GW - 16

MONITORING REPORTS

DATE:

1989-1984

PHILLIPS 66 NATURAL GAS COMPANY
A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

April 5, 1989

Groundwater Monitoring Analyses
Artesia, Eunice, Lee and Lusk Plants

Mr. Dave Boyer
Environmental Bureau Chief
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Boyer:

Per your request, attached please find copies of the fourth quarter groundwater monitoring analyses for the above referenced plants.

If you should have any questions regarding this information, please contact me at (915) 367-1316.

Very truly yours,

Michael D. Ford

Michael D. Ford
Environmental Analyst

MDF

Attachments

RADIAN CORPORATION

Page 1 RAS - Austin REPORT Work Order # 89-02-057
Received: 02/03/89 03/01/89 09:06:44

REPORT TO: Radian
B1.1
Austin

ATTEN: Linda Bendele

CLIENT: PHILLIPS P SAMPLES 3
COMPANY: Phillips Petroleum
FACILITY: Odessa, TX

WORK ID: Eunice
TAKEN: MF
TRANS: UPS
TYPE:
P.O. #:
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT BENDELE

Unknown compounds present in GC samples 01 and 02

Previously Reported on 02/27/89.

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01 Eunice MW-1
02 Eunice MW-2
03 reagent blank

4 TM Quarks
2/89

TEST CODES and NAMES used on this report

AG E	Silver, ICPES
AS G	Arsenic, graphite AA
BA E	Barium, ICPES
CD E	Cadmium, ICPES
CL IC	Chloride, IC
COLI T	Total coliform
CR E	Chromium, ICPES
DG3020	Digestion, method 3020
DG6010	Digestion, method 6010
EPA602	EPA method 602
FE E	Iron, ICPES
F IC	Fluoride, IC
HG C	Mercury, cold vapor
MHO	Specific conductance
MN E	Manganese, ICPES
NA E	Sodium, ICPES
NO3	Nitrate, colorimetric
PB G	Lead, graphite AA
PH	pH
PHEN	Total phenolics
SE G	Selenium, graphite AA
SO4 IC	Sulfate, IC
TOC	Total organic carbon
TOX	Total organic halides
TURB	Turbidity
XYLENE	Xylenes, EPA 602

RADIAN CORPORATION

Received: 02/03/89 Results By Test

SAMPLE Sample Id	Test: AG E ug/ml	Test: AS G ug/ml	Test: BA E ug/ml	Test: CD E ug/ml	Test: CL IC mg/L
01 Eunice MW-1	<0.03	0.037	0.05	<0.005	180
02 Eunice MW-2	<0.03	0.13	1.2	<0.005	540

SAMPLE Sample Id	Test: COLI T colonies/100 mL	Test: CR E ug/ml	Test: DG3020 date complete	Test: DG6010 date complete	Test: FE E ug/ml
01 Eunice MW-1	40	<0.03	02/06/89	02/09/89	3.8
02 Eunice MW-2	<20	<0.03	02/06/89	02/09/89	6.2

SAMPLE Sample Id	Test: F IC mg/L	Test: MHO umhos/cm	Test: MN E ug/ml	Test: NA E ug/ml	Test: NO3 mg/L as N
01 Eunice MW-1	3.2	3200	2.3	380	0.360
		3100			
		3200			
		3200			
02 Eunice MW-2	5.0	2900	0.10	270	0.28
		3000			

RADIAN CORPORATION

SAMPLE Sample Id	Test: F IC mg/L	Test: MHO umhos/cm	Test: MN E ug/ml	Test: NA E ug/ml	Test: NO3 mg/L as N
		3000			
		3000			

SAMPLE Sample Id	Test: PB G ug/ml	Test: PH pH units	Test: PHEN mg/L as phenol	Test: SE G ug/ml	Test: SO4 IC mg/L as SO4
01 Eunice MW-1	<0.002	6.94	0.006*	<0.005	1200
		6.90			
		6.89			
		6.92			
02 Eunice MW-2	<0.002	6.90	0.013*	<0.005	28
		6.93			
		6.88			
		6.89			

RADIAN CORPORATION

Received: 02/03/89 Results By Test

SAMPLE Sample Id	Test: TOC mg/l	Test: TOX mg/L
01 Eunice MW-1	49	0.13
	43	0.11
	41	0.11
	44	0.13
02 Eunice MW-2	71	0.11
	74	0.06
	70	0.14
	69	0.13

RADIAN CORPORATION

Received: 02/03/89
Results by Sample

SAMPLE ID Eunice MW-1 FRACTION 01J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 02/02/89 Category

VERIFIED CL

ANALYST BM
INSTRMT G INJECTED 02/03/89 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	1.6	0.20
108-88-3	Toluene	0.6*	0.20
100-41-4	Ethylbenzene	3.9	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

RADIAN CORPORATION

SAMPLE ID Eunice MW-1 FRACTION 01J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 02/02/89 Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 02/03/89 Results by Sample

SAMPLE ID Eunice MW-1 FRACTION 01I TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 02/02/89 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 02/10/89 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.0002

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
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N\A = not available

SAMPLE ID Eunice MW-1 FRACTION 01A TEST CODE TURB NAME Turbidity
Date & Time Collected 02/02/89 Category

VERIFIED LM

ANALYST LKM
INSTRMT HACH ANALYZED 02/03/89 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	54	1.0

SAMPLE ID Eunice MW-1 FRACTION 01A TEST CODE TURB NAME Turbidity
Date & Time Collected 02/02/89 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
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NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-1 FRACTION 01J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 02/02/89 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT G INJECTD 02/03/89 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	1.0	0.20
108-38-3	m-Xylene	1.7	0.20
95-47-6	o-Xylene	1.3	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 99% recovery

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N\A = not available
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RADIAN CORPORATION

SAMPLE ID Eunice MW-1 FRACTION 01J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 02/02/89 Category

Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 02/03/89 Results by Sample

SAMPLE ID Eunice MW-2 FRACTION 02J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 02/02/89 Category

VERIFIED CL

ANALYST BM
INSTRMT D INJECTED 02/06/89 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	480	5.0
108-88-3	Toluene	130	5.0
100-41-4	Ethylbenzene	110	7.5
108-90-7	Chlorobenzene-A	ND	7.5
106-46-7	1,4-Dichlorobenzene	ND	7.5
541-73-1	1,3-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	105% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

RADIAN CORPORATION

SAMPLE ID Eunice MW-2 FRACTION 02J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 02/02/89 Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 02/03/89 Results by Sample

SAMPLE ID Eunice MW-2 FRACTION 02I TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 02/02/89 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 02/10/89 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.0002

NOTES AND DEFINITIONS FOR THIS REPORT:
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-2 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 02/02/89 Category

VERIFIED LM

ANALYST LKM
INSTRMT HACH ANALYZED 02/03/89 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	95	1.0

SAMPLE ID Eunice MW-2 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 02/02/89 Category

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ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-2 FRACTION 02J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 02/02/89 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTD 02/06/89 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	83	5.0
108-38-3	m-Xylene	120	5.0
95-47-6	o-Xylene	120	2.5

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 105% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-2 FRACTION 02J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 02/02/89 Category

Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 02/03/89 Results by Sample

SAMPLE ID reagent blank FRACTION 03A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

VERIFIED CL

CL
D INJECTED 02/06/89 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

RADIAN CORPORATION

SAMPLE ID reagent blank FRACTION 03A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 02/03/89 Results by Sample

SAMPLE ID reagent blank FRACTION 03A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTD 02/06/89 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	ND	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 89-02-058

Received: 02/03/89 03/01/89 15:42:55

REPORT Phillips Petroleum
TO Radian
Bl. 1
Austin
ATTEN Linda Bendele

CLIENT PHILLIPS P SAMPLES 5
COMPANY Phillips Petroleum
FACILITY Odessa, TX

PREPARED Radian Analytical Services
BY 6.01 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088
ATTEN
PHONE 512-454-4797

CERTIFIED BY

CONTACT BENDELE

WORK ID Eunice
TAKEN MF
TRANS UPS
TYPE
P.O. #
INVOICE under separate cover

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01 Eunice MW-3
02 Eunice MW-4
03 Eunice MW-4 duplicate
04 trip blank
05 reagent blank

4th Quarter
2/89

TEST CODES and NAMES used on this report

AG E	Silver, ICPES
AS G	Arsenic, graphite AA
BA E	Barium, ICPES
CD E	Cadmium, ICPES
CL IC	Chloride, IC
COLI T	Total coliform
CR E	Chromium, ICPES
DG3020	Digestion, method 3020
DG6010	Digestion, method 6010
EPA602	EPA method 602
FE E	Iron, ICPES
F IC	Fluoride, IC
HG C	Mercury, cold vapor
MHO	Specific conductance
MN E	Manganese, ICPES
NA E	Sodium, ICPES
NO3	Nitrate, colorimetric
PB G	Lead, graphite AA
PH	pH
PHEN	Total phenolics
SE G	Selenium, graphite AA
SO4 IC	Sulfate, IC
TOC	Total organic carbon
TOX	Total organic halides
TURB	Turbidity
XYLENE	Xylenes, EPA 602

SAMPLE Sample Id	Test: AG E ug/ml	Test: AS G ug/ml	Test: BA E ug/ml	Test: CD E ug/ml	Test: CL IC mg/L
01 Eunice MW-3	<0.03	0.026R	0.05*	<0.005	260
02 Eunice MW-4	<0.03	0.009*	0.02*	<0.005	270

SAMPLE Sample Id	Test: COLI T colonies/100 ml	Test: CR E ug/ml	Test: DG3020 date complete	Test: DG6010 date complete	Test: FE E ug/ml
01 Eunice MW-3	<20	<0.03	02/17/89	02/09/89	9.8
02 Eunice MW-4	<20	<0.03	02/17/89	02/09/89	3.0
03 Eunice MW-4 dup		<0.03		02/09/89	

SAMPLE Sample Id	Test: F IC mg/l	Test: MHO umhos/cm	Test: MN E ug/ml	Test: NA E ug/ml	Test: NO3 mg/L as N
01 Eunice MW-3	3.1	2500	0.41	240	0.66
		2500			
		2400			
		2400			
02 Eunice MW-4	2.3	2200	0.38	370	5.8

SAMPLE Sample Id	Test: F IC mg/l	Test: MHO umhos/cm	Test: MN E ug/ml	Test: NA E ug/ml	Test: NO3 mg/L
		3200			
		3200			
		3200			

SAMPLE Sample Id	Test: PB G ug/ml	Test: PH pH units	Test: PHEN mg/L as phenol	Test: SE G ug/ml	Test: SO4 IC mg/L as SO4
01 Eunice MW-3	<0.001R	6.92	<0.005	<0.02E	600
		6.90			
		6.91			
		6.90			
02 Eunice MW-4	<0.001	7.10	<0.005	<0.02E	1200
		7.02			
		7.02			
		7.06			

RADIAN CORPORATION

Received: 02/03/89 Results By Test

SAMPLE Sample Id	Test: TOC mg/l	Test: TOX mg/L
01 Eunice MW-3	20@	0.23
	21	0.23
	21	0.24
	20	0.19
02 Eunice MW-4	14	0.11
	16	0.10
	15	0.10
	18	0.11

RADIAN CORPORATION

Received: 02/03/89 Results by Sample

SAMPLE ID Eunice MW-3 FRACTION 01J TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 02/02/89 Category

VERIFIED CL

ANALYST BM FILE #

INSTRMT D INJECTED 02/06/89 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	1.6	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	0.6*	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID Eunice MW-3 FRACTION 01J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 02/02/89 Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice MW-3 FRACTION 01I TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 02/02/89 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 02/15/89 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.0002

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
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NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-3 FRACTION 01A TEST CODE TURB NAME Turbidity
Date & Time Collected 02/02/89 Category

VERIFIED LM

ANALYST LKM
INSTRMT HACH ANALYZED 02/03/89 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	320	1.0

SAMPLE ID Eunice MW-3 FRACTION 01A TEST CODE TURB NAME Turbidity
Date & Time Collected 02/02/89 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-3 FRACTION 01J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 02/02/89 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTD 02/06/89 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	0.6*	0.20
108-38-3	m-Xylene	0.3*	0.20
95-47-6	o-Xylene	0.5	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

RADIAN CORPORATION

SAMPLE ID Eunice MW-3 FRACTION 01J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 02/02/89 Category

Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 02/03/89 Results by Sample

SAMPLE ID Eunice MW-4 FRACTION 02J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 02/02/89 Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTED 02/07/89 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	0.9*	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	0.6*	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	100% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-4 FRACTION 02J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 02/02/89 Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice MW-4 FRACTION 02I TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 02/02/89 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 02/15/89 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.0002

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-4 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 02/02/89 Category

VERIFIED LM

ANALYST LKM
INSTRMT HACH ANALYZED 02/03/89 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	77	1.0

SAMPLE ID Eunice MW-4 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 02/02/89 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-4 FRACTION 02J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 02/02/89 Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTD 02/07/89 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	0.7*	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 100% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

RADIAN CORPORATION

SAMPLE ID Eunice MW-4 FRACTION 02J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 02/02/89 Category

Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 02/03/89 Results by Sample

SAMPLE ID Eunice MW-4 duplicate FRACTION 03B TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 02/02/89 Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTED 02/07/89 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	0.8*	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	0.6*	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-4 duplicate FRACTION 03B TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 02/02/89 Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice MW-4 duplicate FRACTION 03B TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 02/02/89 Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTD 02/07/89 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	0.5*	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 02/03/89 Results by Sample

SAMPLE ID trip blank FRACTION 04A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTED 02/07/89 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	100% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID trip blank FRACTION 04A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 02/03/89 Results by Sample

SAMPLE ID trip blank FRACTION 04A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTD 02/07/89 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	ND	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	100% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 02/03/89 Results by Sample

SAMPLE ID reagent blank FRACTION 05A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTED 02/07/89 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID reagent blank FRACTION 05A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 02/03/89 Results by Sample

SAMPLE ID reagent blank FRACTION 05A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTD 02/07/89 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	ND	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

89-02-058

REPORT FLAGS

R - Indicates that the matrix spike recovery for this analysis is not within acceptable limits indicating an interferent present.

+ - Indicates that the RPD between the percent recoveries of the MS and MSD is not within acceptable limits.

@ - Indicates that the analytical spike recovery for this analysis is not within acceptable limits indicating an interferent present.

B - Sample result was greater than four times the spike added concentration, therefore the spike recovery should not be considered.

^ - Indicates the RPD of the duplicate analysis is not within acceptable limits.

* - Indicates that the value obtained is less than five times the detection limit. Potential error for such low values range between 50 % and 100 %.

E - Indicates that the reported value is estimated due to the presence of an interference.

s - Indicates that a value is determined by Method of Standard Addition.

Q - Daily EPA QC recovery outside 95% confidence limit.

** - Surrogate recovery is not within acceptable limits. This indicates that a possible interference is present.

RADIAN
CORPORATION

Page 1 RAS - Austin REPORT Work Order # 89-02-208
Received: 02/03/89 03/03/89 19:12:38

REPORT TO: Phillips Petroleum
Radian
Bl. 1
Austin
ATTEN: Linda Bendele

CLIENT: PHILLIPS P SAMPLES: 8
COMPANY: Phillips Petroleum
FACILITY: Odessa, TX

WORK ID: Lee and Eunice radiochemistry
TAKEN: MF
TRANS: UPS
TYPE:
P.O. #:
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088
ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: BENDELE

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01 Lee MW-1
02 Lee MW-2
03 Lee MW-3
04 Lee MW-4
05 Eunice MW-1
06 Eunice MW-2
07 Eunice MW-3
08 Eunice MW-4

TEST CODES and NAMES used on this report

ALPHA	Gross alpha radiation
BETA	Gross beta radiation
RA 226	Radium 226

4th Quarter
3/89

RADIAN CORPORATION

Received: 02/03/89 Results By Test

SAMPLE Sample Id		Test: ALPHA pCi/	Test: BETA pCi/	Test: RA 226 pCi/
Lee MW-1	01	25 (3) pCi/L	45 (4) pCi/L	0.93(.05) pCi/L
Lee MW-2	02	15 (2) pCi/L	28 (3) pCi/L	0.80(.05) pCi/L
Lee MW-3	03	11 (2) pCi/L	17 (2) pCi/L	0.45(.04) pCi/L
Lee MW-4	04	8.9 (1.2) pCi/L	12 (1) pCi/L	0.57(.04) pCi/L
Eunice MW-1	05	17 (3) pCi/L	19 (3) pCi/L	0.24(.03) pCi/L
Eunice MW-2	06	11 (2) pCi/L	29 (3) pCi/L	1.62(.07) pCi/L
Eunice MW-3	07	7 (2) pCi/L	15 (3) pCi/L	0.35(.03) pCi/L
Eunice MW-4	08	7 (2) pCi/L	24 (4) pCi/L	0.28(.03) pCi/L

TEST CODE ALPHA NAME Gross alpha radiation

The value in parentheses is a + or - one sigma value. Results are thus expressed as: value (+ or - 1 sigma). One sigma = one standard deviation, 68% confidence level.

TEST CODE BETA NAME Gross beta radiation

The value in parentheses is a + or - one sigma value. Results are thus expressed as: value (+ or - 1 sigma). One sigma = one standard deviation, 68% confidence level.

TEST CODE RA 226 NAME Radium 226

The value in parentheses is a + or - one sigma value. Results are thus expressed as: value (+ or - one sigma). One sigma = one standard deviation, 68% confidence level.

RADIAN CORPORATION

Client: Radian
Bl.1
Austin

01B MW-1 EUNICE
02B MW-2 EUNICE
03B MW-3 EUNICE
04B MW-4 EUNICE

EPA METHOD 8080

Lab No: 89-02-048

RESULTS IN ug/L

CAS #	COMPOUND	01B	02B	03B	04B
58-89-9	gamma-BHC,(Lindane)	<0.038	0.020*	<0.009	<0.009
72-20-8	Endrin	<0.038	<0.019	<0.009	<0.009
8001-35-2	Toxaphene	<1.9	<0.95	<0.45	<0.45
72-43-5	Methoxychlor	<0.19	<0.095	<0.045	<0.045

SURROGATE RECOVERIES (results in % recovery)				
Dibutylchlorendate	57	102	135	99
2,4,5,6-Tetrachloro-m-xylene	55	112	114	85

NOTES AND DEFINITIONS FOR THIS REPORT.
QC = OUTSIDE CONTROL LIMITS.
* = LESS THAN 5 TIMES THE DETECTION LIMIT.
B = DETECTED IN REAGENT BLANK; BACKGROUND SUBTRACTION NOT PERFORMED.
ND = NOT DETECTED AT DETECTION LIMIT.
NA = NOT ANALYZED.
N\A = NOT AVAILABLE.
NS = NOT SPIKED.
J = DETECTED AT LESS THAN THE SPECIFIED DETECTION LIMIT.

4th Quarter
2/89

05A REAGENT BLANK

Client: Radian
Bl.1
Austin

EPA METHOD 8080

Lab No: 89-02-048

RESULTS IN ug/L

CAS #	COMPOUND	05A
58-89-9	gamma-BHC,(Lindane)	<0.002
72-20-8	Endrin	<0.002
8001-35-2	Toxaphene	<0.10
72-43-5	Methoxychlor	<0.010

SURROGATE RECOVERIES (results in % recovery)

Dibutylchlorendate	103
2,4,5,6-Tetrachloro-m-xylene	89

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = NOT DETECTED AT DETECTION LIMIT.
NA = NOT ANALYZED.
N\A = NOT AVAILABLE.
NS = NOT SPIKED.
J = DETECTED AT LESS THAN THE SPECIFIED DETECTION LIMIT.

RADIAN CORPORATION

Client: Radian
Bl.1
Austin

01A MW-1 EUNICE
02A MW-2 EUNICE
03A MW-3 EUNICE
04A MW-4 EUNICE

EPA METHOD 8150

Lab No: 89-02-048

RESULTS IN ug/L

CAS #	COMPOUND	01A	02A	03A	04A
94-75-7	2,4-D	<0.48	<0.48	<0.48	18 C
93-72-1	2,4,5-TP (Silvex)	<0.14	<0.14	<0.14	<0.14

SURROGATE RECOVERIES (results in % recovery)

2,4-Dichlorophenyl acetic acid	114	98	13QC	109

NOTES AND DEFINITIONS FOR THIS REPORT.
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C = RESULT CONFIRMED BY SECOND COLUMN ANALYSIS.
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N\A = NOT AVAILABLE.
NS = NOT SPIKED.

RADIAN CORPORATION

05B REAGENT BLANK

Client: Radian
Bl.1
Austin

EPA METHOD 8150

Lab No: 89-02-048

RESULTS IN ug/L

CAS #	COMPOUND	05B
94-75-7	2,4-D	<0.50
93-72-1	2,4,5-TP (Silvex)	<0.15

SURROGATE RECOVERIES (results in % recovery)

2,4-Dichlorophenyl acetic acid	102

NOTES AND DEFINITIONS FOR THIS REPORT.
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N\A = NOT AVAILABLE.
NS = NOT SPIKED.

06A RECOVERY CHECK

Client: Radian
Bl.1
Austin

EPA METHOD 8150

Lab No: 89-02-048

RESULTS IN %

CAS #	COMPOUND	06A
94-75-7	2,4-D	99
93-72-1	2,4,5-TP (Silvex)	98

SURROGATE RECOVERIES	(results in % recovery)
2,4-Dichlorophenyl acetic acid	107

NOTES AND DEFINITIONS FOR THIS REPORT.
QC = OUTSIDE CONTROL LIMITS.
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C = RESULT CONFIRMED BY SECOND COLUMN ANALYSIS.
ND = NOT DETECTED AT DETECTION LIMIT.
NA = NOT ANALYZED.
N\A = NOT AVAILABLE.
NS = NOT SPIKED.

PHILLIPS 66 NATURAL GAS COMPANY
A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

January 19, 1989

Quarterly Groundwater Monitoring Analyses
Artesia, Eunice, Lee and Lusk Plants

Mr. Dave Boyer
Environmental Bureau Chief
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Boyer:

Per your request, attached please find copies of the third quarter groundwater monitoring analyses for the above referenced plants.

If you should have any questions regarding this information, please contact me at (915) 367-1316.

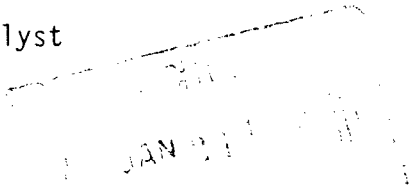
Very truly yours,

Michael D. Ford

Michael D. Ford
Environmental Analyst

MDF

Attachments



RADIAN CORPORATION

Page 1 RAS - Austin REPORT Work Order # 88-11-024

Received: 11/04/88 12/12/88 12:33:51

REPORT TO: Radian, B1.1, Austin

ATTEN: Linda Bendele

CLIENT: PHILLIPS P SAMPLES: 5

COMPANY: Phillips Petroleum

FACILITY: Odessa, TX

WORK ID: Eunice

TAKEN: MF

TRANS: UPS

TYPE:

P.O. #:

INVOICE: under separate cover

PREPARED BY: Radian Analytical Services, 8501 Mo-pac Bl., PO Box 201088, Austin, TX 78720-1088

ATTEN:

PHONE: 512-454-4797

CERTIFIED BY

CONTACT: BENDELE

Unknown compounds present in Eunice MW-2 for 602 + xylene.
** Possible interference.
Phenolic samples diluted due to colorimetry interference.

Footnotes and Comments

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* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01 Eunice MW-1
02 Eunice MW-2 √ Benzene
03 Eunice Equipment Blank
04 Eunice MW-2 dup
05 reagent blank

3rd QTR- 11/88

TEST CODES and NAMES used on this report

AG E	Silver, ICPES
ALPHA	Gross alpha radiation
AS G	Arsenic, graphite AA
BA E	Barium, ICPES
BETA	Gross beta radiation
CD E	Cadmium, ICPES
CL IC	Chloride, IC
COLI T	Total coliform
CR E	Chromium, ICPES
DG3020	Digestion, method 3020
DG6010	Digestion, method 6010
EPA602	EPA method 602
FE E	Iron, ICPES
F IC	Fluoride, IC
HG C	Mercury, cold vapor
MHO	Specific conductance
MN E	Manganese, ICPES
NA E	Sodium, ICPES
NO3	Nitrate, colorimetric
PB G	Lead, graphite AA
PH	pH
PHEN	Total phenolics
RA 226	Radium 226
SE G	Selenium, graphite AA
SO4 IC	Sulfate, IC
TOC	Total organic carbon
TURB	Turbidity
XYLENE	Xylenes, EPA 602

SAMPLE Sample Id	Test: AG E ug/ml	Test: ALPHA pCi/	Test: AS G ug/ml	Test: BA E ug/ml	Test: BETA pCi/
01 Eunice MW-1	<0.03	20 (4) pCi/L	0.049	0.074	19 (4) pCi/L
02 Eunice MW-2	<0.03	5 (2) pCi/L	0.012	1.3	27 (4) pCi/L

SAMPLE Sample Id	Test: CD E ug/ml	Test: CL IC mg/L	Test: COLI T colonies/100 mL	Test: CR E ug/ml	Test: DG3020 date complete
01 Eunice MW-1	<0.005	520		<0.03	11/17/88
02 Eunice MW-2	<0.005	580	25000	<0.03	11/17/88
04 Eunice MW-2 dup				<0.03	

SAMPLE Sample Id	Test: DG6010 date complete	Test: FE E ug/ml	Test: F IC mg/L	Test: MHO umhos/cm	Test: MN E ug/ml
01 Eunice MW-1	11/18/88	0.65	3.4	3900	2.0
				2400	
				3900	
				2900	
02 Eunice MW-2	11/18/88	10	5.3	3200	0.13

SAMPLE Sample Id	Test: DG6010 date complete	Test: FE E ug/ml	Test: F IC mg/L	Test: MHO umhos/cm	Test: MN E ug/ml
				3100	
				3200	
				3400	
04 Eunice MW-2 dup	11/18/08				

SAMPLE Sample Id	Test: NA E ug/ml	Test: NO3 mg/L as N	Test: PB G ug/ml	Test: PH pH units	Test: PHEN mg/L as phenol
01 Eunice MW-1	380	0.08*	<0.002	6.92	0.04*
				6.91	
				6.90	
				6.88	
02 Eunice MW-2	320	0.53	<0.002	6.90	0.05*
				6.99	
				6.88	

RADIAN CORPORATION

SAMPLE Sample Id	Test: NA E ug/ml	Test: NO3 mg/L as N	Test: PB G ug/ml	Test: PH pH units	Test: PHEN mg/L as phenol
				6.88	

SAMPLE Sample Id	Test: RA 226 pCi/	Test: SE G ug/ml	Test: SO4 IC mg/L as SO4	Test: TOC mg/L
01 Eunice MW-1	0.58(.06) pCi/L	<0.004	720	69
				72
				84
				76
02 Eunice MW-2	2.06(.08) pCi/L	<0.004	44	70
				74@
				90
				66

RADIAN CORPORATION

Received: 11/04/88

Results by Sample

SAMPLE ID Eunice MW-1 FRACTION 01J TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST BM FILE #

INSTRMT D INJECTED 11/07/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	0.9*	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	97% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-1 FRACTION 01J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 11/03/88 Category

A-Chlorobenzene and p-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

SAMPLE ID Eunice MW-1 FRACTION Q1I TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 11/03/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 11/20/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.0002

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-1 FRACTION Q1A TEST CODE TURB NAME Turbidity
Date & Time Collected 11/03/88 Category

VERIFIED LM

ANALYST TAM
INSTRMT HACH ANALYZED 11/04/88 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	30	1.0

SAMPLE ID Eunice MW-1 FRACTION 01A TEST CODE TURB NAME Turbidity
Date & Time Collected 11/03/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-1 FRACTION 01J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTD 11/07/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	ND	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	97% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-1 FRACTION 01J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 11/03/88 Category

Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 11/04/88 Results by Sample

SAMPLE ID Eunice MW-2 FRACTION 02J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTED 11/07/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	590	1.0
108-88-3	Toluene	57	1.0
100-41-4	Ethylbenzene	120	1.5
108-90-7	Chlorobenzene-A	ND	1.5
106-46-7	1,4-Dichlorobenzene	ND	1.5
541-73-1	1,3-Dichlorobenzene	ND	2.0
95-50-1	1,2-Dichlorobenzene	ND	2.0

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	167**% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-2 FRACTION 02J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 11/03/88 Category

A-Chlorobenzene and p-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

SAMPLE ID Eunice MW-2 FRACTION 02I TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 11/03/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 11/20/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.0002

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-2 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 11/03/88 Category

VERIFIED LM

ANALYST TAM
INSTRMT HACH ANALYZED 11/04/88 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	58	1.0

SAMPLE ID Eunice MW-2 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 11/03/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-2 FRACTION 02J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTD 11/07/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	52	1.0
108-38-3	m-Xylene	82	1.0
95-47-6	o-Xylene	78	0.50

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 167**% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-2 FRACTION 02J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 11/03/88 Category

Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice Equipment Blank FRACTION 03A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTED 11/07/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	1.3	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice Equipment Blank FRACTION 03A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 11/03/88 Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice Equipment Blank FRACTION 03A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTD 11/07/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	ND	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID reagent blank FRACTION 05A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTED 11/07/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID reagent blank FRACTION 05A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 11/03/88 Category

A-Chlorobenzene and p-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 11/04/88 Results by Sample

SAMPLE ID reagent blank FRACTION 05A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTD 11/07/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	ND	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

FRACTION AND TEST CODES FOR WORK NOT REPORTED ELSEWHERE

01K	:	SPR602
02K	:	SPR602

RADIAN CORPORATION

Page 1 RAS - Austin REPORT Work Order # 88-11-026
Received: 11/04/88 12/12/88 12:19:24

REPORT TO: Radian
Bl. 1
Austin

ATTEN: Linda Bendele

CLIENT: PHILLIPS P SAMPLES: 5
COMPANY: Phillips Petroleum
FACILITY: Odessa, TX

WORK ID: Eunice
TAKEN: MF
TRANS: UPS
TYPE:
P. O. #:
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: BENDELE

Phenolic samples diluted due to colorimetry interference.

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01 Eunice MW-3
02 Eunice MW-4
03 Eunice MW-3 dup
04 trip blank
05 reagent blank

3rd QTR - 11/88

TEST CODES and NAMES used on this report

AG E	Silver, ICPES
ALPHA	Gross alpha radiation
AS G	Arsenic, graphite AA
BA E	Barium, ICPES
BETA	Gross beta radiation
CD E	Cadmium, ICPES
CL IC	Chloride, IC
COLI T	Total coliform
CR E	Chromium, ICPES
DG3020	Digestion, method 3020
DG6010	Digestion, method 6010
EPA602	EPA method 602
FE E	Iron, ICPES
F IC	Fluoride, IC
HG C	Mercury, cold vapor
MHO	Specific conductance
MN E	Manganese, ICPES
NA E	Sodium, ICPES
NO3	Nitrate, colorimetric
PB G	Lead, graphite AA
PH	pH
PHEN	Total phenolics
RA 226	Radium 226
SE G	Selenium, graphite AA
SO4 IC	Sulfate, IC
TOC	Total organic carbon
TURB	Turbidity
XYLENE	Xylenes, EPA 602

SAMPLE Sample Id	Test: AG E ug/ml	Test: ALPHA pCi/	Test: AS G ug/ml	Test: BA E ug/ml	Test: BETA pCi/
01 Eunice MW-3	<0.03	<4 pCi/L	0.045	0.063	8 (3) pCi/L
02 Eunice MW-4	<0.03	11 (4) pCi/L	0.018	0.029*	14 (5) pCi/L

SAMPLE Sample Id	Test: CD E ug/ml	Test: CL IC mg/L	Test: COLI T colonies/100 mL	Test: CR E ug/ml	Test: DG3020 date complete
01 Eunice MW-3	<0.005	150	3300	<0.03	11/17/88
02 Eunice MW-4	<0.005	300	400	<0.03	11/17/88

SAMPLE Sample Id	Test: DG6010 date complete	Test: FE E ug/ml	Test: F IC mg/L	Test: MHO umhos/cm	Test: MN E ug/ml
01 Eunice MW-3	11/18/88	12	3.3	2400	0.24
				2400	
				2400	
				2400	
02 Eunice MW-4	11/18/88	8.4	3.1	3700	0.44
				3700	

RADIAN CORPORATION

SAMPLE Sample Id	Test: DG6010 date complete	Test: FE E ug/ml	Test: F IC mg/L	Test: MHO umhos/cm	Test: MN E ug/ml
				3600	
				3700	

SAMPLE Sample Id	Test: NA E ug/ml	Test: NO3 mg/L as N	Test: PB G ug/ml	Test: PH pH units	Test: PHEN mg/L as phenol
01 Eunice MW-3	300	0.27	<0.002R	7.04	0.03*
				6.94	
				6.99	
				6.98	
02 Eunice MW-4	450	1.4	<0.002	6.99	0.02*
				6.95	
				6.92	
				7.06	

RADIAN CORPORATION

Received: 11/04/88

Results By Test

SAMPLE Sample Id	Test: RA 226 pCi/	Test: SE G ug/ml	Test: SO4 IC mg/L as SO4	Test: TOC mg/L
01 Eunice MW-3	0.44(.05) pCi/L	0.005R*	480	30
				14
				15
				14
02 Eunice MW-4	0.52(.06) pCi/L	<0.004	1300	9
				11
				12
				14

RADIAN CORPORATION

Received: 11/04/88

Results by Sample

SAMPLE ID Eunice MW-3 FRACTION 01J TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST BM FILE #

INSTRMT D INJECTED 11/08/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	1.8	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	102% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-3 FRACTION 01J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 11/03/88 Category

A-Chlorobenzene and p-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Received: 11/04/88 Results by Sample

SAMPLE ID Eunice MW-3 FRACTION 01I TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 11/03/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 11/16/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.0002

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-3 FRACTION 01A TEST CODE TURB NAME Turbidity
Date & Time Collected 11/03/88 Category

VERIFIED LM

ANALYST TAM
INSTRMT HACH ANALYZED 11/04/88 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	24	1.0

SAMPLE ID Eunice MW-3 FRACTION 01A TEST CODE TURB NAME Turbidity
Date & Time Collected 11/03/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-3 FRACTION 01J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTD 11/08/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	ND	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 102% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-3 FRACTION 01J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 11/03/88 Category

Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 11/04/88 Results by Sample

SAMPLE ID Eunice MW-4 FRACTION 02J TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST BM FILE #

INSTRMT D INJECTED 11/08/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	0.9*	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	102% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-4 FRACTION 02J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 11/03/88 Category

A-Chlorobenzene and p-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

SAMPLE ID Eunice MW-4 FRACTION 02I TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 11/03/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 11/16/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.0002

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-4 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 11/03/88 Category

VERIFIED LM

ANALYST TAM
INSTRMT HACH ANALYZED 11/04/88 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	38	1.0

SAMPLE ID Eunice MW-4 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 11/03/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-4 FRACTION 02J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTD 11/08/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	ND	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	102% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
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N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-4 FRACTION 02J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 11/03/88 Category

Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 11/04/88 Results by Sample

SAMPLE ID Eunice MW-3 dup FRACTION 03A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTED 11/08/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	1.9	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	100% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-3 dup FRACTION 03A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 11/03/88 Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 11/04/88 Results by Sample

SAMPLE ID Eunice MW-3 dup FRACTION 03A TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 11/03/88 Category

VERIFIED CL

ANALYST BM FILE #

INSTRMT D INJECTD 11/08/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	ND	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 100% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID trip blank FRACTION 04A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTED 11/08/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	93% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID trip blank FRACTION 04A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and p-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

SAMPLE ID trip blank FRACTION 04A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTD 11/08/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	ND	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	93% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID reagent blank FRACTION 05A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTED 11/08/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID reagent blank FRACTION 05A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and p-xylene co-elute.
Quantitated as chlorobenzene unless
otherwise noted.

RADIAN CORPORATION

Page 23 RAS - Austin REPORT Work Order # 88-11-026
Received: 11/04/88 Results by Sample

SAMPLE ID reagent blank FRACTION 05A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTD 11/08/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene-A	ND	0.20
108-38-3	m-Xylene	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

FRACTION AND TEST CODES FOR WORK NOT REPORTED ELSEWHERE

01K	:	SPR602
02K	:	SPR602

RADIAN CORPORATION

Page 1 RAS - Austin REPORT Work Order # 88-12-146

Received 12/21/88 12/22/88 09:36:04

REPORT Radian
TO Bill
Austin

ATTEN Linda Bendele

CLIENT PHILLIPS P SAMPLES 8
COMPANY Phillips Petroleum
FACILITY Odessa, TX

WORK ID Lea & Eunice, TOX
TAKEN
TRANS
TYPE
P.O. #
INVOICE under separate cover

PREPARED Radian Analytical Services
BY 9701 Mo-pac Bl
PO Box 201088
Austin, TX 78720-1088
ATTN
PHONE 512-454-4797

Jeffrey K. Mutschler
CERTIFIED BY

CONTACT BENDELE

Analyses performed by Gascoyne Laboratories.

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

1 Lee MW-1
2 Lee MW-2
3 Lee MW-3
4 Lee MW-4
5 Eunice MW-1
6 Eunice MW-2
7 Eunice MW-3
8 Eunice MW-4

3rd QTR 12/88

TEST CODES and NAMES used on this report

TOX Total organic halides

SAMPLE Sample Id	Test: TOX mg/L
	0.07
	0.01*
05 Eunice MW-1	0.39
	0.04*
	0.06
	0.11
06 Eunice MW-2	0.19
	0.14
	0.05
	0.07
07 Eunice MW-3	0.47
	0.54
	0.34
	0.68

SAMPLE Sample Id	Test: TOX mg/L
08 Eunice MW-4	0.40
	0.26
	0.12
	0.21

Notes and Definitions

Pesticides/Herbicides
3rd Qtr, Eunice

RADIAN CORPORATION

Data Flags:

TERMS USED IN THIS REPORT:
Analyte - A chemical for which a sample is to be analyzed. The analysis will meet EPA method and QC specifications.

Compound - See Analyte.

Detection Limit - The method specified detection limit, which is the lower limit of quantitation specified by EPA for a method. Radian staff regularly assess their laboratories' method detection limits to verify that they meet or are lower than those specified by EPA. Note, the detection limit may vary from that specified by EPA by the concentration factor. (Refer to Factor, below)

EPA Method - The EPA specified method used to perform an analysis. EPA has specified standard methods for analysis of environmental samples. Radian will perform its analyses and accompanying QC tests in conformance with EPA methods unless otherwise specified.

Factor - The concentration or dilution factor by which the sample extract or digestate differs from that specified by a given EPA method. A sample prepared to the specifications of the method will have a factor of 1. A sample diluted 10 times to bring the analytes within the instrument calibration range will have a factor of 10. Conversely, a sample which is concentrated 10 times more than specified will have a factor of 0.1.

Matrix - The sample material. Generally, it will be soil, water, air, oil, or solid waste.

Radian Work Order - The unique Radian identification code assigned to the samples reported in the analytical summary.

Units -

ug/L	micrograms per liter (parts per billion);liquids/water
ug/Kg	micrograms per kilogram (parts per billion); soils/solids
ug/M3	micrograms per cubic meter; air samples
mg/L	milligrams per liter (parts per million);liquids/water
mg/Kg	milligrams per kilogram (parts per million);soils/solids
%	percent; usually used for percent recovery of QC standards
umhos	conductance unit; microohms/centimeter
ml/hr	milliliters per hour; rate of settlement of matter in water
NTU	turbidity unit; nephelometric turbidity unit

Notes and Definitions

Data Flags:

* The asterisk(*) is used to flag results which are less than five times the method specified detection limit. Studies have shown that the uncertainty of the analysis will increase exponentially as the method detection limit is approached. These results should be considered approximate.

A This flag indicates that a spike is an analytical and/or post-digestion spike. These spikes have not been subjected to the extraction or digestion step.

B This flag indicates that the analyte was detected in the reagent blank Since traces of the background contaminant will vary from sample to sample, the sample results are not corrected from the amount in the blank.

C Most methods of gas chromatography recommend reanalysis on a second column of dissimilar phase to resolve compounds of interest from interferences that may occur and for analyte confirmation. This flag indicates that the analyte has been confirmed on a second column.

D This flag identifies analytes identified in analysis at a secondary dilution factor. In an analysis some compounds can exceed the calibration range of the instrument. Therefore two analyses are performed, one at the concentration of some of the analytes, and a second with the sample diluted so that higher levels fall into calibration range.

E The reported value is estimated because of the presence of interference. The potential source of the interference is included in the report narrative.

RADIAN CORPORATION

Notes and Definitions

Data Flags:

G This flag identifies a GC/MS result whose concentration exceeds the calibration range for that specific analysis. Usually if one or more compounds have a response greater than full scale, the sample or extract is diluted and re-analyzed.

J Indicates an estimated value for GC/MS data. This flag is used either when estimating a concentration for tentatively identified compounds where a response factor of 1 is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit.

N/A A result or value is not available for this parameter, usually a detection limit.

NA This analyte was not analyzed.

NC Applies to RPD and spike recovery results. The relative percent difference (RPD) is not calculated when a result is less than five times the detection limit. A spike recovery is not calculated when the result is greater than four times the spike added concentration because the spike added concentration is considered insignificant.

ND This flag (or <) is used to denote analytes which are not detected at or above the specified detection limit. The value to the right of the < symbol is the method specified detection limit for the sample.

RADIAN CORPORATION

Notes and Definitions

Data Flags:

NR This analyte was not requested by the client.

NS This analyte or surrogate was not added (spiked) to the sample for this analysis.

P Most methods of gas chromatography recommend reanalysis on a second column of dissimilar phase to resolve compounds of interest from interferences that may occur and for analyte confirmation. This flag indicates that the analyte has been confirmed previously. This flag is applicable for samples from a regular sampling program.

Q This quality control standard is outside method or laboratory specified control limits. This flag is applied to matrix spike, analytical QC spike, and surrogate recoveries; and to RPD(relative percent difference) values for duplicate analyses and matrix spike/matrix spike duplicate result.

S This flag indicates that a specific result from a metals analysis has been obtained using the Method of Standard Addition.

U Most methods of gas chromatography recommend reanalysis on a second column of dissimilar phase to resolve compounds of interest from interferences that may occur and for analyte confirmation. This flag indicates that second column was not requested.

RADIAN CORPORATION

Client: PHILLIPS 66
PHILLIPS 66
ODESSA, TEXAS 77480

01A EUNICE MW-4
02A EUNICE MW-1
03A EUNICE MW-3
03B EUNICE MW-3 DUP

EPA METHOD 8080

Lab No: A8-11-018

RESULTS IN ug/L

CAS #	COMPOUND	01A	02A	03A	03B
58-89-9	gamma-BHC,(Lindane)	<0.094	<0.17	<0.18	<0.18
72-20-8	Endrin	<0.094	0.07 J	0.02 J	0.02 J
8001-35-2	Toxaphene	<0.47	<0.87	<0.89	<0.89
72-43-5	Methoxychlor	<4.7	<8.7	<8.9	<8.9

SURROGATE RECOVERIES (results in % recovery)

Dibutylchlorendate	93	93	94	93
2,4,5,6-Tetrachloro-m-xylene	100	100	102	100

NOTES AND DEFINITIONS FOR THIS REPORT.
QC = OUTSIDE CONTROL LIMITS.
* = LESS THAN 5 TIMES THE DETECTION LIMIT.
B = DETECTED IN REAGENT BLANK; BACKGROUND SUBTRACTION NOT PERFORMED.
ND = NOT DETECTED AT DETECTION LIMIT.
NA = NOT ANALYZED.
N\A = NOT AVAILABLE.
NS = NOT SPIKED.
J = DETECTED AT LESS THAN THE SPECIFIED DETECTION LIMIT.

04A EUNICE MW-2
05A REAGENT BLANK

Client: PHILLIPS 66
PHILLIPS 66
ODESSA, TEXAS 77480

EPA METHOD 8080

Lab No: A8-11-018

RESULTS IN ug/L

CAS #	COMPOUND	04A	05A
58-89-9	gamma-BHC,(Lindane)	0.32 *	<0.010
72-20-8	Endrin	<0.094	<0.010
8001-35-2	Toxaphene	<0.47	<0.050
72-43-5	Methoxychlor	<4.7	<0.50

SURROGATE RECOVERIES (results in % recovery)		
Dibutylchlorendate	94	90
2,4,5,6-Tetrachloro-m-xylene	119	74

NOTES AND DEFINITIONS FOR THIS REPORT.
QC = OUTSIDE CONTROL LIMITS.
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ND = NOT DETECTED AT DETECTION LIMIT.
NA = NOT ANALYZED.
N\A = NOT AVAILABLE.
NS = NOT SPIKED.
J = DETECTED AT LESS THAN THE SPECIFIED DETECTION LIMIT.

RADIAN CORPORATION

06A RECOVERY CHECK

Client: PHILLIPS 66
PHILLIPS 66
ODESSA, TEXAS 77480

Eunice

EPA METHOD 8080

Lab No: A8-11-018

RESULTS IN %

CAS #	COMPOUND	06A
58-89-9	gamma-BHC,(Lindane)	91
72-20-8	Endrin	NS
8001-35-2	Toxaphene	NS
72-43-5	Methoxychlor	100

SURROGATE RECOVERIES	(results in % recovery)
Dibutylchlorendate	93
2,4,5,6-Tetrachloro-m-xylene	73

NOTES AND DEFINITIONS FOR THIS REPORT.
QC = OUTSIDE CONTROL LIMITS.
* = LESS THAN 5 TIMES THE DETECTION LIMIT.
B = DETECTED IN REAGENT BLANK; BACKGROUND SUBTRACTION NOT PERFORMED.
ND = NOT DETECTED AT DETECTION LIMIT.
NA = NOT ANALYZED.
N\A = NOT AVAILABLE.
NS = NOT SPIKED.
J = DETECTED AT LESS THAN THE SPECIFIED DETECTION LIMIT.

RADIAN CORPORATION

ANALYTICAL DATA SUMMARY

PHILLIPS 66
Associate Laboratory Data for Radian Work Order: 8901039

Method: EPA 8150 Herbicides Matrix: water

Results in:	ug/L	ug/L	ug/L	ug/L
Sample ID:	Eunice MW-1	Eunice MW-2	Eunice MW-3	Eunice MW-4
2,4-D	<0.5	<0.5	<0.5	<0.5
2,4,5-TP (Silvex)	<0.2	<0.2	<0.2	<0.2

For a detailed description of flags and technical terms in this report refer to the glossary.

PHILLIPS 66 NATURAL GAS COMPANY
A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

December 8, 1988

Quarterly Groundwater Monitoring Analyses
Artesia, Eunice, Lee and Lusk Plants

Mr. Dave Boyer
Environmental Bureau Chief
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Boyer:

Per your request, attached please find copies of the second quarter groundwater monitoring analyses for the above referenced plants. I have also included additional information on the Lee Plant water supply wells for your reference.

If you should have any questions regarding this information, please contact me at (915) 367-1316.

Very truly yours,

Michael D. Ford

Michael D. Ford
Environmental Analyst

MDF

Attachments

RADIAN CORPORATION

Page 1 RAS - Austin REPORT Work Order # 88-09-017

Received: 09/02/88 10/04/88 07:15:56

REPORT TO: Radian
B1.1
Austin

ATTEN: Linda Bendele

CLIENT: PHILLIPS P SAMPLES: 5
COMPANY: Phillips Petroleum
FACILITY: Odessa, TX

WORK ID: Eunice
TAKEN: MF
TRANS: UPS
TYPE:
P.O. #:
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: BENDELE

Chloride by titration, Fluoride by SIE, and Sulfate by nephelometry due to organic interferences.

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01 Eunice MW-1
02 Eunice MW-2
03 Eunice MW-3
04 Eunice MW-4
05 Eunice MW-3 duplicate

2nd Qtr - 9/88

TEST CODES and NAMES used on this report

AG E	Silver, ICPES
AS G	Arsenic, graphite AA
BA E	Barium, ICPES
CD E	Cadmium, ICPES
CL IC	Chloride, IC
CR E	Chromium, ICPES
DG3020	Digestion, method 3020
DG6010	Digestion, method 6010
FE E	Iron, ICPES
F IC	Fluoride, IC
HG C	Mercury, cold vapor
MHO	Specific conductance
MN E	Manganese, ICPES
NA E	Sodium, ICPES
NO3	Nitrate, colorimetric
PB G	Lead, graphite AA
PH	pH
PHEN	Total phenolics
SE G	Selenium, graphite AA
SO4 IC	Sulfate, IC
TOC	Total organic carbon
TOX	Total organic halides
TURB	Turbidity

RADIAN CORPORATION

Received: 09/02/88 Results By Test

SAMPLE Sample Id	Test: AG E ug/ml	Test: AS G ug/ml	Test: BA E ug/ml	Test: CD E ug/ml	Test: CL IC mg/L
01 Eunice MW-1	<0.03	0.074	0.33	<0.005	920
02 Eunice MW-2	<0.03	0.10	1.3	<0.005	640
03 Eunice MW-3	<0.03	0.049	0.065	<0.005	190
04 Eunice MW-4	<0.03	0.026	0.028*	<0.005	350

SAMPLE Sample Id	Test: CR E ug/ml	Test: DG3020 date complete	Test: DG6010 date complete	Test: FE E ug/ml	Test: F IC mg/L
01 Eunice MW-1	<0.03	09/09/88	09/21/88	3.7	1.8
02 Eunice MW-2	<0.03	09/09/88	09/21/88	8.8	3.9
03 Eunice MW-3	<0.03	09/09/88	09/21/88	13	2.0
04 Eunice MW-4	<0.03	09/09/88	09/21/88	16	0.87
05 Eunice MW-3 dup	<0.03		09/09/88		

SAMPLE Sample Id	Test: MHO umhos/cm	Test: MN E ug/ml	Test: NA E ug/ml	Test: NO3 mg/L as N	Test: PB G ug/ml
01 Eunice MW-1	4280	2.2	520	0.13	<0.002

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SAMPLE Sample Id	Test: MHO umhos/cm	Test: MN E ug/ml	Test: NA E ug/ml	Test: NO3 mg/L as N	Test: PB G ug/ml
	4380				
	4330				
	4280				
02 Eunice MW-2	3360	0.17	330	0.28	<0.002
	3360				
	3350				
	3400				
03 Eunice MW-3	2510	0.30	300	0.60	<0.002
	2570				
	2480				
	2550				
04 Eunice MW-4	3870	0.44	480	0.45	<0.002
	4000				
	3990				

SAMPLE Sample Id	Test: MHO umhos/cm	Test: MN E ug/ml	Test: NA E ug/ml	Test: NO3 mg/L as N	Test: PB G ug/ml
	4000				

SAMPLE Sample Id	Test: PH pH units	Test: PHEN mg/L as phenol	Test: SE G ug/ml	Test: SO4 IC mg/L as SO4	Test: TOC mg/L
01 Eunice MW-1	6.92	0.022*	<0.002	300	50
	6.93				64
	6.93				60
	6.94				61
02 Eunice MW-2	6.94	0.025	<0.002	40*	57
	6.93				59
	6.93				58
	6.96				60@
03 Eunice MW-3	7.00	<0.005	<0.002	510	27
	7.00				17

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SAMPLE Sample Id	Test: PH pH units	Test: PHEN mg/L as phenol	Test: SE G ug/ml	Test: SO4 IC mg/L as SO4	Test: TOC mg/L
	7.00				18
	6.99				17
04 Eunice MW-4	7.03	<0.005	<0.002	1400	13
	7.15				18
	6.97				15
	6.99				16

SAMPLE Sample Id	Test: TOX mg/L
01 Eunice MW-1	0.07
	0.06
	0.07
	0.07
02 Eunice MW-2	0.10

SAMPLE Sample Id	Test: TOX mg/L
	0.11
	0.13
●	0.12
03	0.40
Eunice MW-3	0.42
	0.40
	0.37
04	0.15
Eunice MW-4	0.17
●	0.15
	0.14

SAMPLE ID Eunice MW-1 FRACTION 011 TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 09/01/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 09/12/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00018

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-1 FRACTION 01A TEST CODE TURB NAME Turbidity
Date & Time Collected 09/01/88 Category

VERIFIED LM

ANALYST LKM
INSTRMT 2100A ANALYZED 09/02/88 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	24	1.0

SAMPLE ID Eunice MW-1 FRACTION 01A TEST CODE TURB NAME Turbidity
Date & Time Collected 09/01/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-2 FRACTION 02I TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 09/01/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 09/12/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00018

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

RADIAN CORPORATION

Received: 09/02/88 Results by Sample

SAMPLE ID Eunice MW-2 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 09/01/88 Category

VERIFIED LM

ANALYST LKM
INSTRMT 2100A ANALYZED 09/02/88 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	56	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-3 FRACTION 03I TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 09/01/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 09/12/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00018

SAMPLE ID Eunice MW-3 FRACTION 03I TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 09/01/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-3 FRACTION 03A TEST CODE TURB NAME Turbidity
Date & Time Collected 09/01/88 Category

VERIFIED LM

ANALYST LKM
INSTRMT 2100A ANALYZED 09/02/88 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	27	1.0

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

RADIAN CORPORATION

Received: 09/02/88 Results by Sample

SAMPLE ID Eunice MW-4 FRACTION 04I TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 09/01/88 Category

VERIFIED RHH

ANALYST KCP
INSTRMT 403 ANALYZED 09/12/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00018

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice MW-4 FRACTION 04A TEST CODE TURB NAME Turbidity
Date & Time Collected 09/01/88 Category

VERIFIED LM

ANALYST LKM
INSTRMT 2100A ANALYZED 09/02/88 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	32	1.0

RADIAN CORPORATION

SAMPLE ID Eunice MW-4 FRACTION 04A TEST CODE TURB NAME Turbidity
Date & Time Collected 09/01/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT:
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

RADIAN CORPORATION

Page 1 RAS - Austin REPORT Work Order # 88-09-019

Received: 09/02/88 09/15/88 10:05:15

REPORT TO: Radian
Bl. 1
Austin

ATTEN: Linda Bendele

CLIENT: PHILLIPS P SAMPLES: 7
COMPANY: Phillips Petroleum
FACILITY: Odessa, TX

WORK ID: Eunice, BTEX
TAKEN: MF
TRANS: UPS
TYPE:
P.O. #:
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: BENDELE

Unknown compounds present in Eunice MW-1, Eunice MW-2, and Eunice MW-2 duplicate. ** Possible interference.

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01 Eunice MW-1
02 Eunice MW-2
03 Eunice MW-2 duplicate
04 Eunice MW-3
05 Eunice MW-4
06 trip blank
07 reagent blank

TEST CODES and NAMES used on this report

EPA602 EPA method 602
XYLENE Xylenes, EPA 602

2nd Qtr - 9/88

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-09-019

Received: 09/02/88 Results by Sample

SAMPLE ID Eunice MW-1 FRACTION 01A TEST CODE EPA602 NAME EPA method 602

Date & Time Collected 09/01/88 Category

VERIFIED CL

ANALYST CL FILE #

TRMT D INJECTED 09/12/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	5.3	0.20
108-88-3	Toluene	0.5*	0.20
100-41-4	Ethylbenzene	13	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	125**% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-1 FRACTION 01A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 09/01/88 Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-09-019

Received: 09/02/88 Results by Sample

SAMPLE ID Eunice MW-1 FRACTION 01A TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 09/01/88 Category

VERIFIED CL

ANALYST CL FILE #

TRMT D INJECTD 09/12/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	5.4Q	0.20
108-38-3	m-Xylene-A	1.2	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 125**% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene, unless otherwise noted.

RADIAN CORPORATION

Received: 09/02/88 Results by Sample

SAMPLE ID Eunice MW-2 FRACTION 02A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 09/01/88 Category

VERIFIED CL

ANALYST CL FILE #
TRMT D INJECTED 09/12/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	510	1.0
108-88-3	Toluene	130	1.0
100-41-4	Ethylbenzene	90	1.5
108-90-7	Chlorobenzene-A	ND	1.5
106-46-7	1,4-Dichlorobenzene	ND	1.5
541-73-1	1,3-Dichlorobenzene	ND	2.0
95-50-1	1,2-Dichlorobenzene	ND	2.0

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	127**% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-2 FRACTION 02A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 09/01/88 Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 09/02/88
Results by Sample

SAMPLE ID Eunice MW-2 FRACTION 02A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 09/01/88 Category

VERIFIED CL

ANALYST CL FILE #
TRMT D INJECTD 09/12/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	60Q	1.0
108-38-3	m-Xylene-A	69	1.0
95-47-6	o-Xylene	76	0.50

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	127**% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-09-019
Received: 09/02/88 Results by Sample

SAMPLE ID Eunice MW-2 duplicate FRACTION 03A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 09/01/88 Category

VERIFIED CL

ANALYST CL
TRMT D
INJECTED 09/12/88
FILE #
UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	510	1.0
108-88-3	Toluene	130	1.0
100-41-4	Ethylbenzene	91	1.5
108-90-7	Chlorobenzene-A	ND	1.5
106-46-7	1,4-Dichlorobenzene	ND	1.5
541-73-1	1,3-Dichlorobenzene	ND	2.0
95-50-1	1,2-Dichlorobenzene	ND	2.0

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	120**% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-2 duplicate FRACTION 03A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 09/01/88 Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-09-019
Received: 09/02/88
Results by Sample

SAMPLE ID Eunice MW-2 duplicate FRACTION 03A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 09/01/88 Category

VERIFIED CL

ANALYST CL FILE #
TRMT D INJECTD 09/12/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	61Q	1.0
108-38-3	m-Xylene-A	70	1.0
95-47-6	o-Xylene	75	0.50

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 120**% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 09/02/88
Results by Sample

SAMPLE ID Eunice MW-3 FRACTION 04A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 09/01/88 Category

VERIFIED CL

ANALYST CL FILE #
STRMT D INJECTED 09/12/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	1.6	0.20
108-88-3	Toluene	1.1	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	94% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-3 FRACTION 04A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 09/01/88 Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

RAS - Austin REPORT Work Order # 88-09-019

Received: 09/02/88

Results by Sample

SAMPLE ID Eunice MW-3 FRACTION 04A TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 09/01/88 Category

VERIFIED CL

ANALYST CL FILE #

TRMT D INJECTD 09/12/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND, @, Q	0.20
108-38-3	m-Xylene-A	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 94% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 09/02/88 Results by Sample

SAMPLE ID Eunice MW-4 FRACTION 05A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 09/01/88 Category

VERIFIED CL

ANALYST BM FILE #
TRMT D INJECTED 09/12/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	0.4*	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	97% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice MW-4 FRACTION 05A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 09/01/88 Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 09/02/88 Results by Sample

SAMPLE ID Eunice MW-4 FRACTION 05A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 09/01/88 Category

VERIFIED CL

ANALYST BM FILE #
TRMT D INJECTD 09/12/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND, Q	0.20
108-38-3	m-Xylene-A	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	97% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 09/02/88 Results by Sample

SAMPLE ID trip blank FRACTION 06A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST BM FILE #
TRMT D INJECTED 09/12/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	93% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID trip blank FRACTION 06A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-09-019
Received: 09/02/88 Results by Sample

SAMPLE ID trip blank FRACTION 06A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST BM FILE #
DILUTN D INJECTD 09/12/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND,Q	0.20
108-38-3	m-Xylene-A	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	93% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 09/02/88

RAS - Austin REPORT
Results by Sample

Work Order # 88-09-019

SAMPLE ID reagent blank FRACTION 07A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL
TRMT D

FILE #

INJECTED 09/12/88

UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.20
108-88-3	Toluene	ND	0.20
100-41-4	Ethylbenzene	ND	0.30
108-90-7	Chlorobenzene-A	ND	0.30
106-46-7	1,4-Dichlorobenzene	ND	0.30
541-73-1	1,3-Dichlorobenzene	ND	0.40
95-50-1	1,2-Dichlorobenzene	ND	0.40

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.

SAMPLE ID reagent blank FRACTION 07A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID reagent blank FRACTION 07A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
TRMT D INJECTD 09/12/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND, Q	0.20
108-38-3	m-Xylene-A	ND	0.20
95-47-6	o-Xylene	ND	0.10

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N\A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and p-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

FRACTION AND TEST CODES FOR WORK NOT REPORTED ELSEWHERE

01B	:	SPR602
02B	:	SPR602
04B	:	SPR602
05B	:	SPR602
06B	:	SPR602

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-09-021

Received: 09/02/88 10/21/88 14:18:24

REPORT TO: Radian
Bl. 1
Austin

ATTEN: Linda Bendele

CLIENT: PHILLIPS P SAMPLES: 4
COMPANY: Phillips Petroleum
FACILITY: Odessa, TX

WORK ID: Eunice, radiochemistry
TAKEN: MF
TRANS: UPS
TYPE:
P.O. #:
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT: BENDELE

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01 Eunice MW-1
02 Eunice MW-2
03 Eunice MW-3
04 Eunice MW-4

TEST CODES and NAMES used on this report

ALPHA	Gross alpha radiation
BETA	Gross beta radiation
RA 226	Radium 226

2nd Qtr - 9/88

RADIAN CORPORATION

Received: 09/02/88

Results By Test

SAMPLE Sample Id	Test: ALPHA pCi/	Test: BETA pCi/	Test: RA 226 pCi/
01 Eunice MW-1	24 (6) pCi/L	22 (9) pCi/L	0.4 (0.1) pCi/L
02 Eunice MW-2	16 (4) pCi/L	36 (7) pCi/L	2.4 (0.1) pCi/L
03 Eunice MW-3	10 (3) pCi/L	22 (4) pCi/L	0.1 (0.1) pCi/L
04 Eunice MW-4	36 (7) pCi/L	30 (7) pCi/L	0.3 (0.2) pCi/L

Test Methodology

TEST CODE ALPHA NAME Gross alpha radiation

The value in parentheses is a + or - one sigma value. Results are thus expressed as: value (+ or - 1 sigma). One sigma = one standard deviation, 68% confidence level.

TEST CODE BETA NAME Gross beta radiation

The value in parentheses is a + or - one sigma value. Results are thus expressed as: value (+ or - 1 sigma). One sigma = one standard deviation, 68% confidence level.

TEST CODE RA 226 NAME Radium 226

The value in parentheses is a + or - one sigma value. Results are thus expressed as: value (+ or - one sigma). One sigma = one standard deviation, 68% confidence level.

RADIAN CORPORATION

Page 1 RAS - Austin REPORT Work Order # 88-11-164
Received: 09/01/88 11/28/88 15:19:38

REPORT TO: Radian
B1.1
Austin

ATTEN: Linda Bendele

CLIENT: PHILLIPS P SAMPLES: 4
COMPANY: Phillips Petroleum
FACILITY: Odessa, TX

WORK ID: Eunice, coliform samples
TAKEN: MF
TRANS: UPS
TYPE:
P.O. #:
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088

ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT BENDELE

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01 MW-1
02 MW-2
03 MW-3
04 MW-4

TEST CODES and NAMES used on this report

COLI T Total coliform

2nd Qtr 9/88

RADIAN CORPORATION

Received: 09/01/88

Results By Test

SAMPLE Sample Id	Test: COLI T colonies/100 mL
01 MW-1	4600
02 MW-2	24,000
03 MW-3	49,000
04 MW-4	13,000

Pesticides/Herbicides
2nd QTR - Eunice

Notes and Definitions

RADIAN CORPORATION

Data Flags:

TERMS USED IN THIS REPORT:
Analyte - A chemical for which a sample is to be analyzed. The analysis will meet EPA method and QC specifications.

Compound - See Analyte.

Detection Limit - The method specified detection limit, which is the lower limit of quantitation specified by EPA for a method. Radian staff regularly assess their laboratories' method detection limits to verify that they meet or are lower than those specified by EPA. Note, the detection limit may vary from that specified by EPA by the concentration factor. (Refer to Factor, below)

EPA Method - The EPA specified method used to perform an analysis. EPA has specified standard methods for analysis of environmental samples. Radian will perform its analyses and accompanying QC tests in conformance with EPA methods unless otherwise specified.

Factor - The concentration or dilution factor by which the sample extract or digestate differs from that specified by a given EPA method. A sample prepared to the specifications of the method will have a factor of 1. A sample diluted 10 times to bring the analytes within the instrument calibration range will have a factor of 10. Conversely, a sample which is concentrated 10 times more than specified will have a factor of 0.1.

Matrix - The sample material. Generally, it will be soil, water, air, oil, or solid waste.

Radian Work Order - The unique Radian identification code assigned to the samples reported in the analytical summary.

Units -

ug/L	micrograms per liter (parts per billion);liquids/water
ug/Kg	micrograms per kilogram (parts per billion); soils/solids
ug/M3	micrograms per cubic meter; air samples
mg/L	milligrams per liter (parts per million);liquids/water
mg/Kg	milligrams per kilogram (parts per million);soils/solids
%	percent; usually used for percent recovery of QC standards
umhos	conductance unit; microohms/centimeter
ml/hr	milliliters per hour; rate of settlement of matter in water
NTU	turbidity unit; nephelometric turbidity unit

Notes and Definitions

Data Flags:

* The asterisk(*) is used to flag results which are less than five times the method specified detection limit. Studies have shown that the uncertainty of the analysis will increase exponentially as the method detection limit is approached. These results should be considered approximate.

A This flag indicates that a spike is an analytical and/or post-digestion spike. These spikes have not been subjected to the extraction or digestion step.

B This flag indicates that the analyte was detected in the reagent blank Since traces of the background contaminant will vary from sample to sample, the sample results are not corrected from the amount in the blank.

C Most methods of gas chromatography recommend reanalysis on a second column of dissimilar phase to resolve compounds of interest from interferences that may occur and for analyte confirmation. This flag indicates that the analyte has been confirmed on a second column.

D This flag identifies analytes identified in analysis at a secondary dilution factor. In an analysis some compounds can exceed the calibration range of the instrument. Therefore two analyses are performed, one at the concentration of some of the analytes, and a second with the sample diluted so that higher levels fall into calibration range.

E The reported value is estimated because of the presence of interference. The potential source of the interference is included in the report narrative.

RADIAN CORPORATION

Notes and Definitions

Data Flags:

G This flag identifies a GC/MS result whose concentration exceeds the calibration range for that specific analysis. Usually if one or more compounds have a response greater than full scale, the sample or extract is diluted and re-analyzed.

J Indicates an estimated value for GC/MS data. This flag is used either when estimating a concentration for tentatively identified compounds where a response factor of 1 is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit.

N/A A result or value is not available for this parameter, usually a detection limit.

NA This analyte was not analyzed.

NC Applies to RPD and spike recovery results. The relative percent difference (RPD) is not calculated when a result is less than five times the detection limit. A spike recovery is not calculated when the result is greater than four times the spike added concentration because the spike added concentration is considered insignificant.

ND This flag (or <) is used to denote analytes which are not detected at or above the specified detection limit. The value to the right of the < symbol is the method specified detection limit for the sample.

RADIAN CORPORATION

Notes and Definitions

Data Flags:

NR This analyte was not requested by the client.

NS This analyte or surrogate was not added (spiked) to the sample for this analysis.

P Most methods of gas chromatography recommend reanalysis on a second column of dissimilar phase to resolve compounds of interest from interferences that may occur and for analyte confirmation. This flag indicates that the analyte has been confirmed previously. This flag is applicable for samples from a regular sampling program.

Q This quality control standard is outside method or laboratory specified control limits. This flag is applied to matrix spike, analytical QC spike, and surrogate recoveries; and to RPD(relative percent difference) values for duplicate analyses and matrix spike/matrix spike duplicate result.

S This flag indicates that a specific result from a metals analysis has been obtained using the Method of Standard Addition.

U Most methods of gas chromatography recommend reanalysis on a second column of dissimilar phase to resolve compounds of interest from interferences that may occur and for analyte confirmation. This flag indicates that second column was not requested.

RADIAN CORPORATION

ANALYTICAL DATA SUMMARY

Phillips 66
Associate Laboratory Data for Radian Work Order: 8811001

Method: EPA 608 Pesticides Matrix: water

Factor:	1.0	1.0	1.0	1.0	1.0
Results in:	ug/L	ug/L	ug/L	ug/L	ug/L
Sample ID:	Method Blank	Eunice MW-1	Eunice MW-2	Eunice MW-3	Eunice MW-4
Lindane	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Endrin	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Toxaphene	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

For a detailed description of flags and technical terms in this report refer to the glossary.

RADIAN CORPORATION

ANALYTICAL DATA SUMMARY

Phillips 66
Associate Laboratory Data for Radian Work Order: 8811001

Method: EPA 8150 Herbicides		Matrix: water			
Factor:	1.0	20.0	20.0	5.0	1.0
Results in:	ug/L	ug/L	ug/L	ug/L	ug/L
Sample ID:	Method Blank	Eunice MW-1	Eunice MW-2	Eunice MW-3	Eunice MW-4
2,4-D	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-TP (Silvex)	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01

For a detailed description of flags and technical terms in this report refer to the glossary.

RADIAN CORPORATION

Page 1 RAS Perimeter REPORT Work Order # P8-06-002
Received: 05/28/88 07/05/88 11:57:02

REPORT TO: Mike Selke
Geoscience Consultants, Ltd.
Albuquerque, NM 87102

ATTEN:

CLIENT: GEOSCIENCE SAMPLES: 7
COMPANY: Geoscience Consultants, Ltd.
FACILITY: 500 Copper NW
Albuquerque, NM 87102

WORK ID: Geosciences
TAKEN: W. S. Dubyk
TRANS: Fed Ex#768/5387/785
TYPE: Water
P. O. #: 88-0190-700
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
Bldg. 900 Perimeter Park
Morrisville, NC 27560

ATTEN:
PHONE: 919-481-0212

CERTIFIED BY

CONTACT: M DAY

* Matrix Interference

Previously Reported on 07/01/88.

SAMPLE IDENTIFICATION

01 Eunice #1-0900 MW-1
02 Eunice #2-1400 MW-2
03 Eunice #3-1700 MW-3
04 Eunice #4-1112 MW-4
05 Spiked Method Blank
06 Spiked Method Blank Dup
07 Method Blank

TEST CODES and NAMES used on this report

8080 Pesticides/PCBs.
EXT L Extraction for liquid

1st Qtr-5/88

RADIAN CORPORATION

Received: 05/28/88 Results By Test

TEST CODE default units	Sample 01 (entered units)	Sample 02 (entered units)	Sample 03 (entered units)	Sample 04 (entered units)	Sample 05 (entered units)
EXT_L date completed	06/02/88	06/02/88	06/02/88	06/02/88	06/02/88

TEST CODE default units	Sample 06 (entered units)	Sample 07 (entered units)
EXT_L date completed	06/02/88	06/02/88

RADIAN CORPORATION

Received: 05/28/88
Results By Test

SAMPLE Sample Id	Test: EXT L date completed
01 Eunice #1-0900	06/02/88
02 Eunice #2-1400	06/02/88
03 Eunice #3-1700	06/02/88
04 Eunice #4-1112	06/02/88
05 Spiked Method B	06/02/88
06 Spiked Method B	06/02/88
07 Method Blank	06/02/88

RADIAN CORPORATION

Received: 05/28/88 Results by Sample

SAMPLE ID Eunice #1-0900 SAMPLE # 01 FRACTIONS: A

Date & Time Collected 05/27/88 Category

EXT_L 06/02/88
date completed

RADIAN CORPORATION

Received: 05/28/88 Results by Sample

SAMPLE ID Eunice #1-0900 FRACTION 01A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected 05/27/88 Category

ORGANICS ANALYSIS DATA SHEET
PESTICIDES by METHOD 8080

ANALYST BLACKLEY EXTRCTD 06/02/88 FILE # 17 62288 VERIFIED HK
INSTRMT GC1 INJECTD 06/22/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
319-84-6	alpha-BHC	ND	0.010
58-89-9	gamma-BHC (lindane)	ND	0.010
319-85-7	beta-BHC	ND	0.010
76-44-8	heptachlor	ND	0.010
319-86-8	delta-BHC	ND	0.010
309-00-02	aldrin	ND	0.010
1024-57-3	heptachlor epoxide	ND	0.010
959-98-8	endosulfan I	ND	0.010
72-55-9	4,4'-DDE	ND	0.010
60-57-1	dieldrin	ND	0.010
72-20-8	endrin	ND	0.010
72-54-8	4,4'-DDD	ND	0.010
33213-65-9	endosulfan II	ND	0.030
50-29-3	4,4'-DDT	ND	0.020
7421-93-4	endrin aldehyde	ND	0.020
1031-07-8	endosulfan sulphate	ND	0.050
57-74-9	chlordane	ND	0.050
8001-35-2	toxaphene	ND	0.50
12674-11-2	PCB-1016	NR	0.030
11104-28-2	PCB-1221	NR	0.060
11141-16-5	PCB-1232	NR	0.060
53469-21-9	PCB-1242	NR	0.030
12672-29-6	PCB-1248	NR	0.030
11097-69-1	PCB-1254	NR	0.060
11096-82-5	PCB-1260	NR	0.060

RADIAN CORPORATION

SAMPLE ID Eunice #1-0900 FRACTION 01A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected 05/27/88 Category

SURROGATE RECOVERY

COMPOUND	RECOVERY
dibutyl chlorendate	* %
tetrachlorometaxylene	173 %

NOTES AND DEFINITIONS FOR THIS REPORT:
DET LIMIT = detection limit
ND = not detected at specified detection limit.
NR = not required for analysis.
S = compound peak saturated.
J = estimated value less than 3 x minimum detection limit.

RADIAN CORPORATION

Received: 05/28/88 Results by Sample

SAMPLE ID Eunice #2-1400 SAMPLE # 02 FRACTIONS: A

Date & Time Collected 05/26/88 Category

EXT L 06/02/88
date completed

RADIAN CORPORATION

Received: 05/28/88
Results by Sample

SAMPLE ID Eunice #2-1400 FRACTION 02A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected 05/26/88 Category

ORGANICS ANALYSIS DATA SHEET
PESTICIDES by METHOD 8080

VERIFIED HK

ANALYST BLACKLEY EXTRCTD 06/02/88 FILE # 19 62288
INSTRMT GC1 INJECTD 06/22/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
319-84-6	alpha-BHC	ND	0.010
58-89-9	gamma-BHC (lindane)	ND	0.010
319-85-7	beta-BHC	ND	0.010
76-44-8	heptachlor	ND	0.010
319-86-8	delta-BHC	ND	0.010
309-00-02	aldrin	ND	0.010
1024-57-3	heptachlor epoxide	ND	0.010
959-98-8	endosulfan I	ND	0.010
72-55-9	4,4'-DDE	ND	0.010
60-57-1	dieldrin	ND	0.010
72-20-8	endrin	ND	0.010
72-54-8	4,4'-DDD	ND	0.010
33213-65-9	endosulfan II	ND	0.030
50-29-3	4,4'-DDT	ND	0.020
7421-93-4	endrin aldehyde	ND	0.020
1031-07-8	endosulfan sulphate	ND	0.050
57-74-9	chlordane	ND	0.050
8001-35-2	toxaphene	ND	0.50
12674-11-2	PCB-1016	NR	0.030
11104-28-2	PCB-1221	NR	0.060
11141-16-5	PCB-1232	NR	0.060
53469-21-9	PCB-1242	NR	0.030
12672-29-6	PCB-1248	NR	0.030
11097-69-1	PCB-1254	NR	0.060
11096-82-5	PCB-1260	NR	0.060

RADIAN CORPORATION

SAMPLE ID Eunice #2-1400 FRACTION 02A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected 05/26/88 Category

SURROGATE RECOVERY

COMPOUND	RECOVERY
dibutyl chlorendate	87 %
tetrachlorometaxylene	101 %

NOTES AND DEFINITIONS FOR THIS REPORT:
DET LIMIT = detection limit
ND = not detected at specified detection limit.
NR = not required for analysis.
S = compound peak saturated.
J = estimated value less than 3 x minimum detection limit.

SAMPLE ID Eunice #3-1700 SAMPLE # 03 FRACTIONS: A
Date & Time Collected 05/26/88 Category

EXT_L 06/02/88
date completed

RADIAN CORPORATION

Received: 05/28/88 Results by Sample

SAMPLE ID Eunice #3-1700 FRACTION 03A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected 05/26/88 Category

ORGANICS ANALYSIS DATA SHEET
PESTICIDES by METHOD 8080

VERIFIED HK

ANALYST BLACKLEY EXTRCTD 06/02/88 FILE # 21 62288
INSTRMT GC1 INJECTD 06/22/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
319-84-6	alpha-BHC	ND	0.010
58-89-9	gamma-BHC (lindane)	ND	0.010
319-85-7	beta-BHC	ND	0.010
76-44-8	heptachlor	ND	0.010
319-86-8	delta-BHC	ND	0.010
309-00-02	aldrin	ND	0.010
1024-57-3	heptachlor epoxide	ND	0.010
959-98-8	endosulfan I	ND	0.010
72-55-9	4,4'-DDE	ND	0.010
60-57-1	dieldrin	ND	0.010
72-20-8	endrin	ND	0.010
72-54-8	4,4'-DDD	ND	0.010
33213-65-9	endosulfan II	ND	0.030
50-29-3	4,4'-DDT	ND	0.020
7421-93-4	endrin aldehyde	ND	0.020
1031-07-8	endosulfan sulphate	ND	0.050
57-74-9	chlordane	ND	0.050
8001-35-2	toxaphene	ND	0.50
12674-11-2	PCB-1016	NR	0.030
11104-28-2	PCB-1221	NR	0.060
11141-16-5	PCB-1232	NR	0.060
53469-21-9	PCB-1242	NR	0.030
12672-29-6	PCB-1248	NR	0.030
11097-69-1	PCB-1254	NR	0.060
11096-82-5	PCB-1260	NR	0.060

RADIAN CORPORATION

SAMPLE ID Eunice #3-1700 FRACTION 03A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected 05/26/88 Category

SURROGATE RECOVERY

COMPOUND	RECOVERY
dibutyl chlorendate	* %
tetrachlorometaxylene	99 %

NOTES AND DEFINITIONS FOR THIS REPORT:
DET LIMIT = detection limit
ND = not detected at specified detection limit.
NR = not required for analysis.
S = compound peak saturated.
J = estimated value less than 3 x minimum detection limit.

RADIAN CORPORATION

Received: 05/28/88 Results by Sample

SAMPLE ID Eunice #4-1112 SAMPLE # 04 FRACTIONS: A

Date & Time Collected 05/26/88 Category

EXT_L 06/02/88
date completed

RADIAN CORPORATION

Received: 05/28/88 Results by Sample

SAMPLE ID Eunice #4-1112 FRACTION 04A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected 05/26/88 Category

ORGANICS ANALYSIS DATA SHEET
PESTICIDES by METHOD 8080

VERIFIED HK

ANALYST BLACKLEY EXTRCTD 06/02/88 FILE # 23 62288
INSTRMT GC1 INJECTD 06/22/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
319-84-6	alpha-BHC	ND	0.010
58-89-9	gamma-BHC (lindane)	ND	0.010
319-85-7	beta-BHC	ND	0.010
76-44-8	heptachlor	ND	0.010
319-86-8	delta-BHC	ND	0.010
309-00-02	aldrin	ND	0.010
1024-57-3	heptachlor epoxide	ND	0.010
959-98-8	endosulfan I	ND	0.010
72-55-9	4,4'-DDE	ND	0.010
60-57-1	dieldrin	ND	0.010
72-20-8	endrin	ND	0.010
72-54-8	4,4'-DDD	ND	0.010
33213-65-9	endosulfan II	ND	0.030
50-29-3	4,4'-DDT	ND	0.020
7421-93-4	endrin aldehyde	ND	0.020
1031-07-8	endosulfan sulphate	ND	0.050
57-74-9	chlordane	ND	0.050
8001-35-2	toxaphene	ND	0.50
12674-11-2	PCB-1016	NR	0.030
11104-28-2	PCB-1221	NR	0.060
11141-16-5	PCB-1232	NR	0.060
53469-21-9	PCB-1242	NR	0.030
12672-29-6	PCB-1248	NR	0.030
11097-69-1	PCB-1254	NR	0.060
11096-82-5	PCB-1260	NR	0.060

RADIAN CORPORATION

SAMPLE ID Eunice #4-1112 FRACTION 04A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected 05/26/88 Category

SURROGATE RECOVERY

COMPOUND	RECOVERY
dibutyl chlorendate	* %
tetrachlorometaxylene	96 %

NOTES AND DEFINITIONS FOR THIS REPORT:
DET LIMIT = detection limit
ND = not detected at specified detection limit.
NR = not required for analysis.
S = compound peak saturated.
J = estimated value less than 3 x minimum detection limit.

SAMPLE ID Spiked Method Blank SAMPLE # 05 FRACTIONS: A
Date & Time Collected not specified Category

EXT L 06/02/88
date completed

RADIAN CORPORATION

Received: 05/28/88 Results by Sample

SAMPLE ID Spiked Method Blank FRACTION 05A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
PESTICIDES by METHOD 8080

VERIFIED HK

ANALYST BLACKLEY EXTRCTD 06/02/88 FILE # 25 62288
INSTRMT GC1 INJECTD 06/22/88 UNITS % recov

CAS #	COMPOUND	RESULT	DET LIMIT
319-84-6	alpha-BHC	NR	0.010
58-89-9	gamma-BHC (lindane)	128	0.010
319-85-7	beta-BHC	NR	0.010
76-44-8	heptachlor	111	0.010
319-86-8	delta-BHC	NR	0.010
309-00-02	aldrin	105	0.010
1024-57-3	heptachlor epoxide	NR	0.010
959-98-8	endosulfan I	NR	0.010
72-55-9	4,4'-DDE	NR	0.010
60-57-1	dieldrin	97	0.010
72-20-8	endrin	116	0.010
72-54-8	4,4'-DDD	NR	0.010
33213-65-9	endosulfan II	NR	0.030
50-29-3	4,4'-DDT	371*	0.020
7421-93-4	endrin aldehyde	NR	0.020
1031-07-8	endosulfan sulphate	NR	0.050
57-74-9	chlordane	NR	0.050
8001-35-2	toxaphene	NR	0.50
12674-11-2	PCB-1016	NR	0.030
11104-28-2	PCB-1221	NR	0.060
11141-16-5	PCB-1232	NR	0.060
53469-21-9	PCB-1242	NR	0.030
12672-29-6	PCB-1248	NR	0.030
11097-69-1	PCB-1254	NR	0.060
11096-82-5	PCB-1260	NR	0.060

RADIAN CORPORATION

SAMPLE ID Spiked Method Blank FRACTION 05A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected not specified Category

SURROGATE RECOVERY

COMPOUND	RECOVERY
dibutyl chlorendate	* %
tetrachlorometaxylene	87 %

NOTES AND DEFINITIONS FOR THIS REPORT:
DET LIMIT = detection limit
ND = not detected at specified detection limit.
NR = not required for analysis.
S = compound peak saturated.
J = estimated value less than 3 x minimum detection limit.

SAMPLE ID Spiked Method Blank Dup SAMPLE # 06 FRACTIONS: A

Date & Time Collected not specified Category

EXT_L 06/02/88
date completed

SAMPLE ID Spiked Method Blank Dup FRACTION 06A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
PESTICIDES by METHOD 8080

VERIFIED HK

ANALYST BLACKLEY EXTRCTD 06/02/88 FILE # 27 62288
INSTRMT GC1 INJECTD 06/22/88 UNITS % recov

CAS #	COMPOUND	RESULT	DET LIMIT
319-84-6	alpha-BHC	NR	0.010
58-89-9	gamma-BHC (lindane)	146	0.010
319-85-7	beta-BHC	NR	0.010
76-44-8	heptachlor	117	0.010
319-86-8	delta-BHC	NR	0.010
309-00-02	aldrin	112	0.010
1024-57-3	heptachlor epoxide	NR	0.010
959-98-8	endosulfan I	NR	0.010
72-55-9	4,4'-DDE	NR	0.010
60-57-1	dieldrin	121	0.010
72-20-8	endrin	150	0.010
72-54-8	4,4'-DDD	NR	0.010
33213-65-9	endosulfan II	NR	0.030
50-29-3	4,4'-DDT	146	0.020
7421-93-4	endrin aldehyde	NR	0.020
1031-07-8	endosulfan sulphate	NR	0.050
57-74-9	chlordane	NR	0.050
8001-35-2	toxaphene	NR	0.50
12674-11-2	PCB-1016	NR	0.030
11104-28-2	PCB-1221	NR	0.060
11141-16-5	PCB-1232	NR	0.060
53469-21-9	PCB-1242	NR	0.030
12672-29-6	PCB-1248	NR	0.030
11097-69-1	PCB-1254	NR	0.060
11096-82-5	PCB-1260	NR	0.060

SAMPLE ID Spiked Method Blank Dup FRACTION Q6A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected not specified Category

SURROGATE RECOVERY

COMPOUND	RECOVERY
dibutyl chlorendate	* %
tetrachlorometaxylene	78 %

NOTES AND DEFINITIONS FOR THIS REPORT:
DET LIMIT = detection limit
ND = not detected at specified detection limit.
NR = not required for analysis.
S = compound peak saturated.
J = estimated value less than 3 x minimum detection limit.

SAMPLE ID Method Blank SAMPLE # 07 FRACTIONS: A
Date & Time Collected not specified Category

EXT L 06/02/88
date completed

SAMPLE ID Method Blank FRACTION 07A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
PESTICIDES by METHOD 8080

VERIFIED HK

ANALYST BLACKLEY EXTRCTD 06/02/88 FILE # 15 62288
INSTRMT GC1 INJECTD 06/22/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
319-84-6	alpha-BHC	ND	0.010
58-89-9	gamma-BHC (lindane)	ND	0.010
319-85-7	beta-BHC	ND	0.010
76-44-8	heptachlor	ND	0.010
319-86-8	delta-BHC	ND	0.010
309-00-02	aldrin	ND	0.010
1024-57-3	heptachlor epoxide	ND	0.010
959-98-8	endosulfan I	ND	0.010
72-55-9	4,4'-DDE	ND	0.010
60-57-1	dieldrin	ND	0.010
72-20-8	endrin	ND	0.010
72-54-8	4,4'-DDD	ND	0.010
33213-65-9	endosulfan II	ND	0.030
50-29-3	4,4'-DDT	ND	0.020
7421-93-4	endrin aldehyde	ND	0.020
1031-07-8	endosulfan sulphate	ND	0.050
57-74-9	chlordane	ND	0.050
8001-35-2	toxaphene	ND	0.50
12674-11-2	PCB-1016	NR	0.030
11104-28-2	PCB-1221	NR	0.060
11141-16-5	PCB-1232	NR	0.060
53469-21-9	PCB-1242	NR	0.030
12672-29-6	PCB-1248	NR	0.030
11097-69-1	PCB-1254	NR	0.060
11096-82-5	PCB-1260	NR	0.060

SAMPLE ID Method Blank FRACTION 07A TEST CODE 8080 NAME Pesticides/PCBs.
Date & Time Collected not specified Category

SURROGATE RECOVERY

COMPOUND	RECOVERY
dibutyl chlorendate	* %
tetrachlorometaxylene	78 %

NOTES AND DEFINITIONS FOR THIS REPORT:
DET LIMIT = detection limit
ND = not detected at specified detection limit.
NR = not required for analysis.
S = compound peak saturated.
J = estimated value less than 3 x minimum detection limit.

KADIAN CORPORATION

Page 1 RAS Perimeter REPORT Work Order # P8-06-003

Received: 05/28/88 07/11/88 10:07:55

REPORT TO: Mike Selke
Geoscience Consultants, Ltd.
Albuquerque, NM 87102

ATTEN:

PREPARED BY: Radian Analytical Services
Bldg. 900 Perimeter Park
Morrisville, NC 27560

ATTEN:
PHONE: 919-481-0212

CERTIFIED BY

CONTACT M DAY

CLIENT: GEOSCIENCE SAMPLES 5
COMPANY: Geoscience Consultants, Ltd.
FACILITY: 500 Copper NW
Albequerque, NM 87102

Previously Reported on 07/08/88.

WORK ID: Geosciences
TAKEN: W.S. Dubyk
TRANS: Fed Ex #768/5387/785
TYPE: Water
P.O. #: 88-0190-700
INVOICE: under separate cover

SAMPLE IDENTIFICATION

01 Eunice #1-0900 MW-1
02 Eunice #2-1400 MW-2
03 Eunice #3-1700 MW-3
04 Eunice #4-1112 MW-4
06 Method Blank

TEST CODES and NAMES used on this report

509B GC of Herbicides
EXT L Extraction for liquid

1ST QTR-5/88

TEST CODE default units	Sample 01 (entered units)	Sample 02 (entered units)	Sample 03 (entered units)	Sample 04 (entered units)	Sample 06 (entered units)
EXT_L date completed	06/02/88	06/02/88	06/02/88	06/02/88	06/02/88

SAMPLE Sample Id	Test: EXT L date completed
01 Eunice #1-0900	06/02/88
02 Eunice #2-1400	06/02/88
03 Eunice #3-1700	06/02/88
04 Eunice #4-1112	06/02/88
06 Method Blank	06/02/88

SAMPLE ID Eunice #1-0900 SAMPLE # 01 FRACTIONS: A
Date & Time Collected 05/27/88 Category

EXT L 06/02/88
date completed

SAMPLE ID Eunice #1-0900 FRACTION 01A TEST CODE 509B NAME GC of Herbicides
Date & Time Collected 05/27/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST BLACKLEY EXTRCTD 06/02/88 FILE # VERIFIED HK
INSTRMT GC1 INJECTD 06/28/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET. LIMIT
94-75-7	2,4-D	ND	0.50
93-72-1	2,4,5-TP (Silvex)	21	0.10 ?
93-76-5	2,4,5-T	NR	0.10

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NR = not required for analysis.
S = compound peak saturated.
J = estimated value less than 3 x minimum detection limit.

SAMPLE ID Eunice #2-1400 SAMPLE # 02 FRACTIONS: A
Date & Time Collected 05/26/88 Category

EXT L 06/02/88
date completed

SAMPLE ID Eunice #2-1400 FRACTION 02A TEST CODE 509B NAME GC of Herbicides
Date & Time Collected 05/26/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST BLACKLEY EXTRCTD 06/02/88 FILE # VERIFIED HK
INSTRMT GC1 INJECTD 06/28/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET. LIMIT
94-75-7	2,4-D	9.8	0.50
93-72-1	2,4,5-TP (Silvex)	11	0.10
93-76-5	2,4,5-T	NR	0.10

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NR = not required for analysis.
S = compound peak saturated.
J = estimated value less than 3 x minimum detection limit.

SAMPLE ID Eunice #3-1700 SAMPLE # 03 FRACTIONS: A
Date & Time Collected 05/26/88 Category

EXT_L 06/02/88
date completed

SAMPLE ID Eunice #3-1700 FRACTION 03A TEST CODE 509B NAME GC of Herbicides
Date & Time Collected 05/26/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST BLACKLEY EXTRCTD 06/02/88 FILE # VERIFIED HK
INSTRMT GC1 INJECTD 06/28/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET. LIMIT
94-75-7	2,4-D	ND	0.50
93-72-1	2,4,5-TP (Silvex)	7.6	0.10
93-76-5	2,4,5-T	NR	0.10

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NR = not required for analysis.
S = compound peak saturated.
J = estimated value less than 3 x minimum detection limit.

SAMPLE ID Eunice #4-1112 SAMPLE # 04 FRACTIONS: A
Date & Time Collected 05/26/88 Category

EXT_L 06/02/88
date completed

SAMPLE ID Eunice #4-1112 FRACTION 04A TEST CODE 509B NAME GC of Herbicides
Date & Time Collected 05/26/88 Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST BLACKLEY EXTRCTD 06/02/88 FILE # VERIFIED HK
INSTRMT GC1 INJECTD 06/28/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET. LIMIT
94-75-7	2,4-D	8.2	0.50
93-72-1	2,4,5-TP (Silvex)	ND	0.10
93-76-5	2,4,5-T	NR	0.10

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NR = not required for analysis.
S = compound peak saturated.
J = estimated value less than 3 x minimum detection limit.

SAMPLE ID Method Blank SAMPLE # 06 FRACTIONS: A
Date & Time Collected not specified Category

EXT L 06/02/88
date completed

SAMPLE ID Method Blank FRACTION 06A TEST CODE 509B NAME GC of Herbicides
Date & Time Collected not specified Category

ORGANICS ANALYSIS DATA SHEET
HERBICIDES

ANALYST BLACKLEY EXTRCTD 06/02/88 FILE # VERIFIED HK
INSTRMT GC1 INJECTD 06/28/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET. LIMIT
94-75-7	2,4-D	ND	0.50
93-72-1	2,4,5-TP (Silvex)	ND	0.10
93-76-5	2,4,5-T	NR	0.10

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = detection limit.
ND = not detected at specified detection limit.
NR = not required for analysis.
S = compound peak saturated.
J = estimated value less than 3 x minimum detection limit.

RADIAN CORPORATION

 RAS - Austin REPORT Work Order # 88-05-145

Received: 05/28/88 07/11/88 14:47:16

REPORT TO: Geoscience Consultants, Ltd.
500 Copper NW
Suite 200
Albuquerque, NM 87102
ATTEN: Mike Selke

CLIENT: GEOSCIENCE SAMPLES: 6
COMPANY: Geoscience Consultants, Ltd.
FACILITY:

WORK ID: Phillips
TAKEN: WSD
TRANS: Fed Ex
TYPE:
P O. #: 88-0190-700
INV. #: 11837

PREPARED BY: Radian Analytical Services
8501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088
ATTEN:
PHONE: 512-454-4797

CERTIFIED BY

CONTACT GIBSON

Unknown compounds present in GC analysis of -01,-02,-03.

Duplicate of report of 06/27/88.
Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01 Eunice #1
02 Eunice #3
03 Eunice #3 dup
04 Eunice #3 eq blank
05 trip blank
06 reagent blank

1st QTR-5/88

TEST CODES and NAMES used on this report

AG E	Silver, ICPES
ALPHA	Gross alpha radiation
AS G	Arsenic, graphite AA
BA E	Barium, ICPES
BETA	Gross beta radiation
CD E	Cadmium, ICPES
CL IC	Chloride, IC
COLI T	Total coliform
CR E	Chromium, ICPES
DG3020	Digestion, method 3020
DG6010	Digestion, method 6010
EPA602	EPA method 602
FE E	Iron, ICPES
F IC	Fluoride, IC
HG C	Mercury, cold vapor
MHO	Specific conductance
MN E	Manganese, ICPES
NA E	Sodium, ICPES
NO3	Nitrate, colorimetric
PB G	Lead, graphite AA
PH	pH
PHEN	Total phenolics
SE G	Selenium, graphite AA
SO4 IC	Sulfate, IC
TOC	Total organic carbon
TOX	Total organic halides
TURB	Turbidity
XYLENE	Xylenes, EPA 602

RADIAN CORPORATION

SAMPLE Sample Id	Test: AG E ug/ml	Test: ALPHA pCi/	Test: AS E ug/ml	Test: BA E ug/ml	Test: BETA pCi/
01 Eunice #1	<0.003	9.4 (3.7) pCi/L	0.078	0.52	33.1(7.0) pCi/L
02 Eunice #3	<0.003	<2.5 pCi/L	0.066	0.70	9.7+/-2.9 pCi/L

SAMPLE Sample Id	Test: CD E ug/ml	Test: CL IC mg/L	Test: COLI T colonies/100 mL	Test: CR E ug/ml	Test: DG3020 date complete
01 Eunice #1	<0.003	930	>24,000	<0.003	06/03/88
02 Eunice #3	<0.003	360	>24,000	0.005*	06/03/88
03 Eunice #3 dup				<0.003	

SAMPLE Sample Id	Test: DG5010 date complete	Test: FE E ug/ml	Test: F IC mg/L	Test: MHO umhos/cm	Test: MN E ug/ml
01 Eunice #1	06/09/88	2.1	4.0	4190	2.0
				4410	
				4230	
				4280	
02 Eunice #3	06/09/88	0.36	3.9	2430	0.58

RADIAN CORPORATION

SAMPLE Sample Id	Test: DG6010 date complete	Test: FE E ug/ml	Test: F IC mg/L	Test: MHO umhos/cm	Test: MN E ug/ml
				2450	
				2430	
				2410	
03 Eunice #3 dup	06/09/88				

SAMPLE Sample Id	Test: NA E ug/ml	Test: NO3 mg/L as N	Test: PB G ug/ml	Test: PH pH units	Test: PHEN mg/L
01 Eunice #1	570E	<0.1	<0.002	6.[illegible]	0.016*
				7.05	
				6.[illegible]	
				7.10	
02 Eunice #3	300	<0.1	<0.002	7.47	<0.005
				7.45	
				7.46	

SAMPLE Sample Id	Test: NA E ug/ml	Test: NO3 mg/L as N	Test: PB G ug/ml	Test: PH pH units	Test: PHEN mg/L
				7.47	

SAMPLE Sample Id	Test: SE G ug/ml	Test: SO4 IC mg/L	Test: TOC mg/L	Test: TOX mg/L
01	<0.003	430	71	0.74
Eunice #1			70	0.69
			71	0.67
			69	0.67
02	<0.003	200	38	0.04*
Eunice #3			39	0.05*
			41	0.04*
			42	0.03*

RADIAN CORPORATION

Received: 05/26/88 Results by Sample

SAMPLE ID Eunice #1 FRACTION OIJ TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/27/88 Category

VERIFIED CL

ANALYST CL
INSTRMT D INJECTED 06/01/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	6.4	0.2
108-88-3	Toluene	0.7*	0.2
100-41-4	Ethylbenzene	26	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	114% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice #1 FRACTION 01J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/27/88 Category

A-Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice #1 FRACTION 011 TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 05/27/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403 ANALYZED 06/06/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice #1 FRACTION 01A TEST CODE TURB NAME Turbidity
Date & Time Collected 05/27/88 Category

VERIFIED LM

ANALYST TAM
INSTRMT 2100A ANALYZED 05/28/88 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	5.5	1.0

SAMPLE ID Eunice #1 FRACTION 01A TEST CODE TURB NAME Turbidity
Date & Time Collected 05/27/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice #1 FRACTION 01J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 05/27/88 Category

VERIFIED CL

ANALYST CLL FILE #
INSTRMT D INJECTD 06/01/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	12	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	6.2	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 114% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
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NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice #1 FRACTION 01J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 05/27/88 Category

Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RADIAN CORPORATION

Received: 05/28/88 Results by Sample

SAMPLE ID Eunice #3 FRACTION 02J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/26/88 Category

VERIFIED CL

ANALYST CL
TRMT D INJECTED 06/01/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	1.4@	0.2
108-88-3	Toluene	0.4*	0.2
100-41-4	Ethylbenzene	1.4*	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	104% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice #3 FRACTION 02V TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/26/88 Category

A-Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice #3 FRACTION 021 TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 05/26/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403 ANALYZED 06/06/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice #3 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 05/26/88 Category

VERIFIED LM

ANALYST TAM
INSTRMT 2100A ANALYZED 05/28/88 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	16	1.0

SAMPLE ID Eunice #3 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 05/26/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice #3 FRACTION 02J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 05/26/88 Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTD 06/01/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	0.6*@	0.2
108-38-3	m-Xylene-A	0.4*	0.2
95-47-6	o-Xylene	0.9	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 104% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice #3 FRACTION 02J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 05/26/88 Category

Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice #3 dup FRACTION 03A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/26/88 Category

VERIFIED CL

ANALYST CL
TRMT D INJECTED 06/01/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	4.7	0.2
108-88-3	Toluene	0.8*	0.2
100-41-4	Ethylbenzene	1.5	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	102% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice #3 dup FRACTION 03A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/26/88 Category

A-Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice #3 dup FRACTION 03A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 05/26/88 Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTD 06/01/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	0.8*	0.2
108-38-3	m-Xylene-A	0.6*	0.2
95-47-6	o-Xylene	0.8	0.1

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	102% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice #3 eq blank FRACTION 04A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/26/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTED 06/01/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	ND	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	96% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice #3 eq blank FRACTION 04A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/26/88 Category

A-Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice #3 eq blank FRACTION 04A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 05/26/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTD 06/01/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	96% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
G = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID trip blank FRACTION 05A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST BM FILE #
I TRMT D INJECTED 06/01/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	ND	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	100% recovery

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N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID trip blank FRACTION 05A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID trip blank FRACTION 05A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST BM FILE #
TRMT D INJECTD 06/01/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	100% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID reagent blank FRACTION 06A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL
TRMT D INJECTED 06/01/88 FILE # UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	ND	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID reagent blank FRACTION 06A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID reagent blank FRACTION 06A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
TRMT D INJECTD 06/01/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N/A% recovery

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NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
G = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

FRACTION AND TEST CODES FOR WORK NOT REPORTED ELSEWHERE

01N	:	SPARE	01K	:	SPR602
02N	:	SPARE	02K	:	SPR602
03B	:	SPR602			
04B	:	SPR602			
05B	:	SPR602			

CORPORATION

Page 1 RAS - Austin REPORT Work Order # 88-05-147

Received: 05/28/88 06/29/88 13:43:29

REPORT TO: Geoscience Consultants, Ltd.
500 Copper NW
Suite 200
Albuquerque, NM 87102
ATTEN: Mike Selke

CLIENT: GEOSCIENCE SAMPLES: 4
COMPANY: Geoscience Consultants, Ltd.
FACILITY:

WORK ID: Phillips
TAKEN: WSD
TRANS: Fed Ex
TYPE:
P.O. #: 88-0190-700
INVOICE: under separate cover

PREPARED BY: Radian Analytical Services
6501 Mo-pac Bl.
PO Box 201088
Austin, TX 78720-1088
ATTEN:
PHONE: 512-454-4797

Carl Smith
CERTIFIED BY

CONTACT GIBSON

Unknown compounds present in GC analysis of -01.

Footnotes and Comments

* Indicates a value less than 5 times the detection limit. Potential error for such low values ranges between 50 and 100%.

@ Indicates that spike recovery for this analysis on the specific matrix was not within acceptable limits indicating an interferent present.

SAMPLE IDENTIFICATION

01 Eunice #2 check benzene
02 Eunice #4
03 trip blank
04 reagent blank

1st Q/R 5/88

TEST CODES and NAMES used on this report

AG E	Silver, ICPES
ALPHA	Gross alpha radiation
AS G	Arsenic, graphite AA
BA E	Barium, ICPES
BETA	Gross beta radiation
CD E	Cadmium, ICPES
CL IC	Chloride, IC
COLI T	Total coliform
CR E	Chromium, ICPES
DG3020	Digestion, method 3020
DG6010	Digestion, method 6010
EPA602	EPA method 602
FE E	Iron, ICPES
F IC	Fluoride, IC
HG C	Mercury, cold vapor
MHO	Specific conductance
MN E	Manganese, ICPES
NA E	Sodium, ICPES
NO3	Nitrate, colorimetric
PB G	Lead, graphite AA
PH	pH
PHEN	Total phenolics
SE G	Selenium, graphite AA
SO4 IC	Sulfate, IC
TOC	Total organic carbon
TOX	Total organic halides
TURB	Turbidity
XYLENE	Xylenes, EPA 602

SAMPLE Sample Id	Test: AG E ug/ml	Test: ALPHA pCi/	Test: AS G ug/ml	Test: BA E ug/ml	Test: BETA pCi/
01 Eunice #2	<0.003	5.9 (2.2) pCi/L	0.096	1.85	10.3(3.9) pCi/L
02 Eunice #4	<0.003	11.8(3.9) pCi/L	0.056	0.004#	21.4(5.6) pCi/L

SAMPLE Sample Id	Test: CD E ug/ml	Test: CL IC mg/L	Test: COLI T colonies/100 mL	Test: CR E ug/ml	Test: DG3020 date complete
01 Eunice #2	<0.003	550	>24,000	0.016	06/03/88
02 Eunice #4	<0.003	330	>24,000	0.040#	06/03/88

SAMPLE Sample Id	Test: DG6010 date complete	Test: FE E ug/ml	Test: F IC mg/L	Test: MHO umhos/cm	Test: MN E ug/ml
01 Eunice #2	06/09/88	7.00	4.4	2960	0.28
				2960	
				2950	
				3070	
02 Eunice #4	06/09/88	10	3.1@	3770	0.50
				3770	

SAMPLE Sample Id	Test: DG6010 date complete	Test: FE E ug/ml	Test: F IC mg/L	Test: MHO umhos/cm	Test: MN E ug/ml
				3760	
				3760	

SAMPLE Sample Id	Test: NA E ug/ml	Test: NO3 mg/L as N	Test: PB G ug/ml	Test: PH pH units	Test: PHEN mg/L
01	300	3.1	<0.002	6.97	0.012*
Eunice #2				7.04	
				6.96	
				6.97	
02	450	<0.1	<0.002	7.18	<0.005
Eunice #4				6.99	
				7.30	
				7.17	

CORPORATION

RAS - Austin REPORT Work Order # 88-05-147

Received: 05/28/88 Results By Test

SAMPLE Sample Id	Test: SE G ug/ml	Test: SO4 IC mg/L	Test: TOC mg/L	Test: TOX mg/L
01 Eunice #2	<0.003	89	65	0.40
			50	0.39
			62	0.44
			49	0.47
02 Eunice #4	<0.030	1300	22	0.13
			20	0.05
			21	0.06
			23	0.14

Received: 05/28/88 Results by Sample

SAMPLE ID Eunice #2 FRACTION 01J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/26/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTED 06/01/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	250	1
108-88-3	Toluene	45	1
100-41-4	Ethylbenzene	38	2
108-90-7	Chlorobenzene-A	ND	2
106-46-7	1,4-Dichlorobenzene	ND	2
541-73-1	1,3-Dichlorobenzene	ND	2
95-50-1	1,2-Dichlorobenzene	ND	2

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	118% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice #2 FRACTION 01J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/26/88 Category

A-Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

CORPORATION

Page 1 RAS - Austin REPORT Work Order # 88-05-147
Received: 05/28/88 Results by Sample

SAMPLE ID Eunice #2 FRACTION 011 TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 05/26/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403 ANALYZED 06/06/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice #2 FRACTION 01A TEST CODE TURB NAME Turbidity
Date & Time Collected 05/26/88 Category

VERIFIED LM

ANALYST TAM
INSTRMT 2100A ANALYZED 05/28/88 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	13	1.0

SAMPLE ID Eunice #2 FRACTION Q1A TEST CODE TURB NAME Turbidity
Date & Time Collected 05/26/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice #2 FRACTION Q1J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 05/26/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTD 06/01/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	17	1
108-38-3	m-Xylene-A	21	1
95-47-6	o-Xylene	24	0.5

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 118% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
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ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice #2 FRACTION 01J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 05/26/88 Category

Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice #4 FRACTION 02J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/26/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTED 06/01/88 UNITS ug/l.

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	0.6*	0.2
108-88-3	Toluene	0.5*	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	104% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice #4

FRACTION 02J TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/26/88 Category

A-Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID Eunice #4 FRACTION 021 TEST CODE HG C NAME Mercury, cold vapor
Date & Time Collected 05/26/88 Category

VERIFIED DMC

ANALYST KCP
INSTRMT 403 ANALYZED 06/06/88 UNITS ug/ml

ANALYTE	RESULT	DET LIMIT
Mercury	ND	0.00012

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice #4 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 05/26/88 Category

VERIFIED LM

ANALYST TAM
INSTRMT 2100A ANALYZED 05/28/88 UNITS NTU

ANALYTE	RESULT	DET LIMIT
Turbidity	54	1.0

SAMPLE ID Eunice #4 FRACTION 02A TEST CODE TURB NAME Turbidity
Date & Time Collected 05/26/88 Category

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available

SAMPLE ID Eunice #4 FRACTION 02J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 05/26/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTD 06/01/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	104% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID Eunice #4 FRACTION Q2J TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected 05/26/88 Category

Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

CORPORATION

Page 15 RAS - Austin REPORT Work Order # 88-05-147
Received: 05/28/88 Results by Sample

SAMPLE ID trip blank FRACTION 03A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/26/88 Category

VERIFIED CL

ANALYST BM FILE #
INSTRMT D INJECTED 06/01/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	ND	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID trip blank

FRACTION 03A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected 05/26/88 Category

A-Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

RAS - Austin REPORT Work Order # 88-05-147

Received: 05/28/88 Results by Sample

SAMPLE ID trip blank FRACTION 03A TEST CODE XYLENE NAME Xylenes, EPA 602

Date & Time Collected 05/26/88 Category

VERIFIED CL

ANALYST BM FILE #

INSTRMT D INJECTD 06/01/88 UNITS ug/l

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene 99% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.

DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

SAMPLE ID reagent blank FRACTION 04A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTED 06/01/88 UNITS ug/L

CAS#	COMPOUND	RESULT	DET LIMIT
71-43-2	Benzene	ND	0.2
108-88-3	Toluene	ND	0.2
100-41-4	Ethylbenzene	ND	0.3
108-90-7	Chlorobenzene-A	ND	0.3
106-46-7	1,4-Dichlorobenzene	ND	0.3
541-73-1	1,3-Dichlorobenzene	ND	0.4
95-50-1	1,2-Dichlorobenzene	ND	0.4

SURROGATES

98-08-8	a,a,a-Trifluorotoluene	N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed
unless otherwise noted.

SAMPLE ID reagent blank FRACTION Q4A TEST CODE EPA602 NAME EPA method 602
Date & Time Collected not specified Category

A-Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

Received: 05/28/88 Results by Sample

SAMPLE ID reagent blank FRACTION 04A TEST CODE XYLENE NAME Xylenes, EPA 602
Date & Time Collected not specified Category

VERIFIED CL

ANALYST CL FILE #
INSTRMT D INJECTD 06/01/88 UNITS ug/L

CAS #	COMPOUND	RESULT	DET LIMIT
106-42-3	p-Xylene	ND	0.2
108-38-3	m-Xylene-A	ND	0.2
95-47-6	o-Xylene	ND	0.1

SURROGATES

98-08-8 a,a,a-Trifluorotoluene N/A% recovery

NOTES AND DEFINITIONS FOR THIS REPORT.
DET LIMIT = DETECTION LIMIT
ND = not detected at detection limit
NA = not analyzed
* = less than 5 times the detection limit
N\A = not available
Second column confirmation NOT performed unless otherwise noted.
Q = daily EPA standard recovery outside 95% confidence interval.
Chlorobenzene and m-xylene co-elute. Quantitated as chlorobenzene unless otherwise noted.

TEST CODE ALPHA NAME Gross alpha radiation

The value in parentheses is a + or - one sigma value. Results are thus expressed as: value (+ or - 1 sigma). One sigma = one standard deviation, 68% confidence level.

TEST CODE BETA NAME Gross beta radiation

The value in parentheses is a + or - one sigma value. Results are thus expressed as: value (+ or - 1 sigma). One sigma = one standard deviation, 68% confidence level.

FRACTION AND TEST CODES FOR WORK NOT REPORTED ELSEWHERE

01N	SPARE	01K	SPR602
02N	SPARE	02K	SPR602
03B	SPR602		

PHILLIPS 66 NATURAL GAS COMPANY
A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

August 11, 1988

Notification of Discharge
Lee Gasoline Plant

CERTIFIED MAIL
RETURN RECEIPT NO. P-512 089 614

Mr. Dave Boyer
Environmental Bureau Chief
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Boyer:

In compliance with Section 1-203 of the Water Quality Control Commission regulations, this is to notify you of a discharge of hydrocarbon material to the uppermost aquifer at our Lee Gasoline Plant.

As you are aware, we recently completed installation of new groundwater monitoring well systems at our four southeastern New Mexico plants (Artesia, Eunice, Lee and Lusk). The new systems were installed as a result of a Compliance Order issued by the New Mexico Environmental Improvement Division. The first set of samples from the new wells were taken during the month of May. Analysis results were recently received by this office (copies attached).

You will note from the analyses that water in the No. 4 well at Lee Plant shows some evidence of hydrocarbon contamination. Hydrocarbon contamination was also detected in the original upgradient well located approximately 250 feet north of the No. 4 well. We have requested our consultants on this project (Geoscience Consultants, Ltd. of Albuquerque) provide you with a copy of their document entitled "Report on the Installation of a Ground-Water Monitoring System at Phillips 66 Natural Gas Company Lee Plant" for additional detailed information.

Phillips has contracted GCL to perform a contamination assessment of the Lee Plant site. GCL plans to conduct a soil gas vapor survey as the first step in this project. We would like to schedule a meeting with you and your staff to further discuss our strategies for remediation of this problem. Please contact Mike Ford of this office to schedule a meeting date.

Questions regarding this information should be directed to Mike Ford of this office at (915) 367-1316.

Very truly yours,

L. L. Frantz
Manager, Permian Basin Region

LLF:MDF

Attachments

PHILLIPS 66 NATURAL GAS COMPANY
A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

December 8, 1988

Quarterly Groundwater Monitoring Analyses
Artesia, Eunice, Lee and Lusk Plants

Mr. Dave Boyer
Environmental Bureau Chief
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Boyer:

Per your request, attached please find copies of the second quarter groundwater monitoring analyses for the above referenced plants. I have also included additional information on the Lee Plant water supply wells for your reference.

If you should have any questions regarding this information, please contact me at (915) 367-1316.

Very truly yours,

Michael D. Ford

Michael D. Ford
Environmental Analyst

MDF

Attachments

PHILLIPS 66 NATURAL GAS COMPANY
A SUBSIDIARY OF PHILLIPS PETROLEUM COMPANY

ODESSA, TEXAS 79762
4001 PENBROOK

January 19, 1989

Quarterly Groundwater Monitoring Analyses
Artesia, Eunice, Lee and Lusk Plants

Mr. Dave Boyer
Environmental Bureau Chief
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Boyer:

Per your request, attached please find copies of the third quarter groundwater monitoring analyses for the above referenced plants.

If you should have any questions regarding this information, please contact me at (915) 367-1316.

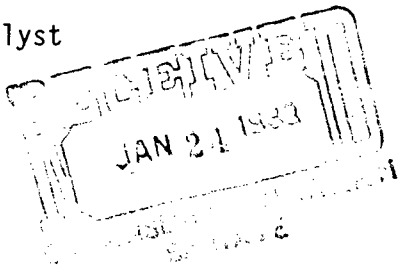
Very truly yours,

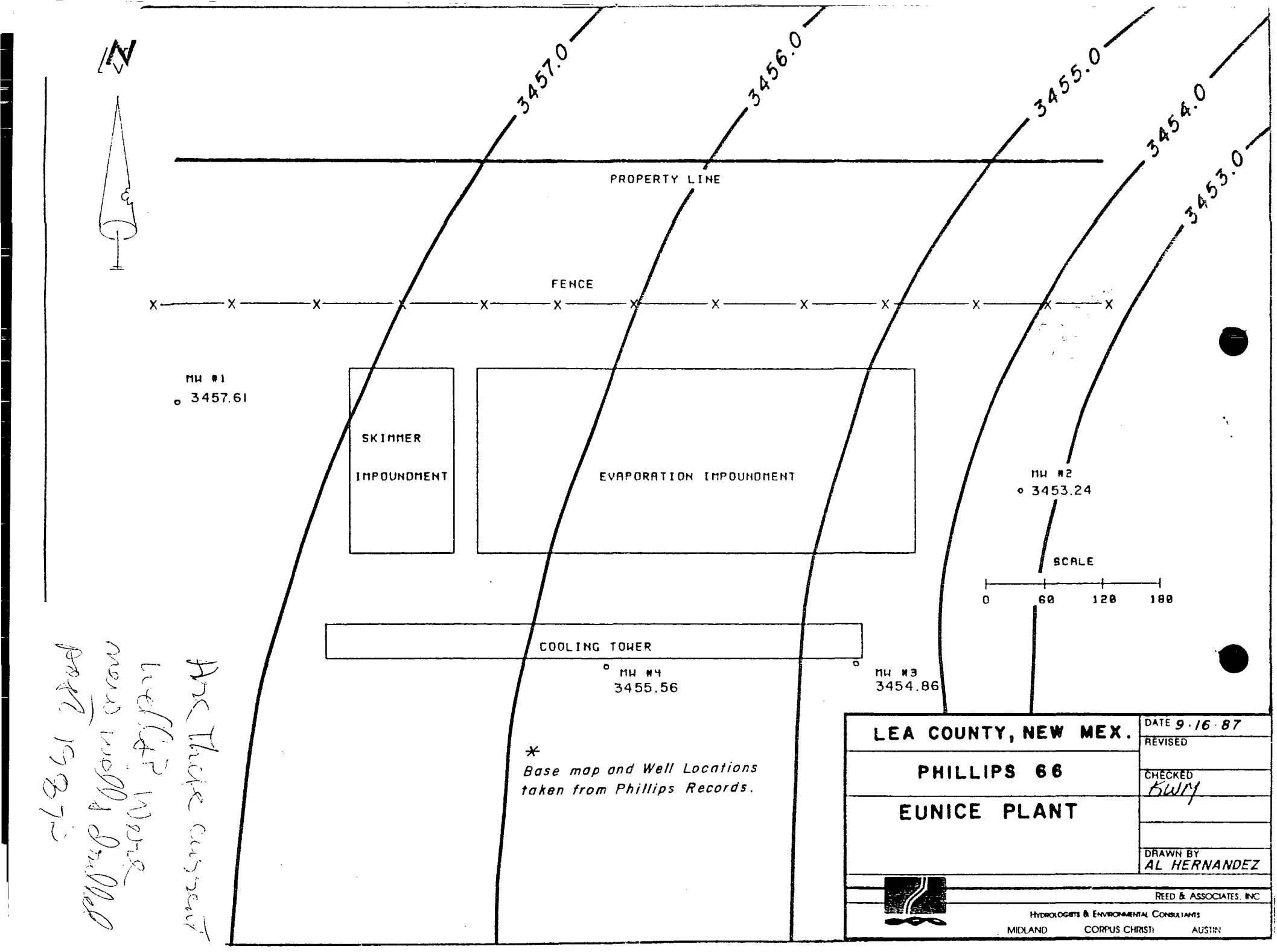
Michael D. Ford

Michael D. Ford
Environmental Analyst

MDF

Attachments




N
3457.0
3456.0
3455.0
3454.0
3453.0
PROPERTY LINE
FENCE
MW #1
3457.61
SKIMMER
IMPOUNDMENT
EVAPORATION IMPOUNDMENT
MW #2
3453.24
SCALE
0
60
120
180
COOLING TOWER
MW #4
3455.56
MW #3
3454.86
* Base map and Well Locations taken from Phillips Records.
LEA COUNTY, NEW MEX.
PHILLIPS 66
EUNICE PLANT
DATE 9-16-87
REVISED
CHECKED
DRAWN BY
AL HERNANDEZ
REED & ASSOCIATES, INC
HYDROLOGISTS & ENVIRONMENTAL CONSULTANTS
MIDLAND
CORPUS CHRISTI
AUSTIN

10/31/89

119904

SwL SOL

Materials, environr

RATORIES

metallurgical and analytical services

50 • Midland, Texas 79701

ROGER,

ATTACHED ARE COPIES OF THE SURFACE IMPOUNDMENT SLUDGE AND SOIL ANALYSES YOU REQUESTED FOR ARTESIA AND EUNICE PLANTS.

MIKE FORD

SwL SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-X
Customer No. 3355796
Report No. 26720
Report Date 1-20-84
Date Received 12-28-83

Report of tests on: Sludge

Client: Phillips Petroleum Company

Identification: Eunice Sludge, Zero (0) to One (1) foot

EP Toxicity Extraction

	Detected, mg/L		EPA Max. Conc. Limits, mg/L
Chromium (D007)	1.5	-------	5.0

Technician: PCB

3 Copies Phillips Petroleum Company
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

Gary M. Burch

SwL SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue [915 - 683-3348] • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-X
Customer No. 3355796
Report No. 26720

Report Date 1-20-84

Report of tests on: Sludge

Date Received 12-28-83

Client: Phillips Petroleum Company

Identification: Eunice Sludge, Zero (0) to One (1) foot

Nitric Acid Digestion

Total Chromium---------- 670 p.p.m.

Technician: PCB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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Gary M. Burch

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File No. C-1950-X
Customer No. 3355796
Report No. 26721
Report Date 1-20-84

Report of tests on: Sludge
Date Received 12-28-83

Client: Phillips Petroleum Company

Identification: Eunice Sludge, Taken at Two (2) foot depth

EP Toxicity Extraction

	Detected, mg/L		EPA Max. Conc. Limits, mg/L
Chromium (D007)----------	1.6	------	5.0

Technician: PCB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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Gary K. Burch

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File No. C-1950-X
Customer No. 3355796
Report No. 26721

Report Date 1-20-84

Report of tests on: Sludge

Date Received 12-28-83

Client: Phillips Petroleum Company

Identification: Eunice Sludge, Taken at Two (2) foot depth

Nitric Acid Digestion

Total Chromium---------- 1331 p.p.m.

Technician: PCB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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119904

File No. C-1950-X
Customer No. 3355796
Report No. 26945
Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 1, Surface Sample, Sampled 5-15-84 @ 11:00 a.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.8	5.0

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-X
Customer No. 3355796
Report No. 26945

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 1, Surface Sample, Sampled 5-15-84 @ 11:00 a.m. by Mike Ford

Total Available Chromium---------- 57 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Co.
Attn: Mike Ford

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1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-X
Customer No. 3355796
Report No. 26937

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 1, Shelby Tube Samples, Sampled 5-15-84 @ 10:30 a.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.4	5.0

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum
Attn: Mike Ford

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File No. C-1950-X
Customer No. 3355796
Report No. 26937

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 1, Shelby Tube Samples, Sampled 5-15-84 @ 10:30 a.m. by Mike Ford

Total Available Chromium---------- 17.9 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Co.
Attn: Mike Ford

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119904

File No. C-1950-X
Customer No. 3355796
Report No. 26946

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 2, Surface Sample, Sampled 5-15-84 @ 11:00 a.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.7	5.0

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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119904

File No. C-1950-X
Customer No. 3355796
Report No. 26946

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 2, Surface Sample, Sampled 5-15-84 @ 11:00 a.m. by Mike Ford

Total Available Chromium---------- 290 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Co.
Attn: Mike Ford

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119904

File No. C-1950-X
Customer No. 3355796
Report No. 26938

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 2, Shelby Tube Samples, Sampled 5-15-84 @ 10:30 a.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.4	5.0

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Co.
Attn: Mike Ford

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Gary M. Burch

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1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-X
Customer No. 3355796
Report No. 26938

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 2, Shelby Tube Samples, Sampled 5-15-84 @ 10:30 a.m. by Mike Ford

Total Available Chromium---------- 69 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Co.
Attn: Mike Ford

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1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-X
Customer No. 3355796
Report No. 26947

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 3, Surface Sample, Sampled 5-15-84 @ 11:00 a.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	* 0.2	5.0

*designates "less than"

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Co.
Attn: Mike Ford

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Mary M. Bunch

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1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-X
Customer No. 3355796
Report No. 26947

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 3, Surface Sample, Sampled 5-15-84 @ 11:00 a.m. by Mike Ford

Total Available Chromium---------- 1020 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Co.
Attn: Mike Ford

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1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

119904

File No. C-1950-X
Customer No. 3355796
Report No. 26939

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 3, Shelby Tube Samples, Sampled 5-15-84 @ 10:30 a.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.2	5.0

Technician: SAM, KLH, GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

Gary M. Burch

SwL SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-X
Customer No. 3355796
Report No. 26939

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 3, Shelby Tube Samples, Sampled 5-15-84 @ 10:30 a.m. by Mike Ford

Total Available Chromium---------- 20.6 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

Gary M. Burch

SwL SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue [915 - 683-3348] • P.O. Box 2150 • Midland, Texas 79701

119904

File No. C-1950-X
Customer No. 3355796
Report No. 26948
Report Date 6-1-84
Date Received 5-16-84

Report of tests on: Soil

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 4, Surface Sample, Sampled 5-15-84 @ 11:00 a.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.4	5.0

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Co.
Attn: Mike Ford

SOUTHWESTERN LABORATORIES
Gary M. Burch

119904

SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

File No. C-1950-X
Customer No. 3355796
Report No. 26948

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 4, Surface Sample, Sampled 5-15-84 @ 11:00 a.m. by Mike Ford

Total Available Chromium---------- 3809 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

SOUTHWESTERN LABORATORIES

Gary M. Burch

SwL SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

119904

File No. C-1950-X
Customer No. 3355796
Report No. 26940
Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 4, Shelby Tube Samples, Sampled 5-15-84 @ 10:30 a.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	* 0.2	5.0

*designates "less than"

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

SOUTHWESTERN LABORATORIES
Gary M. Burch

SwL SOUTHWESTERN LABORATORIES

Materials, environmental and geotechnical engineering, nondestructive, metallurgical and analytical services

1703 W. Industrial Avenue [915 - 683-3348] • P.O. Box 2150 • Midland, Texas 79701

119904

File No. C-1950-X
Customer No. 3355796
Report No. 26940

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: East Eunice Plant Pit, Quad No. 4, Shelby Tube Samples, Sampled 5-15-84 @ 10:30 a.m. by Mike Ford

Total Available Chromium---------- 21.7 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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1703 W. Industrial Avenue (915 - 683-3348) • P.O. Box 2150 • Midland, Texas 79701

119904

File No. C-1950-X
Customer No. 3355796
Report No. 26941

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 1, Surface Sample, Sampled 5-15-84 @ 1:30 p.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.7	5.0

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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File No. C-1950-X
Customer No. 3355796
Report No. 26941
Report Date 6-1-84
Date Received 5-16-84

Report of tests on: Soil

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 1, Surface Sample, Sampled 5-15-84 @ 1:30 p.m. by Mike Ford

Total Available Chromium---------- 4179 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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119904

File No. C-1950-X
Customer No. 3355796
Report No. 26933

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 1, Shelby Tube Samples, Sampled 5-15-84 @ 1:00 p.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.6	5.0

Technician: SAM,KLH,GMB

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File No. C-1950-X
Customer No. 3355796
Report No. 26933

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 1, Shelby Tube Samples, Sampled 5-15-84 @ 1:00 p.m. by Mike Ford

Total Available Chromium---------- 2950 p.p.m.

Technician: SAM,KLH,GMB

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File No. C-1950-X
Customer No. 3355796
Report No. 26942

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 2, Surface Sample, Sampled 5-15-84 @ 1:30 p.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.4	5.0

Technician: SAM,KLH,GMB

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File No. C-1950-X
Customer No. 3355796
Report No. 26942

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 2, Surface Sample, Sampled 5-15-84 @ 1:30 p.m. by Mike Ford

Total Available Chromium---------- 6679 p.p.m.

Technician: SAM,KLH,GMB

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119904

File No. C-1950-X
Customer No. 3355796
Report No. 26934

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 2, Shelby Tube Samples, Sampled 5-15-84 @ 1:00 p.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.4	5.0

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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119904

File No. C-1950-X
Customer No. 3355796
Report No. 26934

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 2, Shelby Tube Samples, Sampled 5-15-84 @ 1:00 p.m. by Mike Ford

Total Available Chromium---------- 94 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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File No. C-1950-X
Customer No. 3355796
Report No. 26943

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 3, Surface Sample, Sampled 5-15-84 @ 1:30 p.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.4	5.0

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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119904

File No. C-1950-X
Customer No. 3355796
Report No. 26943

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 3, Surface Sample, Sampled 5-15-84 @ 1:30 p.m. by Mike Ford

Total Available Chromium----------	206 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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File No. C-1950-X
Customer No. 3355796
Report No. 26935

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 3, Shelby Tube Samples, Sampled 5-15-84 @ 1:00 p.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.4	5.0

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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119904

File No. C-1950-X
Customer No. 3355796
Report No. 26935
Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 3, Shelby Tube Samples, Sampled 5-15-84 @ 1:00 p.m. by Mike Ford

Total Available Chromium---------- 80 p.p.m.

Technician: SAM, KLH, GMB

Copies 3 cc: Phillips Petroleum Co.
Attn: Mike Ford

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File No. C-1950-X
Customer No. 3355796
Report No. 26944

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 4, Surface Sample, Sampled 5-15-84 @ 1:30 p.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.3	5.0

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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119904

File No. C-1950-X
Customer No. 3355796
Report No. 26944

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 4, Surface Sample, Sampled 5-15-84 @ 1:30 p.m. by Mike Ford

Total Available Chromium---------- 2939 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Company
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File No. C-1950-X
Customer No. 3355796
Report No. 26936

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 4, Shelby Tube Samples, Sampled 5-15-84 @ 1:00 p.m. by Mike Ford

EPA Hazardous Waste Number	Contaminant	Detected, mg/L	EPA Max. Conc. Limits, mg/L
D007	Chromium	0.5	5.0

Technician: SAM, KLH, GMB

Copies 3 cc: Phillips Petroleum Company
Attn: Mike Ford

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File No. C-1950-X
Customer No. 3355796
Report No. 26936

Report Date 6-1-84

Report of tests on: Soil

Date Received 5-16-84

Client: Phillips Petroleum Company

Identification: West Eunice Plant Pit, Quad No. 4, Shelby Tube Samples, Sampled 5-15-84 @ 1:00 p.m. by Mike Ford

Total Available Chromium---------- 132 p.p.m.

Technician: SAM,KLH,GMB

Copies 3 cc: Phillips Petroleum Co.
Attn: Mike Ford

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