PLAINTIFF'S EXHIBIT

KRC-646

ENVIROTEST INC.

January 4, 1994

Ms. Barbara Pope
Southwestern Refining Company, Inc.
P.O. Box 9217
Corpus Christi, Texas 78469-9217

Dear Ms. Pope:

Enclosed is written confirmation of analytical results for the three air samples, numbers 94001, 94002, and 94003, received at our laboratory at 10:35 a.m. on Tuesday, January 4, 1994.

Calculations of f/cc are based solely on the volume supplied by Southwestern Refining Company. Envirotest Inc. assumes no responsibility for whether the supplied samples accurately represent the regulated area nor for any subsequent use or interpretations of the analytical results.

The air sample analyses were performed in our Houston laboratory by NIOSH 582-certified personnel with a Nikon Alphaphot microscope equipped with 400X magnification, Walton-Beckett graticule, and positive phase contrast. The NIOSH 7400 method was used. Envirotest, Inc. is licensed by the Texas Department of Health (#30-0005) for asbestos laboratory analysis.

This report and the findings contained herein shall not, in whole or in part, be altered, dispersed, or disclosed to any other party. It is provided for your sole use and may not be used or relied upon by any other party, in whole or in part, without prior written consent from Envirotest, Inc.

If you have any questions regarding the sample analyses, please call. We appreciate the opportunity to be of service to Southwestern Refining Company, Inc.

Sincerely,

Daniel J. Gerhardt, C.P.G.
President
Envirotest, Inc.

DJG/ajf

SWRf/Asbestos 1259

Envirotest, Inc. Laboratory Air Sample Analysis Report

SOUTHWESTERN REFINING COMPANY, INC.

RECD: JANUARY 4, 1993
ANALYZED BY : J.W.

SAMPLE #	FLOW L/M	TIME MIN.	VOLUME LITERS	NUMBER FIELDS	NUMBER FIBERS	BLANK COUNT	F/MM2	F/CC
BTX INVESTIGATION								
94001	.00	0	105.5	100	1.5	.00	8.9	< .033
94002	.00	0	93.1	100	1.5	.00	8.9	< .037
94003 FIELD BLANK	.00	0	.0	100	.0	.00	.0	.000

SWRf/Asbestos 1260

IH ANALYTICAL REQUEST

Client:

Southwestern Refining Company, Inc.
P. O. Box 9217
Corpus Christi, TX 78469

Case No:
Date Recd:
Shipment Method:
Del. agent:
Rec. agent:

Investigation: BTX

Lab Number	Client Number	Sample Type	Air Volume	Test Required	Results/Det.Limits
	94001	25mm CEF	105.48	Asbestos	
	94002	↓	93.09	↓	
	94003	↓	Blank	↓	

Report Comments:

SWRf/Asbestos 1261

File Comments:

1B 047113

Dept Insulation
Site Corpus Christi
Area BTX

KERR McGEE REFINING CORPORATION
INDUSTRIAL HYGIENE DATA FORM

Accession
File No. 93-0441
Site/Use

ID	CAS Registry#	Code	No.	K	Yr.	Mo.	Day	Sheet No.
				E	94	01	03	
1 2 3			11	12	13	14	15 16	17 18 19 24

S	T	D	Elapsed Time, Min	MIE	LIG	Concentration	U	P	Parameter Value	Prot Equip.	No Samp.
A	0	F					C				
25	26	27	28 30	31	32	33 37	38	39	40 44	45 46	47 49

X	Site Locator Codes	SSN
50	51 55 60 65 70	71 75 80

CODES

K—Monitoring Standard
A—8 Hour TWA
B—12 Hour TWA
C—Short Term TWA
D—Instantaneous Peak
E—Duration of Task
O—Other

S—Sample
A—General Area
B—Breathing Zone
C—Continuous
H—Blood (Z2 only)
O—Other
P—Personal
S—Source Sample
U—Urinalysis (Z2 only)

T—Type
F—Full Period Single
G—Series Grab
L—Full Pd. Consecutive
O—Other
P—Partial Period
S—Single Grab

D—Device
A—Adsorption Tube
B—Passive Dosimeter
D—Direct Instrument
F—Filter
G—Grab Sample
I—Impinger/Bubbler
O—Other
R—Filter, Respirable Dust
T—Detector Tube

U—Units
B—Parts/Billion
C—Fiber/cm³
D—Decibels
J—µg/100 g(blood Z2 only)
K—µg/mL(urine Z2 only)
L—µg/mL(urine Z2 only)
M—Parts/Million
O—Other
P—Percent
U—g/m3
X—mg/m3

P—Statistic/Parameter
G—Geometric Mean and Geometric Std. Dev
L—50 Percentile and 95th Percentile
O—Other
X—Arithmetic Mean and Std. Deviation

Protective Equipment/Work
A—Air Supplied Respirator, Continuous Flow
B—Air Supplied Respirator, Demand
E—Cover All Goggles
F—Face Shield
G—Impervious Gloves
H—Air Supplied Respirator, Pressure Demand
I—Hearing Protection—Inserts
J—Impervious Suit—Not Air Supplied
M—Hearing Protection—Muffs
N—None Required
O—Other
P—Air Purifying Respirator, Full Face
Q—Air Purifying Respirator, Half Face
R—Air Purifying Respirator, quarter Face
S—Self-Contained Respirator, Pressure Demand
T—Self-Contained Respirator, Demand
U—Impervious Suit—Air Supplied
Y—Power Air Purifying Respirator
W—Disposable respirator—Dust

M—Measured Value
E—Estimated Value
L—Less Than
G—Greater Than

FOR SITE USE

Monitoring For: Asbestos (Common Chemical Name)

IN: _____ (Site Designation) Person Sampled Area (Last Name First Initial)

DATA/OBSERVATIONS

Protective Equipment Used _____

Humidity 43%

Sample No. 74001 Avg Temp. 57 Avg AtmPress. 30.32 Predominant Wind Direction W Avg Speed 15

Sampler Pump Make MSA Model Flow Lite Ser.No. 7961 No.

Calibration Method _____ Reference _____ By Nancy Logue Date 1-3-94

PUMP SETTING		ELAPSED		CALIBRATED FLOW RATE		VOLUME SAMPLED, LITERS	
Start	Stop	Min.	Strokes	Vol/Min	Vol/Stroke	Uncorrected	Corrected
0830	0930	60		AP 1,758			105.48

1747 1769

Sampling Method _____ Reference _____ Precision _____ Accuracy _____

Make _____ Model _____ Adsorbent _____ Lot No. _____

Anal. Method _____ Reference _____ Precision _____ Accuracy _____

Anal. Equip _____ Manufacturer _____ Model _____ Ser.No. _____

Analytical				Results		
No	Reference	Analyst	Analyte	Mass/No Particles	Concentration	Units
					<0.033	~~DPM~~ f/cc

CALCULATIONS: (Additional data, remarks, etc.) Downwind E. of BTX Compressor

Pump Calibration X = 60 sec x # ml / # sec

- Please Retain Pink Copy for Your Records
Please Do Not Pull Form Set Apart

Investigator (Signature) B. Logue Date 1-3-94

Received by (Signature) _____ Date/Time _____

Completed by (Signature) _____ Date/Time _____

1B 047114

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Dept Insulation
Site Corpus Christi
Area BTX

KERR McGEE REFINING CORPORATION
INDUSTRIAL HYGIENE DATA FORM

Accession ____
File No. 93-0441
SiteUse ____

ID	CAS Registry/Code No.	K	Yr.	Mo.	Day	Sheet No.
		E	94	01	03	
1 2 3	11 12 13 14	15 16	17 18	19		24

S	T	D	Elapsed Time, Min	M/E	L/G	Concentration	U	P	Parameter Value	Prot Equip.	No Samp.
P	O	F					C				
25	26	27	28 30	31	32	33 37	38	39	40 44	45 46	47 49

X	Site Locator Codes	SSN
		464-58-2722
50	51 55 60 65 70	71 75 80

CODES

K—Monitoring Standard
A—8 Hour TWA
B—12 Hour TWA
C—Short Term TWA
D—Instantaneous Peak
E—Duration of Task
O—Other

S—Sample
A—General Area
B—Breathing Zone
C—Continuous
H—Blood (ZZ only)
O—Other
P—Personal
S—Source Sample
U—Urinalysis (ZZ only)

T—Type
F—Full Period Single
G—Series Grab
L—Full Pd. Consecutive
O—Other
P—Partial Period
S—Single Grab

D—Device
A—Adsorption Tube
B—Passive Dosimeter
D—Direct Instrument
F—Filter
G—Grab Sample
I—Impinger/Bubbler
O—Other
R—Filter, Respirable Dust
T—Detector Tube

U—Units
B—Parts/Billion
C—Fiber/cm³
D—Decibels
J—µg/100 g(blood ZZ only)
K—µg/mL(urine ZZ only)
L—µg/mL(urine ZZ only)
M—Parts/Million
O—Other
P—Percent
U—g/m3
X—mg/m3

S—Statistics/Parameter
G—Geometric Mean and Geometric Std. Dev
L—50 Percentile and 95th Percentile
O—Other
X—Arithmetic Mean and Std. Deviation

Protective Equipment
A—Air Supplied Respirator, Continuous Flow
B—Air Supplied Respirator, Demand
E—Cover All Goggles
F—Face Shield
G—Impervious Gloves
H—Air Supplied Respirator, Pressure Demand
I—Hearing Protection—Inserts
J—Impervious Suit—Not Air Supplied
M—Hearing Protection—Muffs
N—None Required
O—Other
P—Air Purifying Respirator, Full Face
Q—Air Purifying Respirator, Half Face
R—Air Purifying Respirator, quarter Face
S—Self-Contained Respirator, Pressure Demand
T—Self-Contained Respirator, Demand
U—Impervious Suit—Air Supplied
V—Power Air Purifying Respirator
W—Disposable respirator—Dust

M—Measured Value
E—Estimated Value
L—Less Than
G—Greater Than

FOR SITE USE

Monitoring For: Asbestos
(Common Chemical Name)

IN: ____ Person Sampled Vallejo, Victor
(Site Designation) (Last Name First Initial)

DATA/OBSERVATIONS

Protective Equipment Used disp. cover, ½ resp, gloves, boots

Sample No. 94002 Avg Temp. ____ Avg AtmPress. ____ Predominant Wind Direction ____ Avg Speed ____

Sampler Pump Make MSA 94002 Model Flow Lite Ser.No. 8027 No. ____

Calibration Method ____ Reference ____ By Nancy Logue Date ____

PUMP SETTING		ELAPSED		CALIBRATED FLOW RATE		VOLUME SAMPLED, LITERS	
Start	Stop	Min.	Strokes	Vol/Min	Vol/Stroke	Uncorrected	Corrected
0830	0950	60		1.551			93.09

1538 1565

Sampling Method ____ Reference ____ Precision ____ Accuracy ____

Make ____ Model ____ Adsorbent ____ Lot No. ____

Anal. Method ____ Reference ____ Precision ____ Accuracy ____

Anal. Equip ____ Manufacturer ____ Model ____ Ser.No ____

Analytical				Results		
No	Reference	Analyst	Analyte	Mass/No Particles	Concentration	Units
					<0.037	~~F/cc~~ D01

CALCULATIONS: (Additional data, remarks, etc.) Removal 2 elbows f/cc

Pump Calibration X = 60 sec x # ml
sec

2 bags, 6'

• Please Retain Pink Copy for Your Records
Please Do Not Pull Form Set Apart

Investigator (Signature) B. Pace Date 1-3-94

Received by (Signature) ____ Date/Time ____

Completed by (Signature) ____ Date/Time ____

1B 047115

1 of 1

Dept Insulation

Site Corpus Christi, BTX

Area

KERR McGEE REFINING CORPORATION
INDUSTRIAL HYGIENE DATA FORM

Accession

File No. 93-0441

Sits Use

ID	CAS Registry#	Code No.	K	Yr.	Mo.	Day	Sheet No.
			B	94	01	03	
1 2 3		11	12	13 14	15 16	17 18	19 24

S	T	D	Elapsed Time, Min	M/E	L/G	Concentration	U	P	Parameter Value	Prot Equip.	No Samp.
0	0	F					C				
25	26	27	28 30	31	32	33 37	38	39	40 44	45 46	47 49

X	Site Locator Codes	SSN
50	51 55 60 65 70	71 75 80

CODES

K—Monitoring Standard
A—8 Hour TWA
B—12 Hour TWA
C—Short Term TWA
D—Instantaneous Peak
E—Duration of Task
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S—Sample
A—General Area
B—Breathing Zone
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H—Blood (Z2 only)
O—Other
P—Personal
S—Source Sample
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T—Type
F—Full Period Single
G—Series Grab
L—Full Pd. Consecutive
O—Other
P—Partial Period
S—Single Grab

D—Device
A—Adsorption Tube
B—Passive Dosimeter
D—Direct Instrument
F—Filter
G—Grab Sample
I—Impinger/Bubbler
O—Other
R—Filter, Respirable Dust
T—Detector Tube

U—Units
B—Parts/Billion
C—Fiber/cm
D—Decibels
J—µg/100 g(blood Z2 only)
K—µg/mL(urine Z2 only)
L—µg/mL(urine Z2 only)
M—Parts/Million
O—Other
P—Percent
U—g/m3
X—mg/m3

P—Statistical Parameter
G—Geometric Mean and Geometric Std. Dev
L—50 Percentile and 95th Percentile
O—Other
X—Arithmetic Mean and Std. Deviation

Protective Equipment Worn
A—Air Supplied Respirator, Continuous Flow
B—Air Supplied Respirator, Demand
E—Cover All Goggles
F—Face Shield
G—Impervious Gloves
H—Air Supplied Respirator, Pressure Demand
I—Hearing Protection—Inserts
J—Impervious Suit—Not Air Supplied
M—Hearing Protection—Muffs
N—None Required
O—Other
P—Air Purifying Respirator, Full Face
Q—Air Purifying Respirator, Half Face
R—Air Purifying Respirator, quarter Face
S—Self-Contained Respirator, Pressure Demand
T—Self-Contained Respirator, Demand
U—Impervious Suit—Air Supplied
V—Power Air Purifying Respirator
W—Disposable respirator—Dust

M—Measured Value
E—Estimated Value
L—Less Than
G—Greater Than

FOR SITE USE

Monitoring For: Asbestos (Common Chemical Name)

IN: _____ (Site Designation) Person Sampled Blank (Last Name First Initial)

DATA/OBSERVATIONS

Protective Equipment Used _____

Sample No. 94003 Avg Temp. _____ Avg Atm Press. _____ Predominant Wind Direction _____ Avg Speed _____

Sampler Pump Make _____ Model _____ Ser. No. _____ No. _____

Calibration Method _____ Reference _____ By Nancy Logue Date _____

PUMP SETTING		ELAPSED		CALIBRATED FLOW RATE		VOLUME SAMPLED, LITERS	
Start	Stop	Min.	Strokes	Vol/Min	Vol/Stroke	Uncorrected	Corrected

Sampling Method _____ Reference _____ Precision _____ Accuracy _____

Make _____ Model _____ Adsorbent _____ Lot No. _____

Anal. Method _____ Reference _____ Precision _____ Accuracy _____

Anal. Equip _____ Manufacturer _____ Model _____ Ser. No. _____

Analytical				Results		
No	Reference	Analyst	Analyte	Mass/No Particles	Concentration	Units
					0.00	P

CALCULATIONS: (Additional data, remarks, etc.)

Pump Calibration X = 60 sec x # ml / # sec

- Please Retain Pink Copy for Your Records
Please Do Not Pull Form Set Apart

Investigator (Signature) _____ Date _____

Received by (Signature) _____ Date/Time _____

Completed by (Signature) _____ Date/Time _____

SWRf/Asbestos 1264

1B 047116

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EMPLOYEE MONITORING NOTIFICATION KM-4772-B

ID NUMBER 94002

DATE 2-1-94

SUBSIDIARY/DIVISION: KMRC

FACILITY: Southwestern

EMPLOYEE NAME (LAST, FIRST): Vallejo, Victor

EMPLOYEE NUMBER: 464-58-2722

JOB TITLE: Insulator

WORK LOCATION: STX (commercial)

NOISE SURVEY

EMPLOYEE'S ACTUAL 8 HOUR-TIME-WEIGHTED AVERAGE:

EMPLOYEE'S REPRESENTATIVE 8 HOUR-TIME WEIGHTED AVERAGE:

TYPE/BRAND HEARING PROTECTION WORN:

OSHA PERMISSIBLE EXPOSURE:

OSHA ACTION LEVEL:

EMPLOYEE ENROLLED IN HEARING CONSERVATION PROGRAM:

SUBSTANCE SURVEY

SUBSTANCE	EMPLOYEE'S 8 HOUR-TIME-WEIGHTED AVERAGE	OSHA 8 HOUR PERMISSIBLE EXPOSURE LIMIT	CEILING EXPOSURE LEVEL		SHORT TERM EXPOSURE LEVEL		PERSONAL PROTECTIVE EQUIPMENT WORN		OSHA ACTION LEVEL
			EMPLOYEE	OSHA/ ACGIH	EMPLOYEE	OSHA/ ACGIH	YES	NO	
Asbestos	<0.03 f/cc	0.2 f/cc							0.1 f/cc

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATOR: half face w/ HEPA

SURVEY PERFORMED BY: [illegible]

SURVEY DATE: 1-3-94

BODY: disposable coveralls

ENGINEERING CONTROL:

GLOVES: disposable

OTHER:

ACTION TAKEN: Pt. provided w/ half face resp.

1B 047117

EMPLOYEE SIGNATURE: [signature]

COMPANY REPRESENTATIVE SIGNATURE: [signature]

DATE: 2-9-94

DISTRIBUTION: ORIGINAL - Employee
COPY - Facility File
COPY - Corporate Medical Services