AP - 023

STAGE 1 & 2 REPORTS

DATE:

Dec. 15, 2000

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Drawer DD, Artesia, NM 88211
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504 -2088

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

(Revised 3/9/94)

PIT REMEDIATION AND CLOSURE REPORT

Operator: Yates Petroleum Corporation **Telephone:** (505) 748-4223

Address: 105 South Fourth Street Artesia, New Mexico 88210

Facility or: Lattion Unlined Surface Impoundment (pit)
Well Name

Location: Unit or Qtr/Qtr Sec NE/4, SW/4 Sec 23 T 18S R 26E County Eddy

Pit Type: Separator _____ Dehydrator _____ Other Production Disposal Pit

Land Type: BLM _____, State _____, Fee X, Other _____

Pit Location: (Attach diagram)
Pit dimensions: length 45', width 45', depth 6'
Reference: wellhead _____, other Tank battery dike
Footage from reference: 16'
Direction from reference: _____ Degrees _____ East North _____ of _____ West South X

Depth to Ground Water: (Vertical distance from contaminants to seasonal high water elevation of ground water)	Less than 50 feet 50 feet to 99 feet Greater than 100 feet	(20 points) (10 points) (0 points) 20
Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or; less than 1000 feet from all other water sources)	Yes No	(20 points) (0 points) 0
Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)	Less than 200 feet 200 feet to 1000 feet Greater than 1000 feet	(20 points) (10 points) (0 points) 0

RANKING SCORE (TOTAL POINTS) : 20

RECEIVED
DEC 19 2000
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Date Remediation Started: 5/17 **Date Completed:** 11/00

Remediation Method: (Check all appropriate sections) Excavation X Approx. cubic yards 12,150

Landfarmed X Insitu Bioremediation

Other

Remediation Location: (ie. landfarmed onsite, name and location of offsite facility) Onsite X Offsite

General Description of Remedial Action: Excavated contaminated soil and land farmed onsite with bioremediation nutrients and water. Once soil was remediated to OCD guideline levels, soil was used as backfill in the excavated pit.

Ground Water Encountered: No X Yes Depth

Final Pit:
Closure Sampling: (if multiple samples, attach sample results and diagram of sample locations and depths)

Sample Location See enclosed risk based closure request with supporting documentation.

Sample depth enclosed

Sample date enclosed Sample time enclosed

Sample Results

Benzene (ppm) enclosed

Total BTEX (ppm) enclosed

Field headscape (ppm) enclosed

TPH enclosed

Ground Water Sample: Yes X No (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE December 15, 2000

SIGNATURE David Haggith PRINTED NAME AND TITLE David Haggith Environmental Coordinator

1305 Stockton Rd.
P. O. Box 494
Brownfield, Texas 79316

1-800-765-3478
Office: 806/637-8033
Fax: 806/637-6926

BIOREMEDIATION CONTRACTORS & CONSULTANTS

BCC, Inc.

Land Reclamation *Weed Control*

February 28, 2000

State of New Mexico
Energy And Minerals Department
Oil Conservation Division
P.O. Box 1980
Hobbs, New Mexico 88240

RE: Final Closure of Unlined Surface Impoundments - Eddy County, New Mexico

Closure Report:
Locations:

Yates Petroleum Corporation
Inex Battery Pit
Sec. 26 - T18S - R26E
Eddy County, New Mexico

Yates Petroleum Corporation
Lattion Battery Pit
Sec. 28 - T18S - R26E
Eddy County, New Mexico

Yates Petroleum Corporation
Scripp Battery Pit
Sec. 25 - T18S - R26E
Eddy County, New Mexico

Yates Petroleum Corporation
Williams Battery Pit
Sec. 25 - T18S - R26E
Eddy County, New Mexico

Since satisfying the criteria for final closure, remedial actions have been completed on the above mentioned unlined surface impoundments. The attached soil analysis of these four sites demonstrate the soil remediation levels have been met. Upon approval from the OCD, final closure will begin by backfilling these four sites, contouring them as to provide drainage away from the sites.

For any questions or concerns regarding this matter, please contact Paul Porter at 1-800-765-3478.

Sincerely,

Paul Porter
Vice President

1305 Stockton Rd.
P. O. Box 494
Brownfield, Texas 79316

1-800-765-3478
Office: 806/637-8033
Fax: 806/637-6926

BIOREMEDIATION CONTRACTORS & CONSULTANTS

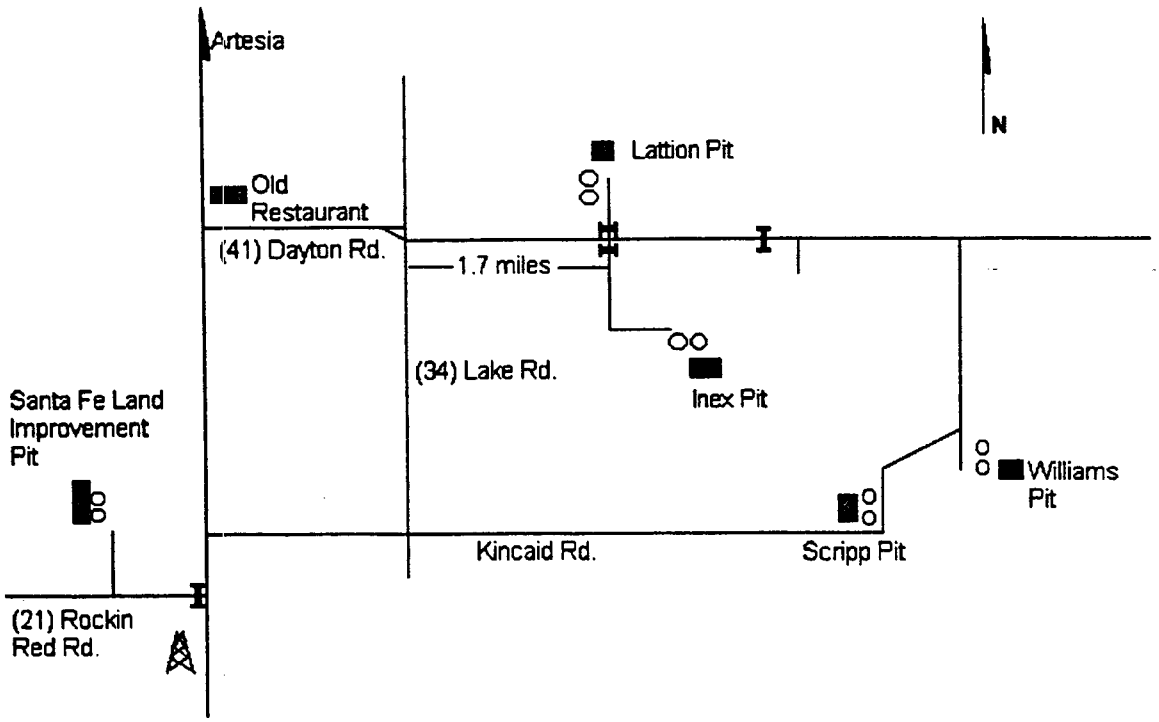
BCC, Inc.

Land Reclamation *Weed Control*

Yates Petroleum Corporation

Unlined Surface Impoundment Closures
(Pit Closures)
on old H & S Battery Sites

1999



YATES PETROLEUM CORPORATION

1305 Stockton Rd.
P. O. Box 494
Brownfield, Texas 79316

1-800-765-3478
Office: 806/637-8033
Fax: 806/637-8926

BIOREMEDIATION CONTRACTORS & CONSULTANTS

BCC, Inc.

Land Reclamation *Weed Control*

May 20, 1998

Mr. Darrell Atkins
YATES PETROLEUM CORPORATION
105 South 4th Street
Artesia, New Mexico 88210

RE: Pit Closures On Old H & S Battery Sites

Dear Darrell,

The following is the costs and procedure for complete pit closures on the old H & S battery sites. I have made the necessary site assessments and rankings required by the OCD. The total cost includes all monitoring, documentation and soil sampling that will be required in order to be in complete compliance with the OCD.

If you have any further questions, please call me at 1 800 765 - 3478. Thank you for the opportunity to price this project.

Sincerely,

Paul Porter
Vice President

1305 Stockton Rd.
P. O. Box 494
[illegible]eld, Texas 79316

1-800-765-3[illegible]
Office: 806/637-803[illegible]
Fax: 806/637-8928

BIOREMEDIATION CONTRACTORS & CONSULTANTS

BCC, Inc.

Land Reclamation *Weed Control*

** LAND RECLAMATION PROPOSAL **
YATES PETROLEUM CORPORATION
PIT CLOSURES

Procedure:

After excess fluids have been vacuumed off pit areas, BCC, Inc. would begin work with the clearing of bird netting and debris from each pit. Backhoe work would then begin in order to make pits accessible for treatment procedures. Affected areas would be deep ripped and power tilled to prepare the soil for treatment. BCC SOP 3 microbial solution would be spray applied over the sites and nutrients added to promote the hydrocarbon degradation process. Sufficient watering will be maintained throughout the project as well as periodic tilling to promote degradation. Once degradation has occurred (TPH levels at 5000 ppm or less - BTEX levels at 50 ppm or less), pit areas would be layered with 10 inches of manure, backfilled, layered with 10 more inches of manure and tandemed smooth.

Cost:

Inex Pit	(based on 250 cubic yards)	$5,354.98
Lattion Pit	(based on 196 cubic yards)	$4,217.48
Williams Pit	(based on 196 cubic yards)	$4,217.48
Scripp Pit	(based on 299 cubic yards)	$6.378.98
Santa Fe Land Improvement Pit	(based on 311 cubic yards)	$6,622.93

Total Project: (5 pits - complete site closures) $26,791.85
(plus any applicable taxes)

Note: This proposal is for treating hydrocarbon damage only. If affected area needs treatment for produced water damage, additional costs would be incurred.

1305 Stockton Rd.
P. O. Box 494
rc sld, Texas 79316

1-800-[illegible]478
Office: 806/637-803
Fax: 806/637-6926

BIOREMEDIATION CONTRACTORS & CONSULTANTS

BCC, Inc.

Land Reclamation *Weed Control*

** LAND RECLAMATION PROPOSAL **
YATES PETROLEUM CORPORATION
PIT CLOSURES

Cost Breakdown: (5 pits - complete site closures)

Materials -	
11.5 drums BCC SOP 3 @ $1,031.25/drum	$11,859.38
635 lbs. Nutrients @ $4.00/lb.	$ 2,540.00
Water	$ 250.00
Total Materials	$14,649.38
Labor & Equipment -	
Backhoe / Dump Trucks for Hauling Manure / Operators	$6,492.47
Application Truck / Equipment / Personnel	$2,250.00
Tractor & Equipment / Personnel	$1,400.00
Total Labor & Equipment	$10,142.47
Soil Sampling / Monitoring / Documentation	$ 2,000.00
Total Project: (5 pits)	$26,791.85

(plus any applicable taxes)

Groundwater 190' ft.

Williams Battery
SE / NW
Sec. 25 - T18S - R26E
Eddy Co., NM

Scripps Battery
SW / SW
Sec. 25 - T18S - R26E
Eddy Co., NM

Inex Battery
NW / NE
Sec. 26 - T18S - R26E
Eddy Co., NM

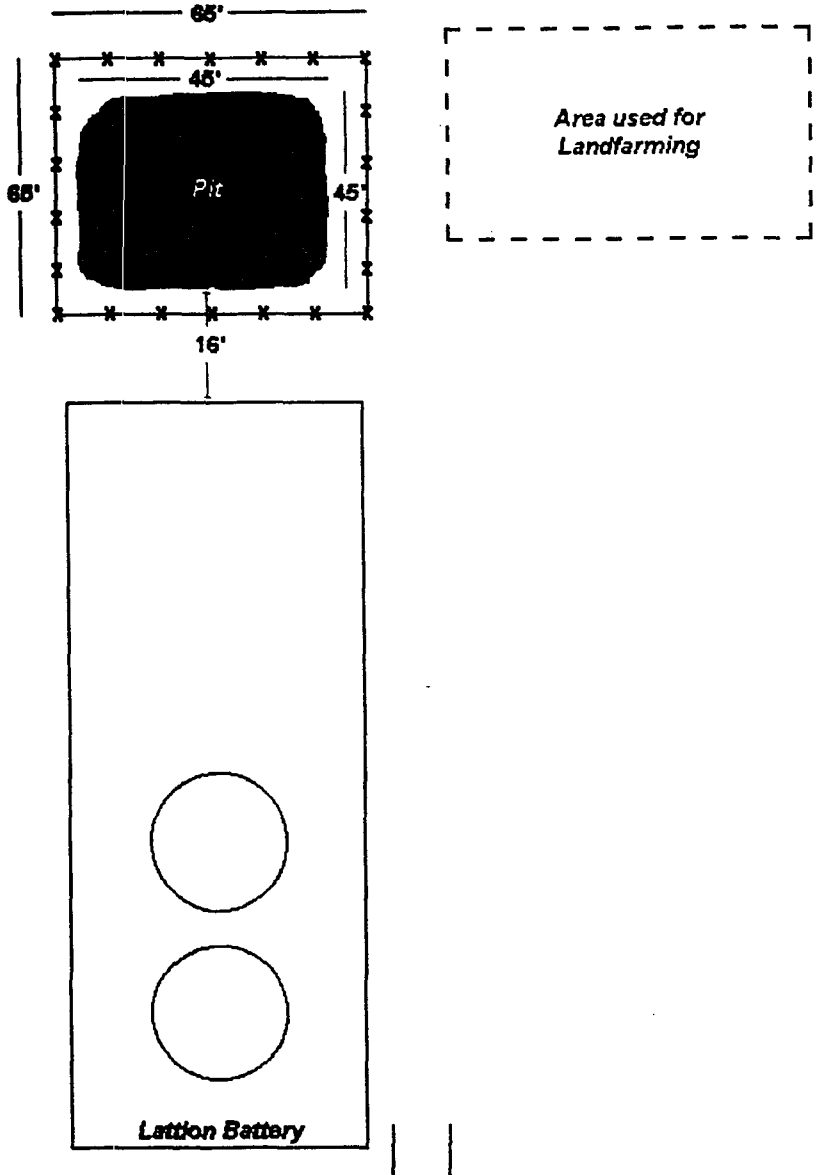
Lattion Battery
SW / SE
Sec. 23 - T18S - R26E
Eddy Co., NM

Yates Petroleum Corporation

Lattion Battery Pit

Sec. 23 - T18S - R26E
Eddy County, New Mexico

Yates Petroleum Corporation
Lattion Battery Pit
Unlined Surface Impoundment
Affected Surface Area - 2,025 sq. ft. / .05 acre



1305 Stockton Rd.
P. O. Box 494
Brownfield, Texas 79316

1-800-765-3478
Office: 806/637-8033
Fax: 806/637-6926

BIOREMEDIATION CONTRACTORS & CONSULTANTS

BCC, Inc.

Land Reclamation *Weed Control*

INVOICE TO: YATES PETROLEUM CORPORATION
105 South 4th Street
Artesia, New Mexico 88210

INVOICE #: 10200B
DATE: 5/18/99

LOCATION: Lattion Pit

CNTY/STATE: Eddy Co., NM

AUTHORIZED BY: Darrell Atkins/Ron Beasley

JOB DATE: 5/17/99

DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT
Phase I **Excavated Pit for Land Farming, Ripped, Power Tilled, Treated and Watered to Promote Hydrocarbon Degradation**			
1 Drum BCC SOP 3	1	$1,031.25	$1,031.25
55 Lbs. Nutrients	55	$4.00	$220.00
1 Water	1	$10.00	$10.00
1 Backhoe/Equipment/Operators	1	$598.77	$598.77
2 Hours Application Truck/Equipment/Operator	2	$50.00	$100.00
4 Hours Tractor/Equipment/Operators	4	$35.00	$140.00
Subtotal			$2,100.02
NM Gross Receipts Tax (5.625%)			$118.13
			$2,218.15

INVOICE TOTAL: **(NET 30)** **$2,218.15**

1305 Stockton Rd.
P. O. Box 494
Brownfield, Texas 79316

1-800-76[redacted]78
Office: 806/637-8033
Fax: 806/637-8926

BIOREMEDIATION CONTRACTORS & CONSULTANTS

BCC, Inc.

Land Reclamation *Weed Control*

INVOICE TO: YATES PETROLEUM CORPORATION
105 South 4th Street
Artesia, New Mexico 88210

INVOICE #: 11349B
DATE: 3/31/00

LOCATION: Lattion Pit

CNTY/STATE: Eddy, NM

AUTHORIZED BY: Darrell Atkins/Ron Beasley

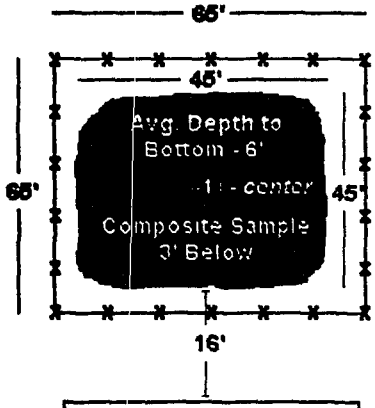
JOB DATE: 3/30/00

Phase II
Treated & watered to prepare Pit for Close Out.
Samples, Backfilled, Layered with Manure and Closed Pit

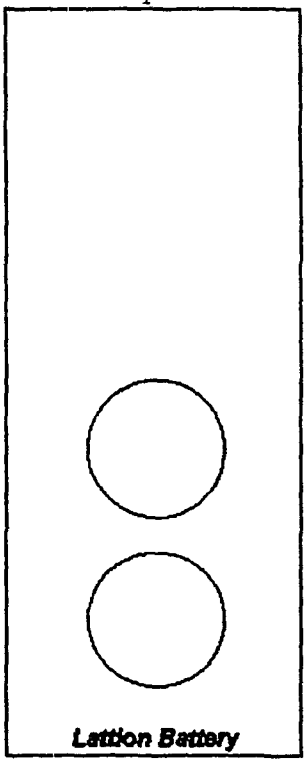
	DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT
0.75 Drum	BCC SOP 3	0.75	$1,031.25	$773.44
41 Lbs.	Nutrients	41	$4.00	$164.00
1	Water			$40.00
1	Backhoe/Equipment/Operators			$502.52
5 Hours	Application Truck/Equipment/Operator	5	$50.00	$250.00
2.5 Hours	Tractor/Equipment/Operators	2.5	$35.00	$87.50
1 Soil	Sampling/Documentation			$300.00
Subtotal				$2,117.46
NM Gross Receipts Tax (5.625%)				$119.11
				$2,236.57

INVOICE TOTAL: **(NET 30)** **$2,236.57**

Yates Petroleum Corporation
Lattion Battery Pit
Unlined Surface Impoundment
Affected Surface Area - 2,025 sq. ft. / .05 acre



Area used for Landfarming



Road

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Paul Porter
BCC, Inc.
P. O. Box 494
Brownfield, TX 79316

Report Date: 2/16/00

Project Number: N/A
Project Name: Yates Petroleum
Project Location: Lattion Pit

Order ID Number: A00021503

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
140519	Lattion Pit	Soil	2/9/00	14:15	2/14/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 2 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Results Report

Sample Number: 140519
Description: Lattion Pit

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
TPH (mg/Kg)									
TRPHC	<10.0	1	E 418.1	2/15/00	2/16/00	MA	PB00747	QC00926	10

Quality Control Report
Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
TRPHC (mg/Kg)		<10.0	10	2/16/00	PB00747	QC00926

Quality Control Report
Matrix Spike and Matrix Duplicate Spike

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	TRPHC (mg/Kg)	13	1	250	296	113		70 - 130	0 - 20	QC00926
MSD	TRPHC (mg/Kg)	13	1	250	253	96	16	70 - 130	0 - 20	QC00926

Quality Control Report
Lab Control Spikes and Duplicate Spike

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	TRPHC (mg/Kg)	<10.0	1	250	237	95		70 - 130	0 - 20	QC00926
LCSD	TRPHC (mg/Kg)	<10.0	1	250	238	95	0	70 - 130	0 - 20	QC00926

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	TRPHC (mg/Kg)		100	114	114	70 - 130	2/16/00	QC00926
CCV 1	TRPHC (mg/Kg)		100	105	105	70 - 130	2/16/00	QC00926
CCV 2	TRPHC (mg/Kg)		100	106	106	70 - 130	2/16/00	QC00926

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Paul Porter
BCC, Inc.
P. O. Box 494
Brownfield, TX 79316

Report Date: 1/28/00

Project Number: N/A
Project Name: Yates Petroleum
Project Location: Lattion Pit

Order ID Number: A00012415

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
139313	Sample #1	Soil	1/11/00	13:30	1/24/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

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Dr. Blair Leftwich, Director

Analytical Results Report

Sample Number: 139313
Description: Sample #1

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
TPH (mg/Kg)									
TRPHC	5350	10	E 418.1	1/25/00	1/26/00	MA	PB00454	QC00589	10

Quality Control Report
Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
TRPHC (mg/Kg)		<10.0	10	1/26/00	PB00454	QC00589

Quality Control Report
Matrix Spike and Matrix Duplicate Spike

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	TRPHC (mg/Kg)	<10.0	1	250	282	113		70 - 130	0 - 20	QC00589
MSD	TRPHC (mg/Kg)	<10.0	1	250	322	129	13	70 - 130	0 - 20	QC00589

Quality Control Report
Lab Control Spikes and Duplicate Spike

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	TRPHC (mg/Kg)	<10.0	1	250	221	88		70 - 130	0 - 20	QC00589
LCSD	TRPHC (mg/Kg)	<10.0	1	250	233	93	5	70 - 130	0 - 20	QC00589

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	TRPHC (mg/Kg)		100	111	111	70 - 130	1/26/00	QC00589
CCV 1	TRPHC (mg/Kg)		100	117	117	70 - 130	1/26/00	QC00589
CCV 2	TRPHC (mg/Kg)		100	111	111	70 - 130	1/26/00	QC00589

TRACEANALYSIS, INC.

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4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Paul Porter
BCC, Inc.
P. O. Box 494
Brownfield, TX 79316

Report Date: 9/27/99

Project Number: N/A
Project Name: Yates Petroleum
Project Location: Lattion Pit

Order ID Number: 99092316

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
132213	Sample #1	Soil	9/22/99	12:50	9/23/99

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

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Dr. Blair Leftwich, Director

Analytical Results Report

Sample Number: 132213
Description: Sample #1

Param	Flag	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Benzene (mg/Kg)		<0.05	50	S 8021B	9/23/99	9/23/99	RC	PB02443	QC03075	0.001
Toluene (mg/Kg)		<0.05	50	S 8021B	9/23/99	9/23/99	RC	PB02443	QC03075	0.001
Ethylbenzene (mg/Kg)		<0.05	50	S 8021B	9/23/99	9/23/99	RC	PB02443	QC03075	0.001
M.P.O-Xylene (mg/Kg)		0.213	50	S 8021B	9/23/99	9/23/99	RC	PB02443	QC03075	0.001
Total BTEX (mg/Kg)		0.213	50	S 8021B	9/23/99	9/23/99	RC	PB02443	QC03075	0.001

Surrogate	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT (mg/Kg)	4.44	50	0.1	88	72 - 128	RC	PB02443	QC03075
4-BFB (mg/Kg)	4.62	50	0.1	92	72 - 128	RC	PB02443	QC03075

	Flag									
C6-C10 (mg/Kg)		<1000	20	TX1005	9/23/99	9/23/99	MF	PB02435	QC03067	50
>C10-C28 (mg/Kg)	*	23100	20	TX1005	9/23/99	9/23/99	MF	PB02435	QC03067	50
C6-C28 (mg/Kg)	*	23100	20	TX1005	9/23/99	9/23/99	MF	PB02435	QC03067	50

* >C10-C28 - Hydrocarbons >C28 present.
* C6-C28 - Hydrocarbons >C28 present.

Quality Control Report
Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Benzene (mg/Kg)		<0.050	0.001	9/23/99	PB02443	QC03075
Toluene (mg/Kg)		<0.050	0.001	9/23/99	PB02443	QC03075
Ethylbenzene (mg/Kg)		<0.050	0.001	9/23/99	PB02443	QC03075
M.P,O-Xylene (mg/Kg)		<0.050	0.001	9/23/99	PB02443	QC03075
Total BTEX (mg/Kg)		<0.050	0.001	9/23/99	PB02443	QC03075

Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
TFT (mg/Kg)	5.16	0.1	103	72 - 128	QC03075
4-BFB (mg/Kg)	5.03	0.1	101	72 - 128	QC03075

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
C6-C10 (mg/Kg)		<50	50	9/23/99	PB02435	QC03067
>C10-C28 (mg/Kg)		<50	50	9/23/99	PB02435	QC03067
C6-C28 (mg/Kg)		<50	50	9/23/99	PB02435	QC03067

Quality Control Report
Matrix Spike and Matrix Duplicate Spike

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	C6-C10 (mg/Kg)	<50	1	250	251	100		70 - 130	0 - 30	QC03067
MS	>C10-C28 (mg/Kg)	<50	1	250	240	96		70 - 130	0 - 30	QC03067
MS	C6-C28 (mg/Kg)	<50	1	500	491	98		70 - 130	0 - 30	QC03067
MSD	C6-C10 (mg/Kg)	<50	1	250	253	101	1	70 - 130	0 - 30	QC03067
MSD	>C10-C28 (mg/Kg)	<50	1	250	249	100	4	70 - 130	0 - 30	QC03067
MSD	C6-C28 (mg/Kg)	<50	1	500	502	100	2	70 - 130	0 - 30	QC03067

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	Benzene (mg/Kg)	<0.05	50	0.1	4.93	99		80 - 120	0 - 20	QC03075
MS	Toluene (mg/Kg)	<0.05	50	0.1	4.76	95		80 - 120	0 - 20	QC03075
MS	Ethylbenzene (mg/Kg)	<0.05	50	0.1	4.7	94		80 - 120	0 - 20	QC03075
MS	M,P,O-Xylene (mg/Kg)	<0.05	50	0.3	13.7	87		80 - 120	0 - 20	QC03075

Standard	Surrogate	Result	Dil.	Spike Amount	Analyst	% Rec.		% Rec. Limit	Prep Batch #	QC Batch #
MS	TFT (mg/Kg)	4.39	50	0.1	RC	88		72 - 128	PB02443	QC03075
MS	4-BFB (mg/Kg)	4.65	50	0.1	RC	89		72 - 128	PB02443	QC03075
MSD	Benzene (mg/Kg)	<0.05	50	0.1	4.92	98	0	80 - 120	0 - 20	QC03075
MSD	Toluene (mg/Kg)	<0.05	50	0.1	4.99	100	5	80 - 120	0 - 20	QC03075
MSD	Ethylbenzene (mg/Kg)	<0.05	50	0.1	4.73	95	1	80 - 120	0 - 20	QC03075
MSD	M,P,O-Xylene (mg/Kg)	<0.05	50	0.3	14.4	96	5	80 - 120	0 - 20	QC03075

Standard	Surrogate	Result	Dil.	Spike Amount	Analyst	% Rec.		% Rec. Limit	Prep Batch #	QC Batch #
MSD	TFT (mg/Kg)	4.59	50	0.1	RC	88		72 - 128	PB02443	QC03075
MSD	4-BFB (mg/Kg)	4.68	50	0.1	RC	94		72 - 128	PB02443	QC03075

Quality Control Report
Lab Control Spikes and Duplicate Spike

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	MTBE (mg/Kg)	<0.050	50	0.1	4.7	94		80 - 120	0 - 20	QC03075
LCS	Benzene (mg/Kg)	<0.050	50	0.1	4.6	92		80 - 120	0 - 20	QC03075
LCS	Toluene (mg/Kg)	<0.050	50	0.1	4.48	89		80 - 120	0 - 20	QC03075
LCS	Ethylbenzene (mg/Kg)	<0.050	50	0.1	4.4	88		80 - 120	0 - 20	QC03075
LCS	M,P,O-Xylene (mg/Kg)	<0.050	50	0.3	12.7	85		80 - 120	0 - 20	QC03075

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCS	TFT (mg/Kg)	50	0.1	5.01	100	72 - 128	QC03075
LCS	4-BFB (mg/Kg)	50	0.1	4.95	99	72 - 128	QC03075

LCSD	MTBE (mg/Kg)	<0.050	50	0.1	4.47	89	5	80 - 120	0 - 20	QC03075
LCSD	Benzene (mg/Kg)	<0.050	50	0.1	4.21	84	9	80 - 120	0 - 20	QC03075
LCSD	Toluene (mg/Kg)	<0.050	50	0.1	4.12	82	8	80 - 120	0 - 20	QC03075
LCSD	Ethylbenzene (mg/Kg)	<0.050	50	0.1	4.03	81	9	80 - 120	0 - 20	QC03075
LCSD	M,P,O-Xylene (mg/Kg)	<0.050	50	0.3	11.6	77	9	80 - 120	0 - 20	QC03075

Standard	Surrogate	Dil.	Spike Amount	Result	% Rec.	% Rec. Limit	QC Batch #
LCSD	TFT (mg/Kg)	50	0.1	4.91	98	72 - 128	QC03075
LCSD	4-BFB (mg/Kg)	50	0.1	4.9	98	72 - 128	QC03075

	Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS	C6-C10 (mg/Kg)	<50	1	250	223	89		70 - 130	0 - 30	QC03067
LCS	>C10-C28 (mg/Kg)	<50	1	250	220	88		70 - 130	0 - 30	QC03067
LCS	C6-C28 (mg/Kg)	<50	1	500	443	89		70 - 130	0 - 30	QC03067
LCSD	C6-C10 (mg/Kg)	<50	1	250	200	80	27	70 - 130	0 - 30	QC03067
LCSD	>C10-C28 (mg/Kg)	<50	1	250	199	80	23	70 - 130	0 - 30	QC03067
LCSD	C6-C28 (mg/Kg)	<50	1	500	398	80	25	70 - 130	0 - 30	QC03067

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Benzene (mg/Kg)		0.1	0.092	92	80 - 120	9/23/99	QC03075
ICV	Toluene (mg/Kg)		0.1	0.09	90	80 - 120	9/23/99	QC03075
ICV	Ethylbenzene (mg/Kg)		0.1	0.089	89	80 - 120	9/23/99	QC03075
ICV	M,P,O-Xylene (mg/Kg)		0.3	0.258	86	80 - 120	9/23/99	QC03075
CCV (1	Benzene (mg/Kg)		0.1	0.098	98	80 - 120	9/23/99	QC03075
CCV (1	Toluene (mg/Kg)		0.1	0.099	99	80 - 120	9/23/99	QC03075
CCV (1	Ethylbenzene (mg/Kg)		0.1	0.099	99	80 - 120	9/23/99	QC03075
CCV (1	M.P.O-Xylene (mg/Kg)		0.3	0.278	93	80 - 120	9/23/99	QC03075

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	C6-C10 (mg/Kg)		250	232	93	70 - 130	9/23/99	QC03067
ICV	>C10-C28 (mg/Kg)		250	244	98	70 - 130	9/23/99	QC03067
ICV	C6-C28 (mg/Kg)		500	476	95	70 - 130	9/23/99	QC03067
CCV (1	C6-C10 (mg/Kg)		250	298	119	70 - 130	9/23/99	QC03067
CCV (1	>C10-C28 (mg/Kg)		250	287	115	70 - 130	9/23/99	QC03067
CCV (1	C6-C28 (mg/Kg)		500	585	117	70 - 130	9/23/99	QC03067
CCV (2	C6-C10 (mg/Kg)		250	294	118	70 - 130	9/23/99	QC03067
CCV (2	>C10-C28 (mg/Kg)		250	309	124	70 - 130	9/23/99	QC03067
CCV (2	C6-C28 (mg/Kg)		500	604	121	70 - 130	9/23/99	QC03067