SOP 938, section 2.2.12).*