GW - 014

REPORTS

Year(s)

2001 - 2008

2001 Groundwater Monitoring Sampling Results
Navajo Refining Company – Lea Refinery
Lovington, New Mexico

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2008 APR 9 PM 1 00

Prepared for:

Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

By:

Safety & Environmental Solutions, Inc.
703 E. Clinton, Suite 102
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TRACEANALYSIS, INC.

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Analytical and Quality Control Report

David Boyer
Safety & Environmental Solutions Inc.
P. O. Box 1613
Hobbs, NM 88240

Report Date: March 6, 2001

Order ID Number: A01022601

Project Number: N/A
Project Name: N/A
Project Location: Lea Refinery, Lovington,NM

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
165647	MW-8	Water	2/22/01	11:20	2/24/01
165648	MW-10	Water	2/22/01	11:55	2/24/01
165649	MW-9	Water	2/22/01	12:46	2/24/01
165650	MW-3	Water	2/22/01	13:42	2/24/01
165651	MW-7	Water	2/22/01	15:05	2/24/01
165652	Field Blank	Water	2/22/01	17:00	2/24/01

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 10 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 165647 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC09462	Date Analyzed:	2/28/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB08120	Date Prepared:	3/1/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.078	mg/L	1	0.10	78	72 - 128
4-BFB		0.074	mg/L	1	0.10	74	72 - 128

Sample: 165648 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC09463	Date Analyzed:	2/28/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB08121	Date Prepared:	3/1/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.088	mg/L	1	0.10	88	72 - 128
4-BFB		0.085	mg/L	1	0.10	85	72 - 128

Sample: 165649 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC09463	Date Analyzed:	2/28/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB08121	Date Prepared:	3/1/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.086	mg/L	1	0.10	86	72 - 128

Continued . . .

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB		0.087	mg/L	1	0.10	87	72 - 128

Sample: 165650 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC09463	Date Analyzed:	2/28/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB08121	Date Prepared:	3/1/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.131	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		0.02	mg/L	1	0.001
Total BTEX		0.151	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.094	mg/L	1	0.10	94	72 - 128
4-BFB		0.127	mg/L	1	0.10	127	72 - 128

Sample: 165651 - MW-7

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC09529	Date Analyzed:	3/2/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB08181	Date Prepared:	3/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		0.032	mg/L	5	0.001
M,P,O-Xylene		0.101	mg/L	5	0.001
Total BTEX		0.133	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.46	mg/L	1	0.10	92	72 - 128
4-BFB		0.539	mg/L	1	0.10	107	72 - 128

Sample: 165652 - Field Blank

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC09463	Date Analyzed:	2/28/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB08121	Date Prepared:	3/1/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.092	mg/L	1	0.10	92	72 - 128
4-BFB		0.092	mg/L	1	0.10	92	72 - 128

Quality Control Report
Method Blank

Method Blank

QCBatch: QC09462

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.087	mg/L	0.10	87	72 - 128
4-BFB		0.085	mg/L	0.10	85	72 - 128

Method Blank

QCBatch: QC09463

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.091	mg/L	0.10	91	72 - 128
4-BFB		0.09	mg/L	0.10	90	72 - 128

Method Blank

QCBatch: QC09529

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.099	mg/L	0.10	99	72 - 128
4-BFB		0.088	mg/L	0.10	88	72 - 128

Quality Control Report
Lab Control Spikes and Duplicate Spikes

LCS QC Batch: QC09462

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.094	mg/L	1	0.10	<0.001	94		80 - 120	20
Benzene		0.102	mg/L	1	0.10	<0.001	102		80 - 120	20
Toluene		0.102	mg/L	1	0.10	<0.001	102		80 - 120	20
Ethylbenzene		0.097	mg/L	1	0.10	<0.001	97		80 - 120	20
M,P,O-Xylene		0.282	mg/L	1	0.30	<0.001	94		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.086	mg/L	1	0.10	86	72 - 128
4-BFB		0.098	mg/L	1	0.10	98	72 - 128

LCSD QC Batch: QC09462

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.094	mg/L	1	0.10	<0.001	94	0	80 - 120	20
Benzene		0.102	mg/L	1	0.10	<0.001	102	0	80 - 120	20
Toluene		0.102	mg/L	1	0.10	<0.001	102	0	80 - 120	20
Ethylbenzene		0.097	mg/L	1	0.10	<0.001	97	0	80 - 120	20
M,P,O-Xylene		0.281	mg/L	1	0.30	<0.001	93	0	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.089	mg/L	1	0.10	89	72 - 128
4-BFB		0.102	mg/L	1	0.10	102	72 - 128

LCS QC Batch: QC09463

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.103	mg/L	1	0.10	<0.001	103		80 - 120	20
Benzene		0.106	mg/L	1	0.10	<0.001	106		80 - 120	20
Toluene		0.106	mg/L	1	0.10	<0.001	106		80 - 120	20
Ethylbenzene		0.105	mg/L	1	0.10	<0.001	105		80 - 120	20
M,P,O-Xylene		0.311	mg/L	1	0.30	<0.001	103		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.094	mg/L	1	0.10	94	72 - 128
4-BFB		0.112	mg/L	1	0.10	112	72 - 128

LCSD

QC Batch: QC09463

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.103	mg/L	1	0.10	<0.001	103	0	80 - 120	20
Benzene		0.107	mg/L	1	0.10	<0.001	107	1	80 - 120	20
Toluene		0.109	mg/L	1	0.10	<0.001	109	3	80 - 120	20
Ethylbenzene		0.108	mg/L	1	0.10	<0.001	108	3	80 - 120	20
M,P,O-Xylene		0.319	mg/L	1	0.30	<0.001	106	2	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.095	mg/L	1	0.10	95	72 - 128
4-BFB		0.116	mg/L	1	0.10	116	72 - 128

LCS

QC Batch: QC09529

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.105	mg/L	1	0.10	<0.001	105		80 - 120	20
Benzene		0.099	mg/L	1	0.10	<0.001	99		80 - 120	20
Toluene		0.104	mg/L	1	0.10	<0.001	104		80 - 120	20
Ethylbenzene		0.104	mg/L	1	0.10	<0.001	104		80 - 120	20
M,P,O-Xylene		0.307	mg/L	1	0.30	<0.001	102		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.1	mg/L	1	0.10	100	72 - 128
4-BFB		0.117	mg/L	1	0.10	117	72 - 128

LCSD

QC Batch: QC09529

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.105	mg/L	1	0.10	<0.001	105	0	80 - 120	20
Benzene		0.103	mg/L	1	0.10	<0.001	103	4	80 - 120	20
Toluene		0.108	mg/L	1	0.10	<0.001	108	4	80 - 120	20
Ethylbenzene		0.11	mg/L	1	0.10	<0.001	110	6	80 - 120	20
M,P,O-Xylene		0.322	mg/L	1	0.30	<0.001	107	5	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.102	mg/L	1	0.10	102	72 - 128
4-BFB		0.118	mg/L	1	0.10	118	72 - 128

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QC Batch: QC09462

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.109	109	85 - 115	2/28/01
Benzene		mg/L	0.10	0.106	106	85 - 115	2/28/01
Toluene		mg/L	0.10	0.109	109	85 - 115	2/28/01
Ethylbenzene		mg/L	0.10	0.105	105	85 - 115	2/28/01
M,P,O-Xylene		mg/L	0.30	0.293	97	85 - 115	2/28/01

CCV (2)

QC Batch: QC09462

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.098	98	85 - 115	2/28/01
Benzene		mg/L	0.10	0.104	104	85 - 115	2/28/01
Toluene		mg/L	0.10	0.101	101	85 - 115	2/28/01
Ethylbenzene		mg/L	0.10	0.095	95	85 - 115	2/28/01
M,P,O-Xylene		mg/L	0.30	0.28	93	85 - 115	2/28/01

ICV (1)

QC Batch: QC09462

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.11	110	85 - 115	2/28/01
Benzene		mg/L	0.10	0.106	106	85 - 115	2/28/01
Toluene		mg/L	0.10	0.107	107	85 - 115	2/28/01
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	2/28/01
M,P,O-Xylene		mg/L	0.30	0.293	97	85 - 115	2/28/01

CCV (1)

QC Batch: QC09463

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.086	86	85 - 115	2/28/01
Benzene		mg/L	0.10	0.109	109	85 - 115	2/28/01
Toluene		mg/L	0.10	0.108	108	85 - 115	2/28/01
Ethylbenzene		mg/L	0.10	0.106	106	85 - 115	2/28/01
M,P,O-Xylene		mg/L	0.30	0.312	104	85 - 115	2/28/01

CCV (2) QC Batch: QC09463

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.098	98	85 - 115	2/28/01
Benzene		mg/L	0.10	0.106	106	85 - 115	2/28/01
Toluene		mg/L	0.10	0.103	103	85 - 115	2/28/01
Ethylbenzene		mg/L	0.10	0.098	98	85 - 115	2/28/01
M,P,O-Xylene		mg/L	0.30	0.293	97	85 - 115	2/28/01

ICV (1) QC Batch: QC09463

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.106	106	85 - 115	2/28/01
Benzene		mg/L	0.10	0.105	105	85 - 115	2/28/01
Toluene		mg/L	0.10	0.105	105	85 - 115	2/28/01
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	2/28/01
M,P,O-Xylene		mg/L	0.30	0.307	102	85 - 115	2/28/01

CCV (1) QC Batch: QC09529

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.106	106	85 - 115	3/2/01
Benzene		mg/L	0.10	0.101	101	85 - 115	3/2/01
Toluene		mg/L	0.10	0.106	106	85 - 115	3/2/01
Ethylbenzene		mg/L	0.10	0.108	108	85 - 115	3/2/01
M,P,O-Xylene		mg/L	0.30	0.318	106	85 - 115	3/2/01

CCV (2) QC Batch: QC09529

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.097	97	85 - 115	3/2/01
Benzene		mg/L	0.10	0.094	94	85 - 115	3/2/01
Toluene		mg/L	0.10	0.099	99	85 - 115	3/2/01
Ethylbenzene		mg/L	0.10	0.1	100	85 - 115	3/2/01
M,P,O-Xylene		mg/L	0.30	0.296	98	85 - 115	3/2/01

ICV (1)

QC Batch: QC09529

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.095	95	85 - 115	3/2/01
Benzene		mg/L	0.10	0.092	92	85 - 115	3/2/01
Toluene		mg/L	0.10	0.097	97	85 - 115	3/2/01
Ethylbenzene		mg/L	0.10	0.098	98	85 - 115	3/2/01
M,P,O-Xylene		mg/L	0.30	0.29	96	85 - 115	3/2/01

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1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #: H010 22601

Company Name: Navajo Refining Company
Phone #: SESI (505) 397-0510
Address: (Street, City, Zip) C/O Safety & Environ. Solutions
Fax #: (505) 393-4388
Contact Person: David Boyer SESI, PO Box 1613, Hobbs NM 88241
Invoice to: (if different from above) Darrell Moore, NRC, PO Box 159 Artesia NM 88211
Project #:
Project Name:
Project Location: Lea Refinery, Lovington NM
Sampler Signature: D. Boyer

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH					Turn Around Time if different from standard	Hold
65647	MW-8	2	40ml	X				X				X		2/22	1120	X																				
48	MW-10	2	"	X				X				X		"	1155	X																				
49	MW-9	2	"	X				X				X		"	1246	X																				
50	MW-3	2	"	X				X				X		"	1342	X																				
51	MW-7 * BL	2	"	X				X				X		"	1505	X																				
52	Field Blank (Shumfine Dist. H2O)	2	"	X				X				X		"	1700	X																				

Relinquished by: D. Boyer Date: 2/23/01 Time: 1300
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Susan L. Carrasco Date: 2/24/1 Time: 10:30

LAB USE ONLY
Intact (Y) N
Headspace Y N
Temp 4 °C
Log-in Review SLC

REMARKS:
Results to Boyer @ SESI
Invoice to D. Moore NRC
* Obtain filtrate BL
☐ Check if Special Reporting Limits Are Needed

Carrier # TNM10 902550 8833

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

ORIGINAL COPY

Analytical and Quality Control Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: September 3, 2001

Order ID Number: A01060407

Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
172381	MW-2	Water	5/31/01	12:20	6/2/01
172382	MW-4	Water	5/31/01	13:15	6/2/01
172383	MW-3	Water	5/31/01	14:10	6/2/01
172384	MW-10	Water	5/31/01	14:50	6/2/01
172385	MW-8	Water	5/31/01	15:55	6/2/01
172386	MW-9	Water	5/31/01	16:50	6/2/01
172387	MW-5	Water	6/1/07	10:20	6/2/01
172388	MW-6	Water	6/1/07	11:20	6/2/01
172389	Duplicate 1	Water	5/31/01	:	6/2/01
172390	Field Blank	Water	5/31/01	18:30	6/2/01

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This report consists of a total of 28 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Michael Abel for
Dr. Blair Leftwich, Director

Analytical Report

Sample: 172381 - MW-2

Analysis: Alkalinity | Analytical Method: E 310.1 | QC Batch: QC11715 | Date Analyzed: 6/5/01
Analyst: RS | Preparation Method: N/A | Prep Batch: PB10013 | Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		232	mg/L as CaCo3	1	1
Total Alkalinity		232	mg/L as CaCo3	1	1

Sample: 172381 - MW-2

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC11761 | Date Analyzed: 6/6/01
Analyst: JW | Preparation Method: E 5030B | Prep Batch: PB10059 | Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0923	mg/L	1	0.10	92	72 - 128
4-BFB		0.0803	mg/L	1	0.10	80	72 - 128

Sample: 172381 - MW-2

Analysis: Conductivity | Analytical Method: SM 2510B | QC Batch: QC11751 | Date Analyzed: 6/6/01
Analyst: RS | Preparation Method: N/A | Prep Batch: PB10053 | Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		904	μMHOS/cm	1	

Sample: 172381 - MW-2

Analysis: Hg, Total | Analytical Method: S 7470A | QC Batch: QC11676 | Date Analyzed: 6/5/01
Analyst: SSC | Preparation Method: N/A | Prep Batch: PB09989 | Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 172381 - MW-2

Analysis: Ion Chromatography (IC) | Analytical Method: E 300.0 | QC Batch: QC11647 | Date Analyzed: 6/2/01
Analyst: JS | Preparation Method: N/A | Prep Batch: PB09968 | Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL		94.0	mg/L	5	0.50
Fluoride		1.65	mg/L	5	0.20
Nitrate-N		3.09	mg/L	5	0.20
Sulfate		69.4	mg/L	5	0.50

Sample: 172381 - MW-2

Analysis:	Salts	Analytical Method:	S 6010B	QC Batch:	QC12044	Date Analyzed:	6/12/01
Analyst:	LB	Preparation Method:	E 3005 A	Prep Batch:	PB10066	Date Prepared:	6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		111	mg/L	1.10	0.50
Dissolved Magnesium		14.2	mg/L	1.10	0.50
Dissolved Potassium		2.82	mg/L	1.10	0.50
Dissolved Sodium		54.8	mg/L	1.10	0.50

Sample: 172381 - MW-2

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC11650	Date Analyzed:	6/5/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09969	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		541	mg/L	1	10

Sample: 172381 - MW-2

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC11834	Date Analyzed:	6/8/01
Analyst:	LDB	Preparation Method:	E 3010A	Prep Batch:	PB10135	Date Prepared:	6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		111	mg/L	1	0.50
Total Magnesium		14.3	mg/L	1	0.50
Total Phosphorous		64.2	mg/L	1	0.05
Total Potassium		2.82	mg/L	1	0.50
Total Sodium		48.1	mg/L	1	0.50

Sample: 172381 - MW-2

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC11817	Date Analyzed:	6/4/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10105	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[1]	7.4	s.u.	1	1

Sample: 172382 - MW-4

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC11715	Date Analyzed:	6/5/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10013	Date Prepared:	6/5/01

[1] Sample run out of holding time

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		182	mg/L as CaCo3	1	1
Total Alkalinity		182	mg/L as CaCo3	1	1

Sample: 172382 - MW-4

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC11761 Date Analyzed: 6/6/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB10059 Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0011	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0011	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0923	mg/L	1	0.10	92	72 - 128
4-BFB		0.0803	mg/L	1	0.10	80	72 - 128

Sample: 172382 - MW-4

Analysis: Conductivity Analytical Method: SM 2510B QC Batch: QC11751 Date Analyzed: 6/6/01
Analyst: RS Preparation Method: N/A Prep Batch: PB10053 Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		591	μMHOS/cm	1	

Sample: 172382 - MW-4

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: QC11676 Date Analyzed: 6/5/01
Analyst: SSC Preparation Method: N/A Prep Batch: PB09989 Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 172382 - MW-4

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC11647 Date Analyzed: 6/2/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09968 Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL		23.4	mg/L	5	0.50
Fluoride		1.61	mg/L	5	0.20
Nitrate-N		2.62	mg/L	5	0.20
Sulfate		73.6	mg/L	5	0.50

Sample: 172382 - MW-4

Analysis:	Salts	Analytical Method:	S 6010B	QC Batch:	QC12044	Date Analyzed:	6/12/01
Analyst:	LB	Preparation Method:	E 3005 A	Prep Batch:	PB10066	Date Prepared:	6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		77	mg/L	1.10	0.50
Dissolved Magnesium		10	mg/L	1.10	0.50
Dissolved Potassium		3.11	mg/L	1.10	0.50
Dissolved Sodium		35.4	mg/L	1.10	0.50

Sample: 172382 - MW-4

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC11650	Date Analyzed:	6/5/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09969	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		368	mg/L	1	10

Sample: 172382 - MW-4

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC11834	Date Analyzed:	6/8/01
Analyst:	LDB	Preparation Method:	E 3010A	Prep Batch:	PB10135	Date Prepared:	6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		80.4	mg/L	1	0.50
Total Magnesium		9.93	mg/L	1	0.50
Total Phosphorous		3.36	mg/L	1	0.05
Total Sodium		34.9	mg/L	1	0.50

Sample: 172382 - MW-4

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC11817	Date Analyzed:	6/4/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10105	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[2]	7.5	s.u.	1	1

Sample: 172383 - MW-3

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC11715	Date Analyzed:	6/5/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10013	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		274	mg/L as CaCo3	1	1
Total Alkalinity		274	mg/L as CaCo3	1	1

[2]Sample run out of holding time

Sample: 172383 - MW-3

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC11761 Date Analyzed: 6/6/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB10059 Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0685	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		0.0151	mg/L	1	0.001
Total BTEX		0.0836	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.091	mg/L	1	0.10	91	72 - 128
4-BFB		0.106	mg/L	1	0.10	106	72 - 128

Sample: 172383 - MW-3

Analysis: Conductivity Analytical Method: SM 2510B QC Batch: QC11751 Date Analyzed: 6/6/01
Analyst: RS Preparation Method: N/A Prep Batch: PB10053 Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		1927	μMHOS/cm	1	

Sample: 172383 - MW-3

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: QC11677 Date Analyzed: 6/5/01
Analyst: SSC Preparation Method: N/A Prep Batch: PB09989 Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 172383 - MW-3

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC11647 Date Analyzed: 6/2/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09968 Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL	[3]	464	mg/L	50	0.50
Fluoride		1.18	mg/L	5	0.20
Nitrate-N		<1.00	mg/L	5	0.20
Sulfate		42.9	mg/L	5	0.50

Sample: 172383 - MW-3

Analysis: Salts Analytical Method: S 6010B QC Batch: QC12044 Date Analyzed: 6/12/01
Analyst: LB Preparation Method: E 3005 A Prep Batch: PB10066 Date Prepared: 6/7/01

[3] Chloride was re-ran on IC060501-2.sch (PB10065; QC11767). ICV %IA = 94; CCV %IA = 93; matrix spikes RPD = 0; matrix spikes %EA = 89; blank spikes RPD = 1; blank spikes %EA = 94.

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		269	mg/L	1.10	0.50
Dissolved Magnesium		33.4	mg/L	1.10	0.50
Dissolved Potassium		5.3	mg/L	1.10	0.50
Dissolved Sodium		66.5	mg/L	1.10	0.50

Sample: 172383 - MW-3

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC11650	Date Analyzed:	6/5/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09969	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		1310	mg/L	2	10

Sample: 172383 - MW-3

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC11834	Date Analyzed:	6/8/01
Analyst:	LDB	Preparation Method:	E 3010A	Prep Batch:	PB10135	Date Prepared:	6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		267	mg/L	1	0.50
Total Magnesium		33.2	mg/L	1	0.50
Total Potassium		5.32	mg/L	1	0.50
Total Sodium		63.6	mg/L	1	0.50

Sample: 172383 - MW-3

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC11817	Date Analyzed:	6/4/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10105	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[4]	7.1	s.u.	1	1

Sample: 172384 - MW-10

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC11715	Date Analyzed:	6/5/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10013	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		190	mg/L as CaCo3	1	1
Total Alkalinity		190	mg/L as CaCo3	1	1

Sample: 172384 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11761	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10059	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001

Continued ...

[4]Sample run out of holding time

... *Continued* Sample: 172384 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0938	mg/L	1	0.10	93	72 - 128
4-BFB		0.0825	mg/L	1	0.10	82	72 - 128

Sample: 172384 - MW-10

Analysis: Conductivity Analytical Method: SM 2510B QC Batch: QC11751 Date Analyzed: 6/6/01
Analyst: RS Preparation Method: N/A Prep Batch: PB10053 Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		703	μMHOS/cm	1	

Sample: 172384 - MW-10

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: QC11677 Date Analyzed: 6/5/01
Analyst: SSC Preparation Method: N/A Prep Batch: PB09989 Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 172384 - MW-10

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC11647 Date Analyzed: 6/2/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09968 Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
Sulfate		87.2	mg/L	5	0.50
Fluoride		1.51	mg/L	5	0.20
Nitrate-N		2.81	mg/L	5	0.20

Sample: 172384 - MW-10

Analysis: Salts Analytical Method: S 6010B QC Batch: QC12044 Date Analyzed: 6/12/01
Analyst: LB Preparation Method: E 3005 A Prep Batch: PB10066 Date Prepared: 6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		89.3	mg/L	1.10	0.50
Dissolved Magnesium		11.6	mg/L	1.10	0.50
Dissolved Potassium		2.92	mg/L	1.10	0.50
Dissolved Sodium		43	mg/L	1.10	0.50

Sample: 172384 - MW-10

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC11650	Date Analyzed:	6/5/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09969	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		449	mg/L	1	10

Sample: 172384 - MW-10

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC11834	Date Analyzed:	6/8/01
Analyst:	LDB	Preparation Method:	E 3010A	Prep Batch:	PB10135	Date Prepared:	6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		86.3	mg/L	1	0.50
Total Magnesium		11.1	mg/L	1	0.50
Total Potassium		2.81	mg/L	1	0.50
Total Sodium		41.6	mg/L	1	0.50

Sample: 172384 - MW-10

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC11817	Date Analyzed:	6/4/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10105	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[5]	7.5	s.u.	1	1

Sample: 172385 - MW-8

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC11715	Date Analyzed:	6/5/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10013	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		278	mg/L as CaCo3	1	1
Total Alkalinity		278	mg/L as CaCo3	1	1

Sample: 172385 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11761	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10059	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

[5] Sample run out of holding time

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.094	mg/L	1	0.10	94	72 - 128
4-BFB		0.0802	mg/L	1	0.10	80	72 - 128

Sample: 172385 - MW-8

Analysis: Conductivity Analytical Method: SM 2510B QC Batch: QC11751 Date Analyzed: 6/6/01
Analyst: RS Preparation Method: N/A Prep Batch: PB10053 Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		2081	μMHOS/cm	1	

Sample: 172385 - MW-8

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: QC11677 Date Analyzed: 6/5/01
Analyst: SSC Preparation Method: N/A Prep Batch: PB09989 Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 172385 - MW-8

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC11647 Date Analyzed: 6/2/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09968 Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL	[6]	418	mg/L	50	0.50
Fluoride		2.05	mg/L	5	0.20
Nitrate-N		3.82	mg/L	5	0.20
Sulfate		93.7	mg/L	5	0.50

Sample: 172385 - MW-8

Analysis: Salts Analytical Method: S 6010B QC Batch: QC12044 Date Analyzed: 6/12/01
Analyst: LB Preparation Method: E 3005 A Prep Batch: PB10066 Date Prepared: 6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		103	mg/L	1.10	0.50
Dissolved Magnesium		12.8	mg/L	1.10	0.50
Dissolved Potassium		12.3	mg/L	1.10	0.50
Dissolved Sodium		250	mg/L	1.10	0.50

Sample: 172385 - MW-8

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC11651 Date Analyzed: 6/5/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09969 Date Prepared: 6/4/01

[6]Chloride was re-ran on IC060501-2.sch (PB10065; QC11767). ICV %IA = 94; CCV %IA = 93; matrix spikes RPD = 0; matrix spikes %EA = 89; blank spikes RPD = 1; blank spikes %EA = 94.

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		<10	mg/L	1	10

Sample: 172385 - MW-8

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC11834	Date Analyzed:	6/8/01
Analyst:	LDB	Preparation Method:	E 3010A	Prep Batch:	PB10135	Date Prepared:	6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		105	mg/L	1	0.50
Total Manganese		12.3	mg/L	1	0.02
Total Potassium		11.8	mg/L	1	0.50
Total Sodium		265	mg/L	1	0.50

Sample: 172385 - MW-8

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC11817	Date Analyzed:	6/4/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10105	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[7]	7.2	s.u.	1	1

Sample: 172386 - MW-9

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC11715	Date Analyzed:	6/5/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10013	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		262	mg/L as CaCo3	1	1
Total Alkalinity		262	mg/L as CaCo3	1	1

Sample: 172386 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11761	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10059	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0931	mg/L	1	0.10	93	72 - 128
4-BFB		0.0807	mg/L	1	0.10	80	72 - 128

[7] Sample run out of holding time

Sample: 172386 - MW-9

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC11751	Date Analyzed:	6/6/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10053	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		1215	μMHOS/cm	1	

Sample: 172386 - MW-9

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC11677	Date Analyzed:	6/5/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB09989	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 172386 - MW-9

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC11647	Date Analyzed:	6/2/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09968	Date Prepared:	6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL		169	mg/L	5	0.50
Fluoride		4.37	mg/L	5	0.20
Nitrate-N		1.51	mg/L	5	0.20
Sulfate		73.4	mg/L	5	0.50

Sample: 172386 - MW-9

Analysis:	Salts	Analytical Method:	S 6010B	QC Batch:	QC12079	Date Analyzed:	6/20/01
Analyst:	LDB	Preparation Method:	E 3005 A	Prep Batch:	PB10067	Date Prepared:	6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		32.6	mg/L	1.10	0.50
Dissolved Magnesium		3.74	mg/L	1.10	0.50
Dissolved Potassium		6.84	mg/L	1.10	0.50
Dissolved Sodium		177	mg/L	1.10	0.50

Sample: 172386 - MW-9

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC11651	Date Analyzed:	6/5/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09969	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		<10	mg/L	1	10

Sample: 172386 - MW-9

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC11834	Date Analyzed:	6/8/01
Analyst:	LDB	Preparation Method:	E 3010A	Prep Batch:	PB10135	Date Prepared:	6/12/01

Continued ...

... *Continued* Sample: 172386 Analysis: Total Metals

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		34.7	mg/L	1	0.50
Total Magnesium		3.68	mg/L	1	0.50
Total Potassium		6.60	mg/L	1	0.50
Total Sodium		195	mg/L	1	0.50

Sample: 172386 - MW-9

Analysis: pH Analytical Method: E 150.1 QC Batch: QC11817 Date Analyzed: 6/4/01
Analyst: RS Preparation Method: N/A Prep Batch: PB10105 Date Prepared: 6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[8]	7.8	s.u.	1	1

Sample: 172387 - MW-5

Analysis: Alkalinity Analytical Method: E 310.1 QC Batch: QC11715 Date Analyzed: 6/5/01
Analyst: RS Preparation Method: N/A Prep Batch: PB10013 Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		316	mg/L as CaCo3	1	1
Total Alkalinity		316	mg/L as CaCo3	1	1

Sample: 172387 - MW-5

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC11761 Date Analyzed: 6/6/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB10059 Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.42	mg/L	5	0.10	84	72 - 128
4-BFB		0.366	mg/L	5	0.10	73	72 - 128

Sample: 172387 - MW-5

Analysis: Conductivity Analytical Method: SM 2510B QC Batch: QC11751 Date Analyzed: 6/6/01
Analyst: RS Preparation Method: N/A Prep Batch: PB10053 Date Prepared: 6/6/01

[8] Sample run out of holding time

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		802	µMHOS/cm	1	

Sample: 172387 - MW-5

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: QC11677 Date Analyzed: 6/5/01
Analyst: SSC Preparation Method: N/A Prep Batch: PB09989 Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		0.00184	mg/L	1	0.0002

Sample: 172387 - MW-5

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC11647 Date Analyzed: 6/2/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09968 Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL		44.0	mg/L	5	0.50
Fluoride		1.13	mg/L	5	0.20
Nitrate-N		1.67	mg/L	5	0.20
Sulfate		46.3	mg/L	5	0.50

Sample: 172387 - MW-5

Analysis: Salts Analytical Method: S 6010B QC Batch: QC12079 Date Analyzed: 6/20/01
Analyst: LDB Preparation Method: E 3005 A Prep Batch: PB10067 Date Prepared: 6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		93.6	mg/L	1.10	0.50
Dissolved Magnesium		12.1	mg/L	1.10	0.50
Dissolved Potassium		3.44	mg/L	1.10	0.50
Dissolved Sodium		50.6	mg/L	1.10	0.50

Sample: 172387 - MW-5

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC11651 Date Analyzed: 6/5/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09969 Date Prepared: 6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		<10	mg/L	1	10

Sample: 172387 - MW-5

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC11834 Date Analyzed: 6/8/01
Analyst: LDB Preparation Method: E 3010A Prep Batch: PB10135 Date Prepared: 6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		139	mg/L	1	0.50
Total Magnesium		18.3	mg/L	1	0.50
Total Potassium		5.05	mg/L	1	0.50
Total Sodium		60.3	mg/L	1	0.50

Sample: 172387 - MW-5

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC11817	Date Analyzed:	6/4/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10105	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[9]	7.3	s.u.	1	1

Sample: 172388 - MW-6

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC11715	Date Analyzed:	6/5/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10013	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		162	mg/L as CaCo3	1	1
Total Alkalinity		162	mg/L as CaCo3	1	1

Sample: 172388 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11761	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10059	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0909	mg/L	1	0.10	90	72 - 128
4-BFB		0.0792	mg/L	1	0.10	79	72 - 128

Sample: 172388 - MW-6

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC11751	Date Analyzed:	6/6/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10053	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		1262	μMHOS/cm	1	

Sample: 172388 - MW-6

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC11677	Date Analyzed:	6/5/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB09989	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		0.00053	mg/L	1	0.0002

[9]Sample run out of holding time

Sample: 172388 - MW-6

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC11647 Date Analyzed: 6/2/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09968 Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL		241	mg/L	5	0.50
Fluoride		2.99	mg/L	5	0.20
Nitrate-N		<1.00	mg/L	5	0.20
Sulfate		68.0	mg/L	5	0.50

Sample: 172388 - MW-6

Analysis: Salts Analytical Method: S 6010B QC Batch: QC12079 Date Analyzed: 6/20/01
Analyst: LDB Preparation Method: E 3005 A Prep Batch: PB10067 Date Prepared: 6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		16.9	mg/L	1.10	0.50
Dissolved Magnesium		2.28	mg/L	1.10	0.50
Dissolved Potassium		2.74	mg/L	1.10	0.50
Dissolved Sodium		187	mg/L	1.10	0.50

Sample: 172388 - MW-6

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC11651 Date Analyzed: 6/5/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09969 Date Prepared: 6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		<10	mg/L	1	10

Sample: 172388 - MW-6

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC11834 Date Analyzed: 6/8/01
Analyst: LDB Preparation Method: E 3010A Prep Batch: PB10135 Date Prepared: 6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		23.3	mg/L	1	0.50
Total Magnesium		2.74	mg/L	1	0.50
Total Potassium		2.73	mg/L	1	0.50
Total Sodium		210	mg/L	1	0.50

Sample: 172388 - MW-6

Analysis: pH Analytical Method: E 150.1 QC Batch: QC11817 Date Analyzed: 6/4/01
Analyst: RS Preparation Method: N/A Prep Batch: PB10105 Date Prepared: 6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[10]	7.9	s.u.	1	1

[10] Sample run out of holding time

Sample: 172389 - Duplicate 1

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11761	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10059	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0905	mg/L	1	0.10	90	72 - 128
4-BFB		0.0785	mg/L	1	0.10	78	72 - 128

Sample: 172390 - Field Blank

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11769	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10060	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		0.0012	mg/L	1	0.001
Total BTEX		0.0012	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0919	mg/L	1	0.10	91	72 - 128
4-BFB		0.0793	mg/L	1	0.10	79	72 - 128

Quality Control Report
Method Blank

Method Blank QCBatch: QC11647

Param	Flag	Results	Units	Reporting Limit
CL		<2.0	mg/L	0.50
Fluoride		<0.2	mg/L	0.20
Nitrate-N		<0.2	mg/L	0.20
Sulfate		<2.0	mg/L	0.50

Method Blank QCBatch: QC11650

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<10	mg/L	10

Method Blank QCBatch: QC11651

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<10	mg/L	10

Method Blank QCBatch: QC11676

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.0002	mg/L	0.0002

Method Blank QCBatch: QC11677

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.0002	mg/L	0.0002

Method Blank QCBatch: QC11715

Param	Flag	Results	Units	Reporting Limit
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.0	mg/L as CaCo3	1
Total Alkalinity		<4.0	mg/L as CaCo3	1

Method Blank

QCBatch: QC11751

Param	Flag	Results	Units	Reporting Limit
Specific Conductance		4.47	μMHOS/cm	

Method Blank

QCBatch: QC11761

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0998	mg/L	1	0.10	99	72 - 128
4-BFB		0.0891	mg/L	1	0.10	89	72 - 128

Method Blank

QCBatch: QC11769

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0957	mg/L	1	0.10	95	72 - 128
4-BFB		0.0819	mg/L	1	0.10	81	72 - 128

Method Blank

QCBatch: QC11834

Param	Flag	Results	Units	Reporting Limit
Total Calcium		<0.5	mg/L	0.50
Total Magnesium		<0.5	mg/L	0.50
Total Potassium		<0.5	mg/L	0.50
Total Sodium		<0.5	mg/L	0.50

Method Blank

QCBatch: QC12079

Param	Flag	Results	Units	Reporting Limit
Dissolved Calcium		<0.5	mg/L	0.50
Dissolved Magnesium		<0.5	mg/L	0.50
Dissolved Potassium		0.6	mg/L	0.50
Dissolved Sodium		0.6	mg/L	0.50

Quality Control Report
Duplicate Samples

Duplicate QCBatch: QC11650

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		2590	2500	mg/L	1	3	8.9

Duplicate QCBatch: QC11715

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	7
Carbonate Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	7
Bicarbonate Alkalinity		162	162	mg/L as CaCo3	1	0	7
Total Alkalinity		162	162	mg/L as CaCo3	1	0	7

Duplicate QCBatch: QC11751

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance		1239	1262	μMHOS/cm	1	1	5.9

Duplicate QCBatch: QC11817

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH		7.9	7.9	s.u.	1	0	0.99

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC11647

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	11.58	11.55	mg/L	1	12.50	<2.0	92	0	90 - 110	20

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Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Fluoride	2.33	2.35	mg/L	1	2.50	<0.2	93	0	90 - 110	20
Nitrate-N	2.33	2.35	mg/L	1	2.50	<0.2	93	0	90 - 110	20
Sulfate	11.43	11.79	mg/L	1	12.50	<2.0	91	3	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC11676

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Mercury	0.00108	0.00107	mg/L	1	0.001	<0.0002	108	0	84 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC11677

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Mercury	0.00108	0.00107	mg/L	1	0.001	<0.0002	108	0	84 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC11761

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.104	0.104	mg/L	1	0.10	<0.001	104	0	80 - 120	20
Benzene	0.0981	0.099	mg/L	1	0.10	<0.001	98	0	80 - 120	20
Toluene	0.0986	0.0998	mg/L	1	0.10	<0.001	98	1	80 - 120	20
Ethylbenzene	0.099	0.1	mg/L	1	0.10	<0.001	99	1	80 - 120	20
M,P,O-Xylene	0.284	0.288	mg/L	1	0.30	<0.001	94	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.102	0.102	mg/L	1	0.10	102	102	72 - 128
4-BFB	0.101	0.101	mg/L	1	0.10	101	101	72 - 128

Laboratory Control Spikes

QCBatch: QC11769

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0973	0.0915	mg/L	1	0.10	<0.001	97	6	80 - 120	20
Benzene	0.102	0.0926	mg/L	1	0.10	<0.001	102	9	80 - 120	20
Toluene	0.102	0.0927	mg/L	1	0.10	<0.001	102	9	80 - 120	20

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Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Ethylbenzene	0.102	0.0921	mg/L	1	0.10	<0.001	102	10	80 - 120	20
M,P,O-Xylene	0.293	0.265	mg/L	1	0.30	<0.001	97	10	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0993	0.0955	mg/L	1	0.10	99	95	72 - 128
4-BFB	0.101	0.0961	mg/L	1	0.10	101	96	72 - 128

Laboratory Control Spikes

QCBatch: QC12079

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Dissolved Calcium	90.5	87.8	mg/L	1	100	<0.5	90	3	75 - 125	20
Dissolved Magnesium	86.3	82.3	mg/L	1	100	<0.5	86	4	75 - 125	20
Dissolved Potassium	91.3	88.1	mg/L	1	100	0.6	91	3	75 - 125	20
Dissolved Sodium	88.6	85.4	mg/L	1	100	0.6	88	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC11647

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	296.05	298.16	mg/L	1	62.50	241	88	3	52 - 131	20
Fluoride	13.98	15.35	mg/L	1	12.50	2.99	87	11	80 - 113	20
Nitrate-N	12.14	12.00	mg/L	1	12.50	<1.00	97	1	84 - 105	20
Sulfate	127.85	124.85	mg/L	1	62.50	68.0	95	5	79 - 104	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

QCBatch: QC11676

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Mercury	0.00106	0.00106	mg/L	1	0.001	<0.0002	106	0	84 - 127	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

QCBatch: QC11677

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Mercury	0.00113	0.00083	mg/L	1	0.001	<0.0002	113	30	84 - 127	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

QCBatch: QC11834

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Phosphorous	5.40	5.19	mg/L	1	1	64.2	0	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

QCBatch: QC12079

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Dissolved Calcium	677	655	mg/L	1	100	541	136	17	75 - 125	20
Dissolved Magnesium	358	308	mg/L	1	100	176	182	31	75 - 125	20
Dissolved Potassium	190	168	mg/L	1	100	29.7	160	14	75 - 125	20
Dissolved Sodium	2437	2309	mg/L	1	100	2303	134	182	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC11647

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.46	98	90 - 110	6/2/01
CL		mg/L	12.50	11.52	92	90 - 110	6/2/01
Fluoride		mg/L	2.50	2.28	91	90 - 110	6/2/01
Nitrate-N		mg/L	2.50	2.34	93	90 - 110	6/2/01
Sulfate		mg/L	12.50	11.73	93	90 - 110	6/2/01

ICV (1)

QCBatch: QC11647

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.37	94	90 - 110	6/2/01
CL		mg/L	12.50	12.42	99	90 - 110	6/2/01

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.31	92	90 - 110	6/2/01
Nitrate-N		mg/L	2.50	2.37	94	90 - 110	6/2/01
Sulfate		mg/L	12.50	11.84	94	90 - 110	6/2/01

CCV (1) QCBatch: QC11650

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	983	98	90 - 110	6/5/01

ICV (1) QCBatch: QC11650

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	985	98	90 - 110	6/5/01

CCV (1) QCBatch: QC11676

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00099	99	80 - 120	6/5/01

ICV (1) QCBatch: QC11676

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.0011	110	80 - 120	6/5/01

CCV (1) QCBatch: QC11677

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00088	88	80 - 120	6/5/01

ICV (1) QCBatch: QC11677

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.0011	110	80 - 120	6/5/01

CCV (1) QCBatch: QC11715

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	6/5/01
Carbonate Alkalinity		mg/L as CaCo3	0	220	0	90 - 110	6/5/01
Bicarbonate Alkalinity		mg/L as CaCo3	0	24	0	90 - 110	6/5/01
Total Alkalinity		mg/L as CaCo3	250	244	97	90 - 110	6/5/01

ICV (1) QCBatch: QC11715

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	6/5/01
Carbonate Alkalinity		mg/L as CaCo3	0	228	0	90 - 110	6/5/01
Bicarbonate Alkalinity		mg/L as CaCo3	0	18	0	90 - 110	6/5/01
Total Alkalinity		mg/L as CaCo3	250	246	98	90 - 110	6/5/01

CCV (1) QCBatch: QC11751

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1412	1400	99	90 - 110	6/6/01

ICV (1) QCBatch: QC11751

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1402	1392	99	90 - 110	6/6/01

CCV (1) QCBatch: QC11761

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0967	96	85 - 115	6/6/01
Benzene		mg/L	0.10	0.1	100	85 - 115	6/6/01

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.1	100	85 - 115	6/6/01
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	6/6/01
M,P,O-Xylene		mg/L	0.30	0.29	96	85 - 115	6/6/01

CCV (2) QCBatch: QC11761

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0931	93	85 - 115	6/6/01
Benzene		mg/L	0.10	0.0955	95	85 - 115	6/6/01
Toluene		mg/L	0.10	0.0957	95	85 - 115	6/6/01
Ethylbenzene		mg/L	0.10	0.0958	95	85 - 115	6/6/01
M,P,O-Xylene		mg/L	0.30	0.276	92	85 - 115	6/6/01

ICV (1) QCBatch: QC11761

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.111	111	85 - 115	6/6/01
Benzene		mg/L	0.10	0.102	102	85 - 115	6/6/01
Toluene		mg/L	0.10	0.102	102	85 - 115	6/6/01
Ethylbenzene		mg/L	0.10	0.103	103	85 - 115	6/6/01
M,P,O-Xylene		mg/L	0.30	0.296	98	85 - 115	6/6/01

CCV (1) QCBatch: QC11769

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.084	84	85 - 115	6/6/01
Benzene		mg/L	0.10	0.0859	85	85 - 115	6/6/01
Toluene		mg/L	0.10	0.0859	85	85 - 115	6/6/01
Ethylbenzene		mg/L	0.10	0.0854	85	85 - 115	6/6/01
M,P,O-Xylene		mg/L	0.30	0.245	81	85 - 115	6/6/01

CCV (2) QCBatch: QC11769

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0948	94	85 - 115	6/6/01
Benzene		mg/L	0.10	0.0939	93	85 - 115	6/6/01

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.094	94	85 - 115	6/6/01
Ethylbenzene		mg/L	0.10	0.0949	94	85 - 115	6/6/01
M,P,O-Xylene		mg/L	0.30	0.272	90	85 - 115	6/6/01

ICV (1) QCBatch: QC11769

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0864	86	85 - 115	6/6/01
Benzene		mg/L	0.10	0.0968	96	85 - 115	6/6/01
Toluene		mg/L	0.10	0.0972	97	85 - 115	6/6/01
Ethylbenzene		mg/L	0.10	0.0974	97	85 - 115	6/6/01
M,P,O-Xylene		mg/L	0.30	0.279	93	85 - 115	6/6/01

ICV (1) QCBatch: QC11817

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	-0.1 s.u. - +0.1 s.u.	6/4/01

CCV (1) QCBatch: QC11834

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Phosphorous		mg/L	1	0.91	0	90 - 110	6/8/01

ICV (1) QCBatch: QC11834

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Phosphorous		mg/L	1	1.01	0	90 - 110	6/8/01

CCV (1) QCBatch: QC12079

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25	25	100	90 - 110	6/20/01

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Magnesium		mg/L	25	23.8	95	90 - 110	6/20/01
Dissolved Potassium		mg/L	25	25.3	101	90 - 110	6/20/01
Dissolved Sodium		mg/L	25	25.1	100	90 - 110	6/20/01

ICV (1) QCBatch: QC12079

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25	25.5	102	95 - 105	6/20/01
Dissolved Magnesium		mg/L	25	24.5	98	95 - 105	6/20/01
Dissolved Potassium		mg/L	25	24.4	97	95 - 105	6/20/01
Dissolved Sodium		mg/L	25	24.5	98	95 - 105	6/20/01

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A0106407

Company Name: NAVAJO REFINING CO Phone #: (505) 748-3311

Address: (Street, City, Zip) 501 E. Main Artesia NM 88210 Fax #: (505) 746-5421

Contact Person: David Boyer (505) 397-0510, 393-4388 FAX

Invoice to: (If different from above) Darrell Moore - NRC

Project #: Lea Refinery Project Name:

Project Location: Lovington NM Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
12381	MW-2	5	1	X				X	X			X		5/31	1200
82	MW-4	5	"	X				X	X			X		"	1315
83	MW-3	5	"	X				X	X			X		"	1410
84	MW-10	5	"	X				X	X			X		"	1450
85	MW-8	5	"	X				X	X			X		"	1555
86	MW-9	5	"	X				X	X			X		"	1650
87	MW-5	5	"	X				X	X			X		6/01	1020
88	MW-6	5	"	X				X	X			X		6/01	1120
	TWR														
89	Duplicate #1	3	"	X				X	X			X		—	—
90	Field Blank	2	40ml	X				X				X		5/31	1830

ANALYSIS REQUEST
(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Metals (see Permian list)	Water Chemistry (see Permian list)	N. Type	Turn Around Time if different from standard	Hold
	X		X												X	X	X		
	X		X												X	X	X		
	X		X												X	X	X		
	X		X												X	X	X		
	X		X												X	X	X		
	X		X												X	X	X		
	X		X												X	X	X		
	X		X												X	X	X		
	X		X				Do not run AIR												
	X		X				Run BTEX only & report analytes already run for Rem. 6-01												

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
D Boyer	6/1/01	1530			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:
				06/02/01	1000

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

LAB USE ONLY

Intact Y / N

Headspace Y / N

Temp 2.0

Log-in-Review JMS

REMARKS:

NM Oil list of metals & water chemistry - List to be FAXED

Copy of Results to D Boyer

☐ Check if Special Reporting Limits Are Needed

P.O. Box 1613 Hobbs 88241

Carrier # Federal 902591494 96

Summary Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: September 3, 2001

Order ID Number: A01082916

Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
178201	MW-8	Water	8/28/01	9:55	8/29/01
178202	MW-10	Water	8/28/01	10:30	8/29/01
178203	MW-9	Water	8/28/01	11:05	8/29/01
178204	MW-3	Water	8/28/01	11:48	8/29/01
178205	North Water Well	Water	8/28/01	14:55	8/29/01
178206	South Water Well	Water	8/28/01	15:10	8/29/01

This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
178201 - MW-8	<0.001	0.001	<0.001	<0.001	<0.001
178202 - MW-10	<0.001	<0.001	<0.001	<0.001	<0.001
178203 - MW-9	<0.001	<0.001	<0.001	<0.001	<0.001
178204 - MW-3	0.037	0.001	<0.001	0.004	0.042
178205 - North Water Well	0.003	<0.001	<0.001	<0.001	0.003
178206 - South Water Well	<0.001	<0.001	<0.001	<0.001	<0.001

Summary Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: September 3, 2001

Order ID Number: A01060407

Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
172381	MW-2	Water	5/31/01	12:20	6/2/01
172382	MW-4	Water	5/31/01	13:15	6/2/01
172383	MW-3	Water	5/31/01	14:10	6/2/01
172384	MW-10	Water	5/31/01	14:50	6/2/01
172385	MW-8	Water	5/31/01	15:55	6/2/01
172386	MW-9	Water	5/31/01	16:50	6/2/01
172387	MW-5	Water	6/1/07	10:20	6/2/01
172388	MW-6	Water	6/1/07	11:20	6/2/01
172389	Duplicate 1	Water	5/31/01	:	6/2/01
172390	Field Blank	Water	5/31/01	18:30	6/2/01

This report consists of a total of 5 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
172381 - MW-2	<0.001	<0.001	<0.001	<0.001	<0.001
172382 - MW-4	0.0011	<0.001	<0.001	<0.001	0.0011
172383 - MW-3	0.0685	<0.001	<0.001	0.0151	0.0836
172384 - MW-10	<0.001	<0.001	<0.001	<0.001	<0.001
172385 - MW-8	<0.001	<0.001	<0.001	<0.001	<0.001
172386 - MW-9	<0.001	<0.001	<0.001	<0.001	<0.001
172387 - MW-5	<0.005	<0.005	<0.005	<0.005	<0.005
172388 - MW-6	<0.001	<0.001	<0.001	<0.001	<0.001
172389 - Duplicate 1	<0.001	<0.001	<0.001	<0.001	<0.001
172390 - Field Blank	<0.001	<0.001	<0.001	0.0012	0.0012

Sample: 172381 - MW-2

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		232	mg/L as CaCo3
Total Alkalinity		232	mg/L as CaCo3
Specific Conductance		904	μMHOS/cm
Total Mercury		<0.0002	mg/L
CL		94.0	mg/L

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Sample 172381 continued ...

Param	Flag	Result	Units
Fluoride		1.65	mg/L
Nitrate-N		3.09	mg/L
Sulfate		69.4	mg/L
Dissolved Calcium		111	mg/L
Dissolved Magnesium		14.2	mg/L
Dissolved Potassium		2.82	mg/L
Dissolved Sodium		54.8	mg/L
Total Dissolved Solids		541	mg/L
Total Calcium		111	mg/L
Total Magnesium		14.3	mg/L
Total Phosphorous		64.2	mg/L
Total Potassium		2.82	mg/L
Total Sodium		48.1	mg/L
pH	[1]	7.4	s.u.

Sample: 172382 - MW-4

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		182	mg/L as CaCo3
Total Alkalinity		182	mg/L as CaCo3
Specific Conductance		591	μMHOS/cm
Total Mercury		<0.0002	mg/L
CL		23.4	mg/L
Fluoride		1.61	mg/L
Nitrate-N		2.62	mg/L
Sulfate		73.6	mg/L
Dissolved Calcium		77	mg/L
Dissolved Magnesium		10	mg/L
Dissolved Potassium		3.11	mg/L
Dissolved Sodium		35.4	mg/L
Total Dissolved Solids		368	mg/L
Total Calcium		80.4	mg/L
Total Magnesium		9.93	mg/L
Total Phosphorous		3.36	mg/L
Total Sodium		34.9	mg/L
pH	[2]	7.5	s.u.

Sample: 172383 - MW-3

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		274	mg/L as CaCo3
Total Alkalinity		274	mg/L as CaCo3
Specific Conductance		1927	μMHOS/cm

Continued on next page ...

[1] Sample run out of holding time
[2] Sample run out of holding time

Sample 172383 continued ...

Param	Flag	Result	Units
Total Mercury		<0.0002	mg/L
CL	3	464	mg/L
Fluoride		1.18	mg/L
Nitrate-N		<1.00	mg/L
Sulfate		42.9	mg/L
Dissolved Calcium		269	mg/L
Dissolved Magnesium		33.4	mg/L
Dissolved Potassium		5.3	mg/L
Dissolved Sodium		66.5	mg/L
Total Dissolved Solids		1310	mg/L
Total Calcium		267	mg/L
Total Magnesium		33.2	mg/L
Total Potassium		5.32	mg/L
Total Sodium		63.6	mg/L
pH	4	7.1	s.u.

Sample: 172384 - MW-10

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		190	mg/L as CaCo3
Total Alkalinity		190	mg/L as CaCo3
Specific Conductance		703	μMHOS/cm
Total Mercury		<0.0002	mg/L
Sulfate		87.2	mg/L
Fluoride		1.51	mg/L
Nitrate-N		2.81	mg/L
Dissolved Calcium		89.3	mg/L
Dissolved Magnesium		11.6	mg/L
Dissolved Potassium		2.92	mg/L
Dissolved Sodium		43	mg/L
Total Dissolved Solids		449	mg/L
Total Calcium		86.3	mg/L
Total Magnesium		11.1	mg/L
Total Potassium		2.81	mg/L
Total Sodium		41.6	mg/L
pH	5	7.5	s.u.

Sample: 172385 - MW-8

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		278	mg/L as CaCo3
Total Alkalinity		278	mg/L as CaCo3
Specific Conductance		2081	μMHOS/cm

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[3]Chloride was re-ran on IC060501-2.sch (PB10065; QC11767). ICV %IA = 94; CCV %IA = 93; matrix spikes RPD = 0; matrix spikes %EA = 89; blank spikes RPD = 1; blank spikes %EA = 94.

[4]Sample run out of holding time

[5]Sample run out of holding time

Sample 172385 continued ...

Param	Flag	Result	Units
Total Mercury		<0.0002	mg/L
CL	[6]	418	mg/L
Fluoride		2.05	mg/L
Nitrate-N		3.82	mg/L
Sulfate		93.7	mg/L
Dissolved Calcium		103	mg/L
Dissolved Magnesium		12.8	mg/L
Dissolved Potassium		12.3	mg/L
Dissolved Sodium		250	mg/L
Total Dissolved Solids		<10	mg/L
Total Calcium		105	mg/L
Total Manganese		12.3	mg/L
Total Potassium		11.8	mg/L
Total Sodium		265	mg/L
pH	[7]	7.2	s.u.

Sample: 172386 - MW-9

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		262	mg/L as CaCo3
Total Alkalinity		262	mg/L as CaCo3
Specific Conductance		1215	μMHOS/cm
Total Mercury		<0.0002	mg/L
CL		169	mg/L
Fluoride		4.37	mg/L
Nitrate-N		1.51	mg/L
Sulfate		73.4	mg/L
Dissolved Calcium		32.6	mg/L
Dissolved Magnesium		3.74	mg/L
Dissolved Potassium		6.84	mg/L
Dissolved Sodium		177	mg/L
Total Dissolved Solids		<10	mg/L
Total Calcium		34.7	mg/L
Total Magnesium		3.68	mg/L
Total Potassium		6.60	mg/L
Total Sodium		195	mg/L
pH	[8]	7.8	s.u.

Sample: 172387 - MW-5

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		316	mg/L as CaCo3

Continued on next page ...

[6]Chloride was re-ran on IC060501-2.sch (PB10065; QC11767). ICV %IA = 94; CCV %IA = 93; matrix spikes RPD = 0; matrix spikes %EA = 89; blank spikes RPD = 1; blank spikes %EA = 94.

[7]Sample run out of holding time

[8]Sample run out of holding time

Sample 172387 continued ...

Param	Flag	Result	Units
Total Alkalinity		316	mg/L as CaCo3
Specific Conductance		802	μMHOS/cm
Total Mercury		0.00184	mg/L
CL		44.0	mg/L
Fluoride		1.13	mg/L
Nitrate-N		1.67	mg/L
Sulfate		46.3	mg/L
Dissolved Calcium		93.6	mg/L
Dissolved Magnesium		12.1	mg/L
Dissolved Potassium		3.44	mg/L
Dissolved Sodium		50.6	mg/L
Total Dissolved Solids		<10	mg/L
Total Calcium		139	mg/L
Total Magnesium		18.3	mg/L
Total Potassium		5.05	mg/L
Total Sodium		60.3	mg/L
pH	[9]	7.3	s.u.

Sample: 172388 - MW-6

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		162	mg/L as CaCo3
Total Alkalinity		162	mg/L as CaCo3
Specific Conductance		1262	μMHOS/cm
Total Mercury		0.00053	mg/L
CL		241	mg/L
Fluoride		2.99	mg/L
Nitrate-N		<1.00	mg/L
Sulfate		68.0	mg/L
Dissolved Calcium		16.9	mg/L
Dissolved Magnesium		2.28	mg/L
Dissolved Potassium		2.74	mg/L
Dissolved Sodium		187	mg/L
Total Dissolved Solids		<10	mg/L
Total Calcium		23.3	mg/L
Total Magnesium		2.74	mg/L
Total Potassium		2.73	mg/L
Total Sodium		210	mg/L
pH	[10]	7.9	s.u.

[9] Sample run out of holding time
[10] Sample run out of holding time

Analytical and Quality Control Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: September 3, 2001

Order ID Number: A01060407

Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
172381	MW-2	Water	5/31/01	12:20	6/2/01
172382	MW-4	Water	5/31/01	13:15	6/2/01
172383	MW-3	Water	5/31/01	14:10	6/2/01
172384	MW-10	Water	5/31/01	14:50	6/2/01
172385	MW-8	Water	5/31/01	15:55	6/2/01
172386	MW-9	Water	5/31/01	16:50	6/2/01
172387	MW-5	Water	6/1/07	10:20	6/2/01
172388	MW-6	Water	6/1/07	11:20	6/2/01
172389	Duplicate 1	Water	5/31/01	:	6/2/01
172390	Field Blank	Water	5/31/01	18:30	6/2/01

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 28 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Michael Abel for
Dr. Blair Leftwich, Director

Analytical Report

Sample: 172381 - MW-2

Analysis: Alkalinity | Analytical Method: E 310.1 | QC Batch: QC11715 | Date Analyzed: 6/5/01
Analyst: RS | Preparation Method: N/A | Prep Batch: PB10013 | Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		232	mg/L as CaCo3	1	1
Total Alkalinity		232	mg/L as CaCo3	1	1

Sample: 172381 - MW-2

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC11761 | Date Analyzed: 6/6/01
Analyst: JW | Preparation Method: E 5030B | Prep Batch: PB10059 | Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0923	mg/L	1	0.10	92	72 - 128
4-BFB		0.0803	mg/L	1	0.10	80	72 - 128

Sample: 172381 - MW-2

Analysis: Conductivity | Analytical Method: SM 2510B | QC Batch: QC11751 | Date Analyzed: 6/6/01
Analyst: RS | Preparation Method: N/A | Prep Batch: PB10053 | Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		904	μMHOS/cm	1	

Sample: 172381 - MW-2

Analysis: Hg, Total | Analytical Method: S 7470A | QC Batch: QC11676 | Date Analyzed: 6/5/01
Analyst: SSC | Preparation Method: N/A | Prep Batch: PB09989 | Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 172381 - MW-2

Analysis: Ion Chromatography (IC) | Analytical Method: E 300.0 | QC Batch: QC11647 | Date Analyzed: 6/2/01
Analyst: JS | Preparation Method: N/A | Prep Batch: PB09968 | Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL		94.0	mg/L	5	0.50
Fluoride		1.65	mg/L	5	0.20
Nitrate-N		3.09	mg/L	5	0.20
Sulfate		69.4	mg/L	5	0.50

Sample: 172381 - MW-2

Analysis:	Salts	Analytical Method:	S 6010B	QC Batch:	QC12044	Date Analyzed:	6/12/01
Analyst:	LB	Preparation Method:	E 3005 A	Prep Batch:	PB10066	Date Prepared:	6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		111	mg/L	1.10	0.50
Dissolved Magnesium		14.2	mg/L	1.10	0.50
Dissolved Potassium		2.82	mg/L	1.10	0.50
Dissolved Sodium		54.8	mg/L	1.10	0.50

Sample: 172381 - MW-2

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC11650	Date Analyzed:	6/5/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09969	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		541	mg/L	1	10

Sample: 172381 - MW-2

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC11834	Date Analyzed:	6/8/01
Analyst:	LDB	Preparation Method:	E 3010A	Prep Batch:	PB10135	Date Prepared:	6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		111	mg/L	1	0.50
Total Magnesium		14.3	mg/L	1	0.50
Total Phosphorous		64.2	mg/L	1	0.05
Total Potassium		2.82	mg/L	1	0.50
Total Sodium		48.1	mg/L	1	0.50

Sample: 172381 - MW-2

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC11817	Date Analyzed:	6/4/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10105	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[1]	7.4	s.u.	1	1

Sample: 172382 - MW-4

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC11715	Date Analyzed:	6/5/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10013	Date Prepared:	6/5/01

[1] Sample run out of holding time

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		182	mg/L as CaCo3	1	1
Total Alkalinity		182	mg/L as CaCo3	1	1

Sample: 172382 - MW-4

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC11761 Date Analyzed: 6/6/01
Analyst: JW Preparation Method: E 5030B Prep Batch: PB10059 Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0011	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0011	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0923	mg/L	1	0.10	92	72 - 128
4-BFB		0.0803	mg/L	1	0.10	80	72 - 128

Sample: 172382 - MW-4

Analysis: Conductivity Analytical Method: SM 2510B QC Batch: QC11751 Date Analyzed: 6/6/01
Analyst: RS Preparation Method: N/A Prep Batch: PB10053 Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		591	μMHOS/cm	1	

Sample: 172382 - MW-4

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: QC11676 Date Analyzed: 6/5/01
Analyst: SSC Preparation Method: N/A Prep Batch: PB09989 Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 172382 - MW-4

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC11647 Date Analyzed: 6/2/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09968 Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL		23.4	mg/L	5	0.50
Fluoride		1.61	mg/L	5	0.20
Nitrate-N		2.62	mg/L	5	0.20
Sulfate		73.6	mg/L	5	0.50

Sample: 172382 - MW-4

Analysis:	Salts	Analytical Method:	S 6010B	QC Batch:	QC12044	Date Analyzed:	6/12/01
Analyst:	LB	Preparation Method:	E 3005 A	Prep Batch:	PB10066	Date Prepared:	6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		77	mg/L	1.10	0.50
Dissolved Magnesium		10	mg/L	1.10	0.50
Dissolved Potassium		3.11	mg/L	1.10	0.50
Dissolved Sodium		35.4	mg/L	1.10	0.50

Sample: 172382 - MW-4

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC11650	Date Analyzed:	6/5/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09969	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		368	mg/L	1	10

Sample: 172382 - MW-4

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC11834	Date Analyzed:	6/8/01
Analyst:	LDB	Preparation Method:	E 3010A	Prep Batch:	PB10135	Date Prepared:	6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		80.4	mg/L	1	0.50
Total Magnesium		9.93	mg/L	1	0.50
Total Phosphorous		3.36	mg/L	1	0.05
Total Sodium		34.9	mg/L	1	0.50

Sample: 172382 - MW-4

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC11817	Date Analyzed:	6/4/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10105	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[2]	7.5	s.u.	1	1

Sample: 172383 - MW-3

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC11715	Date Analyzed:	6/5/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10013	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		274	mg/L as CaCo3	1	1
Total Alkalinity		274	mg/L as CaCo3	1	1

[2]Sample run out of holding time

Sample: 172383 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11761	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10059	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0685	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		0.0151	mg/L	1	0.001
Total BTEX		0.0836	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.091	mg/L	1	0.10	91	72 - 128
4-BFB		0.106	mg/L	1	0.10	106	72 - 128

Sample: 172383 - MW-3

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC11751	Date Analyzed:	6/6/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10053	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		1927	μMHOS/cm	1	

Sample: 172383 - MW-3

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC11677	Date Analyzed:	6/5/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB09989	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 172383 - MW-3

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC11647	Date Analyzed:	6/2/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09968	Date Prepared:	6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL	[3]	464	mg/L	50	0.50
Fluoride		1.18	mg/L	5	0.20
Nitrate-N		<1.00	mg/L	5	0.20
Sulfate		42.9	mg/L	5	0.50

Sample: 172383 - MW-3

Analysis:	Salts	Analytical Method:	S 6010B	QC Batch:	QC12044	Date Analyzed:	6/12/01
Analyst:	LB	Preparation Method:	E 3005 A	Prep Batch:	PB10066	Date Prepared:	6/7/01

[3]Chloride was re-ran on IC060501-2.sch (PB10065; QC11767). ICV %IA = 94; CCV %IA = 93; matrix spikes RPD = 0; matrix spikes %EA = 89; blank spikes RPD = 1; blank spikes %EA = 94.

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		269	mg/L	1.10	0.50
Dissolved Magnesium		33.4	mg/L	1.10	0.50
Dissolved Potassium		5.3	mg/L	1.10	0.50
Dissolved Sodium		66.5	mg/L	1.10	0.50

Sample: 172383 - MW-3

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC11650	Date Analyzed:	6/5/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09969	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		1310	mg/L	2	10

Sample: 172383 - MW-3

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC11834	Date Analyzed:	6/8/01
Analyst:	LDB	Preparation Method:	E 3010A	Prep Batch:	PB10135	Date Prepared:	6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		267	mg/L	1	0.50
Total Magnesium		33.2	mg/L	1	0.50
Total Potassium		5.32	mg/L	1	0.50
Total Sodium		63.6	mg/L	1	0.50

Sample: 172383 - MW-3

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC11817	Date Analyzed:	6/4/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10105	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[4]	7.1	s.u.	1	1

Sample: 172384 - MW-10

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC11715	Date Analyzed:	6/5/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10013	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		190	mg/L as CaCo3	1	1
Total Alkalinity		190	mg/L as CaCo3	1	1

Sample: 172384 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11761	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10059	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001

Continued ...

[4] Sample run out of holding time

... *Continued* Sample: 172384 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0938	mg/L	1	0.10	93	72 - 128
4-BFB		0.0825	mg/L	1	0.10	82	72 - 128

Sample: 172384 - MW-10

Analysis: Conductivity Analytical Method: SM 2510B QC Batch: QC11751 Date Analyzed: 6/6/01
Analyst: RS Preparation Method: N/A Prep Batch: PB10053 Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		703	μMHOS/cm	1	

Sample: 172384 - MW-10

Analysis: Hg, Total Analytical Method: S 7470A QC Batch: QC11677 Date Analyzed: 6/5/01
Analyst: SSC Preparation Method: N/A Prep Batch: PB09989 Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 172384 - MW-10

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC11647 Date Analyzed: 6/2/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09968 Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
Sulfate		87.2	mg/L	5	0.50
Fluoride		1.51	mg/L	5	0.20
Nitrate-N		2.81	mg/L	5	0.20

Sample: 172384 - MW-10

Analysis: Salts Analytical Method: S 6010B QC Batch: QC12044 Date Analyzed: 6/12/01
Analyst: LB Preparation Method: E 3005 A Prep Batch: PB10066 Date Prepared: 6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		89.3	mg/L	1.10	0.50
Dissolved Magnesium		11.6	mg/L	1.10	0.50
Dissolved Potassium		2.92	mg/L	1.10	0.50
Dissolved Sodium		43	mg/L	1.10	0.50

Sample: 172384 - MW-10

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC11650	Date Analyzed:	6/5/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09969	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		449	mg/L	1	10

Sample: 172384 - MW-10

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC11834	Date Analyzed:	6/8/01
Analyst:	LDB	Preparation Method:	E 3010A	Prep Batch:	PB10135	Date Prepared:	6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		86.3	mg/L	1	0.50
Total Magnesium		11.1	mg/L	1	0.50
Total Potassium		2.81	mg/L	1	0.50
Total Sodium		41.6	mg/L	1	0.50

Sample: 172384 - MW-10

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC11817	Date Analyzed:	6/4/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10105	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[5]	7.5	s.u.	1	1

Sample: 172385 - MW-8

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC11715	Date Analyzed:	6/5/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10013	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		278	mg/L as CaCo3	1	1
Total Alkalinity		278	mg/L as CaCo3	1	1

Sample: 172385 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11761	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10059	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

[5] Sample run out of holding time

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.094	mg/L	1	0.10	94	72 - 128
4-BFB		0.0802	mg/L	1	0.10	80	72 - 128

Sample: 172385 - MW-8

Analysis: Conductivity | Analytical Method: SM 2510B | QC Batch: QC11751 | Date Analyzed: 6/6/01
Analyst: RS | Preparation Method: N/A | Prep Batch: PB10053 | Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		2081	μMHOS/cm	1	

Sample: 172385 - MW-8

Analysis: Hg, Total | Analytical Method: S 7470A | QC Batch: QC11677 | Date Analyzed: 6/5/01
Analyst: SSC | Preparation Method: N/A | Prep Batch: PB09989 | Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 172385 - MW-8

Analysis: Ion Chromatography (IC) | Analytical Method: E 300.0 | QC Batch: QC11647 | Date Analyzed: 6/2/01
Analyst: JS | Preparation Method: N/A | Prep Batch: PB09968 | Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL	[6]	418	mg/L	50	0.50
Fluoride		2.05	mg/L	5	0.20
Nitrate-N		3.82	mg/L	5	0.20
Sulfate		93.7	mg/L	5	0.50

Sample: 172385 - MW-8

Analysis: Salts | Analytical Method: S 6010B | QC Batch: QC12044 | Date Analyzed: 6/12/01
Analyst: LB | Preparation Method: E 3005 A | Prep Batch: PB10066 | Date Prepared: 6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		103	mg/L	1.10	0.50
Dissolved Magnesium		12.8	mg/L	1.10	0.50
Dissolved Potassium		12.3	mg/L	1.10	0.50
Dissolved Sodium		250	mg/L	1.10	0.50

Sample: 172385 - MW-8

Analysis: TDS | Analytical Method: E 160.1 | QC Batch: QC11651 | Date Analyzed: 6/5/01
Analyst: JS | Preparation Method: N/A | Prep Batch: PB09969 | Date Prepared: 6/4/01

[6]Chloride was re-ran on IC060501-2.sch (PB10065; QC11767). ICV %IA = 94; CCV %IA = 93; matrix spikes RPD = 0; matrix spikes %EA = 89; blank spikes RPD = 1; blank spikes %EA = 94.

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		<10	mg/L	1	10

Sample: 172385 - MW-8

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC11834	Date Analyzed:	6/8/01
Analyst:	LDB	Preparation Method:	E 3010A	Prep Batch:	PB10135	Date Prepared:	6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		105	mg/L	1	0.50
Total Manganese		12.3	mg/L	1	0.02
Total Potassium		11.8	mg/L	1	0.50
Total Sodium		265	mg/L	1	0.50

Sample: 172385 - MW-8

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC11817	Date Analyzed:	6/4/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10105	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[7]	7.2	s.u.	1	1

Sample: 172386 - MW-9

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC11715	Date Analyzed:	6/5/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10013	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		262	mg/L as CaCo3	1	1
Total Alkalinity		262	mg/L as CaCo3	1	1

Sample: 172386 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11761	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10059	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0931	mg/L	1	0.10	93	72 - 128
4-BFB		0.0807	mg/L	1	0.10	80	72 - 128

[7] Sample run out of holding time

Sample: 172386 - MW-9

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC11751	Date Analyzed:	6/6/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10053	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		1215	μMHOS/cm	1	

Sample: 172386 - MW-9

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC11677	Date Analyzed:	6/5/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB09989	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.0002	mg/L	1	0.0002

Sample: 172386 - MW-9

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC11647	Date Analyzed:	6/2/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09968	Date Prepared:	6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL		169	mg/L	5	0.50
Fluoride		4.37	mg/L	5	0.20
Nitrate-N		1.51	mg/L	5	0.20
Sulfate		73.4	mg/L	5	0.50

Sample: 172386 - MW-9

Analysis:	Salts	Analytical Method:	S 6010B	QC Batch:	QC12079	Date Analyzed:	6/20/01
Analyst:	LDB	Preparation Method:	E 3005 A	Prep Batch:	PB10067	Date Prepared:	6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		32.6	mg/L	1.10	0.50
Dissolved Magnesium		3.74	mg/L	1.10	0.50
Dissolved Potassium		6.84	mg/L	1.10	0.50
Dissolved Sodium		177	mg/L	1.10	0.50

Sample: 172386 - MW-9

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC11651	Date Analyzed:	6/5/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB09969	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		<10	mg/L	1	10

Sample: 172386 - MW-9

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC11834	Date Analyzed:	6/8/01
Analyst:	LDB	Preparation Method:	E 3010A	Prep Batch:	PB10135	Date Prepared:	6/12/01

Continued ...

... *Continued* Sample: 172386 Analysis: Total Metals

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		34.7	mg/L	1	0.50
Total Magnesium		3.68	mg/L	1	0.50
Total Potassium		6.60	mg/L	1	0.50
Total Sodium		195	mg/L	1	0.50

Sample: 172386 - MW-9

Analysis: pH | Analytical Method: E 150.1 | QC Batch: QC11817 | Date Analyzed: 6/4/01
Analyst: RS | Preparation Method: N/A | Prep Batch: PB10105 | Date Prepared: 6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[8]	7.8	s.u.	1	1

Sample: 172387 - MW-5

Analysis: Alkalinity | Analytical Method: E 310.1 | QC Batch: QC11715 | Date Analyzed: 6/5/01
Analyst: RS | Preparation Method: N/A | Prep Batch: PB10013 | Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		316	mg/L as CaCo3	1	1
Total Alkalinity		316	mg/L as CaCo3	1	1

Sample: 172387 - MW-5

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC11761 | Date Analyzed: 6/6/01
Analyst: JW | Preparation Method: E 5030B | Prep Batch: PB10059 | Date Prepared: 6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.42	mg/L	5	0.10	84	72 - 128
4-BFB		0.366	mg/L	5	0.10	73	72 - 128

Sample: 172387 - MW-5

Analysis: Conductivity | Analytical Method: SM 2510B | QC Batch: QC11751 | Date Analyzed: 6/6/01
Analyst: RS | Preparation Method: N/A | Prep Batch: PB10053 | Date Prepared: 6/6/01

[8] Sample run out of holding time

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		802	µMHOS/cm	1	

Sample: 172387 - MW-5

Analysis: Hg, Total | Analytical Method: S 7470A | QC Batch: QC11677 | Date Analyzed: 6/5/01
Analyst: SSC | Preparation Method: N/A | Prep Batch: PB09989 | Date Prepared: 6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		0.00184	mg/L	1	0.0002

Sample: 172387 - MW-5

Analysis: Ion Chromatography (IC) | Analytical Method: E 300.0 | QC Batch: QC11647 | Date Analyzed: 6/2/01
Analyst: JS | Preparation Method: N/A | Prep Batch: PB09968 | Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL		44.0	mg/L	5	0.50
Fluoride		1.13	mg/L	5	0.20
Nitrate-N		1.67	mg/L	5	0.20
Sulfate		46.3	mg/L	5	0.50

Sample: 172387 - MW-5

Analysis: Salts | Analytical Method: S 6010B | QC Batch: QC12079 | Date Analyzed: 6/20/01
Analyst: LDB | Preparation Method: E 3005 A | Prep Batch: PB10067 | Date Prepared: 6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		93.6	mg/L	1.10	0.50
Dissolved Magnesium		12.1	mg/L	1.10	0.50
Dissolved Potassium		3.44	mg/L	1.10	0.50
Dissolved Sodium		50.6	mg/L	1.10	0.50

Sample: 172387 - MW-5

Analysis: TDS | Analytical Method: E 160.1 | QC Batch: QC11651 | Date Analyzed: 6/5/01
Analyst: JS | Preparation Method: N/A | Prep Batch: PB09969 | Date Prepared: 6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		<10	mg/L	1	10

Sample: 172387 - MW-5

Analysis: Total Metals | Analytical Method: S 6010B | QC Batch: QC11834 | Date Analyzed: 6/8/01
Analyst: LDB | Preparation Method: E 3010A | Prep Batch: PB10135 | Date Prepared: 6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		139	mg/L	1	0.50
Total Magnesium		18.3	mg/L	1	0.50
Total Potassium		5.05	mg/L	1	0.50
Total Sodium		60.3	mg/L	1	0.50

Sample: 172387 - MW-5

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC11817	Date Analyzed:	6/4/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10105	Date Prepared:	6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[9]	7.3	s.u.	1	1

Sample: 172388 - MW-6

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC11715	Date Analyzed:	6/5/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10013	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		162	mg/L as CaCo3	1	1
Total Alkalinity		162	mg/L as CaCo3	1	1

Sample: 172388 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11761	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10059	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0909	mg/L	1	0.10	90	72 - 128
4-BFB		0.0792	mg/L	1	0.10	79	72 - 128

Sample: 172388 - MW-6

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC11751	Date Analyzed:	6/6/01
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB10053	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		1262	μMHOS/cm	1	

Sample: 172388 - MW-6

Analysis:	Hg, Total	Analytical Method:	S 7470A	QC Batch:	QC11677	Date Analyzed:	6/5/01
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB09989	Date Prepared:	6/5/01

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		0.00053	mg/L	1	0.0002

[9] Sample run out of holding time

Sample: 172388 - MW-6

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC11647 Date Analyzed: 6/2/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09968 Date Prepared: 6/2/01

Param	Flag	Result	Units	Dilution	RDL
CL		241	mg/L	5	0.50
Fluoride		2.99	mg/L	5	0.20
Nitrate-N		<1.00	mg/L	5	0.20
Sulfate		68.0	mg/L	5	0.50

Sample: 172388 - MW-6

Analysis: Salts Analytical Method: S 6010B QC Batch: QC12079 Date Analyzed: 6/20/01
Analyst: LDB Preparation Method: E 3005 A Prep Batch: PB10067 Date Prepared: 6/7/01

Param	Flag	Result	Units	Dilution	RDL
Dissolved Calcium		16.9	mg/L	1.10	0.50
Dissolved Magnesium		2.28	mg/L	1.10	0.50
Dissolved Potassium		2.74	mg/L	1.10	0.50
Dissolved Sodium		187	mg/L	1.10	0.50

Sample: 172388 - MW-6

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC11651 Date Analyzed: 6/5/01
Analyst: JS Preparation Method: N/A Prep Batch: PB09969 Date Prepared: 6/4/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		<10	mg/L	1	10

Sample: 172388 - MW-6

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC11834 Date Analyzed: 6/8/01
Analyst: LDB Preparation Method: E 3010A Prep Batch: PB10135 Date Prepared: 6/12/01

Param	Flag	Result	Units	Dilution	RDL
Total Calcium		23.3	mg/L	1	0.50
Total Magnesium		2.74	mg/L	1	0.50
Total Potassium		2.73	mg/L	1	0.50
Total Sodium		210	mg/L	1	0.50

Sample: 172388 - MW-6

Analysis: pH Analytical Method: E 150.1 QC Batch: QC11817 Date Analyzed: 6/4/01
Analyst: RS Preparation Method: N/A Prep Batch: PB10105 Date Prepared: 6/4/01

Param	Flag	Result	Units	Dilution	RDL
pH	[10]	7.9	s.u.	1	1

[10] Sample run out of holding time

Sample: 172389 - Duplicate 1

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11761	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10059	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0905	mg/L	1	0.10	90	72 - 128
4-BFB		0.0785	mg/L	1	0.10	78	72 - 128

Sample: 172390 - Field Blank

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC11769	Date Analyzed:	6/6/01
Analyst:	JW	Preparation Method:	E 5030B	Prep Batch:	PB10060	Date Prepared:	6/6/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		0.0012	mg/L	1	0.001
Total BTEX		0.0012	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0919	mg/L	1	0.10	91	72 - 128
4-BFB		0.0793	mg/L	1	0.10	79	72 - 128

Quality Control Report
Method Blank

Method Blank

QCBatch: QC11647

Param	Flag	Results	Units	Reporting Limit
CL		<2.0	mg/L	0.50
Fluoride		<0.2	mg/L	0.20
Nitrate-N		<0.2	mg/L	0.20
Sulfate		<2.0	mg/L	0.50

Method Blank

QCBatch: QC11650

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<10	mg/L	10

Method Blank

QCBatch: QC11651

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<10	mg/L	10

Method Blank

QCBatch: QC11676

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.0002	mg/L	0.0002

Method Blank

QCBatch: QC11677

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.0002	mg/L	0.0002

Method Blank

QCBatch: QC11715

Param	Flag	Results	Units	Reporting Limit
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.0	mg/L as CaCo3	1
Total Alkalinity		<4.0	mg/L as CaCo3	1

Method Blank

QCBatch: QC11751

Param	Flag	Results	Units	Reporting Limit
Specific Conductance		4.47	µMHOS/cm	

Method Blank

QCBatch: QC11761

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0998	mg/L	1	0.10	99	72 - 128
4-BFB		0.0891	mg/L	1	0.10	89	72 - 128

Method Blank

QCBatch: QC11769

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0957	mg/L	1	0.10	95	72 - 128
4-BFB		0.0819	mg/L	1	0.10	81	72 - 128

Method Blank

QCBatch: QC11834

Param	Flag	Results	Units	Reporting Limit
Total Calcium		<0.5	mg/L	0.50
Total Magnesium		<0.5	mg/L	0.50
Total Potassium		<0.5	mg/L	0.50
Total Sodium		<0.5	mg/L	0.50

Method Blank

QCBatch: QC12079

Param	Flag	Results	Units	Reporting Limit
Dissolved Calcium		<0.5	mg/L	0.50
Dissolved Magnesium		<0.5	mg/L	0.50
Dissolved Potassium		0.6	mg/L	0.50
Dissolved Sodium		0.6	mg/L	0.50

Quality Control Report
Duplicate Samples

Duplicate

QCBatch: QC11650

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		2590	2500	mg/L	1	3	8.9

Duplicate

QCBatch: QC11715

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	7
Carbonate Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	7
Bicarbonate Alkalinity		162	162	mg/L as CaCo3	1	0	7
Total Alkalinity		162	162	mg/L as CaCo3	1	0	7

Duplicate

QCBatch: QC11751

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance		1239	1262	μMHOS/cm	1	1	5.9

Duplicate

QCBatch: QC11817

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH		7.9	7.9	s.u.	1	0	0.99

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC11647

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	11.58	11.55	mg/L	1	12.50	<2.0	92	0	90 - 110	20

Continued

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Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Fluoride	2.33	2.35	mg/L	1	2.50	<0.2	93	0	90 - 110	20
Nitrate-N	2.33	2.35	mg/L	1	2.50	<0.2	93	0	90 - 110	20
Sulfate	11.43	11.79	mg/L	1	12.50	<2.0	91	3	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC11676

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Mercury	0.00108	0.00107	mg/L	1	0.001	<0.0002	108	0	84 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC11677

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Mercury	0.00108	0.00107	mg/L	1	0.001	<0.0002	108	0	84 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC11761

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.104	0.104	mg/L	1	0.10	<0.001	104	0	80 - 120	20
Benzene	0.0981	0.099	mg/L	1	0.10	<0.001	98	0	80 - 120	20
Toluene	0.0986	0.0998	mg/L	1	0.10	<0.001	98	1	80 - 120	20
Ethylbenzene	0.099	0.1	mg/L	1	0.10	<0.001	99	1	80 - 120	20
M,P,O-Xylene	0.284	0.288	mg/L	1	0.30	<0.001	94	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.102	0.102	mg/L	1	0.10	102	102	72 - 128
4-BFB	0.101	0.101	mg/L	1	0.10	101	101	72 - 128

Laboratory Control Spikes

QCBatch: QC11769

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0973	0.0915	mg/L	1	0.10	<0.001	97	6	80 - 120	20
Benzene	0.102	0.0926	mg/L	1	0.10	<0.001	102	9	80 - 120	20
Toluene	0.102	0.0927	mg/L	1	0.10	<0.001	102	9	80 - 120	20

Continued ...

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Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Ethylbenzene	0.102	0.0921	mg/L	1	0.10	<0.001	102	10	80 - 120	20
M,P,O-Xylene	0.293	0.265	mg/L	1	0.30	<0.001	97	10	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0993	0.0955	mg/L	1	0.10	99	95	72 - 128
4-BFB	0.101	0.0961	mg/L	1	0.10	101	96	72 - 128

Laboratory Control Spikes

QCBatch: QC12079

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Dissolved Calcium	90.5	87.8	mg/L	1	100	<0.5	90	3	75 - 125	20
Dissolved Magnesium	86.3	82.3	mg/L	1	100	<0.5	86	4	75 - 125	20
Dissolved Potassium	91.3	88.1	mg/L	1	100	0.6	91	3	75 - 125	20
Dissolved Sodium	88.6	85.4	mg/L	1	100	0.6	88	3	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC11647

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
CL	296.05	298.16	mg/L	1	62.50	241	88	3	52 - 131	20
Fluoride	13.98	15.35	mg/L	1	12.50	2.99	87	11	80 - 113	20
Nitrate-N	12.14	12.00	mg/L	1	12.50	<1.00	97	1	84 - 105	20
Sulfate	127.85	124.85	mg/L	1	62.50	68.0	95	5	79 - 104	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

QCBatch: QC11676

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Mercury	0.00106	0.00106	mg/L	1	0.001	<0.0002	106	0	84 - 127	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

QCBatch: QC11677

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Mercury	0.00113	0.00083	mg/L	1	0.001	<0.0002	113	30	84 - 127	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

QCBatch: QC11834

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Phosphorous	5.40	5.19	mg/L	1	1	64.2	0	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

QCBatch: QC12079

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Dissolved Calcium	677	655	mg/L	1	100	541	136	17	75 - 125	20
Dissolved Magnesium	358	308	mg/L	1	100	176	182	31	75 - 125	20
Dissolved Potassium	190	168	mg/L	1	100	29.7	160	14	75 - 125	20
Dissolved Sodium	2437	2309	mg/L	1	100	2303	134	182	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC11647

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.46	98	90 - 110	6/2/01
CL		mg/L	12.50	11.52	92	90 - 110	6/2/01
Fluoride		mg/L	2.50	2.28	91	90 - 110	6/2/01
Nitrate-N		mg/L	2.50	2.34	93	90 - 110	6/2/01
Sulfate		mg/L	12.50	11.73	93	90 - 110	6/2/01

ICV (1)

QCBatch: QC11647

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.37	94	90 - 110	6/2/01
CL		mg/L	12.50	12.42	99	90 - 110	6/2/01

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Fluoride		mg/L	2.50	2.31	92	90 - 110	6/2/01
Nitrate-N		mg/L	2.50	2.37	94	90 - 110	6/2/01
Sulfate		mg/L	12.50	11.84	94	90 - 110	6/2/01

CCV (1) QCBatch: QC11650

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	983	98	90 - 110	6/5/01

ICV (1) QCBatch: QC11650

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	985	98	90 - 110	6/5/01

CCV (1) QCBatch: QC11676

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00099	99	80 - 120	6/5/01

ICV (1) QCBatch: QC11676

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.0011	110	80 - 120	6/5/01

CCV (1) QCBatch: QC11677

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.00088	88	80 - 120	6/5/01

ICV (1) QCBatch: QC11677

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.001	0.0011	110	80 - 120	6/5/01

CCV (1) QCBatch: QC11715

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	6/5/01
Carbonate Alkalinity		mg/L as CaCo3	0	220	0	90 - 110	6/5/01
Bicarbonate Alkalinity		mg/L as CaCo3	0	24	0	90 - 110	6/5/01
Total Alkalinity		mg/L as CaCo3	250	244	97	90 - 110	6/5/01

ICV (1) QCBatch: QC11715

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	6/5/01
Carbonate Alkalinity		mg/L as CaCo3	0	228	0	90 - 110	6/5/01
Bicarbonate Alkalinity		mg/L as CaCo3	0	18	0	90 - 110	6/5/01
Total Alkalinity		mg/L as CaCo3	250	246	98	90 - 110	6/5/01

CCV (1) QCBatch: QC11751

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1412	1400	99	90 - 110	6/6/01

ICV (1) QCBatch: QC11751

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		μMHOS/cm	1402	1392	99	90 - 110	6/6/01

CCV (1) QCBatch: QC11761

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0967	96	85 - 115	6/6/01
Benzene		mg/L	0.10	0.1	100	85 - 115	6/6/01

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.1	100	85 - 115	6/6/01
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	6/6/01
M,P,O-Xylene		mg/L	0.30	0.29	96	85 - 115	6/6/01

CCV (2)

QCBatch: QC11761

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0931	93	85 - 115	6/6/01
Benzene		mg/L	0.10	0.0955	95	85 - 115	6/6/01
Toluene		mg/L	0.10	0.0957	95	85 - 115	6/6/01
Ethylbenzene		mg/L	0.10	0.0958	95	85 - 115	6/6/01
M,P,O-Xylene		mg/L	0.30	0.276	92	85 - 115	6/6/01

ICV (1)

QCBatch: QC11761

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.111	111	85 - 115	6/6/01
Benzene		mg/L	0.10	0.102	102	85 - 115	6/6/01
Toluene		mg/L	0.10	0.102	102	85 - 115	6/6/01
Ethylbenzene		mg/L	0.10	0.103	103	85 - 115	6/6/01
M,P,O-Xylene		mg/L	0.30	0.296	98	85 - 115	6/6/01

CCV (1)

QCBatch: QC11769

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.084	84	85 - 115	6/6/01
Benzene		mg/L	0.10	0.0859	85	85 - 115	6/6/01
Toluene		mg/L	0.10	0.0859	85	85 - 115	6/6/01
Ethylbenzene		mg/L	0.10	0.0854	85	85 - 115	6/6/01
M,P,O-Xylene		mg/L	0.30	0.245	81	85 - 115	6/6/01

CCV (2)

QCBatch: QC11769

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0948	94	85 - 115	6/6/01
Benzene		mg/L	0.10	0.0939	93	85 - 115	6/6/01

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.094	94	85 - 115	6/6/01
Ethylbenzene		mg/L	0.10	0.0949	94	85 - 115	6/6/01
M,P,O-Xylene		mg/L	0.30	0.272	90	85 - 115	6/6/01

ICV (1) QCBatch: QC11769

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0864	86	85 - 115	6/6/01
Benzene		mg/L	0.10	0.0968	96	85 - 115	6/6/01
Toluene		mg/L	0.10	0.0972	97	85 - 115	6/6/01
Ethylbenzene		mg/L	0.10	0.0974	97	85 - 115	6/6/01
M,P,O-Xylene		mg/L	0.30	0.279	93	85 - 115	6/6/01

ICV (1) QCBatch: QC11817

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	-0.1 s.u. - +0.1 s.u.	6/4/01

CCV (1) QCBatch: QC11834

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Phosphorous		mg/L	1	0.91	0	90 - 110	6/8/01

ICV (1) QCBatch: QC11834

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Phosphorous		mg/L	1	1.01	0	90 - 110	6/8/01

CCV (1) QCBatch: QC12079

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25	25	100	90 - 110	6/20/01

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Magnesium		mg/L	25	23.8	95	90 - 110	6/20/01
Dissolved Potassium		mg/L	25	25.3	101	90 - 110	6/20/01
Dissolved Sodium		mg/L	25	25.1	100	90 - 110	6/20/01

ICV (1)

QCBatch: QC12079

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	25	25.5	102	95 - 105	6/20/01
Dissolved Magnesium		mg/L	25	24.5	98	95 - 105	6/20/01
Dissolved Potassium		mg/L	25	24.4	97	95 - 105	6/20/01
Dissolved Sodium		mg/L	25	24.5	98	95 - 105	6/20/01

Analytical and Quality Control Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: September 3, 2001

Order ID Number: A01082916

Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
178201	MW-8	Water	8/28/01	9:55	8/29/01
178202	MW-10	Water	8/28/01	10:30	8/29/01
178203	MW-9	Water	8/28/01	11:05	8/29/01
178204	MW-3	Water	8/28/01	11:48	8/29/01
178205	North Water Well	Water	8/28/01	14:55	8/29/01
178206	South Water Well	Water	8/28/01	15:10	8/29/01

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 7 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 178201 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC13704	Date Analyzed:	8/29/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB11696	Date Prepared:	8/29/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.075	mg/L	1	0.10	75	72 - 128
4-BFB		0.072	mg/L	1	0.10	72	72 - 128

Sample: 178202 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC13704	Date Analyzed:	8/29/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB11696	Date Prepared:	8/29/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.073	mg/L	1	0.10	73	72 - 128
4-BFB	[1]	0.070	mg/L	1	0.10	70	72 - 128

Sample: 178203 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC13675	Date Analyzed:	8/28/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB11668	Date Prepared:	8/28/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

[1] Low surrogate recovery due to matrix difficulties.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.072	mg/L	1	0.10	72	72 - 128
4-BFB	[2]	0.069	mg/L	1	0.10	69	72 - 128

Sample: 178204 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC13704	Date Analyzed:	8/29/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB11696	Date Prepared:	8/29/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.037	mg/L	1	0.001
Toluene		0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		0.004	mg/L	1	0.001
Total BTEX		0.042	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.077	mg/L	1	0.10	77	72 - 128
4-BFB		0.100	mg/L	1	0.10	100	72 - 128

Sample: 178205 - North Water Well

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC13704	Date Analyzed:	8/29/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB11696	Date Prepared:	8/29/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.003	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.003	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[3]	0.069	mg/L	1	0.10	69	72 - 128
4-BFB	[4]	0.065	mg/L	1	0.10	65	72 - 128

Sample: 178206 - South Water Well

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC13704	Date Analyzed:	8/29/01
Analyst:	CG	Preparation Method:	E 5030B	Prep Batch:	PB11696	Date Prepared:	8/29/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001

Continued ...

[2] Low surrogate recovery due to matrix difficulties.
[3] Low surrogate recovery due to lack of mixing.
[4] Low surrogate recovery due to lack of mixing.

... *Continued* Sample: 178206 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[5]	0.068	mg/L	1	0.10	68	72 - 128
4-BFB	[6]	0.064	mg/L	1	0.10	64	72 - 128

[5] Low surrogate recovery due to lack of mixing.
[6] Low surrogate recovery due to lack of mixing.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC13675

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.088	mg/L	1	0.10	88	72 - 128
4-BFB		0.082	mg/L	1	0.10	82	72 - 128

Method Blank

QCBatch: QC13704

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.098	mg/L	1	0.10	98	72 - 128
4-BFB		0.091	mg/L	1	0.10	91	72 - 128

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC13675

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.095	0.093	mg/L	1	0.10	<0.001	95	2	80 - 120	20
Benzene	0.091	0.091	mg/L	1	0.10	<0.001	91	0	80 - 120	20
Toluene	0.095	0.095	mg/L	1	0.10	<0.001	95	0	80 - 120	20
Ethylbenzene	0.095	0.095	mg/L	1	0.10	<0.001	95	0	80 - 120	20
M,P,O-Xylene	0.283	0.284	mg/L	1	0.30	<0.001	94	0	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.084	0.085	mg/L	1	0.10	84	85	72 - 128
4-BFB	0.084	0.084	mg/L	1	0.10	84	84	72 - 128

Laboratory Control Spikes

QCBatch: QC13704

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.100	0.102	mg/L	1	0.10	<0.001	100	2	80 - 120	20
Benzene	0.091	0.094	mg/L	1	0.10	<0.001	91	3	80 - 120	20
Toluene	0.094	0.096	mg/L	1	0.10	<0.001	94	2	80 - 120	20
Ethylbenzene	0.093	0.096	mg/L	1	0.10	<0.001	93	3	80 - 120	20
M,P,O-Xylene	0.282	0.289	mg/L	1	0.30	<0.001	94	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.097	0.098	mg/L	1	0.10	97	98	72 - 128
4-BFB	0.098	0.099	mg/L	1	0.10	98	99	72 - 128

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC13675

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.095	95	85 - 115	8/28/01
Benzene		mg/L	0.10	0.090	90	85 - 115	8/28/01
Toluene		mg/L	0.10	0.094	94	85 - 115	8/28/01
Ethylbenzene		mg/L	0.10	0.095	95	85 - 115	8/28/01
M,P,O-Xylene		mg/L	0.30	0.282	94	85 - 115	8/28/01

CCV (2)

QCBatch: QC13675

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.092	92	85 - 115	8/28/01
Benzene		mg/L	0.10	0.088	88	85 - 115	8/28/01
Toluene		mg/L	0.10	0.091	91	85 - 115	8/28/01
Ethylbenzene		mg/L	0.10	0.092	92	85 - 115	8/28/01
M,P,O-Xylene		mg/L	0.30	0.273	91	85 - 115	8/28/01

ICV (1)

QCBatch: QC13675

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.094	94	85 - 115	8/28/01
Benzene		mg/L	0.10	0.089	89	85 - 115	8/28/01
Toluene		mg/L	0.10	0.093	93	85 - 115	8/28/01
Ethylbenzene		mg/L	0.10	0.092	92	85 - 115	8/28/01
M,P,O-Xylene		mg/L	0.30	0.276	92	85 - 115	8/28/01

CCV (1)

QCBatch: QC13704

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.096	96	85 - 115	8/29/01
Benzene		mg/L	0.10	0.087	87	85 - 115	8/29/01
Toluene		mg/L	0.10	0.089	89	85 - 115	8/29/01
Ethylbenzene		mg/L	0.10	0.089	89	85 - 115	8/29/01
M,P,O-Xylene		mg/L	0.30	0.269	90	85 - 115	8/29/01

CCV (2)

QCBatch: QC13704

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.096	96	85 - 115	8/29/01
Benzene		mg/L	0.10	0.089	89	85 - 115	8/29/01
Toluene		mg/L	0.10	0.091	91	85 - 115	8/29/01
Ethylbenzene		mg/L	0.10	0.091	91	85 - 115	8/29/01
M,P,O-Xylene		mg/L	0.30	0.274	91	85 - 115	8/29/01

ICV (1)

QCBatch: QC13704

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.110	110	85 - 115	8/29/01
Benzene		mg/L	0.10	0.099	99	85 - 115	8/29/01
Toluene		mg/L	0.10	0.102	102	85 - 115	8/29/01
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	8/29/01
M,P,O-Xylene		mg/L	0.30	0.309	103	85 - 115	8/29/01

Summary Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: January 8, 2002

Order ID Number: A01122101

Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
187792	MW-2	Water	12/19/01	9:55	12/20/01
187793	MW-4	Water	12/19/01	10:40	12/20/01
187794	MW-8	Water	12/19/01	11:20	12/20/01
187795	MW-10	Water	12/19/01	12:05	12/20/01
187796	MW-9	Water	12/19/01	12:46	12/20/01
187797	MW-3	Water	12/19/01	13:14	12/20/01
187798	South Water Well	Water	12/19/01	13:55	12/20/01
187799	North Water Well	Water	12/19/01	13:47	12/20/01
187800	MW-5	Water	12/19/01	14:14	12/20/01
187801	MW-6	Water	12/19/01	15:20	12/20/01
187802	Duplicate	Water	12/19/01	:	12/20/01
187803	Field Blank	Water	12/19/01	:	12/20/01

This report consists of a total of 4 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
187792 - MW-2	<0.005	<0.005	<0.005	<0.005	<0.005
187793 - MW-4	<0.005	<0.005	<0.005	<0.005	<0.005
187794 - MW-8	<0.001	<0.001	<0.001	<0.001	<0.001
187795 - MW-10	<0.001	<0.001	<0.001	<0.001	<0.001
187796 - MW-9	<0.005	<0.005	<0.005	<0.005	<0.005
187797 - MW-3	<0.005	<0.005	<0.005	<0.005	<0.005
187798 - South Water Well	<0.001	<0.001	<0.001	<0.001	<0.001
187799 - North Water Well	<0.001	<0.001	<0.001	<0.001	<0.001
187800 - MW-5	<0.001	<0.001	<0.001	<0.001	<0.001
187801 - MW-6	<0.001	<0.001	<0.001	<0.001	<0.001
187802 - Duplicate	<0.001	<0.001	<0.001	<0.001	<0.001
187803 - Field Blank	<0.001	<0.001	<0.001	<0.001	<0.001

Sample: 187792 - MW-2

Param	Flag	Result	Units
Chloride		79.0	mg/L
Fluoride		1.57	mg/L
Nitrate-N		3.38	mg/L

Continued on next page ...

Sample 187792 continued ...

Param	Flag	Result	Units
Sulfate		62.8	mg/L
Total Dissolved Solids		549	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		0.119	mg/L
Total Boron		0.644	mg/L
Total Iron		0.243	mg/L
Total Manganese		<0.02	mg/L
Total Vanadium		<0.02	mg/L

Sample: 187793 - MW-4

Param	Flag	Result	Units
Chloride		21.9	mg/L
Fluoride		1.58	mg/L
Nitrate-N		2.87	mg/L
Sulfate		76.4	mg/L
Total Dissolved Solids		394	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		0.153	mg/L
Total Boron		0.181	mg/L
Total Iron		0.930	mg/L
Total Manganese		<0.02	mg/L
Total Vanadium		0.0266	mg/L

Sample: 187794 - MW-8

Param	Flag	Result	Units
Chloride	[1]	397	mg/L
Fluoride		1.76	mg/L
Nitrate-N		5.41	mg/L
Sulfate		101	mg/L
Total Dissolved Solids		1160	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		0.132	mg/L
Total Boron		0.676	mg/L
Total Iron		0.180	mg/L
Total Manganese		<0.02	mg/L
Total Vanadium		0.025	mg/L

Sample: 187795 - MW-10

Param	Flag	Result	Units
Chloride		29.8	mg/L
Fluoride		1.49	mg/L
Nitrate-N		3.09	mg/L

Continued on next page ...

[1]Chloride re-ran on IC122101-3.sch (PB16670; QC16849). ICV %IA = 102; CCV %IA = 100; matrix spikes RPD = 1; %EA = 97; LCS spikes RPD = 0; %EA = 100.

Sample 187795 continued ...

Param	Flag	Result	Units
Sulfate		91.2	mg/L
Total Dissolved Solids		450	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		0.136	mg/L
Total Boron		0.170	mg/L
Total Iron		0.408	mg/L
Total Manganese		<0.02	mg/L
Total Vanadium		0.0263	mg/L

Sample: 187796 - MW-9

Param	Flag	Result	Units
Chloride	[2]	269	mg/L
Fluoride		3.93	mg/L
Nitrate-N		3.71	mg/L
Sulfate		70.1	mg/L
Total Dissolved Solids		944	mg/L
Total Arsenic		0.0156	mg/L
Total Barium		0.182	mg/L
Total Boron		0.181	mg/L
Total Iron		0.528	mg/L
Total Manganese		0.112	mg/L
Total Vanadium		0.0396	mg/L

Sample: 187797 - MW-3

Param	Flag	Result	Units
Chloride	[3]	548	mg/L
Fluoride		1.01	mg/L
Nitrate-N		<1.00	mg/L
Sulfate		29.0	mg/L
Total Dissolved Solids		1400	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		0.389	mg/L
Total Boron		0.555	mg/L
Total Iron		0.952	mg/L
Total Manganese		0.688	mg/L
Total Vanadium		<0.02	mg/L

Sample: 187800 - MW-5

Param	Flag	Result	Units
Chloride		68.8	mg/L
Fluoride		1.03	mg/L

Continued on next page ...

[2]Chloride re-ran on IC122101-3.sch (PB16670; QC16849). ICV %IA = 102; CCV %IA = 100; matrix spikes RPD = 1; %EA = 97; LCS spikes RPD = 0; %EA = 100.

[3]Chloride re-ran on IC122101-3.sch (PB16670; QC16849). ICV %IA = 102; CCV %IA = 100; matrix spikes RPD = 1; %EA = 97; LCS spikes RPD = 0; %EA = 100.

Sample 187800 continued ...

Param	Flag	Result	Units
Nitrate-N		1.90	mg/L
Sulfate		49.7	mg/L
Total Dissolved Solids		603	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		0.187	mg/L
Total Boron		0.158	mg/L
Total Iron		1.64	mg/L
Total Manganese		<0.02	mg/L
Total Vanadium		<0.02	mg/L

Sample: 187801 - MW-6

Param	Flag	Result	Units
Chloride		171	mg/L
Fluoride		3.97	mg/L
Nitrate-N		<1.00	mg/L
Sulfate		61.4	mg/L
Total Dissolved Solids		667	mg/L
Total Arsenic		0.0821	mg/L
Total Barium		0.102	mg/L
Total Boron		0.112	mg/L
Total Iron		1.11	mg/L
Total Manganese		0.0489	mg/L
Total Vanadium		0.222	mg/L

Analytical and Quality Control Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: January 8, 2002

Order ID Number: A01122101

Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
187792	MW-2	Water	12/19/01	9:55	12/20/01
187793	MW-4	Water	12/19/01	10:40	12/20/01
187794	MW-8	Water	12/19/01	11:20	12/20/01
187795	MW-10	Water	12/19/01	12:05	12/20/01
187796	MW-9	Water	12/19/01	12:46	12/20/01
187797	MW-3	Water	12/19/01	13:14	12/20/01
187798	South Water Well	Water	12/19/01	13:55	12/20/01
187799	North Water Well	Water	12/19/01	13:47	12/20/01
187800	MW-5	Water	12/19/01	14:14	12/20/01
187801	MW-6	Water	12/19/01	15:20	12/20/01
187802	Duplicate	Water	12/19/01	:	12/20/01
187803	Field Blank	Water	12/19/01	:	12/20/01

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 19 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 187792 - MW-2

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC16977 | Date Analyzed: 12/31/01
Analyst: CG | Preparation Method: S 5030B | Prep Batch: PB16762 | Date Prepared: 12/31/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.416	mg/L	5	0.10	83	72 - 128
4-BFB		0.384	mg/L	5	0.10	77	72 - 128

Sample: 187792 - MW-2

Analysis: Ion Chromatography (IC) | Analytical Method: E 300.0 | QC Batch: QC16847 | Date Analyzed: 12/21/01
Analyst: JS | Preparation Method: N/A | Prep Batch: PB16668 | Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride		79.0	mg/L	5	0.50
Fluoride		1.57	mg/L	5	0.20
Nitrate-N		3.38	mg/L	5	0.20
Sulfate		62.8	mg/L	5	0.50

Sample: 187792 - MW-2

Analysis: TDS | Analytical Method: E 160.1 | QC Batch: QC17045 | Date Analyzed: 12/27/01
Analyst: JS | Preparation Method: N/A | Prep Batch: PB16826 | Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		549	mg/L	1	10

Sample: 187792 - MW-2

Analysis: Total Metals | Analytical Method: S 6010B | QC Batch: QC16871 | Date Analyzed: 12/26/01
Analyst: RR | Preparation Method: S 3010A | Prep Batch: PB16622 | Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		0.119	mg/L	1	0.10
Total Boron		0.644	mg/L	1	0.01
Total Iron		0.243	mg/L	1	0.05
Total Manganese		<0.02	mg/L	1	0.02
Total Vanadium		<0.02	mg/L	1	0.02

Sample: 187793 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC16977	Date Analyzed:	12/31/01
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB16762	Date Prepared:	12/31/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.401	mg/L	5	0.10	80	72 - 128
4-BFB		0.378	mg/L	1	0.10	76	72 - 128

Sample: 187793 - MW-4

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC16847	Date Analyzed:	12/21/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB16668	Date Prepared:	12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride		21.9	mg/L	5	0.50
Fluoride		1.58	mg/L	5	0.20
Nitrate-N		2.87	mg/L	5	0.20
Sulfate		76.4	mg/L	5	0.50

Sample: 187793 - MW-4

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC17045	Date Analyzed:	12/27/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB16826	Date Prepared:	12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		394	mg/L	1	10

Sample: 187793 - MW-4

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC16871	Date Analyzed:	12/26/01
Analyst:	RR	Preparation Method:	S 3010A	Prep Batch:	PB16622	Date Prepared:	12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		0.153	mg/L	1	0.10
Total Boron		0.181	mg/L	1	0.01
Total Iron		0.930	mg/L	1	0.05
Total Manganese		<0.02	mg/L	1	0.02
Total Vanadium		0.0266	mg/L	1	0.02

Sample: 187794 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC16853	Date Analyzed:	12/27/01
Analyst:	DN	Preparation Method:	S 5030B	Prep Batch:	PB16673	Date Prepared:	12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.096	mg/L	1	0.10	96	72 - 128
4-BFB		0.0982	mg/L	5	0.10	98	72 - 128

Sample: 187794 - MW-8

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC16847 Date Analyzed: 12/21/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16668 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride	[1]	397	mg/L	50	0.50
Fluoride		1.76	mg/L	5	0.20
Nitrate-N		5.41	mg/L	5	0.20
Sulfate		101	mg/L	5	0.50

Sample: 187794 - MW-8

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC17045 Date Analyzed: 12/27/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16826 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		1160	mg/L	2	10

Sample: 187794 - MW-8

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16871 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: S 3010A Prep Batch: PB16622 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		0.132	mg/L	1	0.10
Total Boron		0.676	mg/L	1	0.01
Total Iron		0.180	mg/L	1	0.05
Total Manganese		<0.02	mg/L	1	0.02
Total Vanadium		0.025	mg/L	1	0.02

Sample: 187795 - MW-10

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16853 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: S 5030B Prep Batch: PB16673 Date Prepared: 12/27/01

[1] Chloride re-ran on IC122101-3.sch (PB16670; QC16849). ICV %IA = 102; CCV %IA = 100; matrix spikes RPD = 1; %EA = 97; LCS spikes RPD = 0; %EA = 100.

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0806	mg/L	1	0.10	81	72 - 128
4-BFB		0.0867	mg/L	1	0.10	87	72 - 128

Sample: 187795 - MW-10

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC16847 Date Analyzed: 12/21/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16668 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride		29.8	mg/L	5	0.50
Fluoride		1.49	mg/L	5	0.20
Nitrate-N		3.09	mg/L	5	0.20
Sulfate		91.2	mg/L	5	0.50

Sample: 187795 - MW-10

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC17045 Date Analyzed: 12/27/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16826 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		450	mg/L	1	10

Sample: 187795 - MW-10

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16871 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: S 3010A Prep Batch: PB16622 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		0.136	mg/L	1	0.10
Total Boron		0.170	mg/L	1	0.01
Total Iron		0.408	mg/L	1	0.05
Total Manganese		<0.02	mg/L	1	0.02
Total Vanadium		0.0263	mg/L	1	0.02

Sample: 187796 - MW-9

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16977 Date Analyzed: 12/31/01
Analyst: CG Preparation Method: S 5030B Prep Batch: PB16762 Date Prepared: 12/31/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001

Continued ...

... *Continued* Sample: 187796 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.417	mg/L	5	0.10	83	72 - 128
4-BFB		0.397	mg/L	5	0.10	79	72 - 128

Sample: 187796 - MW-9

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC16847 Date Analyzed: 12/21/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16668 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride	[2]	269	mg/L	10	0.50
Fluoride		3.93	mg/L	5	0.20
Nitrate-N		3.71	mg/L	5	0.20
Sulfate		70.1	mg/L	5	0.50

Sample: 187796 - MW-9

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC17045 Date Analyzed: 12/27/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16826 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		944	mg/L	2	10

Sample: 187796 - MW-9

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16871 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: S 3010A Prep Batch: PB16622 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		0.0156	mg/L	1	0.01
Total Barium		0.182	mg/L	1	0.10
Total Boron		0.181	mg/L	1	0.01
Total Iron		0.528	mg/L	1	0.05
Total Manganese		0.112	mg/L	1	0.02
Total Vanadium		0.0396	mg/L	1	0.02

Sample: 187797 - MW-3

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16977 Date Analyzed: 12/31/01
Analyst: CG Preparation Method: S 5030B Prep Batch: PB16762 Date Prepared: 12/31/01

[2]Chloride re-ran on IC122101-3.sch (PB16670; QC16849). ICV %IA = 102; CCV %IA = 100; matrix spikes RPD = 1; %EA = 97; LCS spikes RPD = 0; %EA = 100.

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.419	mg/L	5	0.10	84	72 - 128
4-BFB		0.419	mg/L	5	0.10	84	72 - 128

Sample: 187797 - MW-3

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC16847 Date Analyzed: 12/21/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16668 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride	[3]	548	mg/L	50	0.50
Fluoride		1.01	mg/L	5	0.20
Nitrate-N		<1.00	mg/L	5	0.20
Sulfate		29.0	mg/L	5	0.50

Sample: 187797 - MW-3

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC17045 Date Analyzed: 12/27/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16826 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		1400	mg/L	2	10

Sample: 187797 - MW-3

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16871 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: S 3010A Prep Batch: PB16622 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		0.389	mg/L	1	0.10
Total Boron		0.555	mg/L	1	0.01
Total Iron		0.952	mg/L	1	0.05
Total Manganese		0.688	mg/L	1	0.02
Total Vanadium		<0.02	mg/L	1	0.02

Sample: 187798 - South Water Well

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16853 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: S 5030B Prep Batch: PB16673 Date Prepared: 12/27/01

[3]Chloride re-ran on IC122101-3.sch (PB16670; QC16849). ICV %IA = 102; CCV %IA = 100; matrix spikes RPD = 1; %EA = 97; LCS spikes RPD = 0; %EA = 100.

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0861	mg/L	1	0.10	86	72 - 128
4-BFB		0.0905	mg/L	1	0.10	90	72 - 128

Sample: 187799 - North Water Well

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16853 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: S 5030B Prep Batch: PB16673 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0876	mg/L	1	0.10	88	72 - 128
4-BFB		0.0902	mg/L	1	0.10	90	72 - 128

Sample: 187800 - MW-5

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16853 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: S 5030B Prep Batch: PB16673 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0904	mg/L	1	0.10	90	72 - 128
4-BFB		0.0945	mg/L	1	0.10	94	72 - 128

Sample: 187800 - MW-5

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC16847 Date Analyzed: 12/21/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16668 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride		68.8	mg/L	5	0.50
Fluoride		1.03	mg/L	5	0.20
Nitrate-N		1.90	mg/L	5	0.20
Sulfate		49.7	mg/L	5	0.50

Sample: 187800 - MW-5

Analysis: TDS | Analytical Method: E 160.1 | QC Batch: QC17044 | Date Analyzed: 12/26/01
Analyst: JS | Preparation Method: N/A | Prep Batch: PB16825 | Date Prepared: 12/24/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		603	mg/L	1	10

Sample: 187800 - MW-5

Analysis: Total Metals | Analytical Method: S 6010B | QC Batch: QC16871 | Date Analyzed: 12/26/01
Analyst: RR | Preparation Method: S 3010A | Prep Batch: PB16622 | Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		0.187	mg/L	1	0.10
Total Boron		0.158	mg/L	1	0.01
Total Iron		1.64	mg/L	1	0.05
Total Manganese		<0.02	mg/L	1	0.02
Total Vanadium		<0.02	mg/L	1	0.02

Sample: 187801 - MW-6

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC16810 | Date Analyzed: 12/23/01
Analyst: DN | Preparation Method: S 5030B | Prep Batch: PB16628 | Date Prepared: 12/23/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0885	mg/L	1	0.10	88	72 - 128
4-BFB		0.0837	mg/L	1	0.10	84	72 - 128

Sample: 187801 - MW-6

Analysis: Ion Chromatography (IC) | Analytical Method: E 300.0 | QC Batch: QC16847 | Date Analyzed: 12/21/01
Analyst: JS | Preparation Method: N/A | Prep Batch: PB16668 | Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride		171	mg/L	5	0.50

Continued ...

... *Continued* Sample: 187801 Analysis: Ion Chromatography (IC)

Param	Flag	Result	Units	Dilution	RDL
Fluoride		3.97	mg/L	5	0.20
Nitrate-N		<1.00	mg/L	5	0.20
Sulfate		61.4	mg/L	5	0.50

Sample: 187801 - MW-6

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC17044 Date Analyzed: 12/26/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16825 Date Prepared: 12/24/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		667	mg/L	1	10

Sample: 187801 - MW-6

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16871 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: S 3010A Prep Batch: PB16622 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		0.0821	mg/L	1	0.01
Total Barium		0.102	mg/L	1	0.10
Total Boron		0.112	mg/L	1	0.01
Total Iron		1.11	mg/L	1	0.05
Total Manganese		0.0489	mg/L	1	0.02
Total Vanadium		0.222	mg/L	1	0.02

Sample: 187802 - Duplicate

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16810 Date Analyzed: 12/23/01
Analyst: DN Preparation Method: S 5030B Prep Batch: PB16628 Date Prepared: 12/23/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.089	mg/L	1	0.10	89	72 - 128
4-BFB		0.0796	mg/L	1	0.10	80	72 - 128

Sample: 187803 - Field Blank

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16810 Date Analyzed: 12/23/01
Analyst: DN Preparation Method: S 5030B Prep Batch: PB16628 Date Prepared: 12/23/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001

Continued ...

... *Continued* Sample: 187803 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0878	mg/L	1	0.10	88	72 - 128
4-BFB		0.079	mg/L	1	0.10	79	72 - 128

Quality Control Report
Method Blank

Method Blank

QCBatch: QC16810

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		< 0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0865	mg/L	1	0.10	86	72 - 128
4-BFB		0.0774	mg/L	1	0.10	77	72 - 128

Method Blank

QCBatch: QC16847

Param	Flag	Results	Units	Reporting Limit
Chloride		<2.0	mg/L	0.50
Fluoride		<0.2	mg/L	0.20
Nitrate-N		<0.2	mg/L	0.20
Sulfate		<2.0	mg/L	0.50

Method Blank

QCBatch: QC16853

Param	Flag	Results	Units	Reporting Limit
Benzene		0.003	mg/L	0.001
Toluene		0.0036	mg/L	0.001
Ethylbenzene		0.0024	mg/L	0.001
M,P,O-Xylene		0.003	mg/L	0.001
Total BTEX		0.012	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0937	mg/L	1	0.10	94	72 - 128
4-BFB		0.096	mg/L	1	0.10	96	72 - 128

Method Blank

QCBatch: QC16871

Param	Flag	Results	Units	Reporting Limit
Total Arsenic		<0.010	mg/L	0.01
Total Barium		<0.100	mg/L	0.10
Total Boron		<0.010	mg/L	0.01
Total Iron		<0.050	mg/L	0.05
Total Manganese		<0.025	mg/L	0.02
Total Vanadium		<0.025	mg/L	0.02

Method Blank

QCBatch: QC16977

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		< 0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0808	mg/L	1	0.10	81	72 - 128
4-BFB		0.0763	mg/L	1	0.10	76	72 - 128

Method Blank

QCBatch: QC17044

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<10	mg/L	10

Method Blank

QCBatch: QC17045

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<10	mg/L	10

Quality Control Report
Duplicate Samples

Duplicate

QCBatch: QC17044

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		2462	2340	mg/L	1	5	8.9

Duplicate

QCBatch: QC17045

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1450	1400	mg/L	1	3	8.9

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC16810

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.100	0.101	mg/L	1	0.10	<0.001	100	1	80 - 120	20
Benzene	0.101	0.102	mg/L	1	0.10	<0.001	101	1	80 - 120	20
Toluene	0.106	0.107	mg/L	1	0.10	<0.001	106	1	80 - 120	20
Ethylbenzene	0.106	0.107	mg/L	1	0.10	<0.001	106	1	80 - 120	20
M,P,O-Xylene	0.322	0.325	mg/L	1	0.30	<0.001	107	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0869	0.0839	mg/L	1	0.10	87	84	72 - 128
4-BFB	0.0892	0.0869	mg/L	1	0.10	89	87	72 - 128

Laboratory Control Spikes

QCBatch: QC16847

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Chloride	12.06	12.70	mg/L	1	12.50	<2.0	96	5	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC16853

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0986	0.102	mg/L	1	0.10	<0.001	99	3	80 - 120	20
Benzene	0.0978	0.102	mg/L	1	0.10	0.003	95	4	80 - 120	20
Toluene	0.0995	0.103	mg/L	1	0.10	0.0036	96	3	80 - 120	20
Ethylbenzene	0.0986	0.105	mg/L	1	0.10	0.0024	96	6	80 - 120	20
M,P,O-Xylene	0.204	0.304	mg/L	1	0.30	0.003	67	4	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0916	0.0979	mg/L	1	0.10	92	98	72 - 128
4-BFB	0.0952	0.100	mg/L	1	0.10	95	100	72 - 128

Laboratory Control Spikes

QCBatch: QC16871

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Arsenic	0.485	0.472	mg/L	1	0.50	<0.010	97	3	75 - 125	20
Total Barium	1.01	1.01	mg/L	1	1	<0.100	101	0	75 - 125	20
Total Boron	0.0537	0.0528	mg/L	1	0.05	<0.010	107	2	75 - 125	20
Total Iron	0.511	0.515	mg/L	1	0.50	<0.050	102	1	75 - 125	20
Total Manganese	0.254	0.254	mg/L	1	0.25	<0.025	102	0	75 - 125	20
Total Vanadium	0.250	0.249	mg/L	1	0.25	<0.025	100	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC16977

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.099	0.101	mg/L	1	0.10	<0.001	99	2	80 - 120	20
Benzene	0.097	0.0994	mg/L	1	0.10	<0.001	97	2	80 - 120	20
Toluene	0.103	0.105	mg/L	1	0.10	<0.001	103	2	80 - 120	20
Ethylbenzene	0.101	0.105	mg/L	1	0.10	<0.001	101	4	80 - 120	20
M,P,O-Xylene	0.309	0.317	mg/L	1	0.30	<0.001	103	3	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.082	0.0799	mg/L	1	0.10	82	80	72 - 128
4-BFB	0.082	0.0818	mg/L	1	0.10	82	82	72 - 128

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC16847

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Chloride	182.48	182.11	mg/L	1	125	57.5	99	0	52 - 131	20
Fluoride	27.09	27.17	mg/L	1	25		93	0	80 - 113	20
Nitrate-N	32.96	32.42	mg/L	1	25		98	2	84 - 105	20
Sulfate	294.87	296.76	mg/L	1	125		106	1	79 - 104	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

QCBatch: QC16871

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Arsenic	0.485	0.494	mg/L	1	0.50	<0.010	97	2	75 - 125	20

Continued ...

... *Continued*

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Barium	1.09	1.10	mg/L	1	1	0.119	109	1	75 - 125	20
Total Boron	[4] 0.670	[5] 0.656	mg/L	1	0.05	0.644	51	74	75 - 125	20
Total Iron	0.716	0.746	mg/L	1	0.50	0.243	94	6	75 - 125	20
Total Manganese	0.243	0.245	mg/L	1	0.25	<0.02	97	1	75 - 125	20
Total Vanadium	0.265	0.267	mg/L	1	0.25	<0.02	106	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC16810

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.106	106	85 - 115	12/23/01
Benzene		mg/L	0.10	0.103	103	85 - 115	12/23/01
Toluene		mg/L	0.10	0.109	109	85 - 115	12/23/01
Ethylbenzene		mg/L	0.10	0.108	108	85 - 115	12/23/01
M,P,O-Xylene		mg/L	0.30	0.330	110	85 - 115	12/23/01

CCV (2)

QCBatch: QC16810

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1033	103	85 - 115	12/23/01
Benzene		mg/L	0.10	0.1009	100	85 - 115	12/23/01
Toluene		mg/L	0.10	0.106	106	85 - 115	12/23/01
Ethylbenzene		mg/L	0.10	0.1058	105	85 - 115	12/23/01
M,P,O-Xylene		mg/L	0.30	0.3212	107	85 - 115	12/23/01

ICV (1)

QCBatch: QC16810

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.104	104	85 - 115	12/23/01
Benzene		mg/L	0.10	0.103	103	85 - 115	12/23/01
Toluene		mg/L	0.10	0.108	108	85 - 115	12/23/01
Ethylbenzene		mg/L	0.10	0.108	108	85 - 115	12/23/01
M,P,O-Xylene		mg/L	0.30	0.328	109	85 - 115	12/23/01

[4] Matrix spike recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[5] Matrix spike recovery invalid due to matrix difficulties. LCS demonstrates process under control.

CCV (1) QCBatch: QC16847

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.50	12.28	98	90 - 110	12/21/01

ICV (1) QCBatch: QC16847

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.50	12.13	97	90 - 110	12/21/01

CCV (1) QCBatch: QC16853

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	12/27/01
Benzene		mg/L	0.10	0.0949	92	85 - 115	12/27/01
Toluene		mg/L	0.10	0.0977	94	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.0998	97	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.296	98	85 - 115	12/27/01

CCV (2) QCBatch: QC16853

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.096	96	85 - 115	12/27/01
Benzene		mg/L	0.10	0.099	99	85 - 115	12/27/01
Toluene		mg/L	0.10	0.101	101	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.301	100	85 - 115	12/27/01

ICV (1) QCBatch: QC16853

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.100	100	85 - 115	12/27/01
Benzene		mg/L	0.10	0.0996	97	85 - 115	12/27/01
Toluene		mg/L	0.10	0.102	98	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.104	102	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.213	70	85 - 115	12/27/01

CCV (1) QCBatch: QC16871

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		mg/L	1	0.997	100	90 - 110	12/26/01
Total Barium		mg/L	2	2.02	101	90 - 110	12/26/01
Total Boron		mg/L	0.10	0.108	108	90 - 110	12/26/01
Total Iron		mg/L	1	1.03	103	90 - 110	12/26/01
Total Manganese		mg/L	0.50	0.505	101	90 - 110	12/26/01
Total Vanadium		mg/L	0.50	0.498	100	90 - 110	12/26/01

ICV (1) QCBatch: QC16871

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		mg/L	1	1.01	101	90 - 110	12/26/01
Total Barium		mg/L	2	2.04	102	90 - 110	12/26/01
Total Boron		mg/L	0.10	0.103	103	90 - 110	12/26/01
Total Iron		mg/L	1	1.02	102	90 - 110	12/26/01
Total Manganese		mg/L	0.50	0.509	102	90 - 110	12/26/01
Total Vanadium		mg/L	0.50	0.505	101	90 - 110	12/26/01

CCV (1) QCBatch: QC16977

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0976	98	85 - 115	12/31/01
Benzene		mg/L	0.10	0.0962	96	85 - 115	12/31/01
Toluene		mg/L	0.10	0.102	102	85 - 115	12/31/01
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	12/31/01
M,P,O-Xylene		mg/L	0.30	0.307	102	85 - 115	12/31/01

CCV (2) QCBatch: QC16977

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.093	93	85 - 115	12/31/01
Benzene		mg/L	0.10	0.095	95	85 - 115	12/31/01
Toluene		mg/L	0.10	0.101	101	85 - 115	12/31/01
Ethylbenzene		mg/L	0.10	0.1	100	85 - 115	12/31/01
M,P,O-Xylene		mg/L	0.30	0.303	101	85 - 115	12/31/01

ICV (1) QCBatch: QC16977

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.103	103	85 - 115	12/31/01
Benzene		mg/L	0.10	0.099	99	85 - 115	12/31/01
Toluene		mg/L	0.10	0.104	104	85 - 115	12/31/01
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	12/31/01
M,P,O-Xylene		mg/L	0.30	0.318	106	85 - 115	12/31/01

CCV (1) QCBatch: QC17044

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1007	100	90 - 110	12/26/01

ICV (1) QCBatch: QC17044

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1023	102	90 - 110	12/26/01

CCV (1) QCBatch: QC17045

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	993	99	90 - 110	12/27/01

ICV (1) QCBatch: QC17045

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	986	98	90 - 110	12/27/01

Analytical and Quality Control Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: January 8, 2002

Order ID Number: A01122101

Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
187792	MW-2	Water	12/19/01	9:55	12/20/01
187793	MW-4	Water	12/19/01	10:40	12/20/01
187794	MW-8	Water	12/19/01	11:20	12/20/01
187795	MW-10	Water	12/19/01	12:05	12/20/01
187796	MW-9	Water	12/19/01	12:46	12/20/01
187797	MW-3	Water	12/19/01	13:14	12/20/01
187798	South Water Well	Water	12/19/01	13:55	12/20/01
187799	North Water Well	Water	12/19/01	13:47	12/20/01
187800	MW-5	Water	12/19/01	14:14	12/20/01
187801	MW-6	Water	12/19/01	15:20	12/20/01
187802	Duplicate	Water	12/19/01	:	12/20/01
187803	Field Blank	Water	12/19/01	:	12/20/01

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 19 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 187792 - MW-2

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC16977	Date Analyzed:	12/31/01
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB16762	Date Prepared:	12/31/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.416	mg/L	5	0.10	83	72 - 128
4-BFB		0.384	mg/L	5	0.10	77	72 - 128

Sample: 187792 - MW-2

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC16847	Date Analyzed:	12/21/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB16668	Date Prepared:	12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride		79.0	mg/L	5	0.50
Fluoride		1.57	mg/L	5	0.20
Nitrate-N		3.38	mg/L	5	0.20
Sulfate		62.8	mg/L	5	0.50

Sample: 187792 - MW-2

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC17045	Date Analyzed:	12/27/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB16826	Date Prepared:	12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		549	mg/L	1	10

Sample: 187792 - MW-2

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC16871	Date Analyzed:	12/26/01
Analyst:	RR	Preparation Method:	S 3010A	Prep Batch:	PB16622	Date Prepared:	12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		0.119	mg/L	1	0.10
Total Boron		0.644	mg/L	1	0.01
Total Iron		0.243	mg/L	1	0.05
Total Manganese		<0.02	mg/L	1	0.02
Total Vanadium		<0.02	mg/L	1	0.02

Sample: 187793 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC16977	Date Analyzed:	12/31/01
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB16762	Date Prepared:	12/31/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.401	mg/L	5	0.10	80	72 - 128
4-BFB		0.378	mg/L	1	0.10	76	72 - 128

Sample: 187793 - MW-4

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC16847	Date Analyzed:	12/21/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB16668	Date Prepared:	12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride		21.9	mg/L	5	0.50
Fluoride		1.58	mg/L	5	0.20
Nitrate-N		2.87	mg/L	5	0.20
Sulfate		76.4	mg/L	5	0.50

Sample: 187793 - MW-4

Analysis:	TDS	Analytical Method:	E 160.1	QC Batch:	QC17045	Date Analyzed:	12/27/01
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB16826	Date Prepared:	12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		394	mg/L	1	10

Sample: 187793 - MW-4

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC16871	Date Analyzed:	12/26/01
Analyst:	RR	Preparation Method:	S 3010A	Prep Batch:	PB16622	Date Prepared:	12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		0.153	mg/L	1	0.10
Total Boron		0.181	mg/L	1	0.01
Total Iron		0.930	mg/L	1	0.05
Total Manganese		<0.02	mg/L	1	0.02
Total Vanadium		0.0266	mg/L	1	0.02

Sample: 187794 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC16853	Date Analyzed:	12/27/01
Analyst:	DN	Preparation Method:	S 5030B	Prep Batch:	PB16673	Date Prepared:	12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.096	mg/L	1	0.10	96	72 - 128
4-BFB		0.0982	mg/L	5	0.10	98	72 - 128

Sample: 187794 - MW-8

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC16847 Date Analyzed: 12/21/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16668 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride	[1]	397	mg/L	50	0.50
Fluoride		1.76	mg/L	5	0.20
Nitrate-N		5.41	mg/L	5	0.20
Sulfate		101	mg/L	5	0.50

Sample: 187794 - MW-8

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC17045 Date Analyzed: 12/27/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16826 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		1160	mg/L	2	10

Sample: 187794 - MW-8

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16871 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: S 3010A Prep Batch: PB16622 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		0.132	mg/L	1	0.10
Total Boron		0.676	mg/L	1	0.01
Total Iron		0.180	mg/L	1	0.05
Total Manganese		<0.02	mg/L	1	0.02
Total Vanadium		0.025	mg/L	1	0.02

Sample: 187795 - MW-10

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16853 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: S 5030B Prep Batch: PB16673 Date Prepared: 12/27/01

[1] Chloride re-ran on IC122101-3.sch (PB16670; QC16849). ICV %IA = 102; CCV %IA = 100; matrix spikes RPD = 1; %EA = 97; LCS spikes RPD = 0; %EA = 100.

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0806	mg/L	1	0.10	81	72 - 128
4-BFB		0.0867	mg/L	1	0.10	87	72 - 128

Sample: 187795 - MW-10

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC16847 Date Analyzed: 12/21/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16668 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride		29.8	mg/L	5	0.50
Fluoride		1.49	mg/L	5	0.20
Nitrate-N		3.09	mg/L	5	0.20
Sulfate		91.2	mg/L	5	0.50

Sample: 187795 - MW-10

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC17045 Date Analyzed: 12/27/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16826 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		450	mg/L	1	10

Sample: 187795 - MW-10

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16871 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: S 3010A Prep Batch: PB16622 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		0.136	mg/L	1	0.10
Total Boron		0.170	mg/L	1	0.01
Total Iron		0.408	mg/L	1	0.05
Total Manganese		<0.02	mg/L	1	0.02
Total Vanadium		0.0263	mg/L	1	0.02

Sample: 187796 - MW-9

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16977 Date Analyzed: 12/31/01
Analyst: CG Preparation Method: S 5030B Prep Batch: PB16762 Date Prepared: 12/31/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001

Continued ...

... *Continued* Sample: 187796 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.417	mg/L	5	0.10	83	72 - 128
4-BFB		0.397	mg/L	5	0.10	79	72 - 128

Sample: 187796 - MW-9

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC16847 Date Analyzed: 12/21/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16668 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride	[2]	269	mg/L	10	0.50
Fluoride		3.93	mg/L	5	0.20
Nitrate-N		3.71	mg/L	5	0.20
Sulfate		70.1	mg/L	5	0.50

Sample: 187796 - MW-9

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC17045 Date Analyzed: 12/27/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16826 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		944	mg/L	2	10

Sample: 187796 - MW-9

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16871 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: S 3010A Prep Batch: PB16622 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		0.0156	mg/L	1	0.01
Total Barium		0.182	mg/L	1	0.10
Total Boron		0.181	mg/L	1	0.01
Total Iron		0.528	mg/L	1	0.05
Total Manganese		0.112	mg/L	1	0.02
Total Vanadium		0.0396	mg/L	1	0.02

Sample: 187797 - MW-3

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16977 Date Analyzed: 12/31/01
Analyst: CG Preparation Method: S 5030B Prep Batch: PB16762 Date Prepared: 12/31/01

[2]Chloride re-ran on IC122101-3.sch (PB16670; QC16849). ICV %IA = 102; CCV %IA = 100; matrix spikes RPD = 1; %EA = 97; LCS spikes RPD = 0; %EA = 100.

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.419	mg/L	5	0.10	84	72 - 128
4-BFB		0.419	mg/L	5	0.10	84	72 - 128

Sample: 187797 - MW-3

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC16847 Date Analyzed: 12/21/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16668 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride	[3]	548	mg/L	50	0.50
Fluoride		1.01	mg/L	5	0.20
Nitrate-N		<1.00	mg/L	5	0.20
Sulfate		29.0	mg/L	5	0.50

Sample: 187797 - MW-3

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC17045 Date Analyzed: 12/27/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16826 Date Prepared: 12/26/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		1400	mg/L	2	10

Sample: 187797 - MW-3

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16871 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: S 3010A Prep Batch: PB16622 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		0.389	mg/L	1	0.10
Total Boron		0.555	mg/L	1	0.01
Total Iron		0.952	mg/L	1	0.05
Total Manganese		0.688	mg/L	1	0.02
Total Vanadium		<0.02	mg/L	1	0.02

Sample: 187798 - South Water Well

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16853 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: S 5030B Prep Batch: PB16673 Date Prepared: 12/27/01

[3]Chloride re-ran on IC122101-3.sch (PB16670; QC16849). ICV %IA = 102; CCV %IA = 100; matrix spikes RPD = 1; %EA = 97; LCS spikes RPD = 0; %EA = 100.

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0861	mg/L	1	0.10	86	72 - 128
4-BFB		0.0905	mg/L	1	0.10	90	72 - 128

Sample: 187799 - North Water Well

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16853 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: S 5030B Prep Batch: PB16673 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0876	mg/L	1	0.10	88	72 - 128
4-BFB		0.0902	mg/L	1	0.10	90	72 - 128

Sample: 187800 - MW-5

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16853 Date Analyzed: 12/27/01
Analyst: DN Preparation Method: S 5030B Prep Batch: PB16673 Date Prepared: 12/27/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0904	mg/L	1	0.10	90	72 - 128
4-BFB		0.0945	mg/L	1	0.10	94	72 - 128

Sample: 187800 - MW-5

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC16847 Date Analyzed: 12/21/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16668 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride		68.8	mg/L	5	0.50
Fluoride		1.03	mg/L	5	0.20
Nitrate-N		1.90	mg/L	5	0.20
Sulfate		49.7	mg/L	5	0.50

Sample: 187800 - MW-5

Analysis: TDS | Analytical Method: E 160.1 | QC Batch: QC17044 | Date Analyzed: 12/26/01
Analyst: JS | Preparation Method: N/A | Prep Batch: PB16825 | Date Prepared: 12/24/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		603	mg/L	1	10

Sample: 187800 - MW-5

Analysis: Total Metals | Analytical Method: S 6010B | QC Batch: QC16871 | Date Analyzed: 12/26/01
Analyst: RR | Preparation Method: S 3010A | Prep Batch: PB16622 | Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<0.010	mg/L	1	0.01
Total Barium		0.187	mg/L	1	0.10
Total Boron		0.158	mg/L	1	0.01
Total Iron		1.64	mg/L	1	0.05
Total Manganese		<0.02	mg/L	1	0.02
Total Vanadium		<0.02	mg/L	1	0.02

Sample: 187801 - MW-6

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC16810 | Date Analyzed: 12/23/01
Analyst: DN | Preparation Method: S 5030B | Prep Batch: PB16628 | Date Prepared: 12/23/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0885	mg/L	1	0.10	88	72 - 128
4-BFB		0.0837	mg/L	1	0.10	84	72 - 128

Sample: 187801 - MW-6

Analysis: Ion Chromatography (IC) | Analytical Method: E 300.0 | QC Batch: QC16847 | Date Analyzed: 12/21/01
Analyst: JS | Preparation Method: N/A | Prep Batch: PB16668 | Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Chloride		171	mg/L	5	0.50

Continued ...

... *Continued* Sample: 187801 Analysis: Ion Chromatography (IC)

Param	Flag	Result	Units	Dilution	RDL
Fluoride		3.97	mg/L	5	0.20
Nitrate-N		<1.00	mg/L	5	0.20
Sulfate		61.4	mg/L	5	0.50

Sample: 187801 - MW-6

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC17044 Date Analyzed: 12/26/01
Analyst: JS Preparation Method: N/A Prep Batch: PB16825 Date Prepared: 12/24/01

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		667	mg/L	1	10

Sample: 187801 - MW-6

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC16871 Date Analyzed: 12/26/01
Analyst: RR Preparation Method: S 3010A Prep Batch: PB16622 Date Prepared: 12/21/01

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		0.0821	mg/L	1	0.01
Total Barium		0.102	mg/L	1	0.10
Total Boron		0.112	mg/L	1	0.01
Total Iron		1.11	mg/L	1	0.05
Total Manganese		0.0489	mg/L	1	0.02
Total Vanadium		0.222	mg/L	1	0.02

Sample: 187802 - Duplicate

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16810 Date Analyzed: 12/23/01
Analyst: DN Preparation Method: S 5030B Prep Batch: PB16628 Date Prepared: 12/23/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.089	mg/L	1	0.10	89	72 - 128
4-BFB		0.0796	mg/L	1	0.10	80	72 - 128

Sample: 187803 - Field Blank

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC16810 Date Analyzed: 12/23/01
Analyst: DN Preparation Method: S 5030B Prep Batch: PB16628 Date Prepared: 12/23/01

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001

Continued ...

... *Continued* Sample: 187803 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0878	mg/L	1	0.10	88	72 - 128
4-BFB		0.079	mg/L	1	0.10	79	72 - 128

Quality Control Report
Method Blank

Method Blank

QCBatch: QC16810

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		< 0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0865	mg/L	1	0.10	86	72 - 128
4-BFB		0.0774	mg/L	1	0.10	77	72 - 128

Method Blank

QCBatch: QC16847

Param	Flag	Results	Units	Reporting Limit
Chloride		<2.0	mg/L	0.50
Fluoride		<0.2	mg/L	0.20
Nitrate-N		<0.2	mg/L	0.20
Sulfate		<2.0	mg/L	0.50

Method Blank

QCBatch: QC16853

Param	Flag	Results	Units	Reporting Limit
Benzene		0.003	mg/L	0.001
Toluene		0.0036	mg/L	0.001
Ethylbenzene		0.0024	mg/L	0.001
M,P,O-Xylene		0.003	mg/L	0.001
Total BTEX		0.012	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0937	mg/L	1	0.10	94	72 - 128
4-BFB		0.096	mg/L	1	0.10	96	72 - 128

Method Blank

QCBatch: QC16871

Param	Flag	Results	Units	Reporting Limit
Total Arsenic		<0.010	mg/L	0.01
Total Barium		<0.100	mg/L	0.10
Total Boron		<0.010	mg/L	0.01
Total Iron		<0.050	mg/L	0.05
Total Manganese		<0.025	mg/L	0.02
Total Vanadium		<0.025	mg/L	0.02

Method Blank

QCBatch: QC16977

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		< 0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0808	mg/L	1	0.10	81	72 - 128
4-BFB		0.0763	mg/L	1	0.10	76	72 - 128

Method Blank

QCBatch: QC17044

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<10	mg/L	10

Method Blank

QCBatch: QC17045

Param	Flag	Results	Units	Reporting Limit
Total Dissolved Solids		<10	mg/L	10

Quality Control Report
Duplicate Samples

Duplicate

QCBatch: QC17044

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		2462	2340	mg/L	1	5	8.9

Duplicate

QCBatch: QC17045

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1450	1400	mg/L	1	3	8.9

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC16810

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.100	0.101	mg/L	1	0.10	<0.001	100	1	80 - 120	20
Benzene	0.101	0.102	mg/L	1	0.10	<0.001	101	1	80 - 120	20
Toluene	0.106	0.107	mg/L	1	0.10	<0.001	106	1	80 - 120	20
Ethylbenzene	0.106	0.107	mg/L	1	0.10	<0.001	106	1	80 - 120	20
M,P,O-Xylene	0.322	0.325	mg/L	1	0.30	<0.001	107	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0869	0.0839	mg/L	1	0.10	87	84	72 - 128
4-BFB	0.0892	0.0869	mg/L	1	0.10	89	87	72 - 128

Laboratory Control Spikes

QCBatch: QC16847

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Chloride	12.06	12.70	mg/L	1	12.50	<2.0	96	5	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC16853

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0986	0.102	mg/L	1	0.10	<0.001	99	3	80 - 120	20
Benzene	0.0978	0.102	mg/L	1	0.10	0.003	95	4	80 - 120	20
Toluene	0.0995	0.103	mg/L	1	0.10	0.0036	96	3	80 - 120	20
Ethylbenzene	0.0986	0.105	mg/L	1	0.10	0.0024	96	6	80 - 120	20
M,P,O-Xylene	0.204	0.304	mg/L	1	0.30	0.003	67	4	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0916	0.0979	mg/L	1	0.10	92	98	72 - 128
4-BFB	0.0952	0.100	mg/L	1	0.10	95	100	72 - 128

Laboratory Control Spikes

QCBatch: QC16871

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Arsenic	0.485	0.472	mg/L	1	0.50	<0.010	97	3	75 - 125	20
Total Barium	1.01	1.01	mg/L	1	1	<0.100	101	0	75 - 125	20
Total Boron	0.0537	0.0528	mg/L	1	0.05	<0.010	107	2	75 - 125	20
Total Iron	0.511	0.515	mg/L	1	0.50	<0.050	102	1	75 - 125	20
Total Manganese	0.254	0.254	mg/L	1	0.25	<0.025	102	0	75 - 125	20
Total Vanadium	0.250	0.249	mg/L	1	0.25	<0.025	100	0	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC16977

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.099	0.101	mg/L	1	0.10	<0.001	99	2	80 - 120	20
Benzene	0.097	0.0994	mg/L	1	0.10	<0.001	97	2	80 - 120	20
Toluene	0.103	0.105	mg/L	1	0.10	<0.001	103	2	80 - 120	20
Ethylbenzene	0.101	0.105	mg/L	1	0.10	<0.001	101	4	80 - 120	20
M,P,O-Xylene	0.309	0.317	mg/L	1	0.30	<0.001	103	3	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.082	0.0799	mg/L	1	0.10	82	80	72 - 128
4-BFB	0.082	0.0818	mg/L	1	0.10	82	82	72 - 128

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC16847

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Chloride	182.48	182.11	mg/L	1	125	57.5	99	0	52 - 131	20
Fluoride	27.09	27.17	mg/L	1	25		93	0	80 - 113	20
Nitrate-N	32.96	32.42	mg/L	1	25		98	2	84 - 105	20
Sulfate	294.87	296.76	mg/L	1	125		106	1	79 - 104	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

QCBatch: QC16871

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Arsenic	0.485	0.494	mg/L	1	0.50	<0.010	97	2	75 - 125	20

Continued ...

... Continued

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Total Barium	1.09	1.10	mg/L	1	1	0.119	109	1	75 - 125	20
Total Boron	[4] 0.670	[5] 0.656	mg/L	1	0.05	0.644	51	74	75 - 125	20
Total Iron	0.716	0.746	mg/L	1	0.50	0.243	94	6	75 - 125	20
Total Manganese	0.243	0.245	mg/L	1	0.25	<0.02	97	1	75 - 125	20
Total Vanadium	0.265	0.267	mg/L	1	0.25	<0.02	106	1	75 - 125	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC16810

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.106	106	85 - 115	12/23/01
Benzene		mg/L	0.10	0.103	103	85 - 115	12/23/01
Toluene		mg/L	0.10	0.109	109	85 - 115	12/23/01
Ethylbenzene		mg/L	0.10	0.108	108	85 - 115	12/23/01
M,P,O-Xylene		mg/L	0.30	0.330	110	85 - 115	12/23/01

CCV (2)

QCBatch: QC16810

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1033	103	85 - 115	12/23/01
Benzene		mg/L	0.10	0.1009	100	85 - 115	12/23/01
Toluene		mg/L	0.10	0.106	106	85 - 115	12/23/01
Ethylbenzene		mg/L	0.10	0.1058	105	85 - 115	12/23/01
M,P,O-Xylene		mg/L	0.30	0.3212	107	85 - 115	12/23/01

ICV (1)

QCBatch: QC16810

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.104	104	85 - 115	12/23/01
Benzene		mg/L	0.10	0.103	103	85 - 115	12/23/01
Toluene		mg/L	0.10	0.108	108	85 - 115	12/23/01
Ethylbenzene		mg/L	0.10	0.108	108	85 - 115	12/23/01
M,P,O-Xylene		mg/L	0.30	0.328	109	85 - 115	12/23/01

[4] Matrix spike recovery invalid due to matrix difficulties. LCS demonstrates process under control.
[5] Matrix spike recovery invalid due to matrix difficulties. LCS demonstrates process under control.

CCV (1) QCBatch: QC16847

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.50	12.28	98	90 - 110	12/21/01

ICV (1) QCBatch: QC16847

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.50	12.13	97	90 - 110	12/21/01

CCV (1) QCBatch: QC16853

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	12/27/01
Benzene		mg/L	0.10	0.0949	92	85 - 115	12/27/01
Toluene		mg/L	0.10	0.0977	94	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.0998	97	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.296	98	85 - 115	12/27/01

CCV (2) QCBatch: QC16853

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.096	96	85 - 115	12/27/01
Benzene		mg/L	0.10	0.099	99	85 - 115	12/27/01
Toluene		mg/L	0.10	0.101	101	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.301	100	85 - 115	12/27/01

ICV (1) QCBatch: QC16853

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.100	100	85 - 115	12/27/01
Benzene		mg/L	0.10	0.0996	97	85 - 115	12/27/01
Toluene		mg/L	0.10	0.102	98	85 - 115	12/27/01
Ethylbenzene		mg/L	0.10	0.104	102	85 - 115	12/27/01
M,P,O-Xylene		mg/L	0.30	0.213	70	85 - 115	12/27/01

CCV (1) QCBatch: QC16871

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		mg/L	1	0.997	100	90 - 110	12/26/01
Total Barium		mg/L	2	2.02	101	90 - 110	12/26/01
Total Boron		mg/L	0.10	0.108	108	90 - 110	12/26/01
Total Iron		mg/L	1	1.03	103	90 - 110	12/26/01
Total Manganese		mg/L	0.50	0.505	101	90 - 110	12/26/01
Total Vanadium		mg/L	0.50	0.498	100	90 - 110	12/26/01

ICV (1) QCBatch: QC16871

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		mg/L	1	1.01	101	90 - 110	12/26/01
Total Barium		mg/L	2	2.04	102	90 - 110	12/26/01
Total Boron		mg/L	0.10	0.103	103	90 - 110	12/26/01
Total Iron		mg/L	1	1.02	102	90 - 110	12/26/01
Total Manganese		mg/L	0.50	0.509	102	90 - 110	12/26/01
Total Vanadium		mg/L	0.50	0.505	101	90 - 110	12/26/01

CCV (1) QCBatch: QC16977

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0976	98	85 - 115	12/31/01
Benzene		mg/L	0.10	0.0962	96	85 - 115	12/31/01
Toluene		mg/L	0.10	0.102	102	85 - 115	12/31/01
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	12/31/01
M,P,O-Xylene		mg/L	0.30	0.307	102	85 - 115	12/31/01

CCV (2) QCBatch: QC16977

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.093	93	85 - 115	12/31/01
Benzene		mg/L	0.10	0.095	95	85 - 115	12/31/01
Toluene		mg/L	0.10	0.101	101	85 - 115	12/31/01
Ethylbenzene		mg/L	0.10	0.1	100	85 - 115	12/31/01
M,P,O-Xylene		mg/L	0.30	0.303	101	85 - 115	12/31/01

ICV (1) QCBatch: QC16977

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.103	103	85 - 115	12/31/01
Benzene		mg/L	0.10	0.099	99	85 - 115	12/31/01
Toluene		mg/L	0.10	0.104	104	85 - 115	12/31/01
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	12/31/01
M,P,O-Xylene		mg/L	0.30	0.318	106	85 - 115	12/31/01

CCV (1) QCBatch: QC17044

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1007	100	90 - 110	12/26/01

ICV (1) QCBatch: QC17044

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	1023	102	90 - 110	12/26/01

CCV (1) QCBatch: QC17045

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	993	99	90 - 110	12/27/01

ICV (1) QCBatch: QC17045

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	986	98	90 - 110	12/27/01

Summary Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: January 8, 2002

Order ID Number: A01122101

Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
187792	MW-2	Water	12/19/01	9:55	12/20/01
187793	MW-4	Water	12/19/01	10:40	12/20/01
187794	MW-8	Water	12/19/01	11:20	12/20/01
187795	MW-10	Water	12/19/01	12:05	12/20/01
187796	MW-9	Water	12/19/01	12:46	12/20/01
187797	MW-3	Water	12/19/01	13:14	12/20/01
187798	South Water Well	Water	12/19/01	13:55	12/20/01
187799	North Water Well	Water	12/19/01	13:47	12/20/01
187800	MW-5	Water	12/19/01	14:14	12/20/01
187801	MW-6	Water	12/19/01	15:20	12/20/01
187802	Duplicate	Water	12/19/01	:	12/20/01
187803	Field Blank	Water	12/19/01	:	12/20/01

This report consists of a total of 4 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
187792 - MW-2	<0.005	<0.005	<0.005	<0.005	<0.005
187793 - MW-4	<0.005	<0.005	<0.005	<0.005	<0.005
187794 - MW-8	<0.001	<0.001	<0.001	<0.001	<0.001
187795 - MW-10	<0.001	<0.001	<0.001	<0.001	<0.001
187796 - MW-9	<0.005	<0.005	<0.005	<0.005	<0.005
187797 - MW-3	<0.005	<0.005	<0.005	<0.005	<0.005
187798 - South Water Well	<0.001	<0.001	<0.001	<0.001	<0.001
187799 - North Water Well	<0.001	<0.001	<0.001	<0.001	<0.001
187800 - MW-5	<0.001	<0.001	<0.001	<0.001	<0.001
187801 - MW-6	<0.001	<0.001	<0.001	<0.001	<0.001
187802 - Duplicate	<0.001	<0.001	<0.001	<0.001	<0.001
187803 - Field Blank	<0.001	<0.001	<0.001	<0.001	<0.001

Sample: 187792 - MW-2

Param	Flag	Result	Units
Chloride		79.0	mg/L
Fluoride		1.57	mg/L
Nitrate-N		3.38	mg/L

Continued on next page ...

Sample 187792 continued ...

Param	Flag	Result	Units
Sulfate		62.8	mg/L
Total Dissolved Solids		549	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		0.119	mg/L
Total Boron		0.644	mg/L
Total Iron		0.243	mg/L
Total Manganese		<0.02	mg/L
Total Vanadium		<0.02	mg/L

Sample: 187793 - MW-4

Param	Flag	Result	Units
Chloride		21.9	mg/L
Fluoride		1.58	mg/L
Nitrate-N		2.87	mg/L
Sulfate		76.4	mg/L
Total Dissolved Solids		394	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		0.153	mg/L
Total Boron		0.181	mg/L
Total Iron		0.930	mg/L
Total Manganese		<0.02	mg/L
Total Vanadium		0.0266	mg/L

Sample: 187794 - MW-8

Param	Flag	Result	Units
Chloride	[1]	397	mg/L
Fluoride		1.76	mg/L
Nitrate-N		5.41	mg/L
Sulfate		101	mg/L
Total Dissolved Solids		1160	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		0.132	mg/L
Total Boron		0.676	mg/L
Total Iron		0.180	mg/L
Total Manganese		<0.02	mg/L
Total Vanadium		0.025	mg/L

Sample: 187795 - MW-10

Param	Flag	Result	Units
Chloride		29.8	mg/L
Fluoride		1.49	mg/L
Nitrate-N		3.09	mg/L

Continued on next page ...

[1] Chloride re-ran on IC122101-3.sch (PB16670; QC16849). ICV %IA = 102; CCV %IA = 100; matrix spikes RPD = 1; %EA = 97; LCS spikes RPD = 0; %EA = 100.

Sample 187795 continued ...

Param	Flag	Result	Units
Sulfate		91.2	mg/L
Total Dissolved Solids		450	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		0.136	mg/L
Total Boron		0.170	mg/L
Total Iron		0.408	mg/L
Total Manganese		<0.02	mg/L
Total Vanadium		0.0263	mg/L

Sample: 187796 - MW-9

Param	Flag	Result	Units
Chloride	[2]	269	mg/L
Fluoride		3.93	mg/L
Nitrate-N		3.71	mg/L
Sulfate		70.1	mg/L
Total Dissolved Solids		944	mg/L
Total Arsenic		0.0156	mg/L
Total Barium		0.182	mg/L
Total Boron		0.181	mg/L
Total Iron		0.528	mg/L
Total Manganese		0.112	mg/L
Total Vanadium		0.0396	mg/L

Sample: 187797 - MW-3

Param	Flag	Result	Units
Chloride	[3]	548	mg/L
Fluoride		1.01	mg/L
Nitrate-N		<1.00	mg/L
Sulfate		29.0	mg/L
Total Dissolved Solids		1400	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		0.389	mg/L
Total Boron		0.555	mg/L
Total Iron		0.952	mg/L
Total Manganese		0.688	mg/L
Total Vanadium		<0.02	mg/L

Sample: 187800 - MW-5

Param	Flag	Result	Units
Chloride		68.8	mg/L
Fluoride		1.03	mg/L

Continued on next page ...

[2]Chloride re-ran on IC122101-3.sch (PB16670; QC16849). ICV %IA = 102; CCV %IA = 100; matrix spikes RPD = 1; %EA = 97; LCS spikes RPD = 0; %EA = 100.

[3]Chloride re-ran on IC122101-3.sch (PB16670; QC16849). ICV %IA = 102; CCV %IA = 100; matrix spikes RPD = 1; %EA = 97; LCS spikes RPD = 0; %EA = 100.

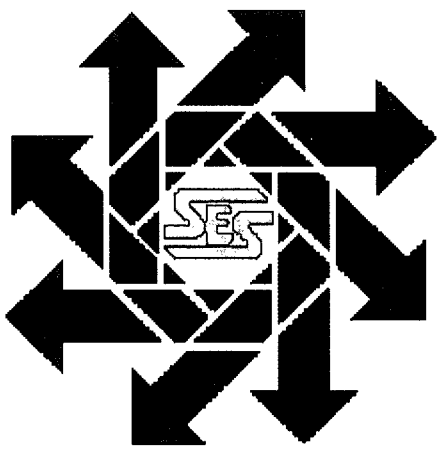
Sample 187800 continued . . .

Param	Flag	Result	Units
Nitrate-N		1.90	mg/L
Sulfate		49.7	mg/L
Total Dissolved Solids		603	mg/L
Total Arsenic		<0.010	mg/L
Total Barium		0.187	mg/L
Total Boron		0.158	mg/L
Total Iron		1.64	mg/L
Total Manganese		<0.02	mg/L
Total Vanadium		<0.02	mg/L

Sample: 187801 - MW-6

Param	Flag	Result	Units
Chloride		171	mg/L
Fluoride		3.97	mg/L
Nitrate-N		<1.00	mg/L
Sulfate		61.4	mg/L
Total Dissolved Solids		667	mg/L
Total Arsenic		0.0821	mg/L
Total Barium		0.102	mg/L
Total Boron		0.112	mg/L
Total Iron		1.11	mg/L
Total Manganese		0.0489	mg/L
Total Vanadium		0.222	mg/L

2002 Groundwater Monitoring Sampling Results
Navajo Refining Company – Lea Refinery
Lovington, New Mexico



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Prepared for:

Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

By:

Safety & Environmental Solutions, Inc.
703 E. Clinton, Suite 102
Hobbs, New Mexico 88240
(505) 397-0510

Summary Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: March 15, 2002

Order ID Number: A02031310

Project Number: N/A
Project Name: N/A
Project Location: Lovington

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
192664	MW-8	Water	3/12/02	9:55	3/13/02
192665	MW-9	Water	3/12/02	10:45	3/13/02
192666	MW-10	Water	3/12/02	11:15	3/13/02
192667	MW-6	Water	3/12/02	12:05	3/13/02
192668	MW-3	Water	3/12/02	12:25	3/13/02
192669	North Water Well	Water	3/12/02	12:40	3/13/02
192670	South Water Well	Water	3/12/02	12:50	3/13/02
192671	Duplicate #1	Water	3/12/02	:	3/13/02
192672	Trip Blank	Water	3/12/02	:	3/13/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
192664 - MW-8	<0.001	<0.001	<0.001	<0.001	<0.001
192665 - MW-9	<0.001	<0.001	<0.001	<0.001	<0.001
192666 - MW-10	<0.001	<0.001	<0.001	<0.001	<0.001
192667 - MW-6	0.0016	<0.001	0.0108	<0.001	0.0124
192668 - MW-3	0.0159	<0.001	<0.001	<0.001	0.0159
192669 - North Water Well	0.0021	<0.001	<0.001	<0.001	0.0021
192670 - South Water Well	<0.001	<0.001	<0.001	<0.001	<0.001
192671 - Duplicate #1	<0.001	<0.001	<0.001	<0.001	<0.001
192672 - Trip Blank	<0.001	<0.001	<0.001	<0.001	<0.001

Analytical and Quality Control Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: March 15, 2002

Order ID Number: A02031310

Project Number: N/A
Project Name: N/A
Project Location: Lovington

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
192664	MW-8	Water	3/12/02	9:55	3/13/02
192665	MW-9	Water	3/12/02	10:45	3/13/02
192666	MW-10	Water	3/12/02	11:15	3/13/02
192667	MW-6	Water	3/12/02	12:05	3/13/02
192668	MW-3	Water	3/12/02	12:25	3/13/02
192669	North Water Well	Water	3/12/02	12:40	3/13/02
192670	South Water Well	Water	3/12/02	12:50	3/13/02
192671	Duplicate #1	Water	3/12/02	:	3/13/02
192672	Trip Blank	Water	3/12/02	:	3/13/02

0
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. Note: the RDL is equal to MQL for all organic analytes including TPH.

This report consists of a total of 7 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.



for
Dr. Blair Leftwich, Director

Analytical Report

Sample: 192664 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC18803	Date Analyzed:	3/13/02
Analyst:	BC	Preparation Method:	S 5030B	Prep Batch:	PB18215	Date Prepared:	3/13/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0955	mg/L	1	0.10	96	70 - 130
4-BFB		0.0849	mg/L	1	0.10	85	70 - 130

Sample: 192665 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC18803	Date Analyzed:	3/13/02
Analyst:	BC	Preparation Method:	S 5030B	Prep Batch:	PB18215	Date Prepared:	3/13/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0958	mg/L	1	0.10	96	70 - 130
4-BFB		0.0846	mg/L	1	0.10	85	70 - 130

Sample: 192666 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC18803	Date Analyzed:	3/13/02
Analyst:	BC	Preparation Method:	S 5030B	Prep Batch:	PB18215	Date Prepared:	3/13/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0937	mg/L	1	0.10	94	70 - 130
4-BFB		0.0828	mg/L	1	0.10	83	70 - 130

Sample: 192667 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC18803	Date Analyzed:	3/13/02
Analyst:	BC	Preparation Method:	S 5030B	Prep Batch:	PB18215	Date Prepared:	3/13/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0016	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		0.0108	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0124	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0836	mg/L	1	0.10	84	70 - 130
4-BFB		0.0742	mg/L	1	0.10	74	70 - 130

Sample: 192668 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC18803	Date Analyzed:	3/13/02
Analyst:	BC	Preparation Method:	S 5030B	Prep Batch:	PB18215	Date Prepared:	3/13/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0159	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0159	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0937	mg/L	1	0.10	94	70 - 130
4-BFB		0.0895	mg/L	1	0.10	90	70 - 130

Sample: 192669 - North Water Well

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC18803	Date Analyzed:	3/13/02
Analyst:	BC	Preparation Method:	S 5030B	Prep Batch:	PB18215	Date Prepared:	3/13/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0021	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001

Continued ...

... *Continued* Sample: 192669 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0021	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0871	mg/L	1	0.10	87	70 - 130
4-BFB		0.0748	mg/L	1	0.10	75	70 - 130

Sample: 192670 - South Water Well

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC18803	Date Analyzed:	3/13/02
Analyst:	BC	Preparation Method:	S 5030B	Prep Batch:	PB18215	Date Prepared:	3/13/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0968	mg/L	1	0.10	97	70 - 130
4-BFB		0.0818	mg/L	1	0.10	82	70 - 130

Sample: 192671 - Duplicate #1

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC18803	Date Analyzed:	3/13/02
Analyst:	BC	Preparation Method:	S 5030B	Prep Batch:	PB18215	Date Prepared:	3/13/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0873	mg/L	1	0.10	87	70 - 130
4-BFB		0.0759	mg/L	1	0.10	76	70 - 130

Sample: 192672 - Trip Blank

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC18803	Date Analyzed:	3/13/02
Analyst:	BC	Preparation Method:	S 5030B	Prep Batch:	PB18215	Date Prepared:	3/13/02

Continued ...

... *Continued* Sample: 192672 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0804	mg/L	1	0.10	80	70 - 130
4-BFB		0.0716	mg/L	1	0.10	72	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC18803

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.094	mg/L	1	0.10	94	70 - 130
4-BFB		0.0798	mg/L	1	0.10	80	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC18803

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0806	0.0885	mg/L	1	0.10	<0.001	81	9	82 - 111	20
Benzene	0.0787	0.0882	mg/L	1	0.10	<0.001	79	11	86 - 106	20
Toluene	0.0745	0.0865	mg/L	1	0.10	<0.001	74	15	82 - 108	20
Ethylbenzene	0.0741	0.0861	mg/L	1	0.10	<0.001	74	15	86 - 115	20
M,P,O-Xylene	0.229	0.261	mg/L	1	0.30	<0.001	76	13	79 - 122	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0831	0.0898	mg/L	1	0.10	83	90	70 - 130
4-BFB	0.0823	0.0879	mg/L	1	0.10	82	88	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC18803

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.093	93	85 - 115	3/13/02
Benzene		mg/L	0.10	0.0895	90	85 - 115	3/13/02

Continued ...

... *Continued*

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.0854	85	85 - 115	3/13/02
Ethylbenzene	[1]	mg/L	0.10	0.0843	84	85 - 115	3/13/02
M,P,O-Xylene		mg/L	0.30	0.254	85	85 - 115	3/13/02

CCV (2)

QCBatch: QC18803

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.089	89	85 - 115	3/13/02
Benzene		mg/L	0.10	0.085	85	85 - 115	3/13/02
Toluene		mg/L	0.10	0.085	85	85 - 115	3/13/02
Ethylbenzene		mg/L	0.10	0.086	86	85 - 115	3/13/02
M,P,O-Xylene		mg/L	0.30	0.252	84	85 - 115	3/13/02

ICV (1)

QCBatch: QC18803

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0934	93	85 - 115	3/13/02
Benzene		mg/L	0.10	0.0921	92	85 - 115	3/13/02
Toluene		mg/L	0.10	0.0889	89	85 - 115	3/13/02
Ethylbenzene		mg/L	0.10	0.0873	87	85 - 115	3/13/02
M,P,O-Xylene		mg/L	0.30	0.270	90	85 - 115	3/13/02

[1] Ethylbenzene outside normal limits. Average of CCV components within acceptable range.

Summary Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: August 2, 2002

Order ID Number: A02062517

Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200030	MW-8	Water	6/20/02	13:55	6/25/02
200031	MW-9	Water	6/20/02	15:15	6/25/02
200032	North Water Well	Water	6/20/02	16:05	6/25/02
200033	South Water Well	Water	6/20/02	16:10	6/25/02
200034	MW-10	Water	6/20/02	17:15	6/25/02
200035	MW-3	Water	6/20/02	18:15	6/25/02
200036	MW-12	Water	6/22/02	8:15	6/25/02
200037	MW-6R	Water	6/22/02	9:05	6/25/02
200038	MW-11	Water	6/22/02	9:45	6/25/02
200039	Duplicate #1	Water	6/22/02	:	6/25/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
200030 - MW-8	<0.001	<0.001	<0.001	<0.001	<0.001
200031 - MW-9	<0.001	<0.001	<0.001	<0.001	<0.001
200032 - North Water Well	0.001	<0.001	<0.001	<0.001	0.001
200033 - South Water Well	<0.001	<0.001	<0.001	<0.001	<0.001
200034 - MW-10	<0.001	<0.001	<0.001	<0.001	<0.001
200035 - MW-3	<0.001	<0.001	<0.001	<0.001	<0.001
200036 - MW-12	<0.001	<0.001	<0.001	<0.001	<0.001
200037 - MW-6R	<0.001	<0.001	<0.001	<0.001	<0.001
200038 - MW-11	1.13	0.0253	0.144	0.0944	1.39
200039 - Duplicate #1	<0.005	<0.005	<0.005	<0.005	<0.005

Analytical and Quality Control Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: August 2, 2002

Order ID Number: A02062517

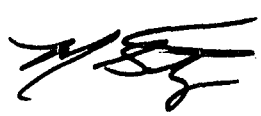
Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200030	MW-8	Water	6/20/02	13:55	6/25/02
200031	MW-9	Water	6/20/02	15:15	6/25/02
200032	North Water Well	Water	6/20/02	16:05	6/25/02
200033	South Water Well	Water	6/20/02	16:10	6/25/02
200034	MW-10	Water	6/20/02	17:15	6/25/02
200035	MW-3	Water	6/20/02	18:15	6/25/02
200036	MW-12	Water	6/22/02	8:15	6/25/02
200037	MW-6R	Water	6/22/02	9:05	6/25/02
200038	MW-11	Water	6/22/02	9:45	6/25/02
200039	Duplicate #1	Water	6/22/02	:	6/25/02

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. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 8 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.



for
Dr. Blair Leftwich, Director

Analytical Report

Sample: 200030 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21358	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB20296	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.090	mg/L	1	0.10	90	70 - 130
4-BFB		0.0897	mg/L	1	0.10	90	70 - 130

Sample: 200031 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21358	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB20296	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0895	mg/L	1	0.10	90	70 - 130
4-BFB		0.0888	mg/L	1	0.10	89	70 - 130

Sample: 200032 - North Water Well

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21358	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB20296	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.093	mg/L	1	0.10	93	70 - 130
4-BFB		0.0899	mg/L	1	0.10	90	70 - 130

Sample: 200033 - South Water Well

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21358	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB20296	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0896	mg/L	1	0.10	90	70 - 130
4-BFB		0.0891	mg/L	1	0.10	89	70 - 130

Sample: 200034 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21358	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB20296	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0905	mg/L	1	0.10	90	70 - 130
4-BFB		0.0883	mg/L	1	0.10	88	70 - 130

Sample: 200035 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21358	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB20296	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0925	mg/L	1	0.10	92	70 - 130
4-BFB		0.0931	mg/L	1	0.10	93	70 - 130

Sample: 200036 - MW-12

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21358	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB20296	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0917	mg/L	1	0.10	92	70 - 130
4-BFB		0.089	mg/L	1	0.10	89	70 - 130

Sample: 200037 - MW-6R

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21358	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB20296	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0898	mg/L	1	0.10	90	70 - 130
4-BFB		0.0883	mg/L	1	0.10	88	70 - 130

Sample: 200038 - MW-11

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21592	Date Analyzed:	6/27/02
Analyst:	DN	Preparation Method:	S 5030B	Prep Batch:	PB20483	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.005	mg/L	5	0.001
Benzene		1.13	mg/L	5	0.001
Toluene		0.0253	mg/L	5	0.001
Ethylbenzene		0.144	mg/L	5	0.001
M,P,O-Xylene		0.0944	mg/L	5	0.001

Continued ...

... *Continued* Sample: 200038 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Total BTEX		1.39	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0923	mg/L	5	0.10	92	70 - 130
4-BFB		0.0967	mg/L	5	0.10	96	70 - 130

Sample: 200039 - Duplicate #1

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21592	Date Analyzed:	6/27/02
Analyst:	DN	Preparation Method:	S 5030B	Prep Batch:	PB20483	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.005	mg/L	5	0.001
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0894	mg/L	5	0.10	89	70 - 130
4-BFB		0.0857	mg/L	5	0.10	85	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21358

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0834	mg/L	1	0.10	83	70 - 130
4-BFB		0.084	mg/L	1	0.10	84	70 - 130

Method Blank

QCBatch: QC21592

Param	Flag	Results	Units	Reporting Limit
MTBE		<0.001	mg/L	0.001
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		< 0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0926	mg/L	1	0.10	92	70 - 130
4-BFB		0.0869	mg/L	1	0.10	86	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21358

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0896	0.0897	mg/L	1	0.10	<0.001	90	0	70 - 130	20
Benzene	0.0941	0.0933	mg/L	1	0.10	<0.001	94	1	70 - 130	20
Toluene	0.0941	0.0911	mg/L	1	0.10	<0.001	94	3	70 - 130	20
Ethylbenzene	0.0944	0.0934	mg/L	1	0.10	<0.001	94	1	70 - 130	20
M,P,O-Xylene	0.284	0.280	mg/L	1	0.30	<0.001	95	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0879	0.0858	mg/L	1	0.10	88	86	70 - 130
4-BFB	0.0912	0.0887	mg/L	1	0.10	91	89	70 - 130

Laboratory Control Spikes

QCBatch: QC21592

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0938	0.0954	mg/L	1	0.10	<0.001	93	1	70 - 130	20
Benzene	0.0934	0.0958	mg/L	1	0.10	<0.001	93	2	70 - 130	20
Toluene	0.0905	0.0933	mg/L	1	0.10	<0.001	90	3	70 - 130	20
Ethylbenzene	0.0906	0.0939	mg/L	1	0.10	<0.001	90	3	70 - 130	20
M,P,O-Xylene	0.271	0.283	mg/L	1	0.30	<0.001	90	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.091	0.093	mg/L	1	0.10	91	93	70 - 130
4-BFB	0.0906	0.0938	mg/L	1	0.10	90	93	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21358

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0901	90	85 - 115	6/25/02
Benzene		mg/L	0.10	0.0906	91	85 - 115	6/25/02
Toluene		mg/L	0.10	0.0891	89	85 - 115	6/25/02
Ethylbenzene		mg/L	0.10	0.0895	90	85 - 115	6/25/02
M,P,O-Xylene		mg/L	0.30	0.269	90	85 - 115	6/25/02

CCV (2)

QCBatch: QC21358

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.092	92	85 - 115	6/25/02
Benzene		mg/L	0.10	0.092	92	85 - 115	6/25/02
Toluene		mg/L	0.10	0.0898	89	85 - 115	6/25/02
Ethylbenzene		mg/L	0.10	0.0902	90	85 - 115	6/25/02
M,P,O-Xylene		mg/L	0.30	0.27	90	85 - 115	6/25/02

ICV (1) QCBatch: QC21358

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0894	89	85 - 115	6/25/02
Benzene		mg/L	0.10	0.0952	95	85 - 115	6/25/02
Toluene		mg/L	0.10	0.0933	93	85 - 115	6/25/02
Ethylbenzene		mg/L	0.10	0.0949	94	85 - 115	6/25/02
M,P,O-Xylene		mg/L	0.30	0.285	95	85 - 115	6/25/02

CCV (1) QCBatch: QC21592

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0887	88	85 - 115	6/27/02
Benzene		mg/L	0.10	0.0901	90	85 - 115	6/27/02
Toluene		mg/L	0.10	0.0878	87	85 - 115	6/27/02
Ethylbenzene		mg/L	0.10	0.0891	89	85 - 115	6/27/02
M,P,O-Xylene		mg/L	0.30	0.266	88	85 - 115	6/27/02

CCV (2) QCBatch: QC21592

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0915	91	85 - 115	6/27/02
Benzene		mg/L	0.10	0.0902	90	85 - 115	6/27/02
Toluene		mg/L	0.10	0.0875	87	85 - 115	6/27/02
Ethylbenzene		mg/L	0.10	0.0882	88	85 - 115	6/27/02
M,P,O-Xylene		mg/L	0.30	0.261	87	85 - 115	6/27/02

ICV (1) QCBatch: QC21592

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0934	93	85 - 115	6/27/02
Benzene		mg/L	0.10	0.0941	94	85 - 115	6/27/02
Toluene		mg/L	0.10	0.0931	93	85 - 115	6/27/02
Ethylbenzene		mg/L	0.10	0.0931	93	85 - 115	6/27/02
M,P,O-Xylene		mg/L	0.30	0.28	93	85 - 115	6/27/02

Analytical and Quality Control Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: September 26, 2002

Order ID Number: A02091903

Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
208274	MW-8	Water	9/17/02	12:15	9/19/02
208275	MW-9	Water	9/17/02	13:25	9/19/02
208276	MW-10	Water	9/17/02	14:14	9/19/02
208277	MW-3	Water	9/17/02	15:50	9/19/02
208278	MW-6R	Water	9/17/02	17:27	9/19/02
208279	North Water Well	Water	9/17/02	11:05	9/19/02
208280	South Water Well	Water	9/17/02	11:18	9/19/02
208281	Duplicate	Water	9/17/02	:	9/19/02

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. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

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Note: Samples will be disposed of 30 days from the report date unless the lab is contacted before the 30 days has past.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 208274 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23648	Date Analyzed:	9/19/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22138	Date Prepared:	9/19/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.102	mg/L	1	0.10	102	70 - 130
4-BFB		0.0837	mg/L	1	0.10	83	70 - 130

Sample: 208275 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23648	Date Analyzed:	9/19/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22138	Date Prepared:	9/19/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.099	mg/L	1	0.10	99	70 - 130
4-BFB		0.0813	mg/L	1	0.10	81	70 - 130

Sample: 208276 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23648	Date Analyzed:	9/19/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22138	Date Prepared:	9/19/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.104	mg/L	1	0.10	104	70 - 130
4-BFB		0.0754	mg/L	1	0.10	75	70 - 130

Sample: 208277 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23648	Date Analyzed:	9/19/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22138	Date Prepared:	9/19/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0842	mg/L	5	0.10	84	70 - 130
4-BFB		0.0737	mg/L	5	0.10	73	70 - 130

Sample: 208278 - MW-6R

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23649	Date Analyzed:	9/19/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22139	Date Prepared:	9/19/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0957	mg/L	1	0.10	96	70 - 130
4-BFB		0.0776	mg/L	1	0.10	78	70 - 130

Sample: 208279 - North Water Well

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23649	Date Analyzed:	9/19/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22139	Date Prepared:	9/19/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0018	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0018	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0955	mg/L	1	0.10	96	70 - 130
4-BFB		0.0778	mg/L	1	0.10	78	70 - 130

Sample: 208280 - South Water Well

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23649	Date Analyzed:	9/19/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22139	Date Prepared:	9/19/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0019	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0019	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0999	mg/L	1	0.10	100	70 - 130
4-BFB		0.0817	mg/L	1	0.10	82	70 - 130

Sample: 208281 - Duplicate

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23649	Date Analyzed:	9/19/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22139	Date Prepared:	9/19/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0898	mg/L	1	0.10	90	70 - 130
4-BFB		0.0706	mg/L	1	0.10	71	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC23648

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0965	mg/L	1	0.10	96	70 - 130
4-BFB		0.0768	mg/L	1	0.10	77	70 - 130

Method Blank

QCBatch: QC23649

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0952	mg/L	1	0.10	95	70 - 130
4-BFB		0.0756	mg/L	1	0.10	76	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC23648

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0995	0.0982	mg/L	1	0.10	<0.001	100	1	70 - 130	20
Benzene	0.107	0.106	mg/L	1	0.10	<0.001	107	1	70 - 130	20
Toluene	0.0983	0.0985	mg/L	1	0.10	<0.001	98	0	70 - 130	20
Ethylbenzene	0.084	0.0836	mg/L	1	0.10	<0.001	84	0	70 - 130	20
M,P,O-Xylene	0.247	0.249	mg/L	1	0.30	<0.001	82	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.106	0.102	mg/L	1	0.10	106	102	70 - 130
4-BFB	0.0795	0.0786	mg/L	1	0.10	80	79	70 - 130

Laboratory Control Spikes

QCBatch: QC23649

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0862	0.0856	mg/L	1	0.10	<0.001	86	1	70 - 130	20
Benzene	0.0905	0.0926	mg/L	1	0.10	<0.001	90	2	70 - 130	20
Toluene	0.0805	0.0841	mg/L	1	0.10	<0.001	80	4	70 - 130	20
Ethylbenzene	0.0799	0.082	mg/L	1	0.10	<0.001	80	2	70 - 130	20
M,P,O-Xylene	0.249	0.251	mg/L	1	0.30	<0.001	83	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0933	0.0956	mg/L	1	0.10	93	96	70 - 130
4-BFB	0.0909	0.0921	mg/L	1	0.10	91	92	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC23648

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0941	94	85 - 115	9/19/02
Benzene		mg/L	0.10	0.107	107	85 - 115	9/19/02
Toluene		mg/L	0.10	0.0987	99	85 - 115	9/19/02
Ethylbenzene		mg/L	0.10	0.0871	87	85 - 115	9/19/02
M,P,O-Xylene		mg/L	0.30	0.256	85	85 - 115	9/19/02

CCV (2)

QCBatch: QC23648

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0978	97	85 - 115	9/19/02
Benzene		mg/L	0.10	0.0989	98	85 - 115	9/19/02
Toluene		mg/L	0.10	0.0952	95	85 - 115	9/19/02
Ethylbenzene		mg/L	0.10	0.0884	88	85 - 115	9/19/02
M,P,O-Xylene		mg/L	0.30	0.2681	89	85 - 115	9/19/02

ICV (1) QCBatch: QC23648

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0889	88	85 - 115	9/19/02
Benzene		mg/L	0.10	0.0937	93	85 - 115	9/19/02
Toluene		mg/L	0.10	0.0932	93	85 - 115	9/19/02
Ethylbenzene		mg/L	0.10	0.0864	86	85 - 115	9/19/02
M,P,O-Xylene		mg/L	0.30	0.262	87	85 - 115	9/19/02

CCV (1) QCBatch: QC23649

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE	[1]	mg/L	0.10	0.0841	84	85 - 115	9/19/02
Benzene		mg/L	0.10	0.0924	92	85 - 115	9/19/02
Toluene	[2]	mg/L	0.10	0.0828	83	85 - 115	9/19/02
Ethylbenzene	[3]	mg/L	0.10	0.0816	82	85 - 115	9/19/02
M,P,O-Xylene	[4]	mg/L	0.30	0.249	83	85 - 115	9/19/02

CCV (2) QCBatch: QC23649

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.102	102	85 - 115	9/19/02
Benzene		mg/L	0.10	0.1	100	85 - 115	9/19/02
Toluene		mg/L	0.10	0.0952	95	85 - 115	9/19/02
Ethylbenzene		mg/L	0.10	0.0929	92	85 - 115	9/19/02
M,P,O-Xylene		mg/L	0.30	0.278	92	85 - 115	9/19/02

ICV (1) QCBatch: QC23649

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0872	87	85 - 115	9/19/02
Benzene		mg/L	0.10	0.0925	92	85 - 115	9/19/02
Toluene	[5]	mg/L	0.10	0.0818	82	85 - 115	9/19/02
Ethylbenzene	[6]	mg/L	0.10	0.0804	80	85 - 115	9/19/02

Continued ...

[1] MTBE outside normal limits. Average(85) of CCV components within acceptable range.
[2] Toluene outside normal limits. Average(85) of CCV components within acceptable range.
[3] Ethylbenzene outside normal limits. Average(85) of CCV components within acceptable range.
[4] Xylene outside normal limits. Average(85) of CCV components within acceptable range.
[5] Toluene outside normal limits. Average(85) of ICV components within acceptable range.
[6] Ethylbenzene outside normal limits. Average(85) of ICV components within acceptable range.

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
M,P,O-Xylene	[7]	mg/L	0.30	0.2544	84	85 - 115	9/19/02

[7] Xylene outside normal limits. Average(85) of ICV components within acceptable range.

Summary Report

David Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: September 26, 2002

Order ID Number: A02091903

Project Number: N/A
Project Name: N/A
Project Location: Lea Refining

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
208274	MW-8	Water	9/17/02	12:15	9/19/02
208275	MW-9	Water	9/17/02	13:25	9/19/02
208276	MW-10	Water	9/17/02	14:14	9/19/02
208277	MW-3	Water	9/17/02	15:50	9/19/02
208278	MW-6R	Water	9/17/02	17:27	9/19/02
208279	North Water Well	Water	9/17/02	11:05	9/19/02
208280	South Water Well	Water	9/17/02	11:18	9/19/02
208281	Duplicate	Water	9/17/02	:	9/19/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
208274 - MW-8	<0.001	<0.001	<0.001	<0.001	<0.001
208275 - MW-9	<0.001	<0.001	<0.001	<0.001	<0.001
208276 - MW-10	<0.001	<0.001	<0.001	<0.001	<0.001
208277 - MW-3	<0.005	<0.005	<0.005	<0.005	<0.005
208278 - MW-6R	<0.001	<0.001	<0.001	<0.001	<0.001
208279 - North Water Well	0.0018	<0.001	<0.001	<0.001	0.0018
208280 - South Water Well	0.0019	<0.001	<0.001	<0.001	0.0019
208281 - Duplicate	<0.001	<0.001	<0.001	<0.001	<0.001

This is only a summary. Please, refer to the complete report package for quality control data.

2003 Groundwater Monitoring Sampling Results
Navajo Refining Company – Lea Refinery
Lovington, New Mexico

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2003 APR 9 PM 1 01

Prepared for:

Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

By:

Safety & Environmental Solutions, Inc.
703 E. Clinton, Suite 102
Hobbs, New Mexico 88240
(505) 397-0510

Analytical and Quality Control Report

Dave Boyer
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: April 2, 2003

Work Order: 3033112

Project Location: Lovington,NM
Project Number: Lea Refinery
Project #: Lea Refinery

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
3997	MW-8	water	2003-03-28	12:40	2003-03-31
3998	MW-9	water	2003-03-28	13:50	2003-03-31
3999	MW-10	water	2003-03-28	14:45	2003-03-31
4000	MW-6R	water	2003-03-28	15:25	2003-03-31
4001	North Water Well	water	2003-03-28	15:45	2003-03-31
4002	South Water Well	water	2003-03-28	15:50	2003-03-31
4003	MW-3	water	2003-03-28	16:30	2003-03-31
4004	Duplicate #1	water	2003-03-28	00:00	2003-03-31
4005	Trip Blank 4199	water	2003-03-12	00:00	2003-03-31

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 6 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 3997 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	712	Date Analyzed:	2003-04-01	Analyzed By:	CG
Prep Batch:	660	Date Prepared:	2003-04-01	Prepared By:	CG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene (isomers)		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[1]	0.115	mg/L	1	0.100	115	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.104	mg/L	1	0.100	104	77.8 - 110

Sample: 3998 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	712	Date Analyzed:	2003-04-01	Analyzed By:	CG
Prep Batch:	660	Date Prepared:	2003-04-01	Prepared By:	CG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene (isomers)		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[2]	0.111	mg/L	1	0.100	111	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.109	mg/L	1	0.100	109	77.8 - 110

Sample: 3999 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	712	Date Analyzed:	2003-04-01	Analyzed By:	CG
Prep Batch:	660	Date Prepared:	2003-04-01	Prepared By:	CG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene (isomers)		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0973	mg/L	1	0.100	97	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.0916	mg/L	1	0.100	92	77.8 - 110

[1]Surrogate outside normal range due to peak interference.
[2]Surrogate outside normal range due to peak interference.

Sample: 4000 - MW-6R

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	712	Date Analyzed:	2003-04-01	Analyzed By:	CG
Prep Batch:	660	Date Prepared:	2003-04-01	Prepared By:	CG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00500	mg/L	5	0.00100
Toluene		<0.00500	mg/L	5	0.00100
Ethylbenzene		<0.00500	mg/L	5	0.00100
Xylene (isomers)		<0.00500	mg/L	5	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.516	mg/L	5	0.100	103	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.505	mg/L	5	0.100	101	77.8 - 110

Sample: 4001 - North Water Well

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	712	Date Analyzed:	2003-04-01	Analyzed By:	CG
Prep Batch:	660	Date Prepared:	2003-04-01	Prepared By:	CG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.101	mg/L	1	0.100	101	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.0927	mg/L	1	0.100	93	77.8 - 110

Sample: 4002 - South Water Well

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	712	Date Analyzed:	2003-04-01	Analyzed By:	CG
Prep Batch:	660	Date Prepared:	2003-04-01	Prepared By:	CG

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[3]	0.0754	mg/L	1	0.100	75	78.7 - 110
4-Bromofluorobenzene (4-BFB)	[4]	0.0752	mg/L	1	0.100	75	77.8 - 110

Sample: 4003 - MW-3

[3]Surrogate outside normal range due to matrix interference.

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	712	Date Analyzed:	2003-04-01	Analyzed By:	CG
Prep Batch:	660	Date Prepared:	2003-04-01	Prepared By:	CG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene (isomers)		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0846	mg/L	1	0.100	85	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.0823	mg/L	1	0.100	82	77.8 - 110

Sample: 4004 - Duplicate #1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	712	Date Analyzed:	2003-04-01	Analyzed By:	CG
Prep Batch:	660	Date Prepared:	2003-04-01	Prepared By:	CG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		<0.00100		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene (isomers)		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0858	mg/L	1	0.100	86	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.0902	mg/L	1	0.100	90	77.8 - 110

Sample: 4005 - Trip Blank 4199

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	712	Date Analyzed:	2003-04-01	Analyzed By:	CG
Prep Batch:	660	Date Prepared:	2003-04-01	Prepared By:	CG

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.00100		mg/L	1	0.00100
Toluene		0.00960		mg/L	1	0.00100
Ethylbenzene		<0.00100		mg/L	1	0.00100
Xylene (isomers)		<0.00100		mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[5]	0.0675	mg/L	1	0.100	68	78.7 - 110
4-Bromofluorobenzene (4-BFB)	[6]	0.0702	mg/L	1	0.100	70	77.8 - 110

Method Blank (1) QC Batch: 712

[5]Surrogate outside normal range due to matrix interference.

Parameter	Flag	Result	Units	MDL
Benzene		<0.000410	mg/L	0.00041
Toluene		<0.000760	mg/L	0.00076
Ethylbenzene		<0.00120	mg/L	0.0012
Xylene (isomers)		<0.00183	mg/L	0.00183

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.1	mg/L	1	0.100	100	78.7 - 110
4-Bromofluorobenzene (4-BFB)		0.0897	mg/L	1	0.100	90	77.8 - 110

Laboratory Control Spike (LCS-1) QC Batch: 712

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.100	0.0974	mg/L	1	0.100	<0.000410	100	1	80.5 - 113	5
Toluene	0.0994	0.0969	mg/L	1	0.100	<0.000760	99	1	81.2 - 112	5
Ethylbenzene	0.0996	0.0957	mg/L	1	0.100	<0.00120	100	2	82.2 - 112	6
Xylene (isomers)	0.302	0.290	mg/L	1	0.300	<0.00183	101	2	80.6 - 112	6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.104	0.102	mg/L	1	0.100	104	102	78.7 - 110
4-Bromofluorobenzene (4-BFB)	0.104	0.0968	mg/L	1	0.100	104	97	77.8 - 110

Standard (ICV-1) QC Batch: 712

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0994	99	85 - 115	2003-04-01
Toluene		mg/L	0.100	0.0988	99	85 - 115	2003-04-01
Ethylbenzene		mg/L	0.100	0.0981	98	85 - 115	2003-04-01
Xylene (isomers)		mg/L	0.300	0.296	99	85 - 115	2003-04-01

Standard (CCV-1) QC Batch: 712

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0980	98	85 - 115	2003-04-01
Toluene		mg/L	0.100	0.0977	98	85 - 115	2003-04-01
Ethylbenzene		mg/L	0.100	0.0981	98	85 - 115	2003-04-01
Xylene (isomers)		mg/L	0.300	0.296	99	85 - 115	2003-04-01

Standard (CCV-2) QC Batch: 712

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0960	96	85 - 115	2003-04-01
Benzene		mg/L	0.100	0.0960	96	85 - 115	2003-04-01
Toluene		mg/L	0.100	0.0996	100	85 - 115	2003-04-01
Toluene		mg/L	0.100	0.0996	100	85 - 115	2003-04-01

continued

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene		mg/L	0.100	0.101	101	85 - 115	2003-04-01
Ethylbenzene		mg/L	0.100	0.101	101	85 - 115	2003-04-01
Xylene (isomers)		mg/L	0.300	0.310	104	85 - 115	2003-04-01
Xylene (isomers)		mg/L	0.300	0.310	104	85 - 115	2003-04-01

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: July 2, 2003

Work Order: 3062314

Project Location: Lovington,NM
Project Name: Lea Refinery
Project Number: Nav-00-019

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
11054	MW-8	water	2003-06-20	13:10	2003-06-23
11055	MW-9	water	2003-06-20	13:50	2003-06-23
11056	MW-10	water	2003-06-20	14:20	2003-06-23
11057	MW-6R	water	2003-06-20	15:05	2003-06-23
11058	MW-3	water	2003-06-20	16:15	2003-06-23
11059	North Well	water	2003-06-20	16:50	2003-06-23
11060	South Well	water	2003-06-20	16:55	2003-06-23
11061	Duplicate #1	water	2003-06-20	00:00	2003-06-23
11062	Trip Blank	water	2003-06-20	00:00	2003-06-23

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 6 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Blair Leftwich

Dr. Blair Leftwich, Director

Analytical Report

Sample: 11054 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	2614	Date Analyzed:	2003-06-27	Analyzed By:	BS
Prep Batch:	2309	Date Prepared:	2003-06-27	Prepared By:	BS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0838	mg/L	1	0.100	84	61 - 127
4-Bromofluorobenzene (4-BFB)		0.0806	mg/L	1	0.100	81	72.6 - 130

Sample: 11055 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	2614	Date Analyzed:	2003-06-27	Analyzed By:	BS
Prep Batch:	2309	Date Prepared:	2003-06-27	Prepared By:	BS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0855	mg/L	1	0.100	86	61 - 127
4-Bromofluorobenzene (4-BFB)		0.0843	mg/L	1	0.100	84	72.6 - 130

Sample: 11056 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	2614	Date Analyzed:	2003-06-27	Analyzed By:	BS
Prep Batch:	2309	Date Prepared:	2003-06-27	Prepared By:	BS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0829	mg/L	1	0.100	83	61 - 127

continued ...

sample continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-Bromofluorobenzene (4-BFB)		0.0801	mg/L	1	0.100	80	72.6 - 130

Sample: 11057 - MW-6R

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	2614	Date Analyzed:	2003-06-27	Analyzed By:	BS
Prep Batch:	2309	Date Prepared:	2003-06-27	Prepared By:	BS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		0.00270	mg/L	1	0.00100
Xylene (isomers)		0.00150	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0846	mg/L	1	0.100	85	61 - 127
4-Bromofluorobenzene (4-BFB)		0.0826	mg/L	1	0.100	83	72.6 - 130

Sample: 11058 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	2614	Date Analyzed:	2003-06-27	Analyzed By:	BS
Prep Batch:	2309	Date Prepared:	2003-06-27	Prepared By:	BS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0805	mg/L	1	0.100	80	61 - 127
4-Bromofluorobenzene (4-BFB)		0.0798	mg/L	1	0.100	80	72.6 - 130

Sample: 11059 - North Well

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	2614	Date Analyzed:	2003-06-27	Analyzed By:	BS
Prep Batch:	2309	Date Prepared:	2003-06-27	Prepared By:	BS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100

continued ...

sample 11059 continued ...

Parameter	Flag	RL Result	Units	Dilution	RL
Xylene (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0953	mg/L	1	0.100	95	61 - 127
4-Bromofluorobenzene (4-BFB)		0.0938	mg/L	1	0.100	94	72.6 - 130

Sample: 11060 - South Well

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	2614	Date Analyzed:	2003-06-27	Analyzed By:	BS
Prep Batch:	2309	Date Prepared:	2003-06-27	Prepared By:	BS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		0.00170	mg/L	1	0.00100
Ethylbenzene		0.00130	mg/L	1	0.00100
Xylene (isomers)		0.00250	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0859	mg/L	1	0.100	86	61 - 127
4-Bromofluorobenzene (4-BFB)		0.0858	mg/L	1	0.100	86	72.6 - 130

Sample: 11061 - Duplicate #1

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	2614	Date Analyzed:	2003-06-27	Analyzed By:	BS
Prep Batch:	2309	Date Prepared:	2003-06-27	Prepared By:	BS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)	[1]	0.0171	mg/L	1	0.100	17	61 - 127
4-Bromofluorobenzene (4-BFB)		0.0795	mg/L	1	0.100	80	72.6 - 130

Sample: 11062 - Trip Blank

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5030B
QC Batch:	2614	Date Analyzed:	2003-06-27	Analyzed By:	BS

[1] Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

Prep Batch: 2309 Date Prepared: 2003-06-27 Prepared By: BS

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.00100	mg/L	1	0.00100
Toluene		<0.00100	mg/L	1	0.00100
Ethylbenzene		<0.00100	mg/L	1	0.00100
Xylene (isomers)		<0.00100	mg/L	1	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0857	mg/L	1	0.100	86	61 - 127
4-Bromofluorobenzene (4-BFB)		0.0856	mg/L	1	0.100	86	72.6 - 130

Method Blank (1) QC Batch: 2614

Parameter	Flag	Result	Units	RL
Benzene		<0.00100	mg/L	0.001
Toluene		<0.00100	mg/L	0.001
Ethylbenzene		<0.00100	mg/L	0.001
Xylene (isomers)		<0.00100	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.0900	mg/L	1	0.100	90	61 - 127
4-Bromofluorobenzene (4-BFB)		0.0894	mg/L	1	0.100	89	72.6 - 130

Laboratory Control Spike (LCS-1) QC Batch: 2614

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.0993	0.0987	mg/L	1	0.100	<0.000350	99	1	77.7 - 115	20
Toluene	0.0990	0.0985	mg/L	1	0.100	<0.000550	99	0	76.5 - 114	20
Ethylbenzene	0.0998	0.0994	mg/L	1	0.100	<0.000690	100	0	78.7 - 112	20
Xylene (isomers)	0.292	0.291	mg/L	1	0.300	<0.000610	97	0	66.3 - 123	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.0898	0.0932	mg/L	1	0.100	90	93	61 - 127
4-Bromofluorobenzene (4-BFB)	0.0971	0.0978	mg/L	1	0.100	97	98	72.6 - 130

Standard (ICV-1) QC Batch: 2614

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.0974	97	85 - 115	2003-06-27
Toluene		mg/L	0.100	0.0973	97	85 - 115	2003-06-27
Ethylbenzene		mg/L	0.100	0.0982	98	85 - 115	2003-06-27

continued . . .

standard continued ...

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Xylene (isomers)		mg/L	0.300	0.287	96	85 - 115	2003-06-27

Standard (CCV-1) QC Batch: 2614

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.111	111	85 - 115	2003-06-27
Toluene		mg/L	0.100	0.110	110	85 - 115	2003-06-27
Ethylbenzene		mg/L	0.100	0.112	112	85 - 115	2003-06-27
Xylene (isomers)		mg/L	0.300	0.327	109	85 - 115	2003-06-27

Standard (CCV-2) QC Batch: 2614

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.100	0.111	111	85 - 115	2003-06-27
Toluene		mg/L	0.100	0.112	112	85 - 115	2003-06-27
Ethylbenzene		mg/L	0.100	0.112	112	85 - 115	2003-06-27
Xylene (isomers)		mg/L	0.300	0.330	110	85 - 115	2003-06-27

e-Lab, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5

September 24, 2003

Darrell Moore
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: NAB-00-019 Lea Refinery MW Work Order : **0309171**

Dear Darrell Moore,

e-Lab, Inc. received 5 samples on 9/18/2003 8:45:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Inc. The total number of pages in this report is 11.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Lora Terrill

Electronically approved by: Lora Terrill

Lora Terrill
VP Lab Operations

e-Lab, Inc.

Date: *September 22, 2003*

CLIENT: Navajo Refining Company
Project: NAB-00-019 Lea Refinery MW
Work Order: **0309171**

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0309171-01	MW-8	Water		9/15/2003 16:22	9/18/2003 08:45	☐
0309171-02	MW-9	Water		9/15/2003 17:30	9/18/2003 08:45	☐
0309171-03	North Water Well	Water		9/15/2003 15:20	9/18/2003 08:45	☐
0309171-04	South Water Well	Water		9/15/2003 15:25	9/18/2003 08:45	☐
0309171-05	Trip Blank	Water		9/15/2003	9/18/2003 08:45	☐

e-Lab, Inc.

Date: *September 24, 2003*

CLIENT: Navajo Refining Company
Work Order: 0309171
Project: NAB-00-019 Lea Refinery MW
Lab ID: 0309171-01

Client Sample ID: MW-8
Collection Date: 9/15/2003 4:22:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	9/18/2003 10:15:00 PM
Toluene	ND	1.0		µg/L	1	9/18/2003 10:15:00 PM
Ethylbenzene	ND	1.0		µg/L	1	9/18/2003 10:15:00 PM
Xylenes, Total	ND	3.0		µg/L	1	9/18/2003 10:15:00 PM
Surr:4-Bromofluorobenzene	83.7	70-130		%REC	1	9/18/2003 10:15:00 PM
Surr: Trifluorotoluene	98.8	70-130		%REC	1	9/18/2003 10:15:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *September 24, 2003*

CLIENT: Navajo Refining Company
Work Order: 0309171
Project: NAB-00-019 Lea Refinery MW
Lab ID: 0309171-02

Client Sample ID: MW-9
Collection Date: 9/15/2003 5:30:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	9/18/2003 10:40:00 PM
Toluene	ND	1.0		µg/L	1	9/18/2003 10:40:00 PM
Ethylbenzene	ND	1.0		µg/L	1	9/18/2003 10:40:00 PM
Xylenes, Total	ND	3.0		µg/L	1	9/18/2003 10:40:00 PM
Surr:4-Bromofluorobenzene	83.8	70-130		%REC	1	9/18/2003 10:40:00 PM
Surr: Trifluorotoluene	98.4	70-130		%REC	1	9/18/2003 10:40:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *September 24, 2003*

CLIENT: Navajo Refining Company
Work Order: 0309171
Project: NAB-00-019 Lea Refinery MW
Lab ID: 0309171-03

Client Sample ID: North Water Well
Collection Date: 9/15/2003 3:20:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	9/18/2003 11:05:00 PM
Toluene	ND	1.0		µg/L	1	9/18/2003 11:05:00 PM
Ethylbenzene	ND	1.0		µg/L	1	9/18/2003 11:05:00 PM
Xylenes, Total	ND	3.0		µg/L	1	9/18/2003 11:05:00 PM
Surr:4-Bromofluorobenzene	83.0	70-130		%REC	1	9/18/2003 11:05:00 PM
Surr: Trifluorotoluene	98.2	70-130		%REC	1	9/18/2003 11:05:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *September 24, 2003*

CLIENT: Navajo Refining Company
Work Order: 0309171
Project: NAB-00-019 Lea Refinery MW
Lab ID: 0309171-04

Client Sample ID: South Water Well
Collection Date: 9/15/2003 3:25:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	9/18/2003 11:31:00 PM
Toluene	ND	1.0		µg/L	1	9/18/2003 11:31:00 PM
Ethylbenzene	ND	1.0		µg/L	1	9/18/2003 11:31:00 PM
Xylenes, Total	ND	3.0		µg/L	1	9/18/2003 11:31:00 PM
Surr:4-Bromofluorobenzene	83.9	70-130		%REC	1	9/18/2003 11:31:00 PM
Surr: Trifluorotoluene	97.4	70-130		%REC	1	9/18/2003 11:31:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *Sep 22 2003*

CLIENT: Navajo Refining Company

QC BATCH REPORT

Work Order: 0309171

Project: NAB-00-019 Lea Refinery MW

Batch ID: **R16220** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW1-091803** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **09/18/03 16:21**

Client ID: Run ID: **BTEX1_030918C** SeqNo: **369505** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	0.8207	1.0								J
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	24.39	1.0	30	0	81.3	70-130	0			
Surr: Trifluorotoluene	29.12	1.0	30	0	97.1	70-130	0			

LCS Sample ID: **BLCSW1-091803** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **09/18/03 15:56**

Client ID: Run ID: **BTEX1_030918C** SeqNo: **369504** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.94	1.0	20	0	105	70-130	0			
Toluene	20.54	1.0	20	0	103	70-130	0			
Ethylbenzene	20.63	1.0	20	0	103	70-130	0			
Methyl tert-butyl ether	117.6	5.0	100	0	118	70-130	0			
Xylenes, Total	62.86	3.0	60	0	105	70-130	0			
Surr: 4-Bromofluorobenzene	25.25	1.0	30	0	84.2	70-130	0			
Surr: Trifluorotoluene	29.05	1.0	30	0	96.8	70-130	0			

MS Sample ID: **0309137-01AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **09/18/03 18:02**

Client ID: Run ID: **BTEX1_030918C** SeqNo: **369508** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.74	1.0	20	0.6306	95.5	70-130	0			
Toluene	19.05	1.0	20	0	95.3	70-130	0			
Ethylbenzene	19.58	1.0	20	0	97.9	70-130	0			
Methyl tert-butyl ether	106.3	5.0	100	0	106	70-130	0			
Xylenes, Total	58.75	3.0	60	0	97.9	70-130	0			
Surr: 4-Bromofluorobenzene	24.84	1.0	30	0	82.8	70-130	0			
Surr: Trifluorotoluene	29.3	1.0	30	0	97.7	70-130	0			

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0309171
Project: NAB-00-019 Lea Refinery MW

QC BATCH REPORT

Batch ID: **R16220** InstrumentID: **BTEX1**

MSD Sample ID: **0309137-01AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **09/18/03 18:27**

Client ID: Run ID: **BTEX1_030918C** SeqNo: **369509** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.59	1.0	20	0.6306	94.8	70-130	19.74	0.763	20	
Toluene	19.02	1.0	20	0	95.1	70-130	19.05	0.15	20	
Ethylbenzene	19.53	1.0	20	0	97.7	70-130	19.58	0.244	20	
Methyl tert-butyl ether	106.6	5.0	100	0	107	70-130	106.3	0.334	20	
Xylenes, Total	58.99	3.0	60	0	98.3	70-130	58.75	0.405	20	
Surr: 4-Bromofluorobenzene	25.12	1.0	30	0	83.7	70-130	24.84	1.15	20	
Surr: Trifluorotoluene	29.09	1.0	30	0	97	70-130	29.3	0.731	20	

Thefollowingsampleswereanalyzedinthisbatch: 0309171-01A 0309171-02A 0309171-03A 0309171-04A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab, Inc.
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 1

e-Lab, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager: Lora Terrill | e-Lab Work Order #: 30217

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order:		Project Name:	Lea Refinery MW	A	BTEX/MTBE (8021)
Work Order:		Project Number:	NAB-00-019	B	
Company Name:	Navajo Refining Company	Bill To Company:	Navajo Refining Company	C	
Send Report To:	Darrell Moore	Invoice Attn:	Darrell Moore	D	
Address:	P.O. Box 159	Address:	P.O. Box 159	E	
City/State/Zip:	Artesia, NM 88211	City/State/Zip:	Artesia, NM 88211	F	
Phone:	505-748-3311	Phone:	505-748-3311	G	
Fax:	505-746-5421	Fax:	505-746-5421	H	
e-Mail Address:				I	
				J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-8	9/15/03	1622	H_2O	1, 8	3	X										
2	MW-9	9/15/03	1730	H_2O	1, 8	3	X										
3	North Water Well	9/15/03	1520	H_2O	1, 8	3	X										
4	South Water Well	9/15/03	1525	H_2O	1, 8	3	X										
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s): Please Print & Sign: David Boyer D. Boyer

Shipment Method: FedEX

Required Turnaround Time: (Check Box) ☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:
D. Boyer	9/17/03	1810	
Relinquished by:	Date:	Time:	Received by (Laboratory):
			RICHARD SANCHEZ 9.18.03 0845
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):

Notes: Copy of report to D. Boyer JESI (505) 397-0510

e-Lab Cooler ID	Cooler Temp.

QC Package: (Check Box Below)

Level II: Standard QC	X
Level III: Standard QC + Raw Data	
Level IV: SW846 Methods/CLP	
Other:	

Preservative Key: 1- HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.

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e-Lab, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 9/18/2003 8:45:00 AM

Work Order Number 0309171

Received by: RSZ

Checklist completed by _____ 9/18/03 (Signature / Date)

Reviewed by _____ 9/18/03 (Initials / Date)

Matrix: W

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.6c	003	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? _____ Checked by _____

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

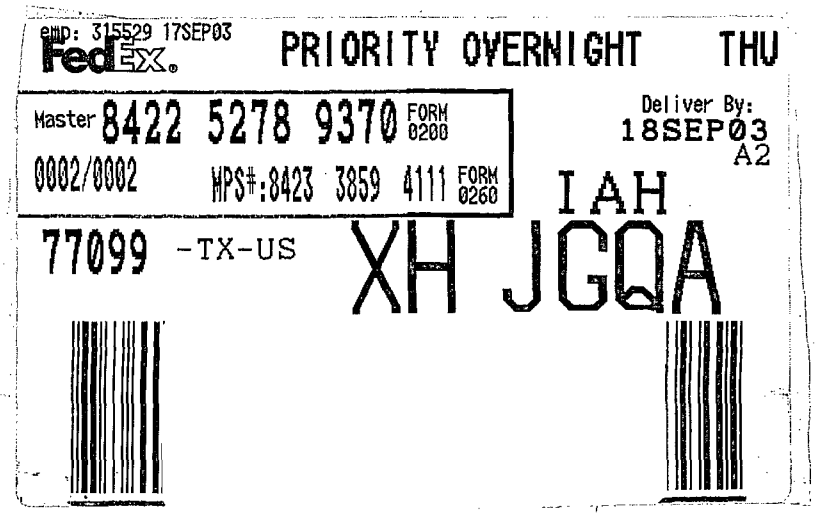
Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

W.O.# 0309171



e-Lab, Inc.
10450 Stancliff Rd. Suite 210
Houston, Texas 77099
Tel. 281.530.5656
Fax. 281.530.5887
QUALITY • INTEGRITY • SERVICE

Date: 9/17/03
Name: BB
Company: NR

CUSTODY SEAL
Time: 1810
03
DSD Boyer
SR/SEEK

Seal Broken
Date: 9.18.03
RS

e-Lab, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5

October 01, 2003

Darrell Moore
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: NAB-00-019 Lea Refinery MW

Work Order : **0309220**

Dear Darrell Moore,

e-Lab, Inc. received 5 samples on 9/23/2003 9:00:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Inc. The total number of pages in this report is 13.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Lora Terrill

Electronically approved by: Lora Terrill

Lora Terrill
VP Lab Operations

e-Lab, Inc.

Date: *October 01, 2003*

CLIENT: Navajo Refining Company
Project: NAB-00-019 Lea Refinery MW
Work Order: **0309220**

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0309220-01	MW-10	Water		9/20/2003 15:20	9/23/2003 09:00	☐
0309220-02	MW-6R	Water		9/20/2003 16:35	9/23/2003 09:00	☐
0309220-03	MW-3	Water		9/20/2003 17:20	9/23/2003 09:00	☐
0309220-04	Duplicate	Water		9/20/2003	9/23/2003 09:00	☐
0309220-05	Trip Blank	Water		9/20/2003	9/23/2003 09:00	☐

e-Lab, Inc.

Date: *October 01, 2003*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	MW-10
Work Order:	0309220	**Collection Date:**	9/20/2003 3:20:00 PM
Project:	NAB-00-019 Lea Refinery MW		
Lab ID:	0309220-01	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	9/26/2003 7:07:00 AM
Toluene	ND	1.0		µg/L	1	9/26/2003 7:07:00 AM
Ethylbenzene	ND	1.0		µg/L	1	9/26/2003 7:07:00 AM
Xylenes, Total	ND	3.0		µg/L	1	9/26/2003 7:07:00 AM
Surr: 4-Bromofluorobenzene	72.2	70-130		%REC	1	9/26/2003 7:07:00 AM
Surr: Trifluorotoluene	83.4	70-130		%REC	1	9/26/2003 7:07:00 AM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *October 01, 2003*

CLIENT: Navajo Refining Company
Work Order: 0309220
Project: NAB-00-019 Lea Refinery MW
Lab ID: 0309220-02

Client Sample ID: MW-6R
Collection Date: 9/20/2003 4:35:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	9/29/2003 4:18:00 PM
Toluene	ND	1.0		µg/L	1	9/29/2003 4:18:00 PM
Ethylbenzene	ND	1.0		µg/L	1	9/29/2003 4:18:00 PM
Xylenes, Total	ND	3.0		µg/L	1	9/29/2003 4:18:00 PM
Surr: 4-Bromofluorobenzene	86.2	70-130		%REC	1	9/29/2003 4:18:00 PM
Surr: Trifluorotoluene	85.1	70-130		%REC	1	9/29/2003 4:18:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *October 01, 2003*

CLIENT: Navajo Refining Company
Work Order: 0309220
Project: NAB-00-019 Lea Refinery MW
Lab ID: 0309220-03

Client Sample ID: MW-3
Collection Date: 9/20/2003 5:20:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	1.1	1.0		µg/L	1	9/29/2003 3:46:00 PM
Toluene	ND	1.0		µg/L	1	9/29/2003 3:46:00 PM
Ethylbenzene	ND	1.0		µg/L	1	9/29/2003 3:46:00 PM
Xylenes, Total	ND	3.0		µg/L	1	9/29/2003 3:46:00 PM
Surr: 4-Bromofluorobenzene	82.9	70-130		%REC	1	9/29/2003 3:46:00 PM
Surr: Trifluorotoluene	88.9	70-130		%REC	1	9/29/2003 3:46:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *October 01, 2003*

CLIENT: Navajo Refining Company
Work Order: 0309220
Project: NAB-00-019 Lea Refinery MW
Lab ID: 0309220-04

Client Sample ID: Duplicate
Collection Date: 9/20/2003
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	1.1	1.0		µg/L	1	9/29/2003 2:09:00 PM
Toluene	ND	1.0		µg/L	1	9/29/2003 2:09:00 PM
Ethylbenzene	ND	1.0		µg/L	1	9/29/2003 2:09:00 PM
Xylenes, Total	ND	3.0		µg/L	1	9/29/2003 2:09:00 PM
Surr: 4-Bromofluorobenzene	88.7	70-130		%REC	1	9/29/2003 2:09:00 PM
Surr: Trifluorotoluene	90.8	70-130		%REC	1	9/29/2003 2:09:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *Oct 01 2003*

CLIENT: Navajo Refining Company

QC BATCH REPORT

Work Order: 0309220

Project: NAB-00-019 Lea Refinery MW

Batch ID: **R16342** InstrumentID: **BTEX3**

MBLK Sample ID: **BBLKW1-092503** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **09/26/03 5:31**

Client ID: Run ID: **BTEX3_030925B** SeqNo: **372225** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	21.94	1.0	30	0	73.1	70-130	0			
Surr: Trifluorotoluene	24.97	1.0	30	0	83.2	70-130	0			

LCS Sample ID: **BLCSW1-092503** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **09/26/03 4:26**

Client ID: Run ID: **BTEX3_030925B** SeqNo: **372224** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.09	1.0	20	0	95.4	70-130	0			
Toluene	18.24	1.0	20	0	91.2	70-130	0			
Ethylbenzene	17.45	1.0	20	0	87.2	70-130	0			
Xylenes, Total	53.41	3.0	60	0	89	70-130	0			
Surr: 4-Bromofluorobenzene	25.25	1.0	30	0	84.2	70-130	0			
Surr: Trifluorotoluene	25.38	1.0	30	0	84.6	70-130	0			

MS Sample ID: **0309220-01AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **09/26/03 7:39**

Client ID: **MW-10** Run ID: **BTEX3_030925B** SeqNo: **372229** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.84	1.0	20	0	89.2	70-130	0			
Toluene	17.22	1.0	20	0	86.1	70-130	0			
Ethylbenzene	16.11	1.0	20	0	80.6	70-130	0			
Xylenes, Total	49.95	3.0	60	0	83.2	70-130	0			
Surr: 4-Bromofluorobenzene	24.47	1.0	30	0	81.6	70-130	0			
Surr: Trifluorotoluene	25.08	1.0	30	0	83.6	70-130	0			

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0309220
Project: NAB-00-019 Lea Refinery MW

QC BATCH REPORT

Batch ID: **R16342** InstrumentID: **BTEX3**

MSD Sample ID: **0309220-01AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **09/26/03 8:12**

Client ID: **MW-10** Run ID: **BTEX3_030925B** SeqNo: **372230** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.72	1.0	20	0	88.6	70-130	17.84	0.675	20	
Toluene	17.11	1.0	20	0	85.5	70-130	17.22	0.632	20	
Ethylbenzene	15.77	1.0	20	0	78.9	70-130	16.11	2.15	20	
Xylenes, Total	48.45	3.0	60	0	80.8	70-130	49.95	3.05	20	
Surr: 4-Bromofluorobenzene	26.61	1.0	30	0	88.7	70-130	24.47	8.36	20	
Surr: Trifluorotoluene	26.23	1.0	30	0	87.4	70-130	25.08	4.5	20	

Thefollowingsampleswereanalyzedinthisbatch: 0309220-01A 0309220-02A 0309220-03A 0309220-04A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0309220
Project: NAB-00-019 Lea Refinery MW

QC BATCH REPORT

Batch ID: **R16388** InstrumentID: **BTEX3**

MBLK Sample ID: **BBLKW1-092903** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **09/29/03 12:32**
Client ID: Run ID: **BTEX3_030929A** SeqNo: **373199** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	0.3497	1.0								J
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	23.3	1.0	30	0	77.7	70-130	0			
Surr: Trifluorotoluene	25.24	1.0	30	0	84.1	70-130	0			

LCS Sample ID: **BLCSW1-092903** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **09/29/03 11:27**
Client ID: Run ID: **BTEX3_030929A** SeqNo: **373198** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.25	1.0	20	0	101	70-130	0			
Toluene	19.69	1.0	20	0	98.5	70-130	0			
Ethylbenzene	18.49	1.0	20	0	92.5	70-130	0			
Xylenes, Total	57.04	3.0	60	0	95.1	70-130	0			
Surr: 4-Bromofluorobenzene	25.72	1.0	30	0	85.7	70-130	0			
Surr: Trifluorotoluene	25.51	1.0	30	0	85	70-130	0			

MS Sample ID: **0309220-04AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **09/29/03 14:41**
Client ID: **Duplicate** Run ID: **BTEX3_030929A** SeqNo: **373203** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.3	1.0	20	1.101	86	70-130	0			
Toluene	17.99	1.0	20	0	90	70-130	0			
Ethylbenzene	16.72	1.0	20	0	83.6	70-130	0			
Xylenes, Total	50.1	3.0	60	0	83.5	70-130	0			
Surr: 4-Bromofluorobenzene	28.42	1.0	30	0	94.7	70-130	0			
Surr: Trifluorotoluene	27.31	1.0	30	0	91	70-130	0			

MSD Sample ID: **0309220-04AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **09/29/03 15:13**
Client ID: **Duplicate** Run ID: **BTEX3_030929A** SeqNo: **373204** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.23	1.0	20	1.101	85.7	70-130	18.3	0.342	20	
Toluene	17.89	1.0	20	0	89.4	70-130	17.99	0.571	20	
Ethylbenzene	16.8	1.0	20	0	84	70-130	16.72	0.471	20	
Xylenes, Total	50.18	3.0	60	0	83.6	70-130	50.1	0.164	20	
Surr: 4-Bromofluorobenzene	27.66	1.0	30	0	92.2	70-130	28.42	2.7	20	
Surr: Trifluorotoluene	27.16	1.0	30	0	90.5	70-130	27.31	0.566	20	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0309220
Project: NAB-00-019 Lea Refinery MW

QC BATCH REPORT

Batch ID: **R16388** InstrumentID: **BTEX3**

Thefollowingsampleswereanalyzedinthisbatch:

0309220-02A	0309220-03A	0309220-04A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab, Inc.
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 1

e-Lab, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager: Lora Tenill | e-Lab Work Order #: 30907120

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lea Refinery MW	A	BTEX ~~MTBE~~ (8021) BTEX only
Work Order		Project Number	NAB-00-019	B	
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	
Send Report To	Darrell Moore	Invoice Attn.	Darrell Moore	D	
Address	P.O. Box 159	Address	P.O. Box 159	E	
				F	
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	G	
Phone	505-748-3311	Phone	505-748-3311	H	
Fax	505-746-5421	Fax	505-746-5421	I	
e-Mail Address				J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-1D	9/20/03	1520	H_2O	1,8	3	X										
2	MW-6R	9/20	1655	"	"	3	X										
3	MW-3	9/20	1720	"	"	3	X										
4	Duplicate	9/20	—	H_2O	1,8	3	X										
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s): Please Print & Sign: D Boyer D Boyer

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) ☐ STD 10 Wk Days ☒ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other _____

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
D Boyer	9/23/03	1145		Copy of Results to Dave Boyer, SESI, (505) 397-0510 (Phone)
Relinquished by:	Date:	Time:	Received by (Laboratory): RICHARD MAR 9-23-03 0900	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

e-Lab Cooler ID	Cooler Temp.

QC Package: (Check Box Below)

Level II: Standard QC	X
Level III: Standard QC + Raw Data	
Level IV: SW846 Methods/CLP	
Other:	

Preservative Key: 1- HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.

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e-Lab, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 9/23/2003 9:00:00 AM

Work Order Number 0309220

Received by: RSZ

Checklist completed by _____ 9/23/03. Reviewed by JT 9/24/03

Signature Date Initials Date

Matrix: W

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.9c	003	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? _____ Checked by _____

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

From: JERRI R LEE (505)397-0510
SESI
703 E. CLINTON

HOBBS, NM, 88240

REVENUE BARCODE

FedEx.

To: Sample Recieving (281)530-5656
E-Labs
10450 Stancliff Road
Suite 210
Houston, TX, 77099

Ref: NAV-00-008

SHIP DATE: 22SEP03
WEIGHT: 15 LBS

DELIVERY ADDRESS BARCODE (S-EDR)

TRK # 7929 7382 0493 FORM 0201

FedEx PRIORITY OVERNIGHT

TUE
A2
Deliver by:
23SEP03

77099-TX-US

IAH

A9 JGQA

e-Lab, Inc.
10450 Stancliff Rd. Suite 210
Houston, Texas 77099
Tel. 281.530.5656
Fax. 281.530.5887
QUALITY • INTEGRITY • SERVICE

Date:
Name
Comp

CUSTODY SEAL

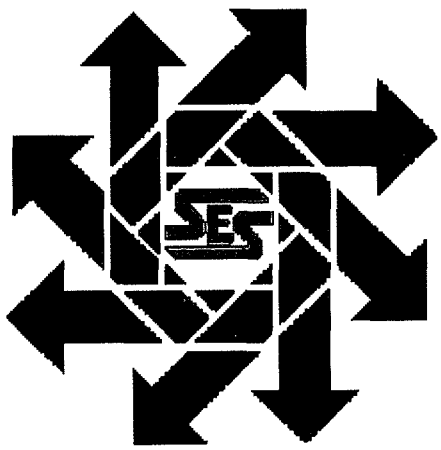
Time: 11:45

Broken By:

Date: 9.23.03

W.O.# B09220

2004 Groundwater Monitoring Sampling Results
Navajo Refining Company – Lea Refinery
Lovington, New Mexico



RECEIVED
2008 APR 9 PM 1 01

Prepared for:

Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

By:

Safety & Environmental Solutions, Inc.
703 E. Clinton, Suite 102
Hobbs, New Mexico 88240
(505) 397-0510

e-Lab, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

January 28, 2004

Darrell Moore
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: Lea Refinery, Lovington Work Order : **0401087**

Dear Darrell Moore,

e-Lab, Inc. received 11 samples on 1/13/2004 8:40:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Inc. The total number of pages in this report is 40.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Lora Terrill

Electronically approved by: Patrina A. Dathorne

Lora Terrill
VP Lab Operations

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Project: Lea Refinery, Lovington
Work Order: **0401087**

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0401087-01	MW-4	Water		1/9/2004 16:30	1/13/2004 08:40	☐
0401087-02	MW-8	Water		1/10/2004 09:20	1/13/2004 08:40	☐
0401087-03	MW-9	Water		1/10/2004 10:35	1/13/2004 08:40	☐
0401087-04	MW-10	Water		1/10/2004 11:40	1/13/2004 08:40	☐
0401087-05	North Water Well	Water		1/10/2004 13:00	1/13/2004 08:40	☐
0401087-06	South Water Well	Water		1/10/2004 13:10	1/13/2004 08:40	☐
0401087-07	MW-3	Water		1/10/2004 13:45	1/13/2004 08:40	☐
0401087-08	MW-6R	Water		1/10/2004 14:50	1/13/2004 08:40	☐
0401087-09	MW-5	Water		1/10/2004 17:15	1/13/2004 08:40	☐
0401087-10	Duplicate	Water		1/10/2004	1/13/2004 08:40	☐
0401087-11	Trip Blank #121903-5	Water		1/10/2004	1/13/2004 08:40	☐

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-01

Client Sample ID: MW-4
Collection Date: 1/9/2004 4:30:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/13/2004 12:55:00 PM
Toluene	ND	1.0		µg/L	1	1/13/2004 12:55:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/13/2004 12:55:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	1/13/2004 12:55:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/13/2004 12:55:00 PM
Surr: 4-Bromofluorobenzene	97.3	70-130		%REC	1	1/13/2004 12:55:00 PM
Surr: Trifluorotoluene	119	70-130		%REC	1	1/13/2004 12:55:00 PM
MERCURY, TOTAL		**SW7470**			Prep Date: **1/13/2004**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	1/14/2004 4:44:13 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **1/19/2004**	Analyst: **ALR**
Aluminum	0.160	0.0100		mg/L	1	1/21/2004 11:49:00 PM
Arsenic	0.00578	0.00500		mg/L	1	1/21/2004 11:49:00 PM
Barium	0.0914	0.00500		mg/L	1	1/21/2004 11:49:00 PM
Beryllium	ND	0.00200		mg/L	1	1/22/2004 9:44:00 PM
Boron	0.196	0.0200		mg/L	1	1/22/2004 9:44:00 PM
Cadmium	ND	0.00100		mg/L	1	1/21/2004 11:49:00 PM
Calcium	77.0	5.00		mg/L	10	1/23/2004 2:50:00 PM
Chromium	ND	0.00200		mg/L	1	1/21/2004 11:49:00 PM
Cobalt	ND	0.00200		mg/L	1	1/21/2004 11:49:00 PM
Copper	0.00264	0.00200		mg/L	1	1/21/2004 11:49:00 PM
Iron	0.494	0.200		mg/L	1	1/21/2004 11:49:00 PM
Lead	ND	0.00500		mg/L	1	1/21/2004 11:49:00 PM
Magnesium	9.47	0.200		mg/L	1	1/21/2004 11:49:00 PM
Manganese	0.00678	0.00500		mg/L	1	1/21/2004 11:49:00 PM
Molybdenum	ND	0.00500		mg/L	1	1/21/2004 11:49:00 PM
Nickel	ND	0.00500		mg/L	1	1/21/2004 11:49:00 PM
Potassium	2.43	0.200		mg/L	1	1/21/2004 11:49:00 PM
Selenium	ND	0.00500		mg/L	1	1/21/2004 11:49:00 PM
Silver	ND	0.00500		mg/L	1	1/21/2004 11:49:00 PM
Sodium	34.5	2.00		mg/L	10	1/23/2004 2:50:00 PM
Vanadium	0.0255	0.00500		mg/L	1	1/21/2004 11:49:00 PM
Zinc	0.00758	0.00500		mg/L	1	1/21/2004 11:49:00 PM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **MG**
Chloride	22.8	0.500		mg/L	1	1/14/2004 11:20:00 AM
Fluoride	1.11	0.100		mg/L	1	1/14/2004 11:20:00 AM
Sulfate	76.2	5.00		mg/L	5	1/14/2004 11:53:00 AM
Nitrate/Nitrite (as N)	ND	0.100		mg/L	1	1/14/2004 11:20:00 AM
Surr: Dichloroacetic acid (surr)	111	80-120		%REC	5	1/14/2004 11:53:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-01

Client Sample ID: MW-4
Collection Date: 1/9/2004 4:30:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
Surr: Dichloroacetic acid (surr)	103	80-120		%REC	1	1/14/2004 11:20:00 AM
ALKALINITY		**E310.1**				Analyst: **LMD**
Alkalinity, Bicarbonate (As CaCO3)	196	5.00		mg/L	1	1/14/2004
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Total (As CaCO3)	196	5.00		mg/L	1	1/14/2004
CONDUCTIVITY		**E120.1**				Analyst: **LMD**
Specific Conductance	576	1.00		µmhos/cm	1	1/13/2004
PH		**E150.1**				Analyst: **LMD**
pH	7.11	0.100	H	pH units	1	1/13/2004
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **JBA**
Total Dissolved Solids (Residue, Filterable)	398	10.0		mg/L	1	1/13/2004

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-02

Client Sample ID: MW-8
Collection Date: 1/10/2004 9:20:00 AM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/13/2004 1:20:00 PM
Toluene	ND	1.0		µg/L	1	1/13/2004 1:20:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/13/2004 1:20:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	1/13/2004 1:20:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/13/2004 1:20:00 PM
Surr: 4-Bromofluorobenzene	92.0	70-130		%REC	1	1/13/2004 1:20:00 PM
Surr: Trifluorotoluene	120	70-130		%REC	1	1/13/2004 1:20:00 PM
MERCURY, TOTAL		**SW7470**			Prep Date: **1/13/2004**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	1/14/2004 4:45:44 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **1/19/2004**	Analyst: **ALR**
Aluminum	0.262	0.100		mg/L	10	1/23/2004 2:54:00 PM
Arsenic	0.00967	0.00500		mg/L	1	1/21/2004 11:54:00 PM
Barium	0.0744	0.00500		mg/L	1	1/21/2004 11:54:00 PM
Beryllium	ND	0.00200		mg/L	1	1/22/2004 9:49:00 PM
Boron	0.369	0.0200		mg/L	1	1/22/2004 9:49:00 PM
Cadmium	ND	0.00100		mg/L	1	1/21/2004 11:54:00 PM
Calcium	59.9	5.00		mg/L	10	1/23/2004 2:54:00 PM
Chromium	0.00878	0.00200		mg/L	1	1/21/2004 11:54:00 PM
Cobalt	ND	0.00200		mg/L	1	1/21/2004 11:54:00 PM
Copper	0.00688	0.00200		mg/L	1	1/21/2004 11:54:00 PM
Iron	0.425	0.200		mg/L	1	1/21/2004 11:54:00 PM
Lead	ND	0.00500		mg/L	1	1/21/2004 11:54:00 PM
Magnesium	5.76	0.200		mg/L	1	1/21/2004 11:54:00 PM
Manganese	0.0269	0.00500		mg/L	1	1/21/2004 11:54:00 PM
Molybdenum	0.00951	0.00500		mg/L	1	1/21/2004 11:54:00 PM
Nickel	ND	0.00500		mg/L	1	1/21/2004 11:54:00 PM
Potassium	4.46	0.200		mg/L	1	1/21/2004 11:54:00 PM
Selenium	ND	0.00500		mg/L	1	1/21/2004 11:54:00 PM
Silver	ND	0.00500		mg/L	1	1/21/2004 11:54:00 PM
Sodium	168	2.00		mg/L	10	1/23/2004 2:54:00 PM
Vanadium	0.0412	0.00500		mg/L	1	1/21/2004 11:54:00 PM
Zinc	0.0909	0.00500		mg/L	1	1/21/2004 11:54:00 PM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **MG**
Chloride	66.8	2.50		mg/L	5	1/14/2004 1:30:00 PM
Fluoride	1.11	0.100		mg/L	1	1/14/2004 12:58:00 PM
Sulfate	88.9	5.00		mg/L	5	1/14/2004 1:30:00 PM
Nitrate/Nitrite (as N)	ND	0.100		mg/L	1	1/14/2004 12:58:00 PM
Surr: Dichloroacetic acid (surr)	108	80-120		%REC	5	1/14/2004 1:30:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-02

Client Sample ID: MW-8
Collection Date: 1/10/2004 9:20:00 AM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
Surr: Dichloroacetic acid (surr)	106	80-120		%REC	1	1/14/2004 12:58:00 PM
ALKALINITY		**E310.1**				Analyst: **LMD**
Alkalinity, Bicarbonate (As CaCO3)	343	5.00		mg/L	1	1/14/2004
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Total (As CaCO3)	343	5.00		mg/L	1	1/14/2004
CONDUCTIVITY		**E120.1**				Analyst: **LMD**
Specific Conductance	941	1.00		µmhos/cm	1	1/13/2004
PH		**E150.1**				Analyst: **LMD**
pH	7.48	0.100	H	pH units	1	1/13/2004
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **JBA**
Total Dissolved Solids (Residue, Filterable)	617	10.0		mg/L	1	1/13/2004

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc. **Date:** *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-03

Client Sample ID: MW-9
Collection Date: 1/10/2004 10:35:00 AM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/13/2004 1:45:00 PM
Toluene	ND	1.0		µg/L	1	1/13/2004 1:45:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/13/2004 1:45:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	1/13/2004 1:45:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/13/2004 1:45:00 PM
Surr: 4-Bromofluorobenzene	99.4	70-130		%REC	1	1/13/2004 1:45:00 PM
Surr: Trifluorotoluene	117	70-130		%REC	1	1/13/2004 1:45:00 PM
MERCURY, TOTAL		**SW7470**			Prep Date: **1/13/2004**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	1/14/2004 4:49:25 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **1/19/2004**	Analyst: **ALR**
Aluminum	0.426	0.100		mg/L	10	1/23/2004 2:58:00 PM
Arsenic	0.0258	0.00500		mg/L	1	1/22/2004 12:07:00 AM
Barium	0.0803	0.00500		mg/L	1	1/22/2004 12:07:00 AM
Beryllium	ND	0.00200		mg/L	1	1/22/2004 9:53:00 PM
Boron	0.165	0.0200		mg/L	1	1/22/2004 9:53:00 PM
Cadmium	ND	0.00100		mg/L	1	1/22/2004 12:07:00 AM
Calcium	32.8	0.500		mg/L	1	1/22/2004 12:07:00 AM
Chromium	ND	0.00200		mg/L	1	1/22/2004 12:07:00 AM
Cobalt	ND	0.00200		mg/L	1	1/22/2004 12:07:00 AM
Copper	0.00594	0.00200		mg/L	1	1/22/2004 12:07:00 AM
Iron	0.286	0.200		mg/L	1	1/22/2004 12:07:00 AM
Lead	ND	0.00500		mg/L	1	1/22/2004 12:07:00 AM
Magnesium	2.79	0.200		mg/L	1	1/22/2004 12:07:00 AM
Manganese	0.0608	0.00500		mg/L	1	1/22/2004 12:07:00 AM
Molybdenum	0.0119	0.00500		mg/L	1	1/22/2004 12:07:00 AM
Nickel	ND	0.00500		mg/L	1	1/22/2004 12:07:00 AM
Potassium	3.91	0.200		mg/L	1	1/22/2004 12:07:00 AM
Selenium	ND	0.00500		mg/L	1	1/22/2004 12:07:00 AM
Silver	ND	0.00500		mg/L	1	1/22/2004 12:07:00 AM
Sodium	214	4.00		mg/L	20	1/23/2004 5:04:00 PM
Vanadium	0.0466	0.00500		mg/L	1	1/22/2004 12:07:00 AM
Zinc	0.0252	0.00500		mg/L	1	1/22/2004 12:07:00 AM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **MG**
Chloride	102	2.50		mg/L	5	1/14/2004 3:08:00 PM
Fluoride	3.99	0.100		mg/L	1	1/14/2004 2:35:00 PM
Sulfate	82.7	5.00		mg/L	5	1/14/2004 3:08:00 PM
Nitrate/Nitrite (as N)	ND	0.100		mg/L	1	1/14/2004 2:35:00 PM
Surr: Dichloroacetic acid (surr)	108	80-120		%REC	5	1/14/2004 3:08:00 PM

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-03

Client Sample ID: MW-9
Collection Date: 1/10/2004 10:35:00 AM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
Surr: Dichloroacetic acid (surr)	99.0	80-120		%REC	1	1/14/2004 2:35:00 PM
ALKALINITY		**E310.1**				Analyst: **LMD**
Alkalinity, Bicarbonate (As CaCO3)	275	5.00		mg/L	1	1/14/2004
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Total (As CaCO3)	275	5.00		mg/L	1	1/14/2004
CONDUCTIVITY		**E120.1**				Analyst: **LMD**
Specific Conductance	975	1.00		µmhos/cm	1	1/13/2004
PH		**E150.1**				Analyst: **LMD**
pH	7.64	0.100	H	pH units	1	1/13/2004
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **JBA**
Total Dissolved Solids (Residue, Filterable)	623	10.0		mg/L	1	1/13/2004

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-04

Client Sample ID: MW-10
Collection Date: 1/10/2004 11:40:00 AM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/13/2004 2:10:00 PM
Toluene	ND	1.0		µg/L	1	1/13/2004 2:10:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/13/2004 2:10:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	1/13/2004 2:10:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/13/2004 2:10:00 PM
Surr: 4-Bromofluorobenzene	90.5	70-130		%REC	1	1/13/2004 2:10:00 PM
Surr: Trifluorotoluene	118	70-130		%REC	1	1/13/2004 2:10:00 PM
MERCURY, TOTAL		**SW7470**			Prep Date: **1/13/2004**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	1/14/2004 4:54:02 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **1/19/2004**	Analyst: **ALR**
Aluminum	0.161	0.0100		mg/L	1	1/22/2004 12:12:00 AM
Arsenic	0.00700	0.00500		mg/L	1	1/22/2004 12:12:00 AM
Barium	0.108	0.00500		mg/L	1	1/22/2004 12:12:00 AM
Beryllium	ND	0.00200		mg/L	1	1/22/2004 9:58:00 PM
Boron	0.192	0.0200		mg/L	1	1/22/2004 9:58:00 PM
Cadmium	ND	0.00100		mg/L	1	1/22/2004 12:12:00 AM
Calcium	90.9	5.00		mg/L	10	1/23/2004 3:03:00 PM
Chromium	ND	0.00200		mg/L	1	1/22/2004 12:12:00 AM
Cobalt	ND	0.00200		mg/L	1	1/22/2004 12:12:00 AM
Copper	0.00304	0.00200		mg/L	1	1/22/2004 12:12:00 AM
Iron	0.485	0.200		mg/L	1	1/22/2004 12:12:00 AM
Lead	ND	0.00500		mg/L	1	1/22/2004 12:12:00 AM
Magnesium	11.4	0.200		mg/L	1	1/22/2004 12:12:00 AM
Manganese	0.00758	0.00500		mg/L	1	1/22/2004 12:12:00 AM
Molybdenum	ND	0.00500		mg/L	1	1/22/2004 12:12:00 AM
Nickel	ND	0.00500		mg/L	1	1/22/2004 12:12:00 AM
Potassium	2.23	0.200		mg/L	1	1/22/2004 12:12:00 AM
Selenium	0.00654	0.00500		mg/L	1	1/22/2004 12:12:00 AM
Silver	ND	0.00500		mg/L	1	1/22/2004 12:12:00 AM
Sodium	39.7	2.00		mg/L	10	1/23/2004 3:03:00 PM
Vanadium	0.0258	0.00500		mg/L	1	1/22/2004 12:12:00 AM
Zinc	0.0164	0.00500		mg/L	1	1/22/2004 12:12:00 AM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **MG**
Chloride	27.5	0.500		mg/L	1	1/14/2004 4:13:00 PM
Fluoride	0.980	0.100		mg/L	1	1/14/2004 4:13:00 PM
Sulfate	96.8	5.00		mg/L	5	1/14/2004 4:45:00 PM
Nitrate/Nitrite (as N)	ND	0.100		mg/L	1	1/14/2004 4:13:00 PM
Surr: Dichloroacetic acid (surr)	114	80-120		%REC	5	1/14/2004 4:45:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-04

Client Sample ID: MW-10
Collection Date: 1/10/2004 11:40:00 AM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
Surr: Dichloroacetic acid (surr)	104	80-120		%REC	1	1/14/2004 4:13:00 PM
ALKALINITY		**E310.1**				Analyst: **LMD**
Alkalinity, Bicarbonate (As CaCO3)	221	5.00		mg/L	1	1/14/2004
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Total (As CaCO3)	221	5.00		mg/L	1	1/14/2004
CONDUCTIVITY		**E120.1**				Analyst: **LMD**
Specific Conductance	661	1.00		µmhos/cm	1	1/13/2004
PH		**E150.1**				Analyst: **LMD**
pH	7.14	0.100	H	pH units	1	1/13/2004
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **JBA**
Total Dissolved Solids (Residue, Filterable)	521	10.0		mg/L	1	1/13/2004

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-05

Client Sample ID: North Water Well
Collection Date: 1/10/2004 1:00:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/13/2004 6:27:00 PM
Toluene	ND	1.0		µg/L	1	1/13/2004 6:27:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/13/2004 6:27:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	1/13/2004 6:27:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/13/2004 6:27:00 PM
Surr: 4-Bromofluorobenzene	87.7	70-130		%REC	1	1/13/2004 6:27:00 PM
Surr: Trifluorotoluene	116	70-130		%REC	1	1/13/2004 6:27:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-06

Client Sample ID: South Water Well
Collection Date: 1/10/2004 1:10:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/13/2004 6:52:00 PM
Toluene	ND	1.0		µg/L	1	1/13/2004 6:52:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/13/2004 6:52:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	1/13/2004 6:52:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/13/2004 6:52:00 PM
Surr: 4-Bromofluorobenzene	87.7	70-130		%REC	1	1/13/2004 6:52:00 PM
Surr: Trifluorotoluene	116	70-130		%REC	1	1/13/2004 6:52:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-07

Client Sample ID: MW-3
Collection Date: 1/10/2004 1:45:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/13/2004 8:58:00 PM
Toluene	ND	1.0		µg/L	1	1/13/2004 8:58:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/13/2004 8:58:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	1/13/2004 8:58:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/13/2004 8:58:00 PM
Surr: 4-Bromofluorobenzene	95.4	70-130		%REC	1	1/13/2004 8:58:00 PM
Surr: Trifluorotoluene	122	70-130		%REC	1	1/13/2004 8:58:00 PM
MERCURY, TOTAL		**SW7470**			Prep Date: **1/13/2004**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	1/14/2004 4:55:35 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **1/19/2004**	Analyst: **ALR**
Aluminum	0.616	0.100		mg/L	10	1/23/2004 3:07:00 PM
Arsenic	0.0124	0.00500		mg/L	1	1/22/2004 12:16:00 AM
Barium	0.124	0.00500		mg/L	1	1/22/2004 12:16:00 AM
Beryllium	ND	0.00200		mg/L	1	1/22/2004 10:02:00 PM
Boron	0.271	0.0200		mg/L	1	1/22/2004 10:02:00 PM
Cadmium	ND	0.00100		mg/L	1	1/22/2004 12:16:00 AM
Calcium	235	5.00		mg/L	10	1/23/2004 3:07:00 PM
Chromium	0.00222	0.00200		mg/L	1	1/22/2004 12:16:00 AM
Cobalt	0.00797	0.00200		mg/L	1	1/22/2004 12:16:00 AM
Copper	0.00658	0.00200		mg/L	1	1/22/2004 12:16:00 AM
Iron	1.31	0.200		mg/L	1	1/22/2004 12:16:00 AM
Lead	ND	0.00500		mg/L	1	1/22/2004 12:16:00 AM
Magnesium	22.8	0.200		mg/L	1	1/22/2004 12:16:00 AM
Manganese	0.193	0.00500		mg/L	1	1/22/2004 12:16:00 AM
Molybdenum	ND	0.00500		mg/L	1	1/22/2004 12:16:00 AM
Nickel	0.0131	0.00500		mg/L	1	1/22/2004 12:16:00 AM
Potassium	4.58	0.200		mg/L	1	1/22/2004 12:16:00 AM
Selenium	ND	0.00500		mg/L	1	1/22/2004 12:16:00 AM
Silver	ND	0.00500		mg/L	1	1/22/2004 12:16:00 AM
Sodium	114	2.00		mg/L	10	1/23/2004 3:07:00 PM
Vanadium	0.0286	0.00500		mg/L	1	1/22/2004 12:16:00 AM
Zinc	0.0233	0.00500		mg/L	1	1/22/2004 12:16:00 AM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **MG**
Chloride	348	5.00		mg/L	10	1/14/2004 8:01:00 PM
Fluoride	0.690	0.100		mg/L	1	1/14/2004 6:56:00 PM
Sulfate	96.1	5.00		mg/L	5	1/14/2004 7:28:00 PM
Nitrate/Nitrite (as N)	ND	0.100		mg/L	1	1/14/2004 6:56:00 PM
Surr: Dichloroacetic acid (surr)	108	80-120		%REC	10	1/14/2004 8:01:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-07

Client Sample ID: MW-3
Collection Date: 1/10/2004 1:45:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
Surr: Dichloroacetic acid (surr)	103	80-120		%REC	5	1/14/2004 7:28:00 PM
Surr: Dichloroacetic acid (surr)	97.2	80-120		%REC	1	1/14/2004 6:56:00 PM
ALKALINITY		**E310.1**				Analyst: **LMD**
Alkalinity, Bicarbonate (As CaCO3)	319	5.00		mg/L	1	1/14/2004
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Total (As CaCO3)	319	5.00		mg/L	1	1/14/2004
CONDUCTIVITY		**E120.1**				Analyst: **LMD**
Specific Conductance	1,520	1.00		µmhos/cm	1	1/13/2004
PH		**E150.1**				Analyst: **LMD**
pH	7.01	0.100	H	pH units	1	1/13/2004
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **JBA**
Total Dissolved Solids (Residue, Filterable)	1,220	10.0		mg/L	1	1/13/2004

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-08

Client Sample ID: MW-6R
Collection Date: 1/10/2004 2:50:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/13/2004 8:33:00 PM
Toluene	ND	1.0		µg/L	1	1/13/2004 8:33:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/13/2004 8:33:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	1/13/2004 8:33:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/13/2004 8:33:00 PM
Surr: 4-Bromofluorobenzene	91.8	70-130		%REC	1	1/13/2004 8:33:00 PM
Surr: Trifluorotoluene	120	70-130		%REC	1	1/13/2004 8:33:00 PM
MERCURY, TOTAL		**SW7470**			Prep Date: **1/13/2004**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	1/14/2004 4:57:08 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **1/19/2004**	Analyst: **ALR**
Aluminum	1.49	0.100		mg/L	10	1/23/2004 3:12:00 PM
Arsenic	0.0245	0.00500		mg/L	1	1/22/2004 12:21:00 AM
Barium	0.157	0.00500		mg/L	1	1/22/2004 12:21:00 AM
Beryllium	ND	0.00200		mg/L	1	1/23/2004 1:51:00 PM
Boron	0.211	0.0200		mg/L	1	1/23/2004 1:51:00 PM
Cadmium	ND	0.00100		mg/L	1	1/22/2004 12:21:00 AM
Calcium	78.8	5.00		mg/L	10	1/23/2004 3:12:00 PM
Chromium	0.00410	0.00200		mg/L	1	1/22/2004 12:21:00 AM
Cobalt	ND	0.00200		mg/L	1	1/22/2004 12:21:00 AM
Copper	0.00354	0.00200		mg/L	1	1/22/2004 12:21:00 AM
Iron	1.60	0.200		mg/L	1	1/22/2004 12:21:00 AM
Lead	ND	0.00500		mg/L	1	1/22/2004 12:21:00 AM
Magnesium	6.60	0.200		mg/L	1	1/22/2004 12:21:00 AM
Manganese	0.525	0.0500		mg/L	10	1/23/2004 3:12:00 PM
Molybdenum	ND	0.00500		mg/L	1	1/22/2004 12:21:00 AM
Nickel	ND	0.00500		mg/L	1	1/22/2004 12:21:00 AM
Potassium	3.08	0.200		mg/L	1	1/22/2004 12:21:00 AM
Selenium	ND	0.00500		mg/L	1	1/22/2004 12:21:00 AM
Silver	ND	0.00500		mg/L	1	1/22/2004 12:21:00 AM
Sodium	229	4.00		mg/L	20	1/23/2004 5:55:00 PM
Vanadium	0.0150	0.00500		mg/L	1	1/22/2004 12:21:00 AM
Zinc	0.0180	0.00500		mg/L	1	1/22/2004 12:21:00 AM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **MG**
Chloride	146	2.50		mg/L	5	1/14/2004 9:06:00 PM
Fluoride	1.42	0.100		mg/L	1	1/14/2004 8:33:00 PM
Sulfate	103	5.00		mg/L	5	1/14/2004 9:06:00 PM
Nitrate/Nitrite (as N)	ND	0.100		mg/L	1	1/14/2004 8:33:00 PM
Surr: Dichloroacetic acid (surr)	109	80-120		%REC	5	1/14/2004 9:06:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc. **Date:** *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-08

Client Sample ID: MW-6R
Collection Date: 1/10/2004 2:50:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
Surr: Dichloroacetic acid (surr)	102	80-120		%REC	1	1/14/2004 8:33:00 PM
ALKALINITY		**E310.1**				Analyst: **LMD**
Alkalinity, Bicarbonate (As CaCO3)	299	5.00		mg/L	1	1/14/2004
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Total (As CaCO3)	299	5.00		mg/L	1	1/14/2004
CONDUCTIVITY		**E120.1**				Analyst: **LMD**
Specific Conductance	1,090	1.00		µmhos/cm	1	1/13/2004
PH		**E150.1**				Analyst: **LMD**
pH	7.39	0.100	H	pH units	1	1/13/2004
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **JBA**
Total Dissolved Solids (Residue, Filterable)	698	10.0		mg/L	1	1/13/2004

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-09

Client Sample ID: MW-5
Collection Date: 1/10/2004 5:15:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/13/2004 7:18:00 PM
Toluene	ND	1.0		µg/L	1	1/13/2004 7:18:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/13/2004 7:18:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	1/13/2004 7:18:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/13/2004 7:18:00 PM
Surr: 4-Bromofluorobenzene	85.6	70-130		%REC	1	1/13/2004 7:18:00 PM
Surr: Trifluorotoluene	116	70-130		%REC	1	1/13/2004 7:18:00 PM
MERCURY, TOTAL		**SW7470**			Prep Date: **1/13/2004**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	1/14/2004 4:58:42 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **1/19/2004**	Analyst: **ALR**
Aluminum	3.65	0.200		mg/L	20	1/23/2004 6:00:00 PM
Arsenic	0.00624	0.00500		mg/L	1	1/22/2004 12:26:00 AM
Barium	0.194	0.00500		mg/L	1	1/22/2004 12:26:00 AM
Beryllium	ND	0.00200		mg/L	1	1/22/2004 10:11:00 PM
Boron	0.140	0.0200		mg/L	1	1/22/2004 10:11:00 PM
Cadmium	ND	0.00100		mg/L	1	1/22/2004 12:26:00 AM
Calcium	116	5.00		mg/L	10	1/23/2004 3:16:00 PM
Chromium	0.00790	0.00200		mg/L	1	1/22/2004 12:26:00 AM
Cobalt	ND	0.00200		mg/L	1	1/22/2004 12:26:00 AM
Copper	0.00331	0.00200		mg/L	1	1/22/2004 12:26:00 AM
Iron	2.64	0.200		mg/L	1	1/22/2004 12:26:00 AM
Lead	ND	0.00500		mg/L	1	1/22/2004 12:26:00 AM
Magnesium	14.6	0.200		mg/L	1	1/22/2004 12:26:00 AM
Manganese	0.0381	0.00500		mg/L	1	1/22/2004 12:26:00 AM
Molybdenum	ND	0.00500		mg/L	1	1/22/2004 12:26:00 AM
Nickel	ND	0.00500		mg/L	1	1/22/2004 12:26:00 AM
Potassium	2.97	0.200		mg/L	1	1/22/2004 12:26:00 AM
Selenium	ND	0.00500		mg/L	1	1/22/2004 12:26:00 AM
Silver	ND	0.00500		mg/L	1	1/22/2004 12:26:00 AM
Sodium	61.7	2.00		mg/L	10	1/23/2004 3:16:00 PM
Vanadium	0.0310	0.00500		mg/L	1	1/22/2004 12:26:00 AM
Zinc	0.0133	0.00500		mg/L	1	1/22/2004 12:26:00 AM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **MG**
Chloride	22.8	0.500		mg/L	1	1/14/2004 10:11:00 PM
Fluoride	0.670	0.100		mg/L	1	1/14/2004 10:11:00 PM
Sulfate	49.2	5.00		mg/L	5	1/14/2004 10:43:00 PM
Nitrate/Nitrite (as N)	ND	0.100		mg/L	1	1/14/2004 10:11:00 PM
Surr: Dichloroacetic acid (surr)	112	80-120		%REC	5	1/14/2004 10:43:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-09

Client Sample ID: MW-5
Collection Date: 1/10/2004 5:15:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
Surr: Dichloroacetic acid (surr)	109	80-120		%REC	1	1/14/2004 10:11:00 PM
ALKALINITY		**E310.1**				Analyst: **LMD**
Alkalinity, Bicarbonate (As CaCO3)	373	5.00		mg/L	1	1/14/2004
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Total (As CaCO3)	373	5.00		mg/L	1	1/14/2004
CONDUCTIVITY		**E120.1**				Analyst: **LMD**
Specific Conductance	776	1.00		µmhos/cm	1	1/13/2004
PH		**E150.1**				Analyst: **LMD**
pH	7.11	0.100	H	pH units	1	1/13/2004
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **JBA**
Total Dissolved Solids (Residue, Filterable)	515	10.0		mg/L	1	1/13/2004

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-10

Client Sample ID: Duplicate
Collection Date: 1/10/2004
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/13/2004 8:08:00 PM
Toluene	ND	1.0		µg/L	1	1/13/2004 8:08:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/13/2004 8:08:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	1/13/2004 8:08:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/13/2004 8:08:00 PM
Surr: 4-Bromofluorobenzene	86.9	70-130		%REC	1	1/13/2004 8:08:00 PM
Surr: Trifluorotoluene	117	70-130		%REC	1	1/13/2004 8:08:00 PM
MERCURY, TOTAL		**SW7470**			Prep Date: **1/13/2004**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	1/14/2004 5:00:16 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **1/19/2004**	Analyst: **ALR**
Aluminum	1.64	0.200		mg/L	20	1/23/2004 6:04:00 PM
Arsenic	0.0257	0.00500		mg/L	1	1/22/2004 12:30:00 AM
Barium	0.180	0.00500		mg/L	1	1/22/2004 12:30:00 AM
Beryllium	ND	0.00200		mg/L	1	1/23/2004 1:56:00 PM
Boron	0.209	0.0200		mg/L	1	1/23/2004 1:56:00 PM
Cadmium	ND	0.00100		mg/L	1	1/22/2004 12:30:00 AM
Calcium	53.1	5.00		mg/L	10	1/23/2004 6:09:00 PM
Chromium	0.00340	0.00200		mg/L	1	1/22/2004 12:30:00 AM
Cobalt	ND	0.00200		mg/L	1	1/22/2004 12:30:00 AM
Copper	0.00323	0.00200		mg/L	1	1/22/2004 12:30:00 AM
Iron	1.53	0.200		mg/L	1	1/22/2004 12:30:00 AM
Lead	ND	0.00500		mg/L	1	1/22/2004 12:30:00 AM
Magnesium	6.93	0.200		mg/L	1	1/22/2004 12:30:00 AM
Manganese	0.464	0.0500		mg/L	10	1/23/2004 6:09:00 PM
Molybdenum	ND	0.00500		mg/L	1	1/22/2004 12:30:00 AM
Nickel	ND	0.00500		mg/L	1	1/22/2004 12:30:00 AM
Potassium	3.34	0.200		mg/L	1	1/22/2004 12:30:00 AM
Selenium	ND	0.00500		mg/L	1	1/22/2004 12:30:00 AM
Silver	ND	0.00500		mg/L	1	1/22/2004 12:30:00 AM
Sodium	218	4.00		mg/L	20	1/23/2004 6:04:00 PM
Vanadium	0.00940	0.00500		mg/L	1	1/22/2004 12:30:00 AM
Zinc	0.0143	0.00500		mg/L	1	1/22/2004 12:30:00 AM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **MG**
Chloride	150	2.50		mg/L	5	1/15/2004 12:21:00 AM
Fluoride	1.41	0.100		mg/L	1	1/14/2004 11:48:00 PM
Sulfate	102	5.00		mg/L	5	1/15/2004 12:21:00 AM
Nitrate/Nitrite (as N)	ND	0.100		mg/L	1	1/14/2004 11:48:00 PM
Surr: Dichloroacetic acid (surr)	108	80-120		%REC	5	1/15/2004 12:21:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-10

Client Sample ID: Duplicate
Collection Date: 1/10/2004
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
Surr: Dichloroacetic acid (surr)	102	80-120		%REC	1	1/14/2004 11:48:00 PM
ALKALINITY		**E310.1**				Analyst: **LMD**
Alkalinity, Bicarbonate (As CaCO3)	284	5.00		mg/L	1	1/14/2004
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	1/14/2004
Alkalinity, Total (As CaCO3)	284	5.00		mg/L	1	1/14/2004
CONDUCTIVITY		**E120.1**				Analyst: **LMD**
Specific Conductance	1,120	1.00		µmhos/cm	1	1/13/2004
PH		**E150.1**				Analyst: **LMD**
pH	7.34	0.100	H	pH units	1	1/13/2004
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **JBA**
Total Dissolved Solids (Residue, Filterable)	720	10.0		mg/L	1	1/13/2004

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *January 28, 2004*

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington
Lab ID: 0401087-11

Client Sample ID: Trip Blank #121903-5
Collection Date: 1/10/2004
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/13/2004 12:30:00 PM
Toluene	ND	1.0		µg/L	1	1/13/2004 12:30:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/13/2004 12:30:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	1/13/2004 12:30:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/13/2004 12:30:00 PM
Surr: 4-Bromofluorobenzene	78.6	70-130		%REC	1	1/13/2004 12:30:00 PM
Surr: Trifluorotoluene	114	70-130		%REC	1	1/13/2004 12:30:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *Jan 28 2004*

CLIENT: Navajo Refining Company

QC BATCH REPORT

Work Order: 0401087

Project: Lea Refinery, Lovington

Batch ID: **R18221** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW1-011304** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **01/13/04 12:05**

Client ID: Run ID: **BTEX1_040113A** SeqNo: **416462** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	27.86	1.0	30	0	92.9	70-130	0			
Surr: Trifluorotoluene	36.03	1.0	30	0	120	70-130	0			

LCS Sample ID: **BLCSW1-011304** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **01/13/04 11:15**

Client ID: Run ID: **BTEX1_040113A** SeqNo: **416461** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.77	1.0	20	0	104	70-130	0			
Toluene	20.79	1.0	20	0	104	70-130	0			
Ethylbenzene	20.67	1.0	20	0	103	70-130	0			
Methyl tert-butyl ether	115.9	5.0	100	0	116	70-130	0			
Xylenes, Total	58.23	3.0	60	0	97.1	70-130	0			
Surr: 4-Bromofluorobenzene	29.69	1.0	30	0	99	70-130	0			
Surr: Trifluorotoluene	36.35	1.0	30	0	121	70-130	0			

MS Sample ID: **0401087-04AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **01/13/04 14:35**

Client ID: **MW-10** Run ID: **BTEX1_040113A** SeqNo: **416468** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.18	1.0	20	0	95.9	70-130	0			
Toluene	18.78	1.0	20	0	93.9	70-130	0			
Ethylbenzene	17.8	1.0	20	0	89	70-130	0			
Methyl tert-butyl ether	105.6	5.0	100	0	106	70-130	0			
Xylenes, Total	47.07	3.0	60	0	78.4	70-130	0			
Surr: 4-Bromofluorobenzene	27.14	1.0	30	0	90.5	70-130	0			
Surr: Trifluorotoluene	34.86	1.0	30	0	116	70-130	0			

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **R18221** InstrumentID: **BTEX1**

MSD Sample ID: **0401087-04AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **01/13/04 15:01**

Client ID: **MW-10** Run ID: **BTEX1_040113A** SeqNo: **416469** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.25	1.0	20	0	96.3	70-130	19.18	0.348	20	
Toluene	18.63	1.0	20	0	93.2	70-130	18.78	0.788	20	
Ethylbenzene	17.93	1.0	20	0	89.6	70-130	17.8	0.734	20	
Methyl tert-butyl ether	106.4	5.0	100	0	106	70-130	105.6	0.78	20	
Xylenes, Total	49.26	3.0	60	0	82.1	70-130	47.07	4.55	20	
Surr: 4-Bromofluorobenzene	26.46	1.0	30	0	88.2	70-130	27.14	2.55	20	
Surr: Trifluorotoluene	35.76	1.0	30	0	119	70-130	34.86	2.55	20	

The following samples were analyzed in this batch:

0401087-01A	0401087-02A	0401087-03A
0401087-04A	0401087-05A	0401087-06A
0401087-07A	0401087-08A	0401087-09A
0401087-10A	0401087-11A	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **7710** InstrumentID: **Mercury**

MBLK Sample ID: **GBLKW5-011304** Test Code: **SW7470** Units: **mg/L** Analysis Date: **01/14/04 16:33**
Client ID: Run ID: **MERCURY_040114D** SeqNo: **416950** Prep Date: **1/13/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020								

LCS Sample ID: **GLCSW5-011304** Test Code: **SW7470** Units: **mg/L** Analysis Date: **01/14/04 16:34**
Client ID: Run ID: **MERCURY_040114D** SeqNo: **416951** Prep Date: **1/13/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00487	0.00020	0.005	0	97.4	83-115		0		

LCSD Sample ID: **GLCSDW5-011304** Test Code: **SW7470** Units: **mg/L** Analysis Date: **01/14/04 16:36**
Client ID: Run ID: **MERCURY_040114D** SeqNo: **416952** Prep Date: **1/13/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00496	0.00020	0.005	0	99.2	83-115	0.00487	1.83	20	

MS Sample ID: **0401037-01CMS** Test Code: **SW7470** Units: **mg/L** Analysis Date: **01/14/04 16:41**
Client ID: Run ID: **MERCURY_040114D** SeqNo: **416955** Prep Date: **1/13/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00507	0.00020	0.005	0.000045	100	70-124		0		

MSD Sample ID: **0401037-01CMSD** Test Code: **SW7470** Units: **mg/L** Analysis Date: **01/14/04 16:42**
Client ID: Run ID: **MERCURY_040114D** SeqNo: **416956** Prep Date: **1/13/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00495	0.00020	0.005	0.000045	98.1	70-124	0.00507	2.4	20	

DUP Sample ID: **0401037-01CDUP** Test Code: **SW7470** Units: **mg/L** Analysis Date: **01/14/04 16:39**
Client ID: Run ID: **MERCURY_040114D** SeqNo: **416954** Prep Date: **1/13/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020	0	0	0	0-0	0.000045	0	20	

The following samples were analyzed in this batch:

0401087-01C	0401087-02C	0401087-03C
0401087-04C	0401087-07C	0401087-08C
0401087-09C	0401087-10C	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Refcrenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **7756** InstrumentID: **ICP4500**

MBLK Sample ID: **MBLKW3-011904** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/21/04 23:14**

Client ID: Run ID: **ICP4500_040121A** SeqNo: **419658** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	0.010								
Arsenic	ND	0.0050								
Barium	ND	0.0050								
Cadmium	ND	0.0010								
Calcium	ND	0.50								
Chromium	ND	0.0020								
Cobalt	ND	0.0020								
Copper	0.0003929	0.0020								J
Iron	ND	0.20								
Lead	ND	0.0050								
Magnesium	ND	0.20								
Manganese	ND	0.0050								
Molybdenum	ND	0.0050								
Nickel	ND	0.0050								
Potassium	ND	0.20								
Selenium	ND	0.0050								
Silver	ND	0.0050								
Sodium	ND	0.20								
Vanadium	ND	0.0050								
Zinc	ND	0.0050								

MBLK Sample ID: **MBLKW3-011904** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/22/04 21:35**

Client ID: Run ID: **ICP4500_040122A** SeqNo: **420025** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	ND	0.0020								
Boron	ND	0.020								

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **7756** InstrumentID: **ICP4500**

LCS Sample ID: **MLCSW3-011904** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/21/04 23:45**

Client ID: Run ID: **ICP4500_040121A** SeqNo: **419664** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.05287	0.010	0.05	0	106	80-120	0			
Arsenic	0.05067	0.0050	0.05	0	101	80-120	0			
Barium	0.04808	0.0050	0.05	0	96.2	80-120	0			
Cadmium	0.04981	0.0010	0.05	0	99.6	80-120	0			
Calcium	5.269	0.50	5	0	105	80-120	0			
Chromium	0.05048	0.0020	0.05	0	101	80-120	0			
Cobalt	0.0508	0.0020	0.05	0	102	80-120	0			
Copper	0.04905	0.0020	0.05	0	98.1	80-120	0			
Iron	5.354	0.20	5	0	107	80-120	0			
Lead	0.0481	0.0050	0.05	0	96.2	80-120	0			
Magnesium	5.454	0.20	5	0	109	80-120	0			
Manganese	0.05029	0.0050	0.05	0	101	80-120	0			
Molybdenum	0.04823	0.0050	0.05	0	96.5	80-120	0			
Nickel	0.05197	0.0050	0.05	0	104	80-120	0			
Potassium	5.369	0.20	5	0	107	80-120	0			
Selenium	0.04698	0.0050	0.05	0	94	80-120	0			
Silver	0.0494	0.0050	0.05	0	98.8	80-120	0			
Sodium	5.317	0.20	5	0	106	80-120	0			
Vanadium	0.04967	0.0050	0.05	0	99.3	80-120	0			
Zinc	0.05036	0.0050	0.05	0	101	80-120	0			

LCS Sample ID: **MLCSW3-011904** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/22/04 21:40**

Client ID: Run ID: **ICP4500_040122A** SeqNo: **420026** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	0.04555	0.0020	0.05	0	91.1	80-120	0			
Boron	0.5045	0.020	0.5	0	101	80-120	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **7756** InstrumentID: **ICP4500**

MS Sample ID: **0401092-10BMS** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/22/04 2:13**
Client ID: Run ID: **ICP4500_040121A** SeqNo: **419690** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	7.945	0.010	0.05	5.457	4980	75-125	0			SEO
Arsenic	0.1244	0.0050	0.05	0.07855	91.7	75-125	0			
Barium	0.342	0.0050	0.05	0.2921	99.8	75-125	0			O
Cadmium	0.0438	0.0010	0.05	0.0001638	87.3	75-125	0			
Calcium	107.6	0.50	5	106.7	18	75-125	0			SEO
Chromium	0.06582	0.0020	0.05	0.01557	100	75-125	0			
Cobalt	0.1054	0.0020	0.05	0.05934	92.1	75-125	0			
Copper	0.06031	0.0020	0.05	0.01649	87.6	75-125	0			
Iron	23.08	0.20	5	17.25	117	75-125	0			
Lead	0.07105	0.0050	0.05	0.02069	101	75-125	0			
Magnesium	53.87	0.20	5	51.82	41	75-125	0			SEO
Manganese	4.487	0.0050	0.05	4.586	-198	75-125	0			SEO
Molybdenum	0.05381	0.0050	0.05	0.006039	95.5	75-125	0			
Nickel	0.07367	0.0050	0.05	0.02927	88.8	75-125	0			
Potassium	8.656	0.20	5	3.468	104	75-125	0			
Selenium	0.05191	0.0050	0.05	0.008553	86.7	75-125	0			
Silver	0.044	0.0050	0.05	0.000006642	88	75-125	0			
Sodium	20	0.20	5	0	400	75-125	0			S
Vanadium	0.07031	0.0050	0.05	0.01866	103	75-125	0			
Zinc	0.1012	0.0050	0.05	0.05987	82.7	75-125	0			

MS Sample ID: **0401092-10BMS** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/22/04 23:29**
Client ID: Run ID: **ICP4500_040122A** SeqNo: **420050** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	0.5113	0.020	0.5	0.03648	95	75-125	0			

MS Sample ID: **0401092-10BMS** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/23/04 14:09**
Client ID: Run ID: **ICP4500_040123A** SeqNo: **420091** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	0.05216	0.0020	0.05	0.006872	90.6	75-125	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **7756** InstrumentID: **ICP4500**

MSD Sample ID: **0401092-10BMSD** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/22/04 2:17**
Client ID: Run ID: **ICP4500_040121A** SeqNo: **419691** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	9.166	0.010	0.05	5.457	7420	75-125	7.945	14.3	25	SEO
Arsenic	0.1242	0.0050	0.05	0.07855	91.3	75-125	0.1244	0.161	25	
Barium	0.3439	0.0050	0.05	0.2921	104	75-125	0.342	0.554	25	O
Cadmium	0.04449	0.0010	0.05	0.0001638	88.7	75-125	0.0438	1.56	25	
Calcium	105.2	0.50	5	106.7	-30	75-125	107.6	2.26	25	SEO
Chromium	0.06529	0.0020	0.05	0.01557	99.4	75-125	0.06582	0.808	25	
Cobalt	0.1047	0.0020	0.05	0.05934	90.7	75-125	0.1054	0.666	25	
Copper	0.0599	0.0020	0.05	0.01649	86.8	75-125	0.06031	0.682	25	
Iron	23.55	0.20	5	17.25	126	75-125	23.08	2.02	25	S
Lead	0.07141	0.0050	0.05	0.02069	101	75-125	0.07105	0.505	25	
Magnesium	53.31	0.20	5	51.82	29.8	75-125	53.87	1.04	25	SEO
Manganese	4.466	0.0050	0.05	4.586	-240	75-125	4.487	0.469	25	SEO
Molybdenum	0.05427	0.0050	0.05	0.006039	96.5	75-125	0.05381	0.851	25	
Nickel	0.07446	0.0050	0.05	0.02927	90.4	75-125	0.07367	1.07	25	
Potassium	8.617	0.20	5	3.468	103	75-125	8.656	0.452	25	
Selenium	0.04973	0.0050	0.05	0.008553	82.4	75-125	0.05191	4.29	25	
Silver	0.04354	0.0050	0.05	0.000006642	87.1	75-125	0.044	1.05	25	
Sodium	20	0.20	5	0	400	75-125	20	0	25	S
Vanadium	0.07042	0.0050	0.05	0.01866	104	75-125	0.07031	0.156	25	
Zinc	0.1013	0.0050	0.05	0.05987	82.9	75-125	0.1012	0.0988	25	

MSD Sample ID: **0401092-10BMSD** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/22/04 23:34**
Client ID: Run ID: **ICP4500_040122A** SeqNo: **420051** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	0.5084	0.020	0.5	0.03648	94.4	75-125	0.5113	0.569	25	

MSD Sample ID: **0401092-10BMSD** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/23/04 14:14**
Client ID: Run ID: **ICP4500_040123A** SeqNo: **420092** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	0.05244	0.0020	0.05	0.006872	91.1	75-125	0.05216	0.535	25	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **7756** InstrumentID: **ICP4500**

DUP Sample ID: **0401092-10BDUP** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/22/04 2:08**
Client ID: Run ID: **ICP4500_040121A** SeqNo: **419689** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.0758	0.0050	0	0	0	0-0	0.07855	3.56	25	
Barium	0.2881	0.0050	0	0	0	0-0	0.2921	1.38	25	
Cadmium	0.0001789	0.0010	0	0	0	0-0	0.0001638	0	25	J
Chromium	0.01639	0.0020	0	0	0	0-0	0.01557	5.13	25	
Cobalt	0.05802	0.0020	0	0	0	0-0	0.05934	2.25	25	
Copper	0.01673	0.0020	0	0	0	0-0	0.01649	1.44	25	
Iron	17.56	0.20	0	0	0	0-0	17.25	1.78	25	
Lead	0.02057	0.0050	0	0	0	0-0	0.02069	0.582	25	
Molybdenum	0.006038	0.0050	0	0	0	0-0	0.006039	0.0166	25	
Nickel	0.02877	0.0050	0	0	0	0-0	0.02927	1.72	25	
Potassium	3.544	0.20	0	0	0	0-0	3.468	2.17	25	
Selenium	0.002879	0.0050	0	0	0	0-0	0.008553	0	25	J
Silver	ND	0.0050	0	0	0	0-0	0.000006642	0	25	
Vanadium	0.01941	0.0050	0	0	0	0-0	0.01866	3.94	25	
Zinc	0.05854	0.0050	0	0	0	0-0	0.05987	2.25	25	

DUP Sample ID: **0401092-10BDUP** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/22/04 23:25**
Client ID: Run ID: **ICP4500_040122A** SeqNo: **420049** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Boron	0.02975	0.020	0	0	0	0-0	0.03648	20.3	25	

DUP Sample ID: **0401092-10BDUP** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/23/04 14:04**
Client ID: Run ID: **ICP4500_040123A** SeqNo: **420090** Prep Date: **1/19/2004** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	0.007307	0.0020	0	0	0	0-0	0.006872	6.14	25	

DUP Sample ID: **0401092-10BDUP** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/26/04 14:03**
Client ID: Run ID: **ICP4500_040129A** SeqNo: **420732** Prep Date: **1/19/2004** DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	4.829	0.50	0	0	0	0-0	5.425	11.6	25	
Manganese	3.463	0.25	0	0	0	0-0	4.272	20.9	25	
Sodium	244.8	10	0	0	0	0-0	0	200	25	R

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **7756** InstrumentID: **ICP4500**

DUP Sample ID: **0401092-10BDUP** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/26/04 14:11**

Client ID: Run ID: **ICP4500_040129A** SeqNo: **420734** Prep Date: **1/19/2004** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	103	5.0	0	0	0	0-0	100.1	2.86	25	
Magnesium	51.78	2.0	0	0	0	0-0	47.33	8.98	25	

The following samples were analyzed in this batch:

0401087-01C	0401087-02C	0401087-03C
0401087-04C	0401087-07C	0401087-08C
0401087-09C	0401087-10C	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **R18216** InstrumentID: **Wet Chemistry**

LCS Sample ID: **WLCSW1-011304** Test Code: **E150.1** Units: **pH units** Analysis Date: **01/13/04 0:00**

Client ID: Run ID: **WET CHEMISTRY_0401** SeqNo: **416384** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.02	0.10	6	0	100	85-115		0		

DUP Sample ID: **0401087-03B DUP** Test Code: **E150.1** Units: **pH units** Analysis Date: **01/13/04 0:00**

Client ID: **MW-9** Run ID: **WET CHEMISTRY_0401** SeqNo: **416388** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.64	0.10	0	0	0	0-0	7.64	0	20	H

The following samples were analyzed in this batch:

0401087-01B	0401087-02B	0401087-03B
0401087-04B	0401087-07B	0401087-08B
0401087-09B	0401087-10B	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **R18217** InstrumentID: **Wet Chemistry**

MBLK Sample ID: **WMBW1-011304** Test Code: **E120.1** Units: **µmhos/cm** Analysis Date: **01/13/04 0:00**
Client ID: Run ID: **WET CHEMISTRY_0401** SeqNo: **416394** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	ND	1.0								

LCS Sample ID: **WLCSW1-011304** Test Code: **E120.1** Units: **µmhos/cm** Analysis Date: **01/13/04 0:00**
Client ID: Run ID: **WET CHEMISTRY_0401** SeqNo: **416395** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	1410	1.0	1409	0	100	80-120		0		

DUP Sample ID: **0401087-03B DUP** Test Code: **E120.1** Units: **µmhos/cm** Analysis Date: **01/13/04 0:00**
Client ID: **MW-9** Run ID: **WET CHEMISTRY_0401** SeqNo: **416400** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	978	1.0	0	0	0	0-0	975	0.307	20	

The following samples were analyzed in this batch:

0401087-01B	0401087-02B	0401087-03B
0401087-04B	0401087-07B	0401087-08B
0401087-09B	0401087-10B	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **R18229** InstrumentID: **Wet Chemistry**

MBLK Sample ID: **WBLKW1-011304** Test Code: **E160.1** Units: **mg/L** Analysis Date: **01/13/04 0:00**
Client ID: Run ID: **WET CHEMISTRY_0401** SeqNo: **416625** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	ND	10								

LCS Sample ID: **WLCSW1-011304** Test Code: **E160.1** Units: **mg/L** Analysis Date: **01/13/04 0:00**
Client ID: Run ID: **WET CHEMISTRY_0401** SeqNo: **416626** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	977	10	1000	0	97.7	80-120		0		

DUP Sample ID: **0401081-01DDUP** Test Code: **E160.1** Units: **mg/L** Analysis Date: **01/13/04 0:00**
Client ID: Run ID: **WET CHEMISTRY_0401** SeqNo: **416640** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	167	10	0	0	0	0-0	157	6.17	20	

The following samples were analyzed in this batch:

0401087-01B	0401087-02B	0401087-03B
0401087-04B	0401087-07B	0401087-08B
0401087-09B	0401087-10B	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **R18247** InstrumentID: **Wet Chemistry**

MBLK Sample ID: **WMBW1-011404** Test Code: **E310.1** Units: **mg/L** Analysis Date: **01/14/04 0:00**
Client ID: Run ID: **WET CHEMISTRY_0401** SeqNo: **417012** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	ND	5.0								
Alkalinity, Carbonate (As CaCO3)	ND	5.0								
Alkalinity, Hydroxide (As CaCO3)	ND	5.0								
Alkalinity, Total (As CaCO3)	ND	5.0								

LCS Sample ID: **WLCSW1-011404** Test Code: **E310.1** Units: **mg/L** Analysis Date: **01/14/04 0:00**
Client ID: Run ID: **WET CHEMISTRY_0401** SeqNo: **417013** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	980.6	5.0	1000	0	98.1	80-120	0			

DUP Sample ID: **0401065-03D DUP** Test Code: **E310.1** Units: **mg/L** Analysis Date: **01/14/04 0:00**
Client ID: Run ID: **WET CHEMISTRY_0401** SeqNo: **417017** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	407	5.0	0	0	0	0-0	407	0	20	
Alkalinity, Carbonate (As CaCO3)	ND	5.0	0	0	0	0-0	0	0	20	
Alkalinity, Hydroxide (As CaCO3)	ND	5.0	0	0	0	0-0	0	0	20	
Alkalinity, Total (As CaCO3)	407	5.0	0	0	0	0-0	407	0	20	

DUP Sample ID: **0401088-09B DUP** Test Code: **E310.1** Units: **mg/L** Analysis Date: **01/14/04 0:00**
Client ID: Run ID: **WET CHEMISTRY_0401** SeqNo: **417038** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	612.9	5.0	0	0	0	0-0	617.8	0.796	20	
Alkalinity, Carbonate (As CaCO3)	ND	5.0	0	0	0	0-0	0	0	20	
Alkalinity, Hydroxide (As CaCO3)	ND	5.0	0	0	0	0-0	0	0	20	
Alkalinity, Total (As CaCO3)	612.9	5.0	0	0	0	0-0	617.8	0.796	20	

The following samples were analyzed in this batch:

0401087-01B	0401087-02B	0401087-03B
0401087-04B	0401087-07B	0401087-08B
0401087-09B	0401087-10B	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **R18251** InstrumentID: **IC201**

MBLK Sample ID: **WBLKW1-011304** Test Code: **E300** Units: **mg/L** Analysis Date: **01/13/04 14:45**
Client ID: Run ID: **IC201_040113A** SeqNo: **417179** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	0.50								
Fluoride	ND	0.10								
Sulfate	ND	1.0								
Nitrate/Nitrite (as N)	ND	0.10								
Surr: Dichloroacetic acid (surr)	4.22	0.10	5	0	84.4	80-120		0		

LCS Sample ID: **WLCSW1-011304** Test Code: **E300** Units: **mg/L** Analysis Date: **01/13/04 15:17**
Client ID: Run ID: **IC201_040113A** SeqNo: **417180** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.39	0.50	10	0	93.9	80-120		0		
Fluoride	1.94	0.10	2	0	97	80-120		0		
Sulfate	9.64	1.0	10	0	96.4	80-120		0		
Surr: Dichloroacetic acid (surr)	5.38	0.10	5	0	108	80-120		0		

LCSD Sample ID: **WLCSDW1-01130** Test Code: **E300** Units: **mg/L** Analysis Date: **01/13/04 15:50**
Client ID: Run ID: **IC201_040113A** SeqNo: **417181** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.36	0.50	10	0	93.6	80-120	9.39	0.32	20	
Fluoride	1.97	0.10	2	0	98.5	80-120	1.94	1.53	20	
Sulfate	9.58	1.0	10	0	95.8	80-120	9.64	0.624	20	
Surr: Dichloroacetic acid (surr)	5.24	0.10	5	0	105	80-120	5.38	2.64	20	

MS Sample ID: **0401088-01BMS** Test Code: **E300** Units: **mg/L** Analysis Date: **01/13/04 17:27**
Client ID: Run ID: **IC201_040113A** SeqNo: **417184** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	68.74	0.50	10	58.31	104	75-125		0		EO
Fluoride	3.34	0.10	2	1.46	94	75-125		0		
Sulfate	1517	1.0	10	1534	-163	75-125		0		SEO
Nitrate/Nitrite (as N)	3.94	0.10	4	0	98.5	75-125		0		
Surr: Dichloroacetic acid (surr)	5.46	0.10	5	0	109	80-120		0		

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0401087
Project: Lea Refinery, Lovington

QC BATCH REPORT

Batch ID: **R18251** InstrumentID: **IC201**

MSD Sample ID: **0401088-01BMSD** Test Code: **E300** Units: **mg/L** Analysis Date: **01/13/04 18:00**

Client ID: Run ID: **IC201_040113A** SeqNo: **417185** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	68.67	0.50	10	58.31	104	75-125	68.74	0.102	20	EO
Fluoride	3.31	0.10	2	1.46	92.5	75-125	3.34	0.902	20	
Sulfate	1519	1.0	10	1534	-147	75-125	1517	0.108	20	SEO
Nitrate/Nitrite (as N)	3.92	0.10	4	0	98	75-125	3.94	0.509	20	
Surr: Dichloroacetic acid (surr)	5.56	0.10	5	0	111	80-120	5.46	1.81	20	

DUP Sample ID: **0401088-01BDUP** Test Code: **E300** Units: **mg/L** Analysis Date: **01/13/04 16:55**

Client ID: Run ID: **IC201_040113A** SeqNo: **417183** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Fluoride	1.43	0.10	0	0	0	0-0	1.46	2.08	20	
Nitrate/Nitrite (as N)	ND	0.10	0	0	0	0-0	0	0	20	
Surr: Dichloroacetic acid (surr)	5.28	0.10	5	0	106	80-120	5.28	0	20	

The following samples were analyzed in this batch:

0401087-01B	0401087-02B	0401087-03B
0401087-04B	0401087-07B	0401087-08B
0401087-09B	0401087-10B	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab
QUALITY • INTEGRITY • SERVICE

☒ e-Lab, Inc.
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 2

☐ e-Lab, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager:

e-Lab Work Order #: 401067

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lea Refinery, Lovington	A	Tot. Metals (6020/7000) *
Work Order		Project Number		B	Anions: Cl, F, SO4, NO3, NO2
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	Solids: TDS
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	Alkalinity, CO_3, HCO_3
Address	P.O. Box 159	Address	P.O. Box 159	E	Conductance, Lab pH
				F	BTEX (8021)
City/State/Zip	Artesia, New Mexico 88211	City/State/Zip	Artesia, New Mexico 88211	G	Cations: Na, K, Ca, Mg,
Phone	(505) 748-3311	Phone	(505) 748-3311	H	
Fax	(505) 746-5421	Fax	(505) 746-5421	I	* Metals Ag, Al, As, Ba, B, Cd, Co, Cr, Cu
e-Mail Address		e-Mail Address		J	Fe, Hg, Mn, Mo, Ni, Pb, Se, K, Zn, Be, V

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-4	1/9/04	1630	H_2O	1,2,8	5	X	X	X	X	X	X	X				
2	MW-8	1/10/04	0920		1,2,8	5	X	X	X	X	X	X	X				
3	MW-9		1035		1,2,8	5	X	X	X	X	X	X	X				
4	MW-10		1140		1,2,8	5	X	X	X	X	X	X	X				
5	North Water Well		1300		1,8	3						X					
6	South Water Well		1310		1,8	3						X					
7	MW-3		1345		1,2,8	5	X	X	X	X	X	X	X				
8	MW-6R		1450		1,2,8	5	X	X	X	X	X	X	X				
9	MW-5		1715		1,2,8	5	X	X	X	X	X	X	X				
10	Duplicate	1/10/04	—	H_2O	1,2,8	5	X	X	X	X	X	X	X				

Sampler(s) Please Print & Sign: D. Boyer D.L. Boyer

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) ☒ STD 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by: D.L. Boyer — Date: 1/12/04 — Time: 10:30

Received by:

Relinquished by: — Date: — Time:

Received by (Laboratory): RICHARD SHOEMAKER 1-B04 08:10

Logged by (Laboratory): — Date: — Time:

Checked by (Laboratory):

Notes: Copy of Results to Boyer, SESI

e-Lab Cooler ID | Cooler Temp

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP CheckList
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other _____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.

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e-Lab, Inc.
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

e-Lab, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager: | e-Lab Work Order #: 0401057

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington Lea Refinery	A	Volatiles - BTEX 8021
Work Order		Project Number		B	
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	
Address	P.O. Box 159	Address	P.O. Box 159	E	
				F	
City/State/Zip	Artesia, New Mexico 88211	City/State/Zip	Artesia, New Mexico 88211	G	
Phone	(505) 748-3311	Phone	(505) 748-3311	H	
Fax	(505) 746-5421	Fax	(505) 746-5421	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Trip Blank #121903-5	→	—	H_2O	1, 8	2	X										
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: D.G. Boyer | Shipment Method: FedEx | Required Turnaround Time: (Check Box) ☒ STD 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other | Results Due Date:

Relinquished by: D.G. Boyer	Date: 1/2/04	Time: 10:30	Received by:	Notes: Copy of Results to D. Boyer, SESL		
Relinquished by:	Date:	Time:	Received by (Laboratory): [illegible] 1-3-04/08:10	e-Lab Cooler ID	Cooler Temp.	QC Package: (Check One Box Below) ☒ Level II Std QC ☐ Level III Std QC/Raw Data ☐ Level IV SW846/CLP ☐ Other ☐ TRRP CheckList ☐ TRRP Level IV
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):			

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.

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e-Lab, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 1/13/2004 8:40:00 AM

Work Order Number 0401087

Received by: RSZ

Checklist completed by: [signature] 1/13/04. (Signature / Date)

Reviewed by: LT 1/14/04 (Initials / Date)

Matrix: W

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☐	No ☑	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.2c	003	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐

Adjusted? _____ Checked by _____

Login Notes: NO3/NO2 was received out of hold time.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

W.O.# 040167.

FedEx Express USA Airbill

FedEx Tracking Number 832684463962

Form I.D. No. 0200 Recipient's Copy

From

Date 11/12/04

Sender's Name DAVE Boyer Phone 505 397-0510

Company Safety & Environmental

Address 703 East Clinton, #102 Dept/Floor/Suite/Room

City Hobbs State NM ZIP 88240

Your Internal Billing Reference Lea Refinery NMNM

To

Recipient's Name Sample Receiving Phone 281 550-5656

Company e-Lab

Address 10450 Stancliff Rd #210

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept/Floor/Suite/Room

City Houston State TX ZIP 77099

4a Express Package Service *Packages up to 150 lbs.*

Delivery commitment may be later in some areas

- [X] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day — Second business day
- [ ] FedEx Express Saver — Third business day
- [ ] NEW FedEx Extra Hour — Later drop-off with next business afternoon delivery for select locations

FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service *Packages over 150 lbs.*

Delivery commitment may be later in some areas

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging * Declared value limit $

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [X] Other Pkg. — Includes FedEx Box, FedEx Tube, and customer pkg.

6 Special Handling Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Available only for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — Not available with FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available only for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____

Dangerous Goods (incl. Dry Ice) cannot be shipped in FedEx packaging or with FedEx Extra Hours service.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [X] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check
- [ ] Obtain Recip. Acct. No.

24

Total Packages	Total Weight	Total Declared Value†	Total Charges
1		$ .00	

†Our liability is limited to $100 unless you declare a higher value. See back for details.

Credit Card Auth.

8 Release Signature *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

Questions? Visit our Web site at fedex.com or call 1.800.Go.FedEx® 800.463.3339.

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e-Lab, Inc.
10450 Stancliff Rd. Suite 210
Houston, Texas 77099
Tel. 281.530.5656
Fax. 281.530.5887
QUALITY • INTEGRITY • SERVICE

Date:
Name:
Co

CUSTODY SEAL

11/12/04 Time: 1030

DAVE BOYER

SES

Company:

Seal Broken By:

Date: 11-13-04

e-Lab, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

May 14, 2004

Jeff Byrd
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5468
Fax: (505) 746-5421

Re: Lea Refinery Quarterly Work Order : **0405036**

Dear Jeff Byrd,

e-Lab, Inc. received 6 samples on 5/5/2004 8:45:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Inc. The total number of pages in this report is 13.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

e-Lab, Inc.

Date: *May 14, 2004*

CLIENT: Navajo Refining Company
Project: Lea Refinery Quarterly
Work Order: **0405036**

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0405036-01	MW-9	Water		4/30/2004 12:05	5/5/2004 08:45	☐
0405036-02	MW-6R	Water		4/30/2004 13:10	5/5/2004 08:45	☐
0405036-03	MW-10	Water		4/30/2004 13:25	5/5/2004 08:45	☐
0405036-04	North Water Well	Water		4/30/2004 15:40	5/5/2004 08:45	☐
0405036-05	South Water Well	Water		4/30/2004 15:45	5/5/2004 08:45	☐
0405036-06	MW-8	Water		4/30/2004 16:10	5/5/2004 08:45	☐

e-Lab, Inc.

Date: *May 14, 2004*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	MW-9
Work Order:	0405036	**Collection Date:**	4/30/2004 12:05:00 PM
Project:	Lea Refinery Quarterly		
Lab ID:	0405036-01	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	5/13/2004 12:45:00 AM
Toluene	ND	1.0		µg/L	1	5/13/2004 12:45:00 AM
Ethylbenzene	ND	1.0		µg/L	1	5/13/2004 12:45:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	5/13/2004 12:45:00 AM
Xylenes, Total	ND	3.0		µg/L	1	5/13/2004 12:45:00 AM
Surr: 4-Bromofluorobenzene	103	77-129		%REC	1	5/13/2004 12:45:00 AM
Surr: Trifluorotoluene	112	75-130		%REC	1	5/13/2004 12:45:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

P - Dual Column results percent difference > 40%

E - Value above quantitation range

H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *May 14, 2004*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	MW-6R
Work Order:	0405036	**Collection Date:**	4/30/2004 1:10:00 PM
Project:	Lea Refinery Quarterly		
Lab ID:	0405036-02	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	5/13/2004 1:09:00 AM
Toluene	ND	1.0		µg/L	1	5/13/2004 1:09:00 AM
Ethylbenzene	ND	1.0		µg/L	1	5/13/2004 1:09:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	5/13/2004 1:09:00 AM
Xylenes, Total	ND	3.0		µg/L	1	5/13/2004 1:09:00 AM
Surr: 4-Bromofluorobenzene	103	77-129		%REC	1	5/13/2004 1:09:00 AM
Surr: Trifluorotoluene	116	75-130		%REC	1	5/13/2004 1:09:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc. **Date:** *May 14, 2004*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	MW-10
Work Order:	0405036	**Collection Date:**	4/30/2004 1:25:00 PM
Project:	Lea Refinery Quarterly		
Lab ID:	0405036-03	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	5/13/2004 1:33:00 AM
Toluene	1.0	1.0		µg/L	1	5/13/2004 1:33:00 AM
Ethylbenzene	ND	1.0		µg/L	1	5/13/2004 1:33:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	5/13/2004 1:33:00 AM
Xylenes, Total	ND	3.0		µg/L	1	5/13/2004 1:33:00 AM
Surr: 4-Bromofluorobenzene	101	77-129		%REC	1	5/13/2004 1:33:00 AM
Surr: Trifluorotoluene	115	75-130		%REC	1	5/13/2004 1:33:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *May 14, 2004*

CLIENT: Navajo Refining Company
Work Order: 0405036
Project: Lea Refinery Quarterly
Lab ID: 0405036-04

Client Sample ID: North Water Well
Collection Date: 4/30/2004 3:40:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	3.8	1.0		µg/L	1	5/13/2004 1:57:00 AM
Toluene	ND	1.0		µg/L	1	5/13/2004 1:57:00 AM
Ethylbenzene	ND	1.0		µg/L	1	5/13/2004 1:57:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	5/13/2004 1:57:00 AM
Xylenes, Total	ND	3.0		µg/L	1	5/13/2004 1:57:00 AM
Surr: 4-Bromofluorobenzene	99.0	77-129		%REC	1	5/13/2004 1:57:00 AM
Surr: Trifluorotoluene	107	75-130		%REC	1	5/13/2004 1:57:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *May 14, 2004*

CLIENT: Navajo Refining Company
Work Order: 0405036
Project: Lea Refinery Quarterly
Lab ID: 0405036-05

Client Sample ID: South Water Well
Collection Date: 4/30/2004 3:45:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	5/13/2004 2:21:00 AM
Toluene	ND	1.0		µg/L	1	5/13/2004 2:21:00 AM
Ethylbenzene	ND	1.0		µg/L	1	5/13/2004 2:21:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	5/13/2004 2:21:00 AM
Xylenes, Total	ND	3.0		µg/L	1	5/13/2004 2:21:00 AM
Surr: 4-Bromofluorobenzene	100	77-129		%REC	1	5/13/2004 2:21:00 AM
Surr: Trifluorotoluene	106	75-130		%REC	1	5/13/2004 2:21:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc. **Date:** *May 14, 2004*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	MW-8
Work Order:	0405036	**Collection Date:**	4/30/2004 4:10:00 PM
Project:	Lea Refinery Quarterly		
Lab ID:	0405036-06	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	5/13/2004 2:45:00 AM
Toluene	ND	1.0		µg/L	1	5/13/2004 2:45:00 AM
Ethylbenzene	ND	1.0		µg/L	1	5/13/2004 2:45:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	5/13/2004 2:45:00 AM
Xylenes, Total	ND	3.0		µg/L	1	5/13/2004 2:45:00 AM
Surr: 4-Bromofluorobenzene	89.5	77-129		%REC	1	5/13/2004 2:45:00 AM
Surr: Trifluorotoluene	107	75-130		%REC	1	5/13/2004 2:45:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab, Inc.

Date: *May 14 2004*

CLIENT: Navajo Refining Company

QC BATCH REPORT

Work Order: 0405036

Project: Lea Refinery Quarterly

Batch ID: **R20457** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW1-051204** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **05/12/04 20:20**

Client ID: Run ID: **BTEX1_040512A** SeqNo: **471047** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	33.01	1.0	30	0	110	77-129		0		
Surr: Trifluorotoluene	35.98	1.0	30	0	120	75-130		0		

LCS Sample ID: **BLCSW1-051204** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **05/12/04 19:32**

Client ID: Run ID: **BTEX1_040512A** SeqNo: **471046** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.58	1.0	20	0	92.9	77-126		0		
Toluene	19.96	1.0	20	0	99.8	80-124		0		
Ethylbenzene	22.16	1.0	20	0	111	76-125		0		
Methyl tert-butyl ether	120.8	5.0	100	0	121	75-128		0		
Xylenes, Total	66.45	3.0	60	0	111	79-124		0		
Surr: 4-Bromofluorobenzene	32.23	1.0	30	0	107	77-129		0		
Surr: Trifluorotoluene	35.86	1.0	30	0	120	75-130		0		

MS Sample ID: **0405093-01AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **05/12/04 22:45**

Client ID: Run ID: **BTEX1_040512A** SeqNo: **471050** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.58	1.0	20	0	103	77-126		0		
Toluene	20.68	1.0	20	0	103	80-124		0		
Ethylbenzene	23.04	1.0	20	0	115	76-125		0		
Methyl tert-butyl ether	114.2	5.0	100	0	114	75-128		0		
Xylenes, Total	63.66	3.0	60	0	106	79-124		0		
Surr: 4-Bromofluorobenzene	32.92	1.0	30	0	110	77-129		0		
Surr: Trifluorotoluene	36.5	1.0	30	0	122	75-130		0		

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

O - Referenced analyte value is > 4 times amount spiked

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

P - Dual Column results percent difference > 40%

B - Analyte detected in assoc. Method Blank

U - Analyzed for but not detected

E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0405036
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R20457** InstrumentID: **BTEX1**

MSD Sample ID: **0405093-01AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **05/12/04 23:09**

Client ID: Run ID: **BTEX1_040512A** SeqNo: **471051** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.02	1.0	20	0	100	77-126	20.58	2.78	20	
Toluene	20.61	1.0	20	0	103	80-124	20.68	0.356	20	
Ethylbenzene	20.33	1.0	20	0	102	76-125	23.04	12.5	20	
Methyl tert-butyl ether	116.1	5.0	100	0	116	75-128	114.2	1.69	20	
Xylenes, Total	59.35	3.0	60	0	98.9	79-124	63.66	7.01	20	
Surr: 4-Bromofluorobenzene	27.82	1.0	30	0	92.7	77-129	32.92	16.8	20	
Surr: Trifluorotoluene	34.98	1.0	30	0	117	75-130	36.5	4.25	20	

The following samples were analyzed in this batch:

0405036-01A	0405036-02A	0405036-03A
0405036-04A	0405036-05A	0405036-06A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab
QUALITY • INTEGRITY • SERVICE

☐ e-Lab, Inc.
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 1

☐ e-Lab, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager: | e-Lab Work Order #: 04C501

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lea Refinery Quarterly	A	BTEX (8021B)
Work Order		Project Number		B	
Company Name	NAVAJO REFINING CO	Bill To Company	NAVAJO REFINING CO	C	
Send Report To	DARRELL MOORE	Invoice Attn.	(Same)	D	
Address	P.O. Box 159	Address		E	
City/State/Zip	ARTESIA NM 88211	City/State/Zip		F	
Phone	(505) 748-3311	Phone		G	
Fax	(505) 746-5421	Fax		H	
e-Mail Address				I	
				J	

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-9	4/30/04	1205	H_2O	1, 8	3	X										
2	MW-6R		1310				X										
3	MW-10		1325				X										
4	~~MW~~ North Water Well		1540				X										
5	South Water Well		1545				X										
6	MW-8	4/30/04	1610	H_2O	1, 8	3	X										
7																	
8																	
9																	
10																	

Sampler(s): Please Print & Sign: A.L. Boyer D.G. Boyer

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) ☒ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
A.L. Boyer	5/4/04	1700			
Relinquished by:	Date:	Time:	Received by (Laboratory):	Date:	Time:
			R S	5.5.04	0845
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):		

Notes: Copy Report to DG Boyer dgboyer@SESI-NM.com

e-Lab Cooler ID	Cooler Temp

QC Package: (Check Box Below)
☐ Level II: Standard QC ☐ Level III: Raw Data
☐ TRRP LRC ☐ TRRP Level IV
☐ Level IV: SW846 Methods/CLP like
☐ Other:

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.

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e-Lab, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 5/5/2004 8:45:00 AM

Work Order Number 0405036

Received by: RSZ

Checklist completed by RICHARD SANCHEZ 5-5-04 (Signature / Date)

Reviewed by _____ 5/6/04 (Initials / Date)

Matrix: W

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.9c	002	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? _____ Checked by _____

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

040536

m This portion can be removed for Recipient's records.

e 3/4/04 FedEx Tracking Number 833541366411

ider's ame David Boyer Phone 505 397-0510

Company JESI

dress 703 E Clinton #102

Hobbs State NM ZIP 88240 Dept/Room/Suite/Room

r Internal Billing Reference Navajo Ernest

e-Lab, Inc.
10450 Stancliff Rd. Suite 210
Houston, Texas 77099
Tel. 281.530.5656
Fax. 281.530.5887

QUALITY • INTEGRITY • SERVICE

Date: 5/4
Name:
Company:

CUSTODY SEAL

#104 Time: 1900

David Boyer

JESI

Seal Broken By:

Date: 5-5-04

e-Lab Analytical, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

July 09, 2004

Darrell Moore
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: NAV-00-019 Lovington-Quarterly Work Order : **0407049**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 8 samples on 7/6/2004 9:00:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 17.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

e-Lab Analytical, Inc.

Date: *July 09, 2004*

CLIENT: Navajo Refining Company
Project: NAV-00-019 Lovington-Quarterly
Work Order: **0407049**

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0407049-01	MW-8	Water		6/30/2004 16:35	7/6/2004 09:00	☐
0407049-02	MW-9	Water		6/30/2004 17:55	7/6/2004 09:00	☐
0407049-03	MW-10	Water		6/30/2004 19:30	7/6/2004 09:00	☐
0407049-04	MW-16R	Water		7/1/2004 14:20	7/6/2004 09:00	☐
0407049-05	North Water Well	Water		7/1/2004 14:50	7/6/2004 09:00	☐
0407049-06	South Water Well	Water		7/1/2004 15:00	7/6/2004 09:00	☐
0407049-07	Duplicate	Water		7/1/2004	7/6/2004 09:00	☐
0407049-08	Trip Blank	Water		7/1/2004	7/6/2004 09:00	☐

e-Lab Analytical, Inc.

Date: *July 09, 2004*

CLIENT: Navajo Refining Company
Work Order: 0407049
Project: NAV-00-019 Lovington-Quarterly
Lab ID: 0407049-01

Client Sample ID: MW-8
Collection Date: 6/30/2004 4:35:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	7/7/2004 8:27:00 PM
Toluene	ND	1.0		µg/L	1	7/7/2004 8:27:00 PM
Ethylbenzene	ND	1.0		µg/L	1	7/7/2004 8:27:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	7/7/2004 8:27:00 PM
Xylenes, Total	ND	3.0		µg/L	1	7/7/2004 8:27:00 PM
Surr: 4-Bromofluorobenzene	94.0	77-129		%REC	1	7/7/2004 8:27:00 PM
Surr: Trifluorotoluene	92.6	75-130		%REC	1	7/7/2004 8:27:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 09, 2004*

CLIENT: Navajo Refining Company
Work Order: 0407049
Project: NAV-00-019 Lovington-Quarterly
Lab ID: 0407049-02

Client Sample ID: MW-9
Collection Date: 6/30/2004 5:55:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	7/8/2004 10:11:00 AM
Toluene	ND	1.0		µg/L	1	7/8/2004 10:11:00 AM
Ethylbenzene	ND	1.0		µg/L	1	7/8/2004 10:11:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	7/8/2004 10:11:00 AM
Xylenes, Total	ND	3.0		µg/L	1	7/8/2004 10:11:00 AM
Surr: 4-Bromofluorobenzene	109	77-129		%REC	1	7/8/2004 10:11:00 AM
Surr: Trifluorotoluene	97.0	75-130		%REC	1	7/8/2004 10:11:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 09, 2004*

CLIENT: Navajo Refining Company
Work Order: 0407049
Project: NAV-00-019 Lovington-Quarterly
Lab ID: 0407049-03

Client Sample ID: MW-10
Collection Date: 6/30/2004 7:30:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	7/7/2004 11:49:00 PM
Toluene	ND	1.0		µg/L	1	7/7/2004 11:49:00 PM
Ethylbenzene	ND	1.0		µg/L	1	7/7/2004 11:49:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	7/7/2004 11:49:00 PM
Xylenes, Total	ND	3.0		µg/L	1	7/7/2004 11:49:00 PM
Surr: 4-Bromofluorobenzene	91.5	77-129		%REC	1	7/7/2004 11:49:00 PM
Surr: Trifluorotoluene	101	75-130		%REC	1	7/7/2004 11:49:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 09, 2004*

CLIENT: Navajo Refining Company
Work Order: 0407049
Project: NAV-00-019 Lovington-Quarterly
Lab ID: 0407049-04

Client Sample ID: MW-16R
Collection Date: 7/1/2004 2:20:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	7/8/2004 12:14:00 AM
Toluene	ND	1.0		µg/L	1	7/8/2004 12:14:00 AM
Ethylbenzene	ND	1.0		µg/L	1	7/8/2004 12:14:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	7/8/2004 12:14:00 AM
Xylenes, Total	ND	3.0		µg/L	1	7/8/2004 12:14:00 AM
Surr: 4-Bromofluorobenzene	94.1	77-129		%REC	1	7/8/2004 12:14:00 AM
Surr: Trifluorotoluene	99.7	75-130		%REC	1	7/8/2004 12:14:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 09, 2004*

CLIENT: Navajo Refining Company
Work Order: 0407049
Project: NAV-00-019 Lovington-Quarterly
Lab ID: 0407049-05

Client Sample ID: North Water Well
Collection Date: 7/1/2004 2:50:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	5.3	1.0		µg/L	1	7/8/2004 12:40:00 AM
Toluene	ND	1.0		µg/L	1	7/8/2004 12:40:00 AM
Ethylbenzene	ND	1.0		µg/L	1	7/8/2004 12:40:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	7/8/2004 12:40:00 AM
Xylenes, Total	ND	3.0		µg/L	1	7/8/2004 12:40:00 AM
Surr: 4-Bromofluorobenzene	92.2	77-129		%REC	1	7/8/2004 12:40:00 AM
Surr: Trifluorotoluene	100	75-130		%REC	1	7/8/2004 12:40:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 09, 2004*

CLIENT: Navajo Refining Company
Work Order: 0407049
Project: NAV-00-019 Lovington-Quarterly
Lab ID: 0407049-06

Client Sample ID: South Water Well
Collection Date: 7/1/2004 3:00:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	7/8/2004 1:05:00 AM
Toluene	ND	1.0		µg/L	1	7/8/2004 1:05:00 AM
Ethylbenzene	ND	1.0		µg/L	1	7/8/2004 1:05:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	7/8/2004 1:05:00 AM
Xylenes, Total	ND	3.0		µg/L	1	7/8/2004 1:05:00 AM
Surr: 4-Bromofluorobenzene	88.3	77-129		%REC	1	7/8/2004 1:05:00 AM
Surr: Trifluorotoluene	89.1	75-130		%REC	1	7/8/2004 1:05:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 09, 2004*

CLIENT: Navajo Refining Company
Work Order: 0407049
Project: NAV-00-019 Lovington-Quarterly
Lab ID: 0407049-07

Client Sample ID: Duplicate
Collection Date: 7/1/2004
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	7/8/2004 1:30:00 AM
Toluene	ND	1.0		µg/L	1	7/8/2004 1:30:00 AM
Ethylbenzene	ND	1.0		µg/L	1	7/8/2004 1:30:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	7/8/2004 1:30:00 AM
Xylenes, Total	ND	3.0		µg/L	1	7/8/2004 1:30:00 AM
Surr: 4-Bromofluorobenzene	89.0	77-129		%REC	1	7/8/2004 1:30:00 AM
Surr: Trifluorotoluene	102	75-130		%REC	1	7/8/2004 1:30:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 09, 2004*

CLIENT: Navajo Refining Company
Work Order: 0407049
Project: NAV-00-019 Lovington-Quarterly
Lab ID: 0407049-08

Client Sample ID: Trip Blank
Collection Date: 7/1/2004
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	7/7/2004 8:02:00 PM
Toluene	ND	1.0		µg/L	1	7/7/2004 8:02:00 PM
Ethylbenzene	ND	1.0		µg/L	1	7/7/2004 8:02:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	7/7/2004 8:02:00 PM
Xylenes, Total	ND	3.0		µg/L	1	7/7/2004 8:02:00 PM
Surr: 4-Bromofluorobenzene	93.7	77-129		%REC	1	7/7/2004 8:02:00 PM
Surr: Trifluorotoluene	97.3	75-130		%REC	1	7/7/2004 8:02:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0407049
Project: NAV-00-019 Lovington-Quarterly

Date: *Jul 09 2004*

QC BATCH REPORT

Batch ID: **R21594** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW2-070704** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **07/07/04 18:45**
Client ID: Run ID: **BTEX1_040706C** SeqNo: **504545** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	29.86	1.0	30	0	99.5	77-129	0			
Surr: Trifluorotoluene	30.68	1.0	30	0	102	75-130	0			

LCS Sample ID: **BLCSW2-070704** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **07/07/04 18:20**
Client ID: Run ID: **BTEX1_040706C** SeqNo: **504544** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.5	1.0	20	0	108	77-126	0			
Toluene	20.33	1.0	20	0	102	80-124	0			
Ethylbenzene	20.21	1.0	20	0	101	76-125	0			
Methyl tert-butyl ether	114.2	5.0	100	0	114	75-128	0			
Xylenes, Total	60.64	3.0	60	0	101	79-124	0			
Surr: 4-Bromofluorobenzene	30.97	1.0	30	0	103	77-129	0			
Surr: Trifluorotoluene	31.62	1.0	30	0	105	75-130	0			

MS Sample ID: **0407049-01AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **07/07/04 20:52**
Client ID: **MW-8** Run ID: **BTEX1_040706C** SeqNo: **504550** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.9	1.0	20	0	89.5	77-126	0			
Toluene	17.96	1.0	20	0	89.8	80-124	0			
Ethylbenzene	18.34	1.0	20	0	91.7	76-125	0			
Methyl tert-butyl ether	85.35	5.0	100	0	85.4	75-128	0			
Xylenes, Total	55.84	3.0	60	0	93.1	79-124	0			
Surr: 4-Bromofluorobenzene	28.48	1.0	30	0	94.9	77-129	0			
Surr: Trifluorotoluene	27.43	1.0	30	0	91.4	75-130	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0407049
Project: NAV-00-019 Lovington-Quarterly

QC BATCH REPORT

Batch ID: **R21594** InstrumentID: **BTEX1**

MSD Sample ID: **0407049-01AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **07/07/04 21:18**

Client ID: **MW-8** Run ID: **BTEX1_040706C** SeqNo: **504551** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.4	1.0	20	0	87	77-126	17.9	2.79	20	
Toluene	17.66	1.0	20	0	88.3	80-124	17.96	1.66	20	
Ethylbenzene	18.26	1.0	20	0	91.3	76-125	18.34	0.468	20	
Methyl tert-butyl ether	80.87	5.0	100	0	80.9	75-128	85.35	5.39	20	
Xylenes, Total	55.92	3.0	60	0	93.2	79-124	55.84	0.139	20	
Surr: 4-Bromofluorobenzene	26.38	1.0	30	0	87.9	77-129	28.48	7.67	20	
Surr: Trifluorotoluene	24.32	1.0	30	0	81.1	75-130	27.43	12	20	

The following samples were analyzed in this batch:

0407049-01A	0407049-03A	0407049-04A
0407049-05A	0407049-06A	0407049-07A
0407049-08A		

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0407049
Project: NAV-00-019 Lovington-Quarterly

QC BATCH REPORT

Batch ID: **R21599** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW1-070804** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **07/08/04 9:46**
Client ID: Run ID: **BTEX1_040708A** SeqNo: **504680** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	31.36	1.0	30	0	105	77-129	0			
Surr: Trifluorotoluene	33.32	1.0	30	0	111	75-130	0			

LCS Sample ID: **BLCSW1-070804** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **07/08/04 9:21**
Client ID: Run ID: **BTEX1_040708A** SeqNo: **504679** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.29	1.0	20	0	101	77-126	0			
Toluene	21.06	1.0	20	0	105	80-124	0			
Ethylbenzene	20.46	1.0	20	0	102	76-125	0			
Methyl tert-butyl ether	86.69	5.0	100	0	86.7	75-128	0			
Xylenes, Total	62.72	3.0	60	0	105	79-124	0			
Surr: 4-Bromofluorobenzene	29.81	1.0	30	0	99.4	77-129	0			
Surr: Trifluorotoluene	29.46	1.0	30	0	98.2	75-130	0			

MS Sample ID: **0407049-02AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **07/08/04 10:37**
Client ID: **MW-9** Run ID: **BTEX1_040708A** SeqNo: **504682** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.76	1.0	20	0	93.8	77-126	0			
Toluene	22.18	1.0	20	0	111	80-124	0			
Ethylbenzene	21.73	1.0	20	0	109	76-125	0			
Methyl tert-butyl ether	99.64	5.0	100	0	99.6	75-128	0			
Xylenes, Total	65.05	3.0	60	0	108	79-124	0			
Surr: 4-Bromofluorobenzene	33.41	1.0	30	0	111	77-129	0			
Surr: Trifluorotoluene	31.54	1.0	30	0	105	75-130	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0407049
Project: NAV-00-019 Lovington-Quarterly

QC BATCH REPORT

Batch ID: **R21599** InstrumentID: **BTEX1**

MSD Sample ID: **0407049-02AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **07/08/04 11:02**

Client ID: **MW-9** Run ID: **BTEX1_040708A** SeqNo: **504683** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.03	1.0	20	0	100	77-126	18.76	6.55	20	
Toluene	23.29	1.0	20	0	116	80-124	22.18	4.88	20	
Ethylbenzene	22.78	1.0	20	0	114	76-125	21.73	4.7	20	
Methyl tert-butyl ether	110.3	5.0	100	0	110	75-128	99.64	10.2	20	
Xylenes, Total	67.5	3.0	60	0	113	79-124	65.05	3.7	20	
Surr: 4-Bromofluorobenzene	34.46	1.0	30	0	115	77-129	33.41	3.07	20	
Surr: Trifluorotoluene	32.85	1.0	30	0	110	75-130	31.54	4.09	20	

The following samples were analyzed in this batch: 0407049-02A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab, Inc.
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page ____ of ____

e-Lab, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager: | e-Lab Work Order #: 407049

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington – Questar/2	A	BTEX (8021)
Work Order		Project Number	NAV-00-013	B	
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	
Address	P.O. Box 159 509 East Main	Address	P.O. Box 159 509 East Main	E	
				F	
City/State/Zip	Artesia, New Mexico 88211	City/State/Zip	Artesia, New Mexico 88211	G	
Phone	(505) 748-3311	Phone	(505) 748-3311	H	
Fax	(505) 746-5421	Fax	(505) 746-5421	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	#Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-8	6/30/04	1635	H_2O	1,8	3	X										
2	MW-9	6/30/04	1755	"	"	3	X										
3	MW-10	6/30/04	1930	"	"	3	X										
4	MW-16R	7/1/04	1420	"	"	3	X										
5	~~MW-AB~~																
6	North Water Well	7/1/04	1450	"	"	3	X										
7	South Water Well	7/1/04	1500	"	"	3	X										
8	Duplicate	"	"	"	"	3	X										
9	Trip Blank	"	"	H_2O	1,8	2	X										
10																	

Sampler(s) Please Print & Sign: M.E. Roy

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) ☐ STD 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other 10 Day TAT.

Results Due Date:

Relinquished by: M.E. Roy	Date: 7/1/04	Time: 1700	Received by:	Notes: Copy Results to dgboyer@navajolp.com	
Relinquished by:	Date:	Time:	Received by (Laboratory):	e-lab Cooler ID	Cooler Temp:
Logged by (Laboratory):	Date: 7/6/04	Time: 09:00	Checked by (Laboratory):		

QC Package: (Check One Box Below)
- ☑ Level II Std QC
- ☐ Level III Std QC/Raw Data
- ☐ Level IV SW846/CLP
- ☐ Other
- ☐ TRRP Checklist
- ☐ TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING | Date/Time Received: 7/6/2004 9:00:00 AM

Work Order Number 0407049 | Received by: FSM

Checklist completed by [signature] 7/6/04 (Signature / Date) | Reviewed by JC 7/6/04 (Initials / Date)

Matrix: W | Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	6.0c	004	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? _____ Checked by _____

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

W.O.# 0407049

This portion can be removed for recipient's records.

Date 7/1/04 FedEx Tracking Number 847223232545

Sender's Name Dave Boyer Phone 505 397-0510

Company SESI

Address 703 E. Clinton #102 Dept/Floor/Suite/Room

City Hobbs State NM ZIP 88240

Your Internal Billing Reference

e-Lab Analytical, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

December 07, 2004

Darrell Moore
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: Lovington Lea Refinery Quarterly Work Order : **0411262**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 6 samples on 11/20/2004 8:40:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 14.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: John Robert Paddison

Jeffrey L Croston

e-Lab Analytical, Inc.

Date: *December 07, 2004*

CLIENT: Navajo Refining Company
Project: Lovington Lea Refinery Quarterly
Work Order: **0411262**

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0411262-01	MW-10	Water		11/19/2004 11:20	11/20/2004 08:40	☐
0411262-02	MW-9	Water		11/19/2004 12:10	11/20/2004 08:40	☐
0411262-03	MW-6R	Water		11/19/2004 13:05	11/20/2004 08:40	☐
0411262-04	North Water Well	Water		11/19/2004 13:45	11/20/2004 08:40	☐
0411262-05	South Water Well	Water		11/19/2004 13:55	11/20/2004 08:40	☐
0411262-06	Trip Blank	Water		11/19/2004	11/20/2004 08:40	☐

e-Lab Analytical, Inc.

Date: *December 07, 2004*

CLIENT: Navajo Refining Company
Work Order: 0411262
Project: Lovington Lea Refinery Quarterly
Lab ID: 0411262-01

Client Sample ID: MW-10
Collection Date: 11/19/2004 11:20:00 AM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	11/24/2004 10:33:00 PM
Toluene	ND	1.0		µg/L	1	11/24/2004 10:33:00 PM
Ethylbenzene	ND	1.0		µg/L	1	11/24/2004 10:33:00 PM
Xylenes, Total	ND	3.0		µg/L	1	11/24/2004 10:33:00 PM
Surr:4-Bromofluorobenzene	111	77-129		%REC	1	11/24/2004 10:33:00 PM
Surr: Trifluorotoluene	98.9	75-130		%REC	1	11/24/2004 10:33:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *December 07, 2004*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	MW-9
Work Order:	0411262	**Collection Date:**	11/19/2004 12:10:00 PM
Project:	Lovington Lea Refinery Quarterly		
Lab ID:	0411262-02	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	11/24/2004 10:59:00 PM
Toluene	ND	1.0		µg/L	1	11/24/2004 10:59:00 PM
Ethylbenzene	ND	1.0		µg/L	1	11/24/2004 10:59:00 PM
Xylenes, Total	ND	3.0		µg/L	1	11/24/2004 10:59:00 PM
Surr: 4-Bromofluorobenzene	108	77-129		%REC	1	11/24/2004 10:59:00 PM
Surr: Trifluorotoluene	96.7	75-130		%REC	1	11/24/2004 10:59:00 PM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *December 07, 2004*

CLIENT: Navajo Refining Company
Work Order: 0411262
Project: Lovington Lea Refinery Quarterly
Lab ID: 0411262-03

Client Sample ID: MW-6R
Collection Date: 11/19/2004 1:05:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	1.1	1.0		µg/L	1	11/24/2004 11:25:00 PM
Toluene	ND	1.0		µg/L	1	11/24/2004 11:25:00 PM
Ethylbenzene	3.5	1.0		µg/L	1	11/24/2004 11:25:00 PM
Xylenes, Total	ND	3.0		µg/L	1	11/24/2004 11:25:00 PM
Surr:4-Bromofluorobenzene	107	77-129		%REC	1	11/24/2004 11:25:00 PM
Surr: Trifluorotoluene	97.0	75-130		%REC	1	11/24/2004 11:25:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
*- Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *December 07, 2004*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	North Water Well
Work Order:	0411262	**Collection Date:**	11/19/2004 1:45:00 PM
Project:	Lovington Lea Refinery Quarterly		
Lab ID:	0411262-04	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	2.5	1.0		µg/L	1	11/23/2004 6:24:00 PM
Toluene	ND	1.0		µg/L	1	11/23/2004 6:24:00 PM
Ethylbenzene	ND	1.0		µg/L	1	11/23/2004 6:24:00 PM
Xylenes, Total	ND	3.0		µg/L	1	11/23/2004 6:24:00 PM
Surr:4-Bromofluorobenzene	107	77-129		%REC	1	11/23/2004 6:24:00 PM
Surr: Trifluorotoluene	93.8	75-130		%REC	1	11/23/2004 6:24:00 PM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *December 07, 2004*

CLIENT: Navajo Refining Company
Work Order: 0411262
Project: Lovington Lea Refinery Quarterly
Lab ID: 0411262-05

Client Sample ID: South Water Well
Collection Date: 11/19/2004 1:55:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	11/24/2004 11:41:00 AM
Toluene	2.3	1.0		µg/L	1	11/24/2004 11:41:00 AM
Ethylbenzene	1.8	1.0		µg/L	1	11/24/2004 11:41:00 AM
Xylenes, Total	3.1	3.0		µg/L	1	11/24/2004 11:41:00 AM
Surr:4-Bromofluorobenzene	102	77-129		%REC	1	11/24/2004 11:41:00 AM
Surr: Trifluorotoluene	95.5	75-130		%REC	1	11/24/2004 11:41:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
*- Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0411262
Project: Lovington Lea Refinery Quarterly

Date: *Dec 07 2004*

QC BATCH REPORT

Batch ID: **R24818** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW2-112304** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **11/23/04 17:57**
Client ID: Run ID: **BTEX1_041122C** SeqNo: **579459** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	0.6503	3.0								J
Surr: 4-Bromofluorobenzene	31.19	1.0	30	0	104	77-129	0			
Surr: Trifluorotoluene	30.85	1.0	30	0	103	75-130	0			

LCS Sample ID: **BLCSW2-112304** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **11/23/04 15:46**
Client ID: Run ID: **BTEX1_041122C** SeqNo: **579458** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.64	1.0	20	0	103	77-126	0			
Toluene	19.67	1.0	20	0	98.3	80-124	0			
Ethylbenzene	18.46	1.0	20	0	92.3	76-125	0			
Xylenes, Total	56.69	3.0	60	0	94.5	79-124	0			
Surr: 4-Bromofluorobenzene	34.65	1.0	30	0	116	77-129	0			
Surr: Trifluorotoluene	36.16	1.0	30	0	121	75-130	0			

MS Sample ID: **0411262-04AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **11/23/04 18:51**
Client ID: **North Water Well** Run ID: **BTEX1_041122C** SeqNo: **579461** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20	1.0	20	2.498	87.5	77-126	0			
Toluene	16.62	1.0	20	0	83.1	80-124	0			
Ethylbenzene	16.84	1.0	20	0	84.2	76-125	0			
Xylenes, Total	52.18	3.0	60	0.5886	86	79-124	0			
Surr: 4-Bromofluorobenzene	31.32	1.0	30	0	104	77-129	0			
Surr: Trifluorotoluene	29.75	1.0	30	0	99.2	75-130	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0411262
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R24818** InstrumentID: **BTEX1**

MSD Sample ID: **0411262-04AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **11/23/04 19:17**

Client ID: **North Water Well** Run ID: **BTEX1_041122C** SeqNo: **579462** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.42	1.0	20	2.498	84.6	77-126	20	2.95	20	
Toluene	16.33	1.0	20	0	81.6	80-124	16.62	1.79	20	
Ethylbenzene	16.81	1.0	20	0	84.1	76-125	16.84	0.139	20	
Xylenes, Total	52.26	3.0	60	0.5886	86.1	79-124	52.18	0.156	20	
Surr: 4-Bromofluorobenzene	31.17	1.0	30	0	104	77-129	31.32	0.485	20	
Surr: Trifluorotoluene	29.14	1.0	30	0	97.1	75-130	29.75	2.08	20	

Thefollowingsampleswereanalyzedinthisbatch: 0411262-04A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0411262
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R24848** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW1-112404** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **11/24/04 11:14**
Client ID: Run ID: **BTEX1_041124A** SeqNo: **580082** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	29.85	1.0	30	0	99.5	77-129	0			
Surr: Trifluorotoluene	28.61	1.0	30	0	95.4	75-130	0			

LCS Sample ID: **BLCSW1-112404** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **11/24/04 10:21**
Client ID: Run ID: **BTEX1_041124A** SeqNo: **580081** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.17	1.0	20	0	90.8	77-126	0			
Toluene	17.47	1.0	20	0	87.3	80-124	0			
Ethylbenzene	18.46	1.0	20	0	92.3	76-125	0			
Xylenes, Total	56.43	3.0	60	0	94	79-124	0			
Surr: 4-Bromofluorobenzene	30.89	1.0	30	0	103	77-129	0			
Surr: Trifluorotoluene	29.31	1.0	30	0	97.7	75-130	0			

MS Sample ID: **0411262-05AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **11/24/04 12:07**
Client ID: **SouthWaterWell** Run ID: **BTEX1_041124A** SeqNo: **580084** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.11	1.0	20	0.7809	86.7	77-126	0			
Toluene	19.27	1.0	20	2.285	84.9	80-124	0			
Ethylbenzene	19.56	1.0	20	1.793	88.8	76-125	0			
Xylenes, Total	56.06	3.0	60	3.142	88.2	79-124	0			
Surr: 4-Bromofluorobenzene	31.54	1.0	30	0	105	77-129	0			
Surr: Trifluorotoluene	29.47	1.0	30	0	98.2	75-130	0			

MSD Sample ID: **0411262-05AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **11/24/04 12:34**
Client ID: **SouthWaterWell** Run ID: **BTEX1_041124A** SeqNo: **580085** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.83	1.0	20	0.7809	85.2	77-126	18.11	1.58	20	
Toluene	18.7	1.0	20	2.285	82.1	80-124	19.27	3.04	20	
Ethylbenzene	18.81	1.0	20	1.793	85.1	76-125	19.56	3.92	20	
Xylenes, Total	54.39	3.0	60	3.142	85.4	79-124	56.06	3.02	20	
Surr: 4-Bromofluorobenzene	31.18	1.0	30	0	104	77-129	31.54	1.16	20	
Surr: Trifluorotoluene	29.05	1.0	30	0	96.8	75-130	29.47	1.44	20	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0411262
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R24848** InstrumentID: **BTEX1**

Thefollowingsampleswereanalyzedinthisbatch:

0411262-01A	0411262-02A	0411262-03A
0411262-05A		

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab
QUALITY • INTEGRITY • SERVICE

☐ e-Lab, Inc.
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page ____ of ____

☐ e-Lab, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager: | e-Lab Work Order #: 0411142

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington Lea Refinery Quarterly	A	BTEX (8021)
Work Order		Project Number		B	
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	
Address	PO Box 159	Address	PO Box 159	E	
				F	
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	G	
Phone	(505) 748-3311	Phone	(505) 748-3311	H	
Fax	(505) 746-5421	Fax	(505) 746-5421	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-1D	11/15/04	1120	H_2O	1, 8	3	X										
2	MW-9		1210				X										
3	MW-6R		1305				X										
4	Northwater well		1345				X										
5	South Water well		1355	H_2O	1, 8	3	X										
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: D. Boyer D. Boyer

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) ☒ STD 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by: D. Boyer	Date: 11/15/04	Time: 1630	Received by:	Notes: Copy Results To dgboyer@sesi-NM.com
Relinquished by:	Date:	Time:	Received by (Laboratory):	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory): 11/20/04 0810	

e-lab Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)
		☑ Level II Std QC ☐ TRRP CheckList
		☐ Level III Std QC/Raw Data ☐ TRRP Level IV
		☐ Level IV SW846/CLP
		☐ Other _____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 11/20/2004 8:40:00 AM

Work Order Number 0411262

Received by: RSZ

Checklist completed by RICHARD SANCHEZ 11.20.04 (Signature / Date)

Reviewed by (Initials) 11/23/04 (Date)

Matrix: W

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.5c	002	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? _____ Checked by _____

Login Notes: Trip blank not on COC; logged in without analysis.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

041262

ate 11/19/04 FedEx Tracking Number 847235574911

ender's ame D. Boyer Phone 505 397-0510

Company SESI

Address 763 E Clinton #102

Dept./Floor/Suite/Room

ity Hobbs State NM ZIP 88240

our Internal Billing Reference Lea Recovery

e-Lab Analytical Inc
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. 281.530.5656
Fax. 218.530.5887

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Date:
Nam
Co

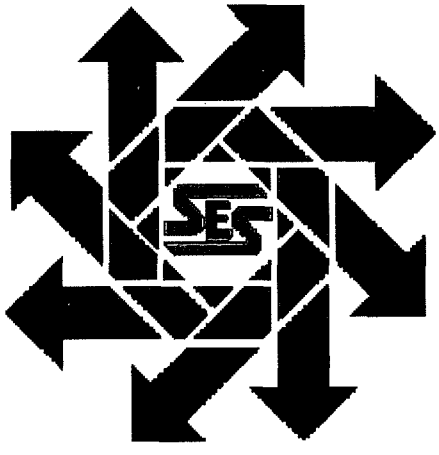
CUSTODY SEAL

Date: 11/19/04 Time: 1630
ne: D. Boyer
mpany: SESI

Seal Broken By:
Date: 11/20/04

2005 Groundwater Monitoring Sampling Results
Navajo Refining Company – Lea Refinery
Lovington, New Mexico

RECEIVED
2006 APR 9 PM 1 06



Prepared for:

Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

By:

Safety & Environmental Solutions, Inc.
703 E. Clinton, Suite 102
Hobbs, New Mexico 88240
(505) 397-0510

e-Lab Analytical, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

March 10, 2005

Darrell Moore
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: Lea Refinery Lovington Work Order : **0502265**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 6 samples on 2/24/2005 9:15:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. The total number of pages in this report is 34.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

e-Lab Analytical, Inc.

Date: *March 10, 2005*

CLIENT: Navajo Refining Company
Project: Lea Refinery Lovington
Work Order: **0502265**

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0502265-01	MW-10	Water		2/22/2005 10:28	2/24/2005 09:15	☐
0502265-02	MW-9	Water		2/22/2005 11:27	2/24/2005 09:15	☐
0502265-03	MW-6R	Water		2/22/2005 12:27	2/24/2005 09:15	☐
0502265-04	MW-5	Water		2/22/2005 13:25	2/24/2005 09:15	☐
0502265-05	North Water Well	Water		2/22/2005 13:44	2/24/2005 09:15	☐
0502265-06	South Water Well	Water		2/22/2005 13:55	2/24/2005 09:15	☐

e-Lab Analytical, Inc. **Date:** *March 10, 2005*

CLIENT: Navajo Refining Company
Project: Lea Refinery Lovington
Work Order: 0502265

Case Narrative

Metals (all samples) could not be analyzed at a lower dilution because of matrix interference.

Batch 12056 Metals MS/MSD was an unrelated sample.

Batch R26802 Anions MS/MSD was an unrelated sample.

e-Lab Analytical, Inc.

Date: *March 10, 2005*

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington
Lab ID: 0502265-01

Client Sample ID: MW-10
Collection Date: 2/22/2005 10:28:00 AM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	3/4/2005 12:47:00 AM
Toluene	ND	1.0		µg/L	1	3/4/2005 12:47:00 AM
Ethylbenzene	ND	1.0		µg/L	1	3/4/2005 12:47:00 AM
Xylenes, Total	ND	3.0		µg/L	1	3/4/2005 12:47:00 AM
Surr: 4-Bromofluorobenzene	94.8	77-129		%REC	1	3/4/2005 12:47:00 AM
Surr: Trifluorotoluene	99.3	75-130		%REC	1	3/4/2005 12:47:00 AM
MERCURY, TOTAL		**SW7470**			Prep Date: **2/24/2005**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	2/25/2005 1:01:40 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **2/25/2005**	Analyst: **SA**
Aluminum	0.212	0.100		mg/L	10	3/8/2005 12:27:00 PM
Arsenic	ND	0.0250		mg/L	5	3/10/2005 12:48:00 PM
Barium	0.120	0.0250		mg/L	5	3/10/2005 12:48:00 PM
Beryllium	ND	0.0100		mg/L	5	3/10/2005 12:48:00 PM
Boron	0.157	0.100		mg/L	5	3/10/2005 12:48:00 PM
Cadmium	ND	0.00500		mg/L	5	3/10/2005 12:48:00 PM
Calcium	99.4	5.00		mg/L	10	3/8/2005 12:27:00 PM
Chromium	ND	0.0100		mg/L	5	3/10/2005 12:48:00 PM
Cobalt	ND	0.0100		mg/L	5	3/10/2005 12:48:00 PM
Copper	ND	0.0100		mg/L	5	3/10/2005 12:48:00 PM
Iron	ND	1.00		mg/L	5	3/10/2005 12:48:00 PM
Lead	ND	0.0250		mg/L	5	3/10/2005 12:48:00 PM
Magnesium	11.4	2.00		mg/L	10	3/8/2005 12:27:00 PM
Manganese	0.0253	0.0250		mg/L	5	3/10/2005 12:48:00 PM
Molybdenum	ND	0.0250		mg/L	5	3/10/2005 12:48:00 PM
Nickel	ND	0.0250		mg/L	5	3/10/2005 12:48:00 PM
Potassium	2.29	1.00		mg/L	5	3/10/2005 12:48:00 PM
Selenium	ND	0.0250		mg/L	5	3/10/2005 12:48:00 PM
Silver	ND	0.0250		mg/L	5	3/10/2005 12:48:00 PM
Sodium	41.0	2.00		mg/L	10	3/8/2005 12:27:00 PM
Vanadium	0.0252	0.0250		mg/L	5	3/10/2005 12:48:00 PM
Zinc	ND	0.0250		mg/L	5	3/10/2005 12:48:00 PM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **LMD**
Chloride	34.4	0.500		mg/L	1	3/6/2005 1:47:00 PM
Fluoride	0.820	0.100		mg/L	1	3/6/2005 1:47:00 PM
Sulfate	82.0	5.00		mg/L	5	3/6/2005 2:15:00 PM
Nitrate/Nitrite (as N)	2.17	0.100		mg/L	1	3/2/2005 12:49:00 PM
Surr: Dichloroacetic acid (surr)	103	80-120		%REC	5	3/6/2005 2:15:00 PM
Surr: Dichloroacetic acid (surr)	104	80-120		%REC	1	3/6/2005 1:47:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *March 10, 2005*

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington
Lab ID: 0502265-01

Client Sample ID: MW-10
Collection Date: 2/22/2005 10:28:00 AM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
Surr: Dichloroacetic acid (surr)	99.4	80-120		%REC	1	3/2/2005 12:49:00 PM
ALKALINITY		**E310.1**				Analyst: **IGF**
Alkalinity, Bicarbonate (As CaCO3)	213	5.00		mg/L	1	3/4/2005
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	3/4/2005
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	3/4/2005
Alkalinity, Total (As CaCO3)	213	5.00		mg/L	1	3/4/2005
CONDUCTIVITY		**E120.1**				Analyst: **IGF**
Specific Conductance	573	1.00		µmhos/cm	1	3/7/2005
PH		**E150.1**				Analyst: **IGF**
pH	6.90	0.100	H	pH units	1	2/24/2005
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **MAM**
Total Dissolved Solids (Residue, Filterable)	456	10.0		mg/L	1	2/24/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *March 10, 2005*

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington
Lab ID: 0502265-02

Client Sample ID: MW-9
Collection Date: 2/22/2005 11:27:00 AM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	3/4/2005 2:06:00 AM
Toluene	ND	1.0		µg/L	1	3/4/2005 2:06:00 AM
Ethylbenzene	ND	1.0		µg/L	1	3/4/2005 2:06:00 AM
Xylenes, Total	ND	3.0		µg/L	1	3/4/2005 2:06:00 AM
Surr: 4-Bromofluorobenzene	101	77-129		%REC	1	3/4/2005 2:06:00 AM
Surr: Trifluorotoluene	103	75-130		%REC	1	3/4/2005 2:06:00 AM
MERCURY, TOTAL		**SW7470**			Prep Date: **2/24/2005**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	2/25/2005 1:13:05 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **2/25/2005**	Analyst: **ALR**
Aluminum	0.0724	0.0500		mg/L	5	3/9/2005 7:17:00 PM
Arsenic	0.0293	0.0250		mg/L	5	3/9/2005 7:17:00 PM
Barium	0.0782	0.0250		mg/L	5	3/9/2005 7:17:00 PM
Beryllium	ND	0.0100		mg/L	5	3/9/2005 7:17:00 PM
Boron	0.104	0.100		mg/L	5	3/9/2005 7:17:00 PM
Cadmium	ND	0.00500		mg/L	5	3/9/2005 7:17:00 PM
Calcium	23.0	2.50		mg/L	5	3/9/2005 7:17:00 PM
Chromium	ND	0.0100		mg/L	5	3/9/2005 7:17:00 PM
Cobalt	ND	0.0100		mg/L	5	3/9/2005 7:17:00 PM
Copper	ND	0.0100		mg/L	5	3/9/2005 7:17:00 PM
Iron	ND	1.00		mg/L	5	3/9/2005 7:17:00 PM
Lead	ND	0.0250		mg/L	5	3/9/2005 7:17:00 PM
Magnesium	2.50	1.00		mg/L	5	3/9/2005 7:17:00 PM
Manganese	0.0452	0.0250		mg/L	5	3/9/2005 7:17:00 PM
Molybdenum	ND	0.0250		mg/L	5	3/9/2005 7:17:00 PM
Nickel	ND	0.0250		mg/L	5	3/9/2005 7:17:00 PM
Potassium	3.38	1.00		mg/L	5	3/9/2005 7:17:00 PM
Selenium	ND	0.0250		mg/L	5	3/9/2005 7:17:00 PM
Silver	ND	0.0250		mg/L	5	3/9/2005 7:17:00 PM
Sodium	177	2.00		mg/L	10	3/8/2005 2:46:00 PM
Vanadium	ND	0.0250		mg/L	5	3/9/2005 7:17:00 PM
Zinc	ND	0.0250		mg/L	5	3/9/2005 7:17:00 PM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **LMD**
Chloride	83.5	5.00		mg/L	10	3/6/2005 3:12:00 PM
Fluoride	2.84	0.100		mg/L	1	3/6/2005 2:44:00 PM
Sulfate	80.8	10.0		mg/L	10	3/6/2005 3:12:00 PM
Nitrate/Nitrite (as N)	0.190	0.100		mg/L	1	3/2/2005 1:18:00 PM
Surr: Dichloroacetic acid (surr)	105	80-120		%REC	10	3/6/2005 3:12:00 PM
Surr: Dichloroacetic acid (surr)	103	80-120		%REC	1	3/6/2005 2:44:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *March 10, 2005*

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington
Lab ID: 0502265-02

Client Sample ID: MW-9
Collection Date: 2/22/2005 11:27:00 AM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
Surr: Dichloroacetic acid (surr)	99.2	80-120		%REC	1	3/2/2005 1:18:00 PM
ALKALINITY		**E310.1**				Analyst: **IGF**
Alkalinity, Bicarbonate (As CaCO3)	260	5.00		mg/L	1	3/4/2005
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	3/4/2005
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	3/4/2005
Alkalinity, Total (As CaCO3)	260	5.00		mg/L	1	3/4/2005
CONDUCTIVITY		**E120.1**				Analyst: **IGF**
Specific Conductance	828	1.00		µmhos/cm	1	3/7/2005
PH		**E150.1**				Analyst: **IGF**
pH	7.55	0.100	H	pH units	1	2/24/2005
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **MAM**
Total Dissolved Solids (Residue, Filterable)	493	10.0		mg/L	1	2/24/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *March 10, 2005*

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington
Lab ID: 0502265-03

Client Sample ID: MW-6R
Collection Date: 2/22/2005 12:27:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	3/4/2005 11:22:00 AM
Toluene	ND	1.0		µg/L	1	3/4/2005 11:22:00 AM
Ethylbenzene	2.0	1.0		µg/L	1	3/4/2005 11:22:00 AM
Xylenes, Total	ND	3.0		µg/L	1	3/4/2005 11:22:00 AM
Surr: 4-Bromofluorobenzene	108	77-129		%REC	1	3/4/2005 11:22:00 AM
Surr: Trifluorotoluene	107	75-130		%REC	1	3/4/2005 11:22:00 AM
MERCURY, TOTAL		**SW7470**			Prep Date: **2/24/2005**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	2/25/2005 1:14:38 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **2/25/2005**	Analyst: **ALR**
Aluminum	ND	0.0500		mg/L	5	3/9/2005 7:23:00 PM
Arsenic	0.0277	0.0250		mg/L	5	3/9/2005 7:23:00 PM
Barium	0.181	0.0250		mg/L	5	3/9/2005 7:23:00 PM
Beryllium	ND	0.0100		mg/L	5	3/9/2005 7:23:00 PM
Boron	0.209	0.100		mg/L	5	3/9/2005 7:23:00 PM
Cadmium	ND	0.00500		mg/L	5	3/9/2005 7:23:00 PM
Calcium	54.1	5.00		mg/L	10	3/8/2005 2:52:00 PM
Chromium	ND	0.0100		mg/L	5	3/9/2005 7:23:00 PM
Cobalt	ND	0.0100		mg/L	5	3/9/2005 7:23:00 PM
Copper	ND	0.0100		mg/L	5	3/9/2005 7:23:00 PM
Iron	ND	1.00		mg/L	5	3/9/2005 7:23:00 PM
Lead	ND	0.0250		mg/L	5	3/9/2005 7:23:00 PM
Magnesium	8.78	1.00		mg/L	5	3/9/2005 7:23:00 PM
Manganese	0.844	0.0500		mg/L	10	3/8/2005 2:52:00 PM
Molybdenum	ND	0.0250		mg/L	5	3/9/2005 7:23:00 PM
Nickel	ND	0.0250		mg/L	5	3/9/2005 7:23:00 PM
Potassium	3.34	1.00		mg/L	5	3/9/2005 7:23:00 PM
Selenium	ND	0.0250		mg/L	5	3/9/2005 7:23:00 PM
Silver	ND	0.0250		mg/L	5	3/9/2005 7:23:00 PM
Sodium	250	2.00		mg/L	10	3/8/2005 2:52:00 PM
Vanadium	ND	0.0250		mg/L	5	3/9/2005 7:23:00 PM
Zinc	0.238	0.0250		mg/L	5	3/9/2005 7:23:00 PM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **LMD**
Chloride	256	5.00		mg/L	10	3/6/2005 5:06:00 PM
Fluoride	0.750	0.100		mg/L	1	3/6/2005 4:38:00 PM
Sulfate	72.8	10.0		mg/L	10	3/6/2005 5:06:00 PM
Nitrate/Nitrite (as N)	0.190	0.100		mg/L	1	3/2/2005 1:46:00 PM
Surr: Dichloroacetic acid (surr)	104	80-120		%REC	10	3/6/2005 5:06:00 PM
Surr: Dichloroacetic acid (surr)	103	80-120		%REC	1	3/6/2005 4:38:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *March 10, 2005*

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington
Lab ID: 0502265-03

Client Sample ID: MW-6R
Collection Date: 2/22/2005 12:27:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
Surr: Dichloroacetic acid (surr)	97.4	80-120		%REC	1	3/2/2005 1:46:00 PM
ALKALINITY		**E310.1**				Analyst: **IGF**
Alkalinity, Bicarbonate (As CaCO3)	315	5.00		mg/L	1	3/4/2005
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	3/4/2005
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	3/4/2005
Alkalinity, Total (As CaCO3)	315	5.00		mg/L	1	3/4/2005
CONDUCTIVITY		**E120.1**				Analyst: **IGF**
Specific Conductance	1,250	1.00		µmhos/cm	1	3/7/2005
PH		**E150.1**				Analyst: **IGF**
pH	7.48	0.100	H	pH units	1	2/24/2005
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **MAM**
Total Dissolved Solids (Residue, Filterable)	870	10.0		mg/L	1	2/24/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *March 10, 2005*

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington
Lab ID: 0502265-04

Client Sample ID: MW-5
Collection Date: 2/22/2005 1:25:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	3/4/2005 2:33:00 AM
Toluene	ND	1.0		µg/L	1	3/4/2005 2:33:00 AM
Ethylbenzene	ND	1.0		µg/L	1	3/4/2005 2:33:00 AM
Xylenes, Total	ND	3.0		µg/L	1	3/4/2005 2:33:00 AM
Surr: 4-Bromofluorobenzene	96.9	77-129		%REC	1	3/4/2005 2:33:00 AM
Surr: Trifluorotoluene	101	75-130		%REC	1	3/4/2005 2:33:00 AM
MERCURY, TOTAL		**SW7470**			Prep Date: **2/24/2005**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	2/25/2005 1:16:11 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **2/25/2005**	Analyst: **ALR**
Aluminum	0.0776	0.0500		mg/L	5	3/9/2005 7:28:00 PM
Arsenic	ND	0.0250		mg/L	5	3/9/2005 7:28:00 PM
Barium	0.115	0.0250		mg/L	5	3/9/2005 7:28:00 PM
Beryllium	ND	0.0100		mg/L	5	3/9/2005 7:28:00 PM
Boron	ND	0.100		mg/L	5	3/9/2005 7:28:00 PM
Cadmium	0.0191	0.00500		mg/L	5	3/9/2005 7:28:00 PM
Calcium	70.5	5.00		mg/L	10	3/8/2005 2:57:00 PM
Chromium	ND	0.0100		mg/L	5	3/9/2005 7:28:00 PM
Cobalt	ND	0.0100		mg/L	5	3/9/2005 7:28:00 PM
Copper	ND	0.0100		mg/L	5	3/9/2005 7:28:00 PM
Iron	ND	1.00		mg/L	5	3/9/2005 7:28:00 PM
Lead	ND	0.0250		mg/L	5	3/9/2005 7:28:00 PM
Magnesium	8.38	1.00		mg/L	5	3/9/2005 7:28:00 PM
Manganese	ND	0.0250		mg/L	5	3/9/2005 7:28:00 PM
Molybdenum	ND	0.0250		mg/L	5	3/9/2005 7:28:00 PM
Nickel	ND	0.0250		mg/L	5	3/9/2005 7:28:00 PM
Potassium	2.28	1.00		mg/L	5	3/9/2005 7:28:00 PM
Selenium	ND	0.0250		mg/L	5	3/9/2005 7:28:00 PM
Silver	ND	0.0250		mg/L	5	3/9/2005 7:28:00 PM
Sodium	155	2.00		mg/L	10	3/8/2005 2:57:00 PM
Vanadium	ND	0.0250		mg/L	5	3/9/2005 7:28:00 PM
Zinc	ND	0.0250		mg/L	5	3/9/2005 7:28:00 PM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **LMD**
Chloride	67.1	5.00		mg/L	10	3/6/2005 6:03:00 PM
Fluoride	0.810	0.100		mg/L	1	3/6/2005 5:35:00 PM
Sulfate	96.4	10.0		mg/L	10	3/6/2005 6:03:00 PM
Nitrate/Nitrite (as N)	3.78	0.100		mg/L	1	3/2/2005 2:15:00 PM
Surr: Dichloroacetic acid (surr)	105	80-120		%REC	10	3/6/2005 6:03:00 PM
Surr: Dichloroacetic acid (surr)	103	80-120		%REC	1	3/6/2005 5:35:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *March 10, 2005*

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington
Lab ID: 0502265-04

Client Sample ID: MW-5
Collection Date: 2/22/2005 1:25:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
Surr: Dichloroacetic acid (surr)	99.0	80-120		%REC	1	3/2/2005 2:15:00 PM
ALKALINITY		**E310.1**				Analyst: **IGF**
Alkalinity, Bicarbonate (As CaCO3)	355	5.00		mg/L	1	3/4/2005
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	3/4/2005
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	3/4/2005
Alkalinity, Total (As CaCO3)	355	5.00		mg/L	1	3/4/2005
CONDUCTIVITY		**E120.1**				Analyst: **IGF**
Specific Conductance	872	1.00		µmhos/cm	1	3/7/2005
PH		**E150.1**				Analyst: **IGF**
pH	7.49	0.100	H	pH units	1	2/24/2005
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **MAM**
Total Dissolved Solids (Residue, Filterable)	650	10.0		mg/L	1	2/24/2005

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *March 10, 2005*

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington
Lab ID: 0502265-05

Client Sample ID: North Water Well
Collection Date: 2/22/2005 1:44:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	1.7	1.0		µg/L	1	3/3/2005 7:55:00 PM
Toluene	ND	1.0		µg/L	1	3/3/2005 7:55:00 PM
Ethylbenzene	ND	1.0		µg/L	1	3/3/2005 7:55:00 PM
Xylenes, Total	ND	3.0		µg/L	1	3/3/2005 7:55:00 PM
Surr: 4-Bromofluorobenzene	98.7	77-129		%REC	1	3/3/2005 7:55:00 PM
Surr: Trifluorotoluene	103	75-130		%REC	1	3/3/2005 7:55:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *March 10, 2005*

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington
Lab ID: 0502265-06

Client Sample ID: South Water Well
Collection Date: 2/22/2005 1:55:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	3/4/2005 4:19:00 AM
Toluene	1.1	1.0		µg/L	1	3/4/2005 4:19:00 AM
Ethylbenzene	ND	1.0		µg/L	1	3/4/2005 4:19:00 AM
Xylenes, Total	ND	3.0		µg/L	1	3/4/2005 4:19:00 AM
Surr: 4-Bromofluorobenzene	96.9	77-129		%REC	1	3/4/2005 4:19:00 AM
Surr: Trifluorotoluene	100	75-130		%REC	1	3/4/2005 4:19:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

Date: *Mar 10 2005*

QC BATCH REPORT

Batch ID: **R26720** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW2-030305** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/03/05 9:19**
Client ID: Run ID: **BTEX1_050301E** SeqNo: **616552** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	27.2	1.0	30	0	90.7	77-129	0			
Surr: Trifluorotoluene	28.02	1.0	30	0	93.4	75-130	0			

LCS Sample ID: **BLCSW2-030305** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/03/05 8:10**
Client ID: Run ID: **BTEX1_050301E** SeqNo: **616551** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.78	1.0	20	0	98.9	77-126	0			
Toluene	20.56	1.0	20	0	103	80-124	0			
Ethylbenzene	20.66	1.0	20	0	103	76-125	0			
Xylenes, Total	61.02	3.0	60	0	102	79-124	0			
Surr: 4-Bromofluorobenzene	35.85	1.0	30	0	119	77-129	0			
Surr: Trifluorotoluene	27.26	1.0	30	0	90.9	75-130	0			

MS Sample ID: **0503005-01AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/03/05 10:39**
Client ID: Run ID: **BTEX1_050301E** SeqNo: **616555** Prep Date: DF: **1000**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20580	1,000	20000	690.4	99.5	77-126	0			
Toluene	20460	1,000	20000	0	102	80-124	0			
Ethylbenzene	21800	1,000	20000	1627	101	76-125	0			
Xylenes, Total	62230	3,000	60000	2242	100	79-124	0			
Surr: 4-Bromofluorobenzene	29080	1,000	30000	0	96.9	77-129	0			
Surr: Trifluorotoluene	29220	1,000	30000	0	97.4	75-130	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **R26720** InstrumentID: **BTEX1**

MSD Sample ID: **0503005-01AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/03/05 11:05**

Client ID: Run ID: **BTEX1_050301E** SeqNo: **616556** Prep Date: DF: **1000**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21170	1,000	20000	690.4	102	77-126	20580	2.82	20	
Toluene	21240	1,000	20000	0	106	80-124	20460	3.72	20	
Ethylbenzene	22080	1,000	20000	1627	102	76-125	21800	1.25	20	
Xylenes, Total	64390	3,000	60000	2242	104	79-124	62230	3.4	20	
Surr: 4-Bromofluorobenzene	30120	1,000	30000	0	100	77-129	29080	3.53	20	
Surr: Trifluorotoluene	30750	1,000	30000	0	103	75-130	29220	5.12	20	

The following samples were analyzed in this batch: 0502265-05A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **R26737** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW1-030405** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/03/05 23:54**
Client ID: Run ID: **BTEX1_050301F** SeqNo: **617054** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	29.34	1.0	30	0	97.8	77-129	0			
Surr: Trifluorotoluene	30.53	1.0	30	0	102	75-130	0			

LCS Sample ID: **BLCSW1-030405** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/03/05 23:28**
Client ID: Run ID: **BTEX1_050301F** SeqNo: **617053** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.8	1.0	20	0	99	77-126	0			
Toluene	20.28	1.0	20	0	101	80-124	0			
Ethylbenzene	20.08	1.0	20	0	100	76-125	0			
Xylenes, Total	59.41	3.0	60	0	99	79-124	0			
Surr: 4-Bromofluorobenzene	28.48	1.0	30	0	94.9	77-129	0			
Surr: Trifluorotoluene	29.3	1.0	30	0	97.7	75-130	0			

MS Sample ID: **0502265-01AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/04/05 1:13**
Client ID: **MW-10** Run ID: **BTEX1_050301F** SeqNo: **617057** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.97	1.0	20	0	99.8	77-126	0			
Toluene	20.33	1.0	20	0	102	80-124	0			
Ethylbenzene	19.81	1.0	20	0	99	76-125	0			
Xylenes, Total	58.97	3.0	60	0	98.3	79-124	0			
Surr: 4-Bromofluorobenzene	28.9	1.0	30	0	96.3	77-129	0			
Surr: Trifluorotoluene	29.6	1.0	30	0	98.7	75-130	0			

MSD Sample ID: **0502265-01AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **03/04/05 1:40**
Client ID: **MW-10** Run ID: **BTEX1_050301F** SeqNo: **617058** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.69	1.0	20	0	98.5	77-126	19.97	1.38	20	
Toluene	20.01	1.0	20	0	100	80-124	20.33	1.6	20	
Ethylbenzene	19.46	1.0	20	0	97.3	76-125	19.81	1.76	20	
Xylenes, Total	58.18	3.0	60	0	97	79-124	58.97	1.35	20	
Surr: 4-Bromofluorobenzene	28.35	1.0	30	0	94.5	77-129	28.9	1.94	20	
Surr: Trifluorotoluene	29.05	1.0	30	0	96.8	75-130	29.6	1.88	20	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **R26737** InstrumentID: **BTEX1**

The following samples were analyzed in this batch:

0502265-01A	0502265-02A	0502265-03A
0502265-04A	0502265-06A	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **12042** InstrumentID: **Mercury**

MBLK Sample ID: **GBLKW2-022405** Test Code: **SW7470** Units: **mg/L** Analysis Date: **02/25/05 12:57**
Client ID: Run ID: **MERCURY_050225B** SeqNo: **614339** Prep Date: **2/24/2005** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020								

LCS Sample ID: **GLCSW2-022405** Test Code: **SW7470** Units: **mg/L** Analysis Date: **02/25/05 12:58**
Client ID: Run ID: **MERCURY_050225B** SeqNo: **614340** Prep Date: **2/24/2005** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00528	0.00020	0.005	0	106	83-115		0		

LCSD Sample ID: **GLCSDW2-022405** Test Code: **SW7470** Units: **mg/L** Analysis Date: **02/25/05 13:00**
Client ID: Run ID: **MERCURY_050225B** SeqNo: **614341** Prep Date: **2/24/2005** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00515	0.00020	0.005	0	103	83-115	0.00528	2.49	20	

MS Sample ID: **0502265-01DMS** Test Code: **SW7470** Units: **mg/L** Analysis Date: **02/25/05 13:04**
Client ID: **MW-10** Run ID: **MERCURY_050225B** SeqNo: **614344** Prep Date: **2/24/2005** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00471	0.00020	0.005	-0.000008	94.4	83-115		0		

MSD Sample ID: **0502265-01DMSD** Test Code: **SW7470** Units: **mg/L** Analysis Date: **02/25/05 13:09**
Client ID: **MW-10** Run ID: **MERCURY_050225B** SeqNo: **614345** Prep Date: **2/24/2005** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00464	0.00020	0.005	-0.000008	93	83-115	0.00471	1.5	20	

DUP Sample ID: **0502265-01DDUP** Test Code: **SW7470** Units: **mg/L** Analysis Date: **02/25/05 13:03**
Client ID: **MW-10** Run ID: **MERCURY_050225B** SeqNo: **614343** Prep Date: **2/24/2005** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020	0	0	0	0-0	-0.000008	0	20	

The following samples were analyzed in this batch: 0502265-01D 0502265-02D 0502265-03D 0502265-04D

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **12056** InstrumentID: **ICP7500**

MBLK Sample ID: **MBLKW4-022505** Test Code: **SW6020** Units: **mg/L** Analysis Date: **03/03/05 13:54**

Client ID: Run ID: **ICP7500_050303A** SeqNo: **616956** Prep Date: **2/25/2005** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.00196	0.010								J
Arsenic	ND	0.0050								
Barium	ND	0.0050								
Beryllium	ND	0.0020								
Boron	ND	0.020								
Cadmium	ND	0.0020								
Calcium	ND	0.50								
Chromium	ND	0.0050								
Cobalt	ND	0.0050								
Copper	ND	0.0050								
Iron	ND	0.20								
Lead	ND	0.0050								
Magnesium	ND	0.20								
Manganese	ND	0.0050								
Molybdenum	ND	0.0050								
Nickel	ND	0.0050								
Potassium	ND	0.20								
Selenium	ND	0.0050								
Silver	ND	0.0050								
Sodium	0.04568	0.20								J
Vanadium	ND	0.0050								
Zinc	ND	0.0050								

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **12056** InstrumentID: **ICP7500**

LCS Sample ID: **MLCSW4-022505** Test Code: **SW6020** Units: **mg/L** Analysis Date: **03/03/05 14:00**

Client ID: Run ID: **ICP7500_050303A** SeqNo: **616957** Prep Date: **2/25/2005** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.05254	0.010	0.05	0	105	79-126	0			
Arsenic	0.04901	0.0050	0.05	0	98	80-121	0			
Barium	0.04912	0.0050	0.05	0	98.2	79.8-119	0			
Beryllium	0.05036	0.0020	0.05	0	101	78.9-120	0			
Boron	0.5171	0.020	0.5	0	103	80-120	0			
Cadmium	0.05096	0.0020	0.05	0	102	79.1-119	0			
Calcium	5.144	0.50	5	0	103	80-121	0			
Chromium	0.05185	0.0050	0.05	0	104	79.3-121	0			
Cobalt	0.05167	0.0050	0.05	0	103	82-121	0			
Copper	0.04651	0.0050	0.05	0	93	81-120	0			
Iron	5.13	0.20	5	0	103	80-120	0			
Lead	0.04725	0.0050	0.05	0	94.5	80-118	0			
Magnesium	5.245	0.20	5	0	105	80-120	0			
Manganese	0.05209	0.0050	0.05	0	104	82-119	0			
Molybdenum	0.04656	0.0050	0.05	0	93.1	81-115	0			
Nickel	0.04969	0.0050	0.05	0	99.4	82-120	0			
Potassium	5.055	0.20	5	0	101	80-120	0			
Selenium	0.05072	0.0050	0.05	0	101	79.2-118	0			
Silver	0.04611	0.0050	0.05	0	92.2	80-117	0			
Sodium	5.207	0.20	5	0	104	80.6-119	0			
Vanadium	0.05082	0.0050	0.05	0	102	82.1-119	0			
Zinc	0.04512	0.0050	0.05	0	90.2	79-118	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **12056** InstrumentID: **ICP7500**

MS Sample ID: **0502261-04BMS** Test Code: **SW6020** Units: **mg/L** Analysis Date: **03/03/05 14:29**

Client ID: Run ID: **ICP7500_050303A** SeqNo: **616971** Prep Date: **2/25/2005** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	1.792	0.010	0.05	0.7532	2080	79-126	0			SEO
Arsenic	0.05356	0.0050	0.05	0.002804	102	80-121	0			
Barium	0.1836	0.0050	0.05	0.1343	98.6	79.8-119	0			
Beryllium	0.05295	0.0020	0.05	0	106	78.9-120	0			
Boron	0.6245	0.020	0.5	0.06468	112	80-120	0			
Cadmium	0.05148	0.0020	0.05	0	103	79.1-119	0			
Calcium	43.88	0.50	5	38.5	108	80-121	0			O
Chromium	0.051	0.0050	0.05	0.0006571	101	79.3-121	0			
Cobalt	0.0513	0.0050	0.05	0.001539	99.5	82-121	0			
Copper	0.04697	0.0050	0.05	0.0008071	92.3	80-120	0			
Iron	11.87	0.20	5	6.246	112	80-120	0			
Lead	0.05029	0.0050	0.05	0.001684	97.2	80-118	0			
Magnesium	8.063	0.20	5	3.38	93.7	80-120	0			
Manganese	0.6439	0.0050	0.05	0.5979	92	82-119	0			O
Molybdenum	0.04896	0.0050	0.05	0	97.9	81-115	0			
Nickel	0.04879	0.0050	0.05	0.0005632	96.5	82-120	0			
Potassium	7.057	0.20	5	2.111	98.9	80-120	0			
Selenium	0.05122	0.0050	0.05	0	102	79.2-118	0			
Silver	0.04692	0.0050	0.05	0	93.8	80-117	0			
Sodium	13.16	0.20	5	8.464	93.9	80.6-119	0			
Vanadium	0.0549	0.0050	0.05	0.003953	102	82.1-119	0			
Zinc	0.04712	0.0050	0.05	0	94.2	79-118	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **12056** InstrumentID: **ICP7500**

MSD Sample ID: **0502261-04BMSD** Test Code: **SW6020** Units: **mg/L** Analysis Date: **03/03/05 14:34**

Client ID: Run ID: **ICP7500_050303A** SeqNo: **616972** Prep Date: **2/25/2005** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	3.01	0.010	0.05	0.7532	4510	79-126	1.792	50.7	15	SREO
Arsenic	0.05233	0.0050	0.05	0.002804	99.1	80-121	0.05356	2.32	15	
Barium	0.1794	0.0050	0.05	0.1343	90.2	79.8-119	0.1836	2.31	15	
Beryllium	0.05176	0.0020	0.05	0	104	78.9-120	0.05295	2.27	15	
Boron	0.6168	0.020	0.5	0.06468	110	80-120	0.6245	1.24	15	
Cadmium	0.05069	0.0020	0.05	0	101	79.1-119	0.05148	1.55	15	
Calcium	41.86	0.50	5	38.5	67.2	80-121	43.88	4.71	15	SO
Chromium	0.05096	0.0050	0.05	0.0006571	101	79.3-121	0.051	0.0785	15	
Cobalt	0.05052	0.0050	0.05	0.001539	98	82-121	0.0513	1.53	15	
Copper	0.04652	0.0050	0.05	0.0008071	91.4	81-120	0.04697	0.963	15	
Iron	12.14	0.20	5	6.246	118	80-120	11.87	2.25	15	
Lead	0.04807	0.0050	0.05	0.001684	92.8	80-118	0.05029	4.51	15	
Magnesium	8.043	0.20	5	3.38	93.3	80-120	8.063	0.248	15	
Manganese	0.6269	0.0050	0.05	0.5979	58	82-119	0.6439	2.68	15	SO
Molybdenum	0.04804	0.0050	0.05	0	96.1	81-115	0.04896	1.9	15	
Nickel	0.048	0.0050	0.05	0.0005632	94.9	82-120	0.04879	1.63	15	
Potassium	6.948	0.20	5	2.111	96.7	80-120	7.057	1.56	15	
Selenium	0.04884	0.0050	0.05	0	97.7	79.2-118	0.05122	4.76	15	
Silver	0.04657	0.0050	0.05	0	93.1	80-117	0.04692	0.749	15	
Sodium	12.86	0.20	5	8.464	87.9	80.6-119	13.16	2.31	15	
Vanadium	0.05502	0.0050	0.05	0.003953	102	82.1-119	0.0549	0.218	15	
Zinc	0.04845	0.0050	0.05	0	96.9	79-118	0.04712	2.78	15	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **12056** InstrumentID: **ICP7500**

DUP Sample ID: **0502261-04BDUP** Test Code: **SW6020** Units: **mg/L** Analysis Date: **03/03/05 14:23**

Client ID: Run ID: **ICP7500_050303A** SeqNo: **616969** Prep Date: **2/25/2005** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.8804	0.010	0	0	0	0-0	0.7532	15.6	25	
Arsenic	0.002577	0.0050	0	0	0	0-0	0.002804	0	25	J
Barium	0.1314	0.0050	0	0	0	0-0	0.1343	2.18	25	
Beryllium	ND	0.0020	0	0	0	0-0	0	0	25	
Boron	0.06132	0.020	0	0	0	0-0	0.06468	5.33	25	
Cadmium	ND	0.0020	0	0	0	0-0	0	0	25	
Calcium	38.24	0.50	0	0	0	0-0	38.5	0.678	25	
Chromium	0.001068	0.0050	0	0	0	0-0	0.0006571	0	25	J
Cobalt	0.001577	0.0050	0	0	0	0-0	0.001539	0	25	J
Copper	0.0008761	0.0050	0	0	0	0-0	0.0008071	0	25	J
iron	6.285	0.20	0	0	0	0-0	6.246	0.622	25	
Lead	0.001664	0.0050	0	0	0	0-0	0.001684	0	25	J
Magnesium	3.461	0.20	0	0	0	0-0	3.38	2.37	25	
Manganese	0.5938	0.0050	0	0	0	0-0	0.5979	0.688	25	
Molybdenum	ND	0.0050	0	0	0	0-0	0	0	25	
Nickel	0.0007244	0.0050	0	0	0	0-0	0.0005632	0	25	J
Potassium	2.099	0.20	0	0	0	0-0	2.111	0.57	25	
Selenium	ND	0.0050	0	0	0	0-0	0	0	25	
Silver	ND	0.0050	0	0	0	0-0	0	0	25	
Sodium	8.589	0.20	0	0	0	0-0	8.464	1.47	25	
Vanadium	0.003936	0.0050	0	0	0	0-0	0.003953	0	25	J
Zinc	ND	0.0050	0	0	0	0-0	0	0	25	

The following samples were analyzed in this batch: 0502265-01D 0502265-02D 0502265-03D 0502265-04D

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **R26584** InstrumentID: **WetChem**

LCS Sample ID: **WLCSW1-022405** Test Code: **E150.1** Units: **pH units** Analysis Date: **02/24/05 0:00**

Client ID: Run ID: **WETCHEM_050224A** SeqNo: **613515** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.07	0.10	6	0	101	85-115	0			

DUP Sample ID: **0502265-01CDUP** Test Code: **E150.1** Units: **pH units** Analysis Date: **02/24/05 0:00**

Client ID: **MW-10** Run ID: **WETCHEM_050224A** SeqNo: **613520** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.89	0.10	0	0	0	0-0	6.9	0.145	20	H

The following samples were analyzed in this batch: 0502265-01C 0502265-02C 0502265-03C 0502265-04C

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **R26612** InstrumentID: **WetChem**

MBLK Sample ID: **WBLKW1-022405** Test Code: **E160.1** Units: **mg/L** Analysis Date: **02/24/05 0:00**

Client ID: Run ID: **WETCHEM_050224H** SeqNo: **614195** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	ND	10								

LCS Sample ID: **WLCSW1-022405** Test Code: **E160.1** Units: **mg/L** Analysis Date: **02/24/05 0:00**

Client ID: Run ID: **WETCHEM_050224H** SeqNo: **614196** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	984	10	1000	0	98.4	80-120	0			

DUP Sample ID: **0502268-01FDUP** Test Code: **E160.1** Units: **mg/L** Analysis Date: **02/24/05 0:00**

Client ID: Run ID: **WETCHEM_050224H** SeqNo: **614210** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	2584	10	0	0	0	0-0	2593	0.348	20	

The following samples were analyzed in this batch: 0502265-01C 0502265-02C 0502265-03C 0502265-04C

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **R26724** InstrumentID: **IC201**

MBLK Sample ID: **WBLKW1-030105** Test Code: **E300** Units: **mg/L** Analysis Date: **03/02/05 1:54**
Client ID: Run ID: **IC201_050301A** SeqNo: **616615** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	ND	0.10								
Surr: Dichloroacetic acid (surr)	4.98	0.10	5	0	99.6	80-120	0			

LCS Sample ID: **WLCSW1-030105** Test Code: **E300** Units: **mg/L** Analysis Date: **03/02/05 2:22**
Client ID: Run ID: **IC201_050301A** SeqNo: **616633** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	3.8	0.10	0	0	0	80-120	0			
Surr: Dichloroacetic acid (surr)	5.08	0.10	5	0	102	80-120	0			

LCSD Sample ID: **WLCSDW1-03010** Test Code: **E300** Units: **mg/L** Analysis Date: **03/02/05 2:51**
Client ID: Run ID: **IC201_050301A** SeqNo: **616634** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	3.8	0.10	0	0	0	80-120	3.8	0	20	
Surr: Dichloroacetic acid (surr)	5.19	0.10	5	0	104	80-120	5.08	2.14	20	

MS Sample ID: **0503004-01GMS** Test Code: **E300** Units: **mg/L** Analysis Date: **03/02/05 5:13**
Client ID: Run ID: **IC201_050301A** SeqNo: **616647** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	3.72	0.10	0	0.2	0	75-125	0			
Surr: Dichloroacetic acid (surr)	4.97	0.10	5	0	99.4	80-120	0			

MSD Sample ID: **0503004-01GMSD** Test Code: **E300** Units: **mg/L** Analysis Date: **03/02/05 5:42**
Client ID: Run ID: **IC201_050301A** SeqNo: **616648** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	3.74	0.10	0	0.2	0	75-125	3.72	0.536	20	
Surr: Dichloroacetic acid (surr)	5	0.10	5	0	100	80-120	4.97	0.602	20	

DUP Sample ID: **0503004-01GDUP** Test Code: **E300** Units: **mg/L** Analysis Date: **03/02/05 4:45**
Client ID: Run ID: **IC201_050301A** SeqNo: **616646** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	0.21	0.10	0	0	0	0-0	0.2	4.88	20	
Surr: Dichloroacetic acid (surr)	5.09	0.10	5	0	102	80-120	5.1	0.196	20	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **R26724** InstrumentID: **IC201**

DUP Sample ID: **0503004-01GDUP** Test Code: **E300** Units: **mg/L** Analysis Date: **03/02/05 7:36**

Client ID: Run ID: **IC201_050301A** SeqNo: **616652** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	0.9	0.50	0	0	0	0-0	0	200	20	R
Surr: Dichloroacetic acid (surr)	25.8	0.50	25	0	103	80-120	25.9	0.387	20	

The following samples were analyzed in this batch:

0502265-01B	0502265-02B	0502265-03B
0502265-04B		

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **R26769** InstrumentID: **WetChem**

MBLK Sample ID: **WBLKW1-030705** Test Code: **E120.1** Units: **µmhos/cm** Analysis Date: **03/07/05 0:00**
Client ID: Run ID: **WETCHEM_050307C** SeqNo: **617730** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	ND	1.0								

LCS Sample ID: **WLCSW1-030705** Test Code: **E120.1** Units: **µmhos/cm** Analysis Date: **03/07/05 0:00**
Client ID: Run ID: **WETCHEM_050307C** SeqNo: **617731** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	1420	1.0	1413	0	100	80-120	0			

DUP Sample ID: **0502265-01CDUP** Test Code: **E120.1** Units: **µmhos/cm** Analysis Date: **03/07/05 0:00**
Client ID: **MW-10** Run ID: **WETCHEM_050307C** SeqNo: **617746** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	575	1.0	0	0	0	0-0	573	0.348	20	

The following samples were analyzed in this batch: 0502265-01C 0502265-02C 0502265-03C 0502265-04C

ND - Not Detected at the Reporting Limit
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R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **R26770** InstrumentID: **WetChem**

MBLK Sample ID: **WBLKW1-030405** Test Code: **E310.1** Units: **mg/L** Analysis Date: **03/04/05 0:00**

Client ID: Run ID: **WETCHEM_050304D** SeqNo: **617747** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	ND	5.0								
Alkalinity, Carbonate (As CaCO3)	ND	5.0								
Alkalinity, Hydroxide (As CaCO3)	ND	5.0								
Alkalinity, Total (As CaCO3)	ND	5.0								

LCS Sample ID: **WLCSW1-030405** Test Code: **E310.1** Units: **mg/L** Analysis Date: **03/04/05 0:00**

Client ID: Run ID: **WETCHEM_050304D** SeqNo: **617748** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	970	5.0	0	1	0	0-0	0			
Alkalinity, Carbonate (As CaCO3)	ND	5.0	0	0	0	0-0	0			
Alkalinity, Hydroxide (As CaCO3)	ND	5.0	0	0	0	0-0	0			
Alkalinity, Total (As CaCO3)	970	5.0	1000	0	97	80-120	0			

DUP Sample ID: **0503002-01CDUP** Test Code: **E310.1** Units: **mg/L** Analysis Date: **03/04/05 0:00**

Client ID: Run ID: **WETCHEM_050304D** SeqNo: **617760** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	272	5.0	0	0	0	0-0	270	0.738	20	
Alkalinity, Carbonate (As CaCO3)	ND	5.0	0	0	0	0-0	0	0	20	
Alkalinity, Hydroxide (As CaCO3)	ND	5.0	0	0	0	0-0	0	0	20	
Alkalinity, Total (As CaCO3)	272	5.0	0	0	0	0-0	270	0.738	20	

The following samples were analyzed in this batch: 0502265-01C 0502265-02C 0502265-03C 0502265-04C

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **R26802** InstrumentID: **IC201**

MBLK Sample ID: **WBLKW1-030505** Test Code: **E300** Units: **mg/L** Analysis Date: **03/06/05 1:54**
Client ID: Run ID: **IC201_050305A** SeqNo: **618506** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	0.50								
Fluoride	ND	0.10								
Sulfate	ND	1.0								
Surr: Dichloroacetic acid (surr)	5.01	0.10	5	0	100	80-120	0			

LCS Sample ID: **WLCSW1-030505** Test Code: **E300** Units: **mg/L** Analysis Date: **03/06/05 2:22**
Client ID: Run ID: **IC201_050305A** SeqNo: **618527** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.09	0.50	10	0	90.9	80-120	0			
Fluoride	1.84	0.10	2	0	92	80-120	0			
Sulfate	9.61	1.0	10	0	96.1	80-120	0			
Surr: Dichloroacetic acid (surr)	5.05	0.10	5	0	101	80-120	0			

LCSD Sample ID: **WLCSDW1-03050** Test Code: **E300** Units: **mg/L** Analysis Date: **03/06/05 2:51**
Client ID: Run ID: **IC201_050305A** SeqNo: **618528** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.04	0.50	10	0	90.4	80-120	9.09	0.552	20	
Fluoride	1.83	0.10	2	0	91.5	80-120	1.84	0.545	20	
Sulfate	9.56	1.0	10	0	95.6	80-120	9.61	0.522	20	
Surr: Dichloroacetic acid (surr)	5.04	0.10	5	0	101	80-120	5.05	0.198	20	

MS Sample ID: **0503063-09GMS** Test Code: **E300** Units: **mg/L** Analysis Date: **03/05/05 21:37**
Client ID: Run ID: **IC201_050305A** SeqNo: **618499** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	18.79	0.50	10	9.58	92.1	75-125	0			
Fluoride	1.94	0.10	2	0.25	84.5	75-125	0			
Sulfate	614.4	1.0	10	613.8	6.1	75-125	0			SEO
Surr: Dichloroacetic acid (surr)	4.91	0.10	5	0	98.2	80-120	0			

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R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0502265
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **R26802** InstrumentID: **IC201**

MSD Sample ID: **0503063-09GMSD** Test Code: **E300** Units: **mg/L** Analysis Date: **03/05/05 22:06**
Client ID: Run ID: **IC201_050305A** SeqNo: **618500** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	18.77	0.50	10	9.58	91.9	75-125	18.79	0.106	20	
Fluoride	1.95	0.10	2	0.25	85	75-125	1.94	0.514	20	
Sulfate	614.5	1.0	10	613.8	6.8	75-125	614.4	0.0114	20	SEO
Surr: Dichloroacetic acid (surr)	4.93	0.10	5	0	98.6	80-120	4.91	0.407	20	

DUP Sample ID: **0503063-09GDUP** Test Code: **E300** Units: **mg/L** Analysis Date: **03/05/05 21:09**
Client ID: Run ID: **IC201_050305A** SeqNo: **618498** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.58	0.50	0	0	0	0-0	9.58	0	20	
Fluoride	0.26	0.10	0	0	0	0-0	0.25	3.92	20	
Sulfate	613.6	1.0	0	0	0	0-0	613.8	0.0293	20	E
Surr: Dichloroacetic acid (surr)	5.13	0.10	5	0	103	80-120	5.01	2.37	20	

DUP Sample ID: **0502265-04CDUP** Test Code: **E300** Units: **mg/L** Analysis Date: **03/06/05 18:32**
Client ID: **MW-5** Run ID: **IC201_050305A** SeqNo: **618524** Prep Date: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	67	5.0	0	0	0	0-0	67.1	0.149	20	
Fluoride	1.7	1.0	0	0	0	0-0	1.8	5.71	20	
Sulfate	96.2	10	0	0	0	0-0	96.4	0.208	20	
Surr: Dichloroacetic acid (surr)	51.8	1.0	50	0	104	80-120	52.5	1.34	20	

The following samples were analyzed in this batch: 0502265-01C 0502265-02C 0502265-03C 0502265-04C

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab Analytical, Inc.
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 1

e-Lab Analytical, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager:

e-Lab Work Order #: 150265

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lea Refinery, Lovington	A	BTEX/~~MTBE~~ (8021) DW BTEX only
Work Order		Project Number		B	Total Metals (6020/7000) WQCC + Cations
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	Anions (300) Cl, F, SO4, NO3, NO2
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	Conductance
Address	PO Box 159	Address	PO Box 159	E	Alkalinity
				F	pH
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	G	TDS
Phone	(505) 748-3311	Phone	(505) 748-3311	H	
Fax	(505) 746-5421	Fax	(505) 746-5421	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-1D	2/22/05	1028	H_2O	1,2,8	5	X	X	X	X	X	X	X				
2	MW-9	2/22/05	1127	H_2O	1,2,8	5	X	X	X	X	X	X	X				
3	MW-6R	2/22/05	1227	H_2O	1,2,8	5	X	X	X	X	X	X	X				
4	MW-5	2/22/05	1325	H_2O	1,2,8	5	X	X	X	X	X	X	X				
5	North Water Well	2/22/05	1344	H_2O	1, 8	3	X										
6	South Water Well	2/22/05	1355	H_2O	1, 8	3	X										
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: David Boyer DW Boyer

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) ☐ STD 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other 10 day TAT

Results Due Date:

Relinquished by: DW Boyer — Date: 2/23/05 — Time: 0910

Relinquished by: — Date: — Time:

Received by:

Received by (Laboratory): — 2/24/05 09:15

Logged by (Laboratory): — Date: — Time:

Checked by (Laboratory):

Notes: Copy Results to dwboyer@sesi-NM.com

e-Lab Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)
- ☑ Level II Std QC
- ☐ Level III Std QC/Raw Data
- ☐ Level IV SW846/CLP
- ☐ Other

☐ TRRP CheckList
☐ TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 2/24/2005 9:15:00 AM

Work Order Number 0502265

Received by: RNG

Checklist completed by [signature] 2/24/05 (Signature / Date)

Reviewed by [initials] 2/28/05 (Initials / Date)

Matrix: W

Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.7c	002	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐

Adjusted? _____ Checked by RNG

Login Notes: Split and preserve H2SO4 for NO3/NO2 analysis.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

W.O.# 0502265

.om This portion can be removed for Recipient's records.

Date 2/23/05 FedEx Tracking Number 849883018562

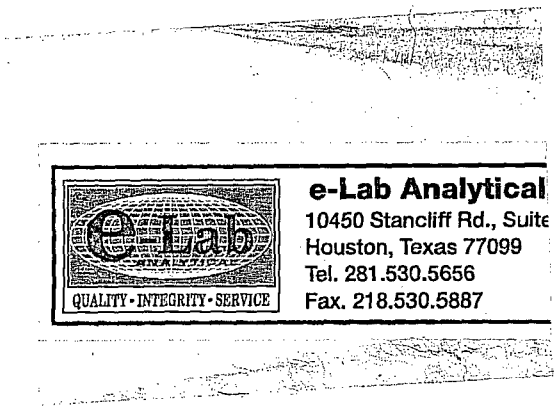
Sender's Name S. Bowen Phone 505 397-0510

Company SESI

Address 703 E Clinton Dept./Floor/Suite/Room

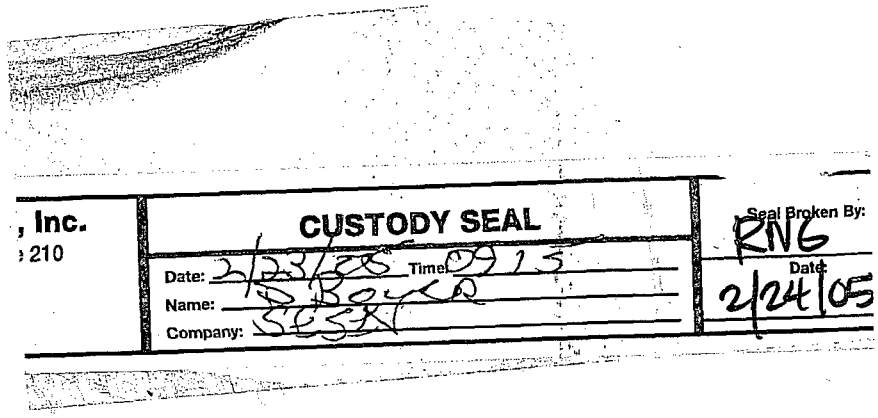
City Hobbs State NM ZIP 88240

Your Internal Billing Reference NHU-00-017



e-Lab Analytical
10450 Stancliff Rd., Suite
Houston, Texas 77099
Tel. 281.530.5656
Fax. 218.530.5887

QUALITY • INTEGRITY • SERVICE



, Inc.
: 210

CUSTODY SEAL

Date: 2/23/05 Time: 0915

Name: S Bowen

Company: SESI

Seal Broken By: RNG

Date: 2/24/05

e-Lab Analytical, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

July 08, 2005

Jeff Byrd
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5468
Fax: (505) 746-5421

Re: Lea Refinery

Work Order : **0506418**

Dear Jeff Byrd,

e-Lab Analytical, Inc. received 5 samples on 6/30/2005 8:30:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 12.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

e-Lab Analytical, Inc.

Date: *July 08, 2005*

CLIENT: Navajo Refining Company
Project: Lea Refinery
Work Order: **0506418**

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0506418-01	North Water Well	Water		6/28/2005 11:05	6/30/2005 08:30	☐
0506418-02	South Water Well	Water		6/28/2005 11:30	6/30/2005 08:30	☐
0506418-03	MW-9	Water		6/28/2005 12:20	6/30/2005 08:30	☐
0506418-04	MW-6R	Water		6/28/2005 13:10	6/30/2005 08:30	☐
0506418-05	050505-33 Trip Blank	Water		6/28/2005 13:10	6/30/2005 08:30	☐

e-Lab Analytical, Inc.

Date: *July 08, 2005*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	North Water Well
Work Order:	0506418	**Collection Date:**	6/28/2005 11:05:00 AM
Project:	Lea Refinery		
Lab ID:	0506418-01	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **RKG**
Benzene	1.3	1.0		µg/L	1	7/1/2005 8:40:00 PM
Toluene	ND	1.0		µg/L	1	7/1/2005 8:40:00 PM
Ethylbenzene	ND	1.0		µg/L	1	7/1/2005 8:40:00 PM
Xylenes, Total	ND	3.0		µg/L	1	7/1/2005 8:40:00 PM
Surr: 4-Bromofluorobenzene	104	77-129		%REC	1	7/1/2005 8:40:00 PM
Surr: Trifluorotoluene	110	75-130		%REC	1	7/1/2005 8:40:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

P - Dual Column results percent difference > 40%

E - Value above quantitation range

H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 08, 2005*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	South Water Well
Work Order:	0506418	**Collection Date:**	6/28/2005 11:30:00 AM
Project:	Lea Refinery		
Lab ID:	0506418-02	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **RKG**
Benzene	ND	1.0		µg/L	1	7/1/2005 9:07:00 PM
Toluene	2.7	1.0		µg/L	1	7/1/2005 9:07:00 PM
Ethylbenzene	1.5	1.0		µg/L	1	7/1/2005 9:07:00 PM
Xylenes, Total	ND	3.0		µg/L	1	7/1/2005 9:07:00 PM
Surr: 4-Bromofluorobenzene	93.9	77-129		%REC	1	7/1/2005 9:07:00 PM
Surr: Trifluorotoluene	97.8	75-130		%REC	1	7/1/2005 9:07:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 08, 2005*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	MW-9
Work Order:	0506418	**Collection Date:**	6/28/2005 12:20:00 PM
Project:	Lea Refinery		
Lab ID:	0506418-03	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **RKG**
Benzene	ND	1.0		µg/L	1	7/1/2005 9:33:00 PM
Toluene	ND	1.0		µg/L	1	7/1/2005 9:33:00 PM
Ethylbenzene	ND	1.0		µg/L	1	7/1/2005 9:33:00 PM
Xylenes, Total	ND	3.0		µg/L	1	7/1/2005 9:33:00 PM
Surr: 4-Bromofluorobenzene	105	77-129		%REC	1	7/1/2005 9:33:00 PM
Surr: Trifluorotoluene	111	75-130		%REC	1	7/1/2005 9:33:00 PM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 08, 2005*

CLIENT: Navajo Refining Company
Work Order: 0506418
Project: Lea Refinery
Lab ID: 0506418-04

Client Sample ID: MW-6R
Collection Date: 6/28/2005 1:10:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **RKG**
Benzene	1.1	1.0		µg/L	1	7/1/2005 10:00:00 PM
Toluene	ND	1.0		µg/L	1	7/1/2005 10:00:00 PM
Ethylbenzene	ND	1.0		µg/L	1	7/1/2005 10:00:00 PM
Xylenes, Total	ND	3.0		µg/L	1	7/1/2005 10:00:00 PM
Surr: 4-Bromofluorobenzene	102	77-129		%REC	1	7/1/2005 10:00:00 PM
Surr: Trifluorotoluene	110	75-130		%REC	1	7/1/2005 10:00:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 08, 2005*

CLIENT: Navajo Refining Company
Work Order: 0506418
Project: Lea Refinery
Lab ID: 0506418-05

Client Sample ID: 050505-33 Trip Blank
Collection Date: 6/28/2005 1:10:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **RKG**
Benzene	ND	1.0		µg/L	1	7/1/2005 8:13:00 PM
Toluene	ND	1.0		µg/L	1	7/1/2005 8:13:00 PM
Ethylbenzene	ND	1.0		µg/L	1	7/1/2005 8:13:00 PM
Xylenes, Total	ND	3.0		µg/L	1	7/1/2005 8:13:00 PM
Surr: 4-Bromofluorobenzene	101	77-129		%REC	1	7/1/2005 8:13:00 PM
Surr: Trifluorotoluene	109	75-130		%REC	1	7/1/2005 8:13:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0506418
Project: Lea Refinery

Date: *Jul 08 2005*

QC BATCH REPORT

Batch ID: **R29585** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW-0701** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **07/01/05 12:29**
Client ID: Run ID: **BTEX1_050701A** SeqNo: **678491** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	28.14	1.0	30	0	93.8	77-129	0			
Surr: Trifluorotoluene	30.06	1.0	30	0	100	75-130	0			

LCS Sample ID: **BLCSW-0701** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **07/01/05 10:40**
Client ID: Run ID: **BTEX1_050701A** SeqNo: **678536** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.53	1.0	20	0	103	77-126	0			
Toluene	21.59	1.0	20	0	108	80-124	0			
Ethylbenzene	21.47	1.0	20	0	107	76-125	0			
Xylenes, Total	62.96	3.0	60	0	105	79-124	0			
Surr: 4-Bromofluorobenzene	31.34	1.0	30	0	104	77-129	0			
Surr: Trifluorotoluene	32.77	1.0	30	0	109	75-130	0			

MS Sample ID: **0506424-09AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **07/01/05 22:53**
Client ID: Run ID: **BTEX1_050701A** SeqNo: **679306** Prep Date: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	199.4	10	200	0	99.7	77-126	0			
Toluene	205.7	10	200	0	103	80-124	0			
Ethylbenzene	209.4	10	200	0	105	76-125	0			
Xylenes, Total	608.3	30	600	0	101	79-124	0			
Surr: 4-Bromofluorobenzene	288.9	10	300	0	96.3	77-129	0			
Surr: Trifluorotoluene	303.1	10	300	0	101	75-130	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0506418
Project: Lea Refinery

QC BATCH REPORT

Batch ID: **R29585** InstrumentID: **BTEX1**

MSD Sample ID: **0506424-09AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **07/01/05 23:20**

Client ID: Run ID: **BTEX1_050701A** SeqNo: **679307** Prep Date: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	202.9	10	200	0	101	77-126	199.4	1.77	20	
Toluene	208.3	10	200	0	104	80-124	205.7	1.21	20	
Ethylbenzene	212.4	10	200	0	106	76-125	209.4	1.41	20	
Xylenes, Total	616.2	30	600	0	103	79-124	608.3	1.29	20	
Surr: 4-Bromofluorobenzene	312	10	300	0	104	77-129	288.9	7.69	20	
Surr: Trifluorotoluene	333.1	10	300	0	111	75-130	303.1	9.42	20	

The following samples were analyzed in this batch:

0506418-01A	0506418-02A	0506418-03A
0506418-04A	0506418-05A	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab Analytical, Inc.
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

e-Lab Analytical, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

Page 1 of 1

e-Lab Project Manager: | e-Lab Work Order #: 0500418

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lea Refinery	A	Volatiles Select: BTEX via 8021
Work Order		Project Number		B	
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	
Address	PO Box 159	Address	PO Box 159	E	
				F	
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	G	
Phone	(505) 748-3311	Phone	(505) 748-3311	H	
Fax	(505) 746-5421	Fax	(505) 746-5421	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	North Water Well	6/28/05	1105	H_2O	1, 8	3	A										
2	South Water Well	"	1130	"	"	3	A										
3	MW-9	"	1200	"	"	3	A										
4	MW-GR	6/28/05	1310	"	"	3	A										
5	Trip Blank 050506-33	—	—	H_2O	1, 8	2 VOAs	A										
6					1, 8 HCl												
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: D Boyer D Boyer

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 6 WK Days ☐ Other ☐ 2 WK Days ☐ 24 Hour

Results Due Date:

Relinquished by: D Boyer | Date: 6/29/05 | Time: 0900 | Received by:

Relinquished by: | Date: | Time: | Received by (Laboratory): Rmoore 6/30/05 0830

Logged by (Laboratory): | Date: | Time: | Checked by (Laboratory):

Notes: Copy Results to dgboyce@secinm.com

e-Lab Cooler ID | Cooler Temp.

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP CheckList
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.
2. Unless otherwise agreed in a formal contract, services provided by e-Lab Analytical, Inc. are expressly limited to the terms and conditions stated on the reverse.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING | Date/Time Received: 6/30/2005 8:30:00 AM

Work Order Number 0506418 | Received by: RSZ

Checklist completed by [signature] 6.30.05 (Signature / Date) | Reviewed by [signature] 7/1/05 (Initials / Date)

Matrix W | Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.7	002	
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? _____ Checked b _____

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

0506418

Date 6/29/05 FedEx Tracking Number 850076268003

Sender's Name DAVE Boyer Phone 505 393-2510

Company SESI

Address 703 E. Clinton #102

Dept/Floor/Suite/Room

City Hobbs State NM ZIP 88240

Your Internal Billing Reference NAVajo Lea Refinery

e-Lab Analytical, Inc.
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. 281.530.5656
Fax. 218.530.5887

QUALITY • INTEGRITY • SERVICE

Date:
Name
Company:

CUSTODY SEAL

Date: 6/29/05 Time: 0830

Name: D. Boyer

Company: SESI

Seal Broken By:

Date: 63005

e-Lab Analytical, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

October 06, 2005

Darrell Moore
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: Lea Refinery Lovington

Work Order : **0510008**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 4 samples on 10/1/2005 8:30:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 11.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

e-Lab Analytical, Inc.

Date: *October 06, 2005*

CLIENT: Navajo Refining Company
Project: Lea Refinery Lovington
Work Order: **0510008**

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0510008-01	MW-6R Purge Hose	Water		9/30/2005 10:25	10/1/2005 08:30	☐
0510008-02	MW-6R Bailer	Water		9/30/2005 10:50	10/1/2005 08:30	☐
0510008-03	North Water Well	Water		9/30/2005 11:05	10/1/2005 08:30	☐
0510008-04	South Water Well	Water		9/30/2005 11:15	10/1/2005 08:30	☐

e-Lab Analytical, Inc.

Date: *October 06, 2005*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	MW-6R Purge Hose
Work Order:	0510008	**Collection Date:**	9/30/2005 10:25:00 AM
Project:	Lea Refinery Lovington		
Lab ID:	0510008-01	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	10/4/2005 3:39:00 PM
Toluene	ND	1.0		µg/L	1	10/4/2005 3:39:00 PM
Ethylbenzene	20	1.0		µg/L	1	10/4/2005 3:39:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	10/4/2005 3:39:00 PM
Xylenes, Total	ND	3.0		µg/L	1	10/4/2005 3:39:00 PM
Surr: 4-Bromofluorobenzene	108	77-129		%REC	1	10/4/2005 3:39:00 PM
Surr: Trifluorotoluene	88.0	75-130		%REC	1	10/4/2005 3:39:00 PM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *October 06, 2005*

CLIENT: Navajo Refining Company
Work Order: 0510008
Project: Lea Refinery Lovington
Lab ID: 0510008-02

Client Sample ID: MW-6R Bailer
Collection Date: 9/30/2005 10:50:00 AM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	10/4/2005 4:06:00 PM
Toluene	ND	1.0		µg/L	1	10/4/2005 4:06:00 PM
Ethylbenzene	18	1.0		µg/L	1	10/4/2005 4:06:00 PM
Methyl tert-butyl ether	ND	5.0		µg/L	1	10/4/2005 4:06:00 PM
Xylenes, Total	ND	3.0		µg/L	1	10/4/2005 4:06:00 PM
Surr: 4-Bromofluorobenzene	112	77-129		%REC	1	10/4/2005 4:06:00 PM
Surr: Trifluorotoluene	91.4	75-130		%REC	1	10/4/2005 4:06:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *October 06, 2005*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	North Water Well
Work Order:	0510008	**Collection Date:**	9/30/2005 11:05:00 AM
Project:	Lea Refinery Lovington		
Lab ID:	0510008-03	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	10/4/2005 8:28:00 AM
Toluene	ND	1.0		µg/L	1	10/4/2005 8:28:00 AM
Ethylbenzene	ND	1.0		µg/L	1	10/4/2005 8:28:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	10/4/2005 8:28:00 AM
Xylenes, Total	ND	3.0		µg/L	1	10/4/2005 8:28:00 AM
Surr: 4-Bromofluorobenzene	118	77-129		%REC	1	10/4/2005 8:28:00 AM
Surr: Trifluorotoluene	108	75-130		%REC	1	10/4/2005 8:28:00 AM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *October 06, 2005*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	South Water Well
Work Order:	0510008	**Collection Date:**	9/30/2005 11:15:00 AM
Project:	Lea Refinery Lovington		
Lab ID:	0510008-04	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	10/4/2005 8:54:00 AM
Toluene	3.4	1.0		µg/L	1	10/4/2005 8:54:00 AM
Ethylbenzene	1.4	1.0		µg/L	1	10/4/2005 8:54:00 AM
Methyl tert-butyl ether	ND	5.0		µg/L	1	10/4/2005 8:54:00 AM
Xylenes, Total	ND	3.0		µg/L	1	10/4/2005 8:54:00 AM
Surr: 4-Bromofluorobenzene	118	77-129		%REC	1	10/4/2005 8:54:00 AM
Surr: Trifluorotoluene	97.4	75-130		%REC	1	10/4/2005 8:54:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0510008
Project: Lea Refinery Lovington

Date: *Oct 06 2005*

QC BATCH REPORT

Batch ID: **R31781** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW1-100405** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **10/04/05 5:47**
Client ID: Run ID: **BTEX1_051003B** SeqNo: **724891** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	34.11	1.0	30	0	114	77-129	0			
Surr: Trifluorotoluene	26.08	1.0	30	0	86.9	75-130	0			

LCS Sample ID: **BLCSW1-100405** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **10/04/05 4:53**
Client ID: Run ID: **BTEX1_051003B** SeqNo: **724890** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20	1.0	20	0	100	77-126	0			
Toluene	20.25	1.0	20	0	101	80-124	0			
Ethylbenzene	20.18	1.0	20	0	101	76-125	0			
Methyl tert-butyl ether	102.2	5.0	100	0	102	75-128	0			
Xylenes, Total	61.28	3.0	60	0	102	79-124	0			
Surr: 4-Bromofluorobenzene	35.51	1.0	30	0	118	77-129	0			
Surr: Trifluorotoluene	27.04	1.0	30	0	90.1	75-130	0			

MS Sample ID: **0510004-01AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **10/04/05 7:07**
Client ID: Run ID: **BTEX1_051003B** SeqNo: **724894** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.89	1.0	20	0	89.5	77-126	0			
Toluene	18.18	1.0	20	0	90.9	80-124	0			
Ethylbenzene	18.27	1.0	20	0	91.4	76-125	0			
Methyl tert-butyl ether	97.7	5.0	100	0	97.7	75-128	0			
Xylenes, Total	54.39	3.0	60	0	90.6	79-124	0			
Surr: 4-Bromofluorobenzene	36.83	1.0	30	0	123	77-129	0			
Surr: Trifluorotoluene	27.67	1.0	30	0	92.2	75-130	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0510008
Project: Lea Refinery Lovington

QC BATCH REPORT

Batch ID: **R31781** InstrumentID: **BTEX1**

MSD Sample ID: **0510004-01AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **10/04/05 7:34**

Client ID: Run ID: **BTEX1_051003B** SeqNo: **724895** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.94	1.0	20	0	89.7	77-126	17.89	0.287	20	
Toluene	18.04	1.0	20	0	90.2	80-124	18.18	0.768	20	
Ethylbenzene	18.24	1.0	20	0	91.2	76-125	18.27	0.202	20	
Methyl tert-butyl ether	95.19	5.0	100	0	95.2	75-128	97.7	2.6	20	
Xylenes, Total	54.54	3.0	60	0	90.9	79-124	54.39	0.281	20	
Surr: 4-Bromofluorobenzene	35.99	1.0	30	0	120	77-129	36.83	2.3	20	
Surr: Trifluorotoluene	26.96	1.0	30	0	89.9	75-130	27.67	2.62	20	

The following samples were analyzed in this batch: 0510008-01A 0510008-02A 0510008-03A 0510008-04A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab Analytical, Inc.
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 1

☐ e-Lab Analytical, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager: | e-Lab Work Order #: 0570008

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lea Refinery, Lovington	A	BTEX/MTBE (8021)
Work Order		Project Number		B	Total Metals (6020/7000) WQCC + Cations
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	Anions (300) Cl, F, SO4, NO3, NO2
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	Conductance
Address	PO Box 159	Address	PO Box 159	E	Alkalinity
				F	pH
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	G	TDS
Phone	(505) 748-3311	Phone	(505) 748-3311	H	
Fax	(505) 746-5421	Fax	(505) 746-5421	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-6R Purge Hose	9/30/05	1025	H_2O	1,8	3	X										
2	MW-6R Boiler	〃	1050	〃	〃	3	X										
3	North WATER Well	〃	1105	〃	〃	3	X										
4	South WATER Well	9/30/05	1115	H_2O	1,8	3	X										
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: David Boyer D Boyer

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☐ STD 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other 10 day TAT

Results Due Date: SesC-NM.com

Relinquished by: D Boyer	Date: 9/30/05	Time: 1630	Received by:	Notes: Copy Results to dgboyer@	
Relinquished by:	Date:	Time:	Received by (Laboratory):	e-lab Cooler ID	Cooler Temp.
Logged by (Laboratory):	Date: 10/1/05	Time: 08:30	Checked by (Laboratory):		

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.
2. Unless otherwise agreed in a formal contract, services provided by e-Lab Analytical, Inc. are expressly limited to the terms and conditions stated on the reverse.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name: NAVAJO REFINING Date/Time Received: 10/1/2005 8:30:00 AM

Work Order Number 0510008 Received by: FSM

Checklist completed by: Signature 10/1/05 Date Reviewed by: Initials 10/3/05 Date

Matrix: Liquid Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.2c	002	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? _____ Checked by _____

Login Notes: No TB in cooler.

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action: _____

0510008

This portion can be removed for Recipient's records.

Date 9/30/05 FedEx Tracking Number 849883017544

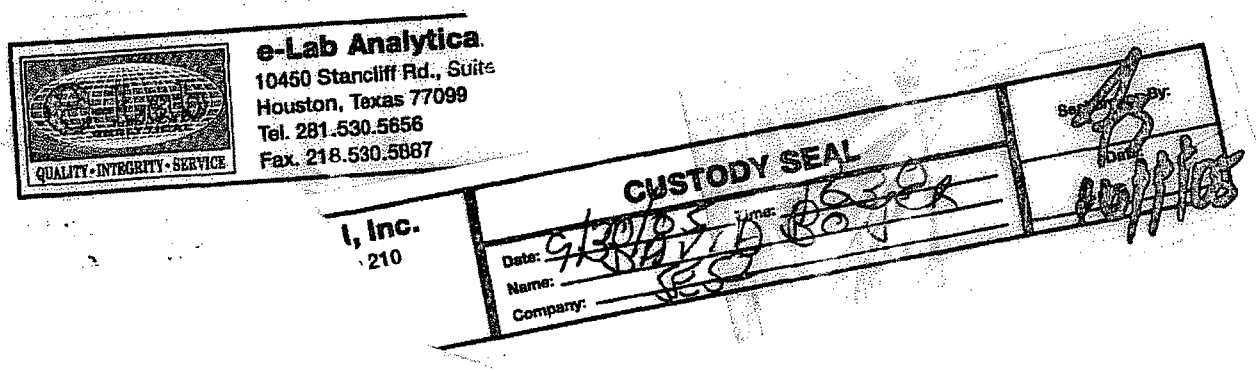
Sender's Name DAVID BOYER Phone 505 397-05

Company JESI

Address 203 E Clinton #102 Dept/Floor/Suite/Room

City Hobbs State NM ZIP 88240

Your Internal Billing Reference NAUAJO Lea Refinery



e-Lab Analytical, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

January 17, 2006

Darrell Moore
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: Lovington Lea Refinery Quarterly Work Order : **0512428**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 4 samples on 12/30/2005 9:12:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 30.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

ACCREDITED IN ACCORDANCE WITH nelac

Certificate No: LA 03087

e-Lab Analytical, Inc.

Date: *January 17, 2006*

CLIENT: Navajo Refining Company
Project: Lovington Lea Refinery Quarterly
Work Order: **0512428**

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0512428-01	MW-6R	Water		12/29/2005 13:45	12/30/2005 09:12	☐
0512428-02	MW-5	Water		12/29/2005 14:55	12/30/2005 09:12	☐
0512428-03	North Water Well	Water		12/29/2005 15:25	12/30/2005 09:12	☐
0512428-04	South Water Well	Water		12/29/2005 15:30	12/30/2005 09:12	☐

e-Lab Analytical, Inc.

Date: *January 17, 2006*

CLIENT: Navajo Refining Company
Project: Lovington Lea Refinery Quarterly
Work Order: 0512428

Case Narrative

Batch 15939 Metals MS/MSD was an unrelated sample.

e-Lab Analytical, Inc.

Date: *January 17, 2006*

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly
Lab ID: 0512428-01

Client Sample ID: MW-6R
Collection Date: 12/29/2005 1:45:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	1.2	1.0		µg/L	1	1/4/2006 3:46:00 PM
Toluene	ND	1.0		µg/L	1	1/4/2006 3:46:00 PM
Ethylbenzene	13	1.0		µg/L	1	1/4/2006 3:46:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/4/2006 3:46:00 PM
Surr: 4-Bromofluorobenzene	106	77-129		%REC	1	1/4/2006 3:46:00 PM
Surr: Trifluorotoluene	113	75-130		%REC	1	1/4/2006 3:46:00 PM
MERCURY, TOTAL		**SW7470**			Prep Date: **1/5/2006**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	1/5/2006 7:10:18 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **1/4/2006**	Analyst: **ALR**
Aluminum	0.0578	0.0100		mg/L	1	1/6/2006 3:34:00 PM
Arsenic	0.0381	0.00500		mg/L	1	1/6/2006 2:46:00 AM
Barium	0.441	0.0500		mg/L	10	1/5/2006 11:12:00 PM
Beryllium	ND	0.00200		mg/L	1	1/6/2006 2:46:00 AM
Boron	0.303	0.0200		mg/L	1	1/6/2006 2:46:00 AM
Cadmium	ND	0.00100		mg/L	1	1/6/2006 2:46:00 AM
Calcium	129	5.00		mg/L	10	1/5/2006 11:12:00 PM
Chromium	ND	0.00200		mg/L	1	1/6/2006 2:46:00 AM
Cobalt	0.00296	0.00200		mg/L	1	1/6/2006 2:46:00 AM
Copper	ND	0.00200		mg/L	1	1/6/2006 2:46:00 AM
Iron	3.20	0.200		mg/L	1	1/6/2006 2:46:00 AM
Lead	ND	0.00500		mg/L	1	1/6/2006 2:46:00 AM
Magnesium	21.8	2.00		mg/L	10	1/5/2006 11:12:00 PM
Manganese	3.02	0.0500		mg/L	10	1/5/2006 11:12:00 PM
Molybdenum	ND	0.00500		mg/L	1	1/6/2006 2:46:00 AM
Nickel	0.00591	0.00500		mg/L	1	1/6/2006 2:46:00 AM
Potassium	3.94	0.200		mg/L	1	1/6/2006 2:46:00 AM
Selenium	ND	0.00500		mg/L	1	1/6/2006 2:46:00 AM
Silver	ND	0.00500		mg/L	1	1/6/2006 2:46:00 AM
Sodium	241	2.00		mg/L	10	1/5/2006 11:12:00 PM
Vanadium	ND	0.00500		mg/L	1	1/6/2006 2:46:00 AM
Zinc	0.0577	0.00500		mg/L	1	1/6/2006 2:46:00 AM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **LMD**
Chloride	373	5.00		mg/L	10	1/14/2006 5:38:00 PM
Fluoride	0.536	0.100		mg/L	1	12/30/2005 5:56:00 PM
Sulfate	41.8	1.00		mg/L	1	12/30/2005 5:56:00 PM
Nitrate/Nitrite (as N)	ND	0.100		mg/L	1	12/30/2005 5:56:00 PM
Surr: Dichloroacetic acid (surr)	105	80-120		%REC	1	12/30/2005 5:56:00 PM
Surr: Dichloroacetic acid (surr)	102	80-120		%REC	10	1/14/2006 5:38:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *January 17, 2006*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	MW-6R
Work Order:	0512428	**Collection Date:**	12/29/2005 1:45:00 PM
Project:	Lovington Lea Refinery Quarterly		
Lab ID:	0512428-01	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
ALKALINITY			**E310.1**			Analyst: **RPM**
Alkalinity, Bicarbonate (As CaCO3)	386	5.00		mg/L	1	1/3/2006
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	1/3/2006
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	1/3/2006
Alkalinity, Total (As CaCO3)	386	5.00		mg/L	1	1/3/2006
CONDUCTIVITY			**E120.1**			Analyst: **RPM**
Specific Conductance	1,630	1.00		µmhos/cm	1	12/30/2005
PH			**E150.1**			Analyst: **RPM**
pH	6.87	0.100		pH units	1	12/30/2005
TOTAL DISSOLVED SOLIDS			**E160.1**			Analyst: **RPM**
Total Dissolved Solids (Residue, Filterable)	1,050	10.0		mg/L	1	12/30/2005

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *January 17, 2006*

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly
Lab ID: 0512428-02

Client Sample ID: MW-5
Collection Date: 12/29/2005 2:55:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/3/2006 3:39:00 PM
Toluene	ND	1.0		µg/L	1	1/3/2006 3:39:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/3/2006 3:39:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/3/2006 3:39:00 PM
Surr: 4-Bromofluorobenzene	101	77-129		%REC	1	1/3/2006 3:39:00 PM
Surr: Trifluorotoluene	115	75-130		%REC	1	1/3/2006 3:39:00 PM
MERCURY, TOTAL		**SW7470**			Prep Date: **1/5/2006**	Analyst: **JCJ**
Mercury	ND	0.000200		mg/L	1	1/5/2006 7:11:50 PM
ICP METALS, TOTAL		**SW6020**			Prep Date: **1/4/2006**	Analyst: **ALR**
Aluminum	0.0861	0.0100		mg/L	1	1/6/2006 3:40:00 PM
Arsenic	0.00586	0.00500		mg/L	1	1/6/2006 2:52:00 AM
Barium	0.112	0.00500		mg/L	1	1/6/2006 2:52:00 AM
Beryllium	ND	0.00200		mg/L	1	1/6/2006 2:52:00 AM
Boron	0.120	0.0200		mg/L	1	1/6/2006 2:52:00 AM
Cadmium	ND	0.00100		mg/L	1	1/6/2006 2:52:00 AM
Calcium	57.3	5.00		mg/L	10	1/5/2006 11:18:00 PM
Chromium	0.00287	0.00200		mg/L	1	1/6/2006 2:52:00 AM
Cobalt	ND	0.00200		mg/L	1	1/6/2006 2:52:00 AM
Copper	ND	0.00200		mg/L	1	1/6/2006 2:52:00 AM
Iron	ND	0.200		mg/L	1	1/6/2006 2:52:00 AM
Lead	ND	0.00500		mg/L	1	1/6/2006 2:52:00 AM
Magnesium	6.28	0.200		mg/L	1	1/6/2006 3:40:00 PM
Manganese	0.00976	0.00500		mg/L	1	1/6/2006 2:52:00 AM
Molybdenum	0.00535	0.00500		mg/L	1	1/6/2006 2:52:00 AM
Nickel	ND	0.00500		mg/L	1	1/6/2006 2:52:00 AM
Potassium	2.38	0.200		mg/L	1	1/6/2006 2:52:00 AM
Selenium	ND	0.00500		mg/L	1	1/6/2006 2:52:00 AM
Silver	ND	0.00500		mg/L	1	1/6/2006 2:52:00 AM
Sodium	172	2.00		mg/L	10	1/5/2006 11:18:00 PM
Vanadium	0.0335	0.00500		mg/L	1	1/6/2006 2:52:00 AM
Zinc	ND	0.00500		mg/L	1	1/6/2006 2:52:00 AM
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **LMD**
Chloride	72.3	2.50		mg/L	5	1/14/2006 6:07:00 PM
Fluoride	0.998	0.100		mg/L	1	12/30/2005 6:53:00 PM
Sulfate	54.9	5.00		mg/L	5	1/14/2006 6:07:00 PM
Nitrate/Nitrite (as N)	2.39	0.100		mg/L	1	12/30/2005 6:53:00 PM
Surr: Dichloroacetic acid (surr)	95.5	80-120		%REC	1	12/30/2005 6:53:00 PM
Surr: Dichloroacetic acid (surr)	103	80-120		%REC	5	1/14/2006 6:07:00 PM

Qualifiers:

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J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *January 17, 2006*

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly
Lab ID: 0512428-02

Client Sample ID: MW-5
Collection Date: 12/29/2005 2:55:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
ALKALINITY			**E310.1**			Analyst: **RPM**
Alkalinity, Bicarbonate (As CaCO3)	322	5.00		mg/L	1	1/3/2006
Alkalinity, Carbonate (As CaCO3)	ND	5.00		mg/L	1	1/3/2006
Alkalinity, Hydroxide (As CaCO3)	ND	5.00		mg/L	1	1/3/2006
Alkalinity, Total (As CaCO3)	322	5.00		mg/L	1	1/3/2006
CONDUCTIVITY			**E120.1**			Analyst: **RPM**
Specific Conductance	899	1.00		µmhos/cm	1	12/30/2005
PH			**E150.1**			Analyst: **RPM**
pH	7.22	0.100		pH units	1	12/30/2005
TOTAL DISSOLVED SOLIDS			**E160.1**			Analyst: **RPM**
Total Dissolved Solids (Residue, Filterable)	590	10.0		mg/L	1	12/30/2005

Qualifiers:

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P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *January 17, 2006*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	North Water Well
Work Order:	0512428	**Collection Date:**	12/29/2005 3:25:00 PM
Project:	Lovington Lea Refinery Quarterly		
Lab ID:	0512428-03	**Matrix:**	WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	ND	1.0		µg/L	1	1/3/2006 3:12:00 PM
Toluene	ND	1.0		µg/L	1	1/3/2006 3:12:00 PM
Ethylbenzene	ND	1.0		µg/L	1	1/3/2006 3:12:00 PM
Xylenes, Total	ND	3.0		µg/L	1	1/3/2006 3:12:00 PM
Surr: 4-Bromofluorobenzene	103	77-129		%REC	1	1/3/2006 3:12:00 PM
Surr: Trifluorotoluene	113	75-130		%REC	1	1/3/2006 3:12:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *January 17, 2006*

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly
Lab ID: 0512428-04

Client Sample ID: South Water Well
Collection Date: 12/29/2005 3:30:00 PM
Matrix: WATER

Analyses	Result	Report Limit	Qual	Units	Dilution Factor	Date Analyzed
BTEX, WATER		**SW8021B**				Analyst: **WLR**
Benzene	2.8	1.0		µg/L	1	1/3/2006 10:53:00 AM
Toluene	11	1.0		µg/L	1	1/3/2006 10:53:00 AM
Ethylbenzene	8.1	1.0		µg/L	1	1/3/2006 10:53:00 AM
Xylenes, Total	18	3.0		µg/L	1	1/3/2006 10:53:00 AM
Surr: 4-Bromofluorobenzene	103	77-129		%REC	1	1/3/2006 10:53:00 AM
Surr: Trifluorotoluene	113	75-130		%REC	1	1/3/2006 10:53:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

Date: *Jan 17 2006*

QC BATCH REPORT

Batch ID: **R34160** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW1-010306** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **01/03/06 9:59**
Client ID: Run ID: **BTEX1_060103A** SeqNo: **779419** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	30.56	1.0	30	0	102	77-129		0		
Surr: Trifluorotoluene	34.61	1.0	30	0	115	75-130		0		

LCS Sample ID: **BLCSW1-010306** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **01/03/06 9:04**
Client ID: Run ID: **BTEX1_060103A** SeqNo: **779418** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.22	1.0	20	0	111	77-126		0		
Toluene	23.31	1.0	20	0	117	80-124		0		
Ethylbenzene	23.4	1.0	20	0	117	76-125		0		
Xylenes, Total	72.24	3.0	60	0	120	79-124		0		
Surr: 4-Bromofluorobenzene	32.87	1.0	30	0	110	77-129		0		
Surr: Trifluorotoluene	34.88	1.0	30	0	116	75-130		0		

MS Sample ID: **0512428-04AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **01/03/06 11:20**
Client ID: **South Water Well** Run ID: **BTEX1_060103A** SeqNo: **779422** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	24.01	1.0	20	2.809	106	77-126		0		
Toluene	32.3	1.0	20	10.69	108	80-124		0		
Ethylbenzene	30.07	1.0	20	8.071	110	76-125		0		
Xylenes, Total	85.2	3.0	60	17.8	112	79-124		0		
Surr: 4-Bromofluorobenzene	32.86	1.0	30	0	110	77-129		0		
Surr: Trifluorotoluene	33.94	1.0	30	0	113	75-130		0		

ND - Not Detected at the Reporting Limit
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R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R34160** InstrumentID: **BTEX1**

MSD Sample ID: **0512428-04AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **01/03/06 11:48**

Client ID: **South Water Well** Run ID: **BTEX1_060103A** SeqNo: **779423** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	22.92	1.0	20	2.809	101	77-126	24.01	4.65	20	
Toluene	31.01	1.0	20	10.69	102	80-124	32.3	4.1	20	
Ethylbenzene	28.94	1.0	20	8.071	104	76-125	30.07	3.85	20	
Xylenes, Total	81.47	3.0	60	17.8	106	79-124	85.2	4.47	20	
Surr: 4-Bromofluorobenzene	32.82	1.0	30	0	109	77-129	32.86	0.119	20	
Surr: Trifluorotoluene	33.31	1.0	30	0	111	75-130	33.94	1.87	20	

The following samples were analyzed in this batch: 0512428-02A 0512428-03A 0512428-04A

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J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R34209** InstrumentID: **BTEX1**

MBLK Sample ID: **BBLKW1-010406** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **01/04/06 13:01**
Client ID: Run ID: **BTEX1_060104A** SeqNo: **780626** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	29.69	1.0	30	0	99	77-129	0			
Surr: Trifluorotoluene	33.41	1.0	30	0	111	75-130	0			

LCS Sample ID: **BLCSW1-010406** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **01/04/06 12:06**
Client ID: Run ID: **BTEX1_060104A** SeqNo: **780623** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.56	1.0	20	0	103	77-126	0			
Toluene	21.76	1.0	20	0	109	80-124	0			
Ethylbenzene	22.09	1.0	20	0	110	76-125	0			
Xylenes, Total	68.35	3.0	60	0	114	79-124	0			
Surr: 4-Bromofluorobenzene	31.33	1.0	30	0	104	77-129	0			
Surr: Trifluorotoluene	33.76	1.0	30	0	113	75-130	0			

MS Sample ID: **0601008-01AMS** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **01/04/06 14:51**
Client ID: Run ID: **BTEX1_060104A** SeqNo: **780637** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.6	1.0	20	0	93	77-126	0			
Toluene	20.36	1.0	20	0.6027	98.8	80-124	0			
Ethylbenzene	20.61	1.0	20	0	103	76-125	0			
Xylenes, Total	62.94	3.0	60	0	105	79-124	0			
Surr: 4-Bromofluorobenzene	29.89	1.0	30	0	99.6	77-129	0			
Surr: Trifluorotoluene	31.9	1.0	30	0	106	75-130	0			

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R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R34209** InstrumentID: **BTEX1**

MSD Sample ID: **0601008-01AMSD** Test Code: **SW8021B** Units: **µg/L** Analysis Date: **01/04/06 15:19**

Client ID: Run ID: **BTEX1_060104A** SeqNo: **780640** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.8	1.0	20	0	94	77-126	18.6	1.04	20	
Toluene	20.03	1.0	20	0.6027	97.1	80-124	20.36	1.64	20	
Ethylbenzene	20.17	1.0	20	0	101	76-125	20.61	2.14	20	
Xylenes, Total	61.57	3.0	60	0	103	79-124	62.94	2.2	20	
Surr: 4-Bromofluorobenzene	30.16	1.0	30	0	101	77-129	29.89	0.893	20	
Surr: Trifluorotoluene	32.08	1.0	30	0	107	75-130	31.9	0.547	20	

The following samples were analyzed in this batch: 0512428-01A

ND - Not Detected at the Reporting Limit
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R - RPD outside accepted recovery limits
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CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **15939** InstrumentID: **ICPMS02**

MBLK Sample ID: **MBLKW1-010406** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/05/06 13:44**

Client ID: Run ID: **ICPMS02_060105A** SeqNo: **781035** Prep Date: **1/4/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.003444	0.010								J
Arsenic	ND	0.0050								
Barium	ND	0.0050								
Beryllium	0.0005357	0.0020								J
Boron	ND	0.020								
Cadmium	ND	0.0020								
Calcium	ND	0.50								
Chromium	ND	0.0050								
Cobalt	ND	0.0050								
Copper	ND	0.0050								
Iron	ND	0.20								
Lead	0.0005557	0.0050								J
Magnesium	ND	0.20								
Manganese	ND	0.0050								
Molybdenum	ND	0.0050								
Nickel	ND	0.0050								
Potassium	0.0339	0.20								J
Selenium	ND	0.0050								
Silver	ND	0.0050								
Vanadium	ND	0.0050								
Zinc	ND	0.0050								

MBLK Sample ID: **MBLKW1-010406** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/06/06 14:02**

Client ID: Run ID: **ICPMS02_060106A** SeqNo: **781721** Prep Date: **1/4/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	ND	0.20								

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B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **15939** InstrumentID: **ICPMS02**

LCS Sample ID: **MLCSW1-010406** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/05/06 12:50**

Client ID: Run ID: **ICPMS02_060105A** SeqNo: **781019** Prep Date: **1/4/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.05202	0.010	0.05	0	104	79-126	0			
Arsenic	0.04942	0.0050	0.05	0	98.8	80-121	0			
Barium	0.04907	0.0050	0.05	0	98.1	79.8-119	0			
Beryllium	0.04826	0.0020	0.05	0	96.5	78.9-120	0			
Boron	0.4686	0.020	0.5	0	93.7	80-120	0			
Cadmium	0.05038	0.0020	0.05	0	101	79.1-119	0			
Calcium	4.879	0.50	5	0	97.6	80-121	0			
Chromium	0.05262	0.0050	0.05	0	105	79.3-121	0			
Cobalt	0.05456	0.0050	0.05	0	109	82-121	0			
Copper	0.05041	0.0050	0.05	0	101	81-120	0			
Iron	4.802	0.20	5	0	96	80-120	0			
Lead	0.04829	0.0050	0.05	0	96.6	80-118	0			
Magnesium	4.725	0.20	5	0	94.5	80-120	0			
Manganese	0.05372	0.0050	0.05	0	107	82-119	0			
Molybdenum	0.04775	0.0050	0.05	0	95.5	81-116	0			
Nickel	0.04939	0.0050	0.05	0	98.8	82-120	0			
Potassium	4.706	0.20	5	0	94.1	80-120	0			
Selenium	0.0507	0.0050	0.05	0	101	79.2-118	0			
Silver	0.04794	0.0050	0.05	0	95.9	80-117	0			
Vanadium	0.05384	0.0050	0.05	0	108	82.1-119	0			
Zinc	0.04957	0.0050	0.05	0	99.1	79-118	0			

LCS Sample ID: **MLCSW1-010406** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/06/06 14:08**

Client ID: Run ID: **ICPMS02_060106A** SeqNo: **781722** Prep Date: **1/4/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sodium	4.874	0.20	5	0	97.5	80.6-119	0			

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B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **15939** InstrumentID: **ICPMS02**

MS Sample ID: **0512386-15CMS** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/06/06 2:22**
Client ID: Run ID: **ICPMS02_060105A** SeqNo: **781401** Prep Date: **1/4/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05309	0.0050	0.05	0.002877	100	80-121	0			
Barium	0.2196	0.0050	0.05	0.1699	99.4	79.8-119	0			
Cadmium	0.05181	0.0020	0.05	0.00021	103	79.1-119	0			
Calcium	296.5	0.50	5	269.1	548	80-121	0			SEO
Chromium	0.0617	0.0050	0.05	0.003713	116	79.3-121	0			
Cobalt	0.05883	0.0050	0.05	0.0004583	117	82-121	0			
Copper	0.04872	0.0050	0.05	-0.0002072	97.9	80-120	0			
Iron	5.634	0.20	5	0.3583	106	80-120	0			
Lead	0.0547	0.0050	0.05	0.001122	107	80-118	0			
Magnesium	71.99	0.20	5	60.26	235	80-120	0			SEO
Manganese	0.6242	0.0050	0.05	0.5364	176	82-119	0			SEO
Molybdenum	0.05526	0.0050	0.05	0.001321	108	81-116	0			
Nickel	0.07561	0.0050	0.05	0.02285	106	82-120	0			
Potassium	38.47	0.20	5	30.25	164	80-120	0			SO
Selenium	0.03708	0.0050	0.05	0.001011	72.1	79.2-118	0			S
Silver	0.04833	0.0050	0.05	-0.0003786	97.4	80-117	0			
Sodium	120	0.20	5	101.9	362	80.6-119	0			SEO
Vanadium	0.06037	0.0050	0.05	0.0008848	119	82.1-119	0			
Zinc	0.0493	0.0050	0.05	0.001993	94.6	79-118	0			

MS Sample ID: **0512386-15CMS** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/06/06 14:47**
Client ID: Run ID: **ICPMS02_060106A** SeqNo: **782016** Prep Date: **1/4/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1034	0.010	0.05	0.04898	109	79-126	0			
Beryllium	0.05173	0.0020	0.05	0.000441	103	78.9-120	0			
Boron	0.8557	0.020	0.5	0.3359	104	80-120	0			

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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **15939** InstrumentID: **ICPMS02**

MSD Sample ID: **0512386-15CMSD** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/06/06 2:28**
Client ID: Run ID: **ICPMS02_060105A** SeqNo: **781403** Prep Date: **1/4/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05392	0.0050	0.05	0.002877	102	80-121	0.05309	1.55	15	
Barium	0.2181	0.0050	0.05	0.1699	96.4	79.8-119	0.2196	0.685	15	
Cadmium	0.05151	0.0020	0.05	0.00021	103	79.1-119	0.05181	0.581	15	
Calcium	291.4	0.50	5	269.1	446	80-121	296.5	1.73	15	SEO
Chromium	0.0615	0.0050	0.05	0.003713	116	79.3-121	0.0617	0.325	15	
Cobalt	0.0582	0.0050	0.05	0.0004583	115	82-121	0.05883	1.08	15	
Copper	0.04944	0.0050	0.05	-0.0002072	99.3	81-120	0.04872	1.47	15	
Iron	5.571	0.20	5	0.3583	104	80-120	5.634	1.12	15	
Lead	0.05335	0.0050	0.05	0.001122	104	80-118	0.0547	2.5	15	
Magnesium	70.79	0.20	5	60.26	211	80-120	71.99	1.68	15	SEO
Manganese	0.6151	0.0050	0.05	0.5364	157	82-119	0.6242	1.47	15	SEO
Molybdenum	0.05441	0.0050	0.05	0.001321	106	81-116	0.05526	1.55	15	
Nickel	0.07418	0.0050	0.05	0.02285	103	82-120	0.07561	1.91	15	
Potassium	37.75	0.20	5	30.25	150	80-120	38.47	1.89	15	SO
Selenium	0.03956	0.0050	0.05	0.001011	77.1	79.2-118	0.03708	6.47	15	S
Silver	0.04805	0.0050	0.05	-0.0003786	96.9	80-117	0.04833	0.581	15	
Sodium	117.9	0.20	5	101.9	320	80.6-119	120	1.77	15	SEO
Vanadium	0.05973	0.0050	0.05	0.0008848	118	82.1-119	0.06037	1.07	15	
Zinc	0.04849	0.0050	0.05	0.001993	93	79-118	0.0493	1.66	15	

MSD Sample ID: **0512386-15CMSD** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/06/06 14:53**
Client ID: Run ID: **ICPMS02_060106A** SeqNo: **782017** Prep Date: **1/4/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1091	0.010	0.05	0.04898	120	79-126	0.1034	5.36	15	
Beryllium	0.0516	0.0020	0.05	0.000441	102	78.9-120	0.05173	0.252	15	
Boron	0.8569	0.020	0.5	0.3359	104	80-120	0.8557	0.14	15	

DUP Sample ID: **0512386-15CDUP** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/05/06 23:48**
Client ID: Run ID: **ICPMS02_060105A** SeqNo: **781376** Prep Date: **1/4/2006** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	251.2	5.0	0	0	0	0-0	252.3	0.437	25	
Magnesium	56.75	2.0	0	0	0	0-0	57.48	1.28	25	
Manganese	0.6003	0.050	0	0	0	0-0	0.6094	1.5	25	
Potassium	28.68	2.0	0	0	0	0-0	29.01	1.14	25	
Sodium	95.41	2.0	0	0	0	0-0	96.53	1.17	25	

ND - Not Detected at the Reporting Limit
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P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **15939** InstrumentID: **ICPMS02**

DUP Sample ID: **0512386-15CDUP** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/06/06 2:16**

Client ID: Run ID: **ICPMS02_060105A** SeqNo: **781400** Prep Date: **1/4/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.003182	0.0050	0	0	0	0-0	0.002877	0	25	J
Barium	0.1691	0.0050	0	0	0	0-0	0.1699	0.472	25	
Cadmium	ND	0.0020	0	0	0	0-0	0.00021	0	25	
Chromium	0.003773	0.0050	0	0	0	0-0	0.003713	0	25	J
Cobalt	0.0003864	0.0050	0	0	0	0-0	0.0004583	0	25	J
Copper	ND	0.0050	0	0	0	0-0	-0.0002072	0	25	
Iron	0.3588	0.20	0	0	0	0-0	0.3583	0.139	25	
Lead	0.001034	0.0050	0	0	0	0-0	0.001122	0	25	J
Molybdenum	ND	0.0050	0	0	0	0-0	0.001321	0	25	
Nickel	0.02309	0.0050	0	0	0	0-0	0.02285	1.04	25	
Selenium	0.001942	0.0050	0	0	0	0-0	0.001011	0	25	J
Silver	ND	0.0050	0	0	0	0-0	-0.0003786	0	25	
Vanadium	0.0008121	0.0050	0	0	0	0-0	0.0008848	0	25	J
Zinc	0.00218	0.0050	0	0	0	0-0	0.001993	0	25	J

DUP Sample ID: **0512386-15CDUP** Test Code: **SW6020** Units: **mg/L** Analysis Date: **01/06/06 14:35**

Client ID: Run ID: **ICPMS02_060106A** SeqNo: **782015** Prep Date: **1/4/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.04857	0.010	0	0	0	0-0	0.04898	0.841	25	
Beryllium	0.0003259	0.0020	0	0	0	0-0	0.000441	0	25	J
Boron	0.3396	0.020	0	0	0	0-0	0.3359	1.1	25	

The following samples were analyzed in this batch: 0512428-01C 0512428-02C

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **15961** InstrumentID: **Mercury**

MBLK Sample ID: **GBLKW2-010506** Test Code: **SW7470** Units: **mg/L** Analysis Date: **01/05/06 18:22**
Client ID: Run ID: **MERCURY_060105B** SeqNo: **781262** Prep Date: **1/5/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020								

LCS Sample ID: **GLCSW2-010506** Test Code: **SW7470** Units: **mg/L** Analysis Date: **01/05/06 18:24**
Client ID: Run ID: **MERCURY_060105B** SeqNo: **781263** Prep Date: **1/5/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00486	0.00020	0.005	0	97.2	83-115		0		

LCSD Sample ID: **GLCSDW2-010506** Test Code: **SW7470** Units: **mg/L** Analysis Date: **01/05/06 18:25**
Client ID: Run ID: **MERCURY_060105B** SeqNo: **781264** Prep Date: **1/5/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00487	0.00020	0.005	0	97.4	83-115	0.00486	0.206	20	

MS Sample ID: **0512386-15CMS** Test Code: **SW7470** Units: **mg/L** Analysis Date: **01/05/06 18:45**
Client ID: Run ID: **MERCURY_060105B** SeqNo: **781267** Prep Date: **1/5/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00537	0.00020	0.005	0.000012	107	83-115		0		

MSD Sample ID: **0512386-15CMSD** Test Code: **SW7470** Units: **mg/L** Analysis Date: **01/05/06 18:47**
Client ID: Run ID: **MERCURY_060105B** SeqNo: **781268** Prep Date: **1/5/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.0053	0.00020	0.005	0.000012	106	83-115	0.00537	1.31	20	

DUP Sample ID: **0512386-15CDUP** Test Code: **SW7470** Units: **mg/L** Analysis Date: **01/05/06 18:28**
Client ID: Run ID: **MERCURY_060105B** SeqNo: **781266** Prep Date: **1/5/2006** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020	0	0	0	0-0	0.000012	0	20	

The following samples were analyzed in this batch: 0512428-01C 0512428-02C

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R34125** InstrumentID: **WetChem**

LCS Sample ID: **WLCSW1-123005** Test Code: **E150.1** Units: **pH units** Analysis Date: **12/30/05 0:00**

Client ID: Run ID: **WETCHEM_051230B** SeqNo: **778665** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.05	0.10	6	0	101	85-115	0			

DUP Sample ID: **0512428-01BDUP** Test Code: **E150.1** Units: **pH units** Analysis Date: **12/30/05 0:00**

Client ID: **MW-6R** Run ID: **WETCHEM_051230B** SeqNo: **778668** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.88	0.10	0	0	0	0-0	6.87	0.145	20	

The following samples were analyzed in this batch: 0512428-01B 0512428-02B

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R34132** InstrumentID: **WetChem**

MBLK Sample ID: **WBLKW1-123005** Test Code: **E120.1** Units: **µmhos/cm** Analysis Date: **12/30/05 0:00**
Client ID: Run ID: **WETCHEM_051230D** SeqNo: **778786** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	ND	1.0								

LCS Sample ID: **WLCSW1-123005** Test Code: **E120.1** Units: **µmhos/cm** Analysis Date: **12/30/05 0:00**
Client ID: Run ID: **WETCHEM_051230D** SeqNo: **778787** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	1410	1.0	1413	0	99.8	80-120		0		

DUP Sample ID: **0512428-01BDUP** Test Code: **E120.1** Units: **µmhos/cm** Analysis Date: **12/30/05 0:00**
Client ID: **MW-6R** Run ID: **WETCHEM_051230D** SeqNo: **778790** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Specific Conductance	1630	1.0	0	0	0	0-0	1630	0	20	

The following samples were analyzed in this batch: 0512428-01B 0512428-02B

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R34141** InstrumentID: **WetChem**

MBLK Sample ID: **WBLKW1-123005** Test Code: **E160.1** Units: **mg/L** Analysis Date: **12/30/05 0:00**

Client ID: Run ID: **WETCHEM_051230G** SeqNo: **778917** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	ND	10								

LCS Sample ID: **WLCSW1-123005** Test Code: **E160.1** Units: **mg/L** Analysis Date: **12/30/05 0:00**

Client ID: Run ID: **WETCHEM_051230G** SeqNo: **778918** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	1001	10	1000	0	100	80-120		0		

DUP Sample ID: **0512400-01EDUP** Test Code: **E160.1** Units: **mg/L** Analysis Date: **12/30/05 0:00**

Client ID: Run ID: **WETCHEM_051230G** SeqNo: **778932** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	17330	10	0	0	0	0-0	17260	0.416	20	

The following samples were analyzed in this batch: 0512428-01B 0512428-02B

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected.
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R34146** InstrumentID: **IC201**

MBLK Sample ID: **WBLKW1-122905** Test Code: **E300** Units: **mg/L** Analysis Date: **12/29/05 22:55**
Client ID: Run ID: **IC201_051229A** SeqNo: **779021** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	0.50								
Fluoride	ND	0.10								
Sulfate	ND	1.0								
Nitrate/Nitrite (as N)	ND	0.10								
Surr: Dichloroacetic acid (surr)	4.937	0.10	5	0	98.7	80-120	0			

LCS Sample ID: **WLCSW1-122905** Test Code: **E300** Units: **mg/L** Analysis Date: **12/29/05 23:23**
Client ID: Run ID: **IC201_051229A** SeqNo: **779022** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.021	0.50	10	0	90.2	80-120	0			
Fluoride	1.98	0.10	2	0	99	80-120	0			
Sulfate	9.484	1.0	10	0	94.8	80-120	0			
Nitrate/Nitrite (as N)	3.815	0.10	4	0	95.4	80-120	0			
Surr: Dichloroacetic acid (surr)	5.249	0.10	5	0	105	80-120	0			

LCSD Sample ID: **WLCSDW1-12290** Test Code: **E300** Units: **mg/L** Analysis Date: **12/29/05 23:52**
Client ID: Run ID: **IC201_051229A** SeqNo: **779023** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.265	0.50	10	0	92.6	80-120	9.021	2.67	20	
Fluoride	2.028	0.10	2	0	101	80-120	1.98	2.4	20	
Sulfate	9.48	1.0	10	0	94.8	80-120	9.484	0.0422	20	
Nitrate/Nitrite (as N)	3.876	0.10	4	0	96.9	80-120	3.815	1.59	20	
Surr: Dichloroacetic acid (surr)	5.382	0.10	5	0	108	80-120	5.249	2.5	20	

MS Sample ID: **0512409-04DMS** Test Code: **E300** Units: **mg/L** Analysis Date: **12/30/05 3:12**
Client ID: Run ID: **IC201_051229A** SeqNo: **779044** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	180.9	0.50	10	172.9	79.6	75-125	0			EO
Fluoride	2.237	0.10	2	0.435	90.1	75-125	0			
Sulfate	106.5	1.0	10	96.06	104	75-125	0			EO
Nitrate/Nitrite (as N)	3.803	0.10	4	0.186	90.4	75-125	0			
Surr: Dichloroacetic acid (surr)	5.198	0.10	5	0	104	80-120	0			

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R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R34146** InstrumentID: **IC201**

MSD Sample ID: **0512409-04DMSD** Test Code: **E300** Units: **mg/L** Analysis Date: **12/30/05 3:40**
Client ID: Run ID: **IC201_051229A** SeqNo: **779045** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	181.2	0.50	10	172.9	82.6	75-125	180.9	0.164	20	EO
Fluoride	2.215	0.10	2	0.435	89	75-125	2.237	0.988	20	
Sulfate	106.5	1.0	10	96.06	104	75-125	106.5	0.0047	20	EO
Nitrate/Nitrite (as N)	3.858	0.10	4	0.186	91.8	75-125	3.803	1.44	20	
Surr: Dichloroacetic acid (surr)	5.207	0.10	5	0	104	80-120	5.198	0.173	20	

DUP Sample ID: **0512409-04DDUP** Test Code: **E300** Units: **mg/L** Analysis Date: **12/30/05 2:43**
Client ID: Run ID: **IC201_051229A** SeqNo: **779041** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	171.1	0.50	0	0	0	0-0	172.9	1.03	20	E
Fluoride	0.436	0.10	0	0	0	0-0	0.435	0.23	20	
Sulfate	96.34	1.0	0	0	0	0-0	96.06	0.301	20	E
Nitrate/Nitrite (as N)	0.185	0.10	0	0	0	0-0	0.186	0.539	20	
Surr: Dichloroacetic acid (surr)	4.9	0.10	5	0	98	80-120	4.892	0.163	20	

DUP Sample ID: **0512409-04DDUP** Test Code: **E300** Units: **mg/L** Analysis Date: **12/30/05 4:37**
Client ID: Run ID: **IC201_051229A** SeqNo: **779047** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	148.9	2.5	0	0	0	0-0	148.6	0.199	20	
Fluoride	ND	0.50	0	0	0	0-0	0	0	20	
Sulfate	82.12	5.0	0	0	0	0-0	82.42	0.362	20	
Nitrate/Nitrite (as N)	ND	0.50	0	0	0	0-0	0	0	20	
Surr: Dichloroacetic acid (surr)	25.9	0.50	25	0	104	80-120	25.85	0.201	20	

The following samples were analyzed in this batch: 0512428-01B 0512428-02B

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R34157** InstrumentID: **WetChem**

MBLK Sample ID: **WBLKW1-010306** Test Code: **E310.1** Units: **mg/L** Analysis Date: **01/03/06 0:00**
Client ID: Run ID: **WETCHEM_060103A** SeqNo: **779376** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	ND	5.0								
Alkalinity, Carbonate (As CaCO3)	ND	5.0								
Alkalinity, Hydroxide (As CaCO3)	ND	5.0								
Alkalinity, Total (As CaCO3)	ND	5.0								

LCS Sample ID: **WLCSW1-010306** Test Code: **E310.1** Units: **mg/L** Analysis Date: **01/03/06 0:00**
Client ID: Run ID: **WETCHEM_060103A** SeqNo: **779377** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	990	5.0	0	0.99	0	0-0	0			
Alkalinity, Carbonate (As CaCO3)	ND	5.0	0	0	0	0-0	0			
Alkalinity, Hydroxide (As CaCO3)	ND	5.0	0	0	0	0-0	0			
Alkalinity, Total (As CaCO3)	990	5.0	1000	0	99	80-120	0			

DUP Sample ID: **0512386-10BDUP** Test Code: **E310.1** Units: **mg/L** Analysis Date: **01/03/06 0:00**
Client ID: Run ID: **WETCHEM_060103A** SeqNo: **779389** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	277	5.0	0	0	0	0-0	272	1.82	20	
Alkalinity, Carbonate (As CaCO3)	ND	5.0	0	0	0	0-0	0	0	20	
Alkalinity, Hydroxide (As CaCO3)	ND	5.0	0	0	0	0-0	0	0	20	
Alkalinity, Total (As CaCO3)	277	5.0	0	0	0	0-0	272	1.82	20	

The following samples were analyzed in this batch: 0512428-01B 0512428-02B

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R34430** InstrumentID: **IC201**

MBLK Sample ID: **WBLKW1-011306** Test Code: **E300** Units: **mg/L** Analysis Date: **01/14/06 4:49**
Client ID: Run ID: **IC201_060113A** SeqNo: **785707** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	0.50								
Fluoride	ND	0.10								
Sulfate	ND	1.0								
Nitrate/Nitrite (as N)	ND	0.10								
Surr: Dichloroacetic acid (surr)	5.102	0.10	5	0	102	80-120	0			

LCS Sample ID: **WLCSW1-011306/** Test Code: **E300** Units: **mg/L** Analysis Date: **01/14/06 5:17**
Client ID: Run ID: **IC201_060113A** SeqNo: **785708** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.983	0.50	10	0	99.8	80-120	0			
Fluoride	1.902	0.10	2	0	95.1	80-120	0			
Sulfate	9.648	1.0	10	0	96.5	80-120	0			
Nitrate/Nitrite (as N)	3.96	0.10	4	0	99	80-120	0			
Surr: Dichloroacetic acid (surr)	5.181	0.10	5	0	104	80-120	0			

LCSD Sample ID: **WLCSDW1-01130** Test Code: **E300** Units: **mg/L** Analysis Date: **01/14/06 5:46**
Client ID: Run ID: **IC201_060113A** SeqNo: **785709** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	10.23	0.50	10	0	102	80-120	9.983	2.4	20	
Fluoride	1.91	0.10	2	0	95.5	80-120	1.902	0.42	20	
Sulfate	9.649	1.0	10	0	96.5	80-120	9.648	0.0104	20	
Nitrate/Nitrite (as N)	4.097	0.10	4	0	102	80-120	3.96	3.4	20	
Surr: Dichloroacetic acid (surr)	5.53	0.10	5	0	111	80-120	5.181	6.52	20	

MS Sample ID: **0601133-05DMS#3** Test Code: **E300** Units: **mg/L** Analysis Date: **01/14/06 2:26**
Client ID: Run ID: **IC201_060113A** SeqNo: **785699** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	179.8	0.50	10	168.9	110	75-125	0			EO
Fluoride	2.184	0.10	2	0.314	93.5	75-125	0			
Sulfate	53	1.0	10	42.35	107	75-125	0			EO
Nitrate/Nitrite (as N)	3.759	0.10	4	0	94	75-125	0			
Surr: Dichloroacetic acid (surr)	4.846	0.10	5	0	96.9	80-120	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0512428
Project: Lovington Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R34430** InstrumentID: **IC201**

MSD Sample ID: **0601133-05DMSD** Test Code: **E300** Units: **mg/L** Analysis Date: **01/14/06 2:55**
Client ID: Run ID: **IC201_060113A** SeqNo: **785700** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	179.7	0.50	10	168.9	108	75-125	179.8	0.0918	20	EO
Fluoride	2.127	0.10	2	0.314	90.6	75-125	2.184	2.64	20	
Sulfate	53.07	1.0	10	42.35	107	75-125	53	0.123	20	EO
Nitrate/Nitrite (as N)	3.762	0.10	4	0	94	75-125	3.759	0.0798	20	
Surr: Dichloroacetic acid (surr)	5.235	0.10	5	0	105	80-120	4.846	7.72	20	

DUP Sample ID: **0601133-05DDUP** Test Code: **E300** Units: **mg/L** Analysis Date: **01/14/06 1:29**
Client ID: Run ID: **IC201_060113A** SeqNo: **785681** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	168.8	0.50	0	0	0	0-0	168.9	0.0592	20	E
Fluoride	0.321	0.10	0	0	0	0-0	0.314	2.2	20	
Sulfate	42.34	1.0	0	0	0	0-0	42.35	0.0378	20	
Nitrate/Nitrite (as N)	ND	0.10	0	0	0	0-0	0	0	20	
Surr: Dichloroacetic acid (surr)	5.03	0.10	5	0	101	80-120	5	0.598	20	

DUP Sample ID: **0601124-12DDUP** Test Code: **E300** Units: **mg/L** Analysis Date: **01/14/06 12:53**
Client ID: Run ID: **IC201_060113A** SeqNo: **785688** Prep Date: DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	97.34	10	0	0	0	0-0	97.81	0.473	20	
Fluoride	ND	2.0	0	0	0	0-0	0	0	20	
Sulfate	612.7	20	0	0	0	0-0	612.6	0.0114	20	
Nitrate/Nitrite (as N)	ND	2.0	0	0	0	0-0	0	0	20	
Surr: Dichloroacetic acid (surr)	107	2.0	100	0	107	80-120	107.5	0.483	20	

The following samples were analyzed in this batch: 0512428-01B 0512428-02B

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab, Inc.
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page 1 of 1

☐ e-Lab, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager: | e-Lab Work Order #: 15124-28

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington Lea Refinery Quarterly	A	BTEX (8021)
Work Order		Project Number		B	An, DRO, OIK, Cond/pH/TDS
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	Metals + Cat. ions
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	
Address	PO Box 159	Address	PO Box 159	E	
				F	
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	G	
Phone	(505) 748-3311	Phone	(505) 748-3311	H	
Fax	(505) 746-5421	Fax	(505) 746-5421	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-6R	12/29/05	1345	H_2O	1,2,8	5	X	X	X								
2	MW-5	"	1455	"	1,2,8	5	X	X	X								
3	North Water Well	"	1525	"	1,8	3	X										
4	South Water Well	12/29/05	1530	H_2O	1,8	3	X										
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: [signature] 12/29/05

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) ☐ STD 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by: [signature]	Date: 12/30/05	Time: 1630	Received by:	Notes: Copy Results to dgb@Sesi-NM.com	
Relinquished by:	Date:	Time:	Received by (Laboratory): 12-30-05 1012	e-lab Cooler ID	Cooler Temp.
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):		

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP Checklist
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab, Inc.
2. Unless otherwise agreed in a formal contract, services provided by e-Lab, Inc. are expressly limited to the terms and conditions stated on the reverse.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING | Date/Time Received: 12/30/2005 9:12:00 AM

Work Order Number 0512488 | Received by: RSZ

Checklist completed by [signature] Signature 12/30/05 Date | Reviewed by [initials] Initials 1/4/06 Date

Matrix: W | Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.4c	002	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐

Adjusted? _____ Checked by AMB

Login Notes:

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

W.O.# 0512428

m This portion can be removed for Recipient's records.

e 12/29/05 FedEx Tracking Number 833541366124

ider's me B Loyca Phone 505 397-6510

Company SEC

ddress 703 E. Clinton #102

Hobbs State NM ZIP 88240 Dept./Floor/Suite/Room

r Internal Billing Reference Lea Practical

2006 Groundwater Monitoring Sampling Results
Navajo Refining Company – Lea Refinery
Lovington, New Mexico

RECEIVED
2008 APR 9 PM 1 06

Prepared for:

Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

By:

Safety & Environmental Solutions, Inc.
703 E. Clinton, Suite 102
Hobbs, New Mexico 88240
(505) 397-0510

e-Lab Analytical, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

April 18, 2006

Darrell Moore
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: Lovington Lea Refinery

Work Order : **0604144**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 3 samples on 4/11/2006 8:40:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 12.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

Certificate No: LA 03087

e-Lab Analytical, Inc.

Date: *April 18, 2006*

CLIENT: Navajo Refining Company
Project: Lovington Lea Refinery
Work Order: **0604144**

Work Order Sample Summary

Lab Samp I	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0604144-01	MW-6R	Water		4/10/2006 09:15	4/11/2006 08:40	☐
0604144-02	South Well	Water		4/10/2006 09:50	4/11/2006 08:40	☐
0604144-03	North Well	Water		4/10/2006 09:55	4/11/2006 08:40	☐

e-Lab Analytical, Inc.

Date: *April 18, 2006*

CLIENT: Navajo Refining Company
Work Order: 0604144
Project: Lovington Lea Refinery
Lab ID: 0604144-01

Client Sample ID: MW-6R
Collection Date: 4/10/2006 9:15:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	4/17/2006 1:50:00 PM
Toluene	ND		1.0	µg/L	1	4/17/2006 1:50:00 PM
Ethylbenzene	ND		1.0	µg/L	1	4/17/2006 1:50:00 PM
Xylenes, Total	ND		3.0	µg/L	1	4/17/2006 1:50:00 PM
Surr: 4-Bromofluorobenzene	*90.7*		*77-129*	*%REC*	1	4/17/2006 1:50:00 PM
Surr: Trifluorotoluene	*87.8*		*75-130*	*%REC*	1	4/17/2006 1:50:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *April 18, 2006*

CLIENT: Navajo Refining Company
Work Order: 0604144
Project: Lovington Lea Refinery
Lab ID: 0604144-02

Client Sample ID: South Well
Collection Date: 4/10/2006 9:50:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	**8.3**		**1.0**	**µg/L**	1	4/14/2006 9:09:00 PM
Toluene	**76**		**1.0**	**µg/L**	1	4/14/2006 9:09:00 PM
Ethylbenzene	**45**		**1.0**	**µg/L**	1	4/14/2006 9:09:00 PM
Xylenes, Total	**77**		**3.0**	**µg/L**	1	4/14/2006 9:09:00 PM
Surr: 4-Bromofluorobenzene	*99.2*		*77-129*	*%REC*	1	4/14/2006 9:09:00 PM
Surr: Trifluorotoluene	*99.5*		*75-130*	*%REC*	1	4/14/2006 9:09:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *April 18, 2006*

CLIENT: Navajo Refining Company
Work Order: 0604144
Project: Lovington Lea Refinery
Lab ID: 0604144-03

Client Sample ID: North Well
Collection Date: 4/10/2006 9:55:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	**1.8**		**1.0**	**µg/L**	1	4/14/2006 9:37:00 PM
Toluene	ND		1.0	µg/L	1	4/14/2006 9:37:00 PM
Ethylbenzene	ND		1.0	µg/L	1	4/14/2006 9:37:00 PM
Xylenes, Total	ND		3.0	µg/L	1	4/14/2006 9:37:00 PM
Surr: 4-Bromofluorobenzene	*86.6*		*77-129*	*%REC*	1	4/14/2006 9:37:00 PM
Surr: Trifluorotoluene	*94.0*		*75-130*	*%REC*	1	4/14/2006 9:37:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0604144
Project: Lovington Lea Refinery

Date: *Apr 18 2006*

QC BATCH REPORT

Batch ID: **R36925** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW2-041406** Units: **µg/L** Analysis Date: **04/14/06 14:11**
Client ID: Run ID: **BTEX1_060412D** SeqNo: **842639** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*26.39*	1.0	*30*	0	*88*	*77-129*	0			
Surr: Trifluorotoluene	*28.56*	1.0	*30*	0	*95.2*	*75-130*	0			

LCS Sample ID: **BLCSW2-041406** Units: **µg/L** Analysis Date: **04/14/06 13:16**
Client ID: Run ID: **BTEX1_060412D** SeqNo: **842638** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.36	1.0	20	0	102	77-126	0			
Toluene	20.16	1.0	20	0	101	80-124	0			
Ethylbenzene	20.23	1.0	20	0	101	76-125	0			
Xylenes, Total	61.7	3.0	60	0	103	79-124	0			
Surr: 4-Bromofluorobenzene	*26.72*	1.0	*30*	0	*89.1*	*77-129*	0			
Surr: Trifluorotoluene	*29.49*	1.0	*30*	0	*98.3*	*75-130*	0			

MS Sample ID: **0604150-04AMS** Units: **µg/L** Analysis Date: **04/14/06 16:03**
Client ID: Run ID: **BTEX1_060412D** SeqNo: **842643** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.7	1.0	20	0	93.5	77-126	0			
Toluene	18.63	1.0	20	0	93.1	80-124	0			
Ethylbenzene	18.62	1.0	20	0	93.1	76-125	0			
Xylenes, Total	56.61	3.0	60	0	94.4	79-124	0			
Surr: 4-Bromofluorobenzene	*26.68*	1.0	*30*	0	*88.9*	*77-129*	0			
Surr: Trifluorotoluene	*28.42*	1.0	*30*	0	*94.7*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0604144
Project: Lovington Lea Refinery

QC BATCH REPORT

Batch ID: **R36925** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0604150-04AMSD** Units: **µg/L** Analysis Date: **04/14/06 16:31**

Client ID: Run ID: **BTEX1_060412D** SeqNo: **842644** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.77	1.0	20	0	88.9	77-126	18.7	5.06	20	
Toluene	18.1	1.0	20	0	90.5	80-124	18.63	2.86	20	
Ethylbenzene	18.33	1.0	20	0	91.6	76-125	18.62	1.57	20	
Xylenes, Total	56.4	3.0	60	0	94	79-124	56.61	0.376	20	
Surr: 4-Bromofluorobenzene	*26.62*	1.0	*30*	0	*88.7*	*77-129*	26.68	*0.208*	*20*	
Surr: Trifluorotoluene	*27.93*	1.0	*30*	0	*93.1*	*75-130*	28.42	*1.74*	*20*	

The following samples were analyzed in this batch: 0604144-02A 0604144-03A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0604144
Project: Lovington Lea Refinery

QC BATCH REPORT

Batch ID: **R36938** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-041706** Units: **µg/L** Analysis Date: **04/17/06 9:10**

Client ID: Run ID: **BTEX1_060417B** SeqNo: **843018** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*23.79*	1.0	*30*	0	*79.3*	*77-129*	0			
Surr: Trifluorotoluene	*25.54*	1.0	*30*	0	*85.1*	*75-130*	0			

LCS Sample ID: **BLCSW1-041706** Units: **µg/L** Analysis Date: **04/17/06 8:14**

Client ID: Run ID: **BTEX1_060417B** SeqNo: **843017** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.7	1.0	20	0	88.5	77-126	0			
Toluene	17.74	1.0	20	0	88.7	80-124	0			
Ethylbenzene	18.12	1.0	20	0	90.6	76-125	0			
Xylenes, Total	55.79	3.0	60	0	93	79-124	0			
Surr: 4-Bromofluorobenzene	*25.09*	1.0	*30*	0	*83.6*	*77-129*	0			
Surr: Trifluorotoluene	*27.17*	1.0	*30*	0	*90.6*	*75-130*	0			

MS Sample ID: **0604202-01AMS** Units: **µg/L** Analysis Date: **04/17/06 11:57**

Client ID: Run ID: **BTEX1_060417B** SeqNo: **843135** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	16.6	1.0	20	0	83	77-126	0			
Toluene	16.89	1.0	20	0	84.4	80-124	0			
Ethylbenzene	16.96	1.0	20	0	84.8	76-125	0			
Xylenes, Total	52.93	3.0	60	0	88.2	79-124	0			
Surr: 4-Bromofluorobenzene	*26.46*	1.0	*30*	0	*88.2*	*77-129*	0			
Surr: Trifluorotoluene	*25.2*	1.0	*30*	0	*84*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0604144
Project: Lovington Lea Refinery

QC BATCH REPORT

Batch ID: **R36938** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0604202-01AMSD** Units: **µg/L** Analysis Date: **04/17/06 12:26**

Client ID: Run ID: **BTEX1_060417B** SeqNo: **843136** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	16.59	1.0	20	0	82.9	77-126	16.6	0.0793	20	
Toluene	16.77	1.0	20	0	83.8	80-124	16.89	0.707	20	
Ethylbenzene	16.97	1.0	20	0	84.9	76-125	16.96	0.0708	20	
Xylenes, Total	53.11	3.0	60	0	88.5	79-124	52.93	0.348	20	
Surr: 4-Bromofluorobenzene	*27.26*	1.0	*30*	0	*90.9*	*77-129*	26.46	*2.96*	*20*	
Surr: Trifluorotoluene	*25.19*	1.0	*30*	0	*84*	*75-130*	25.2	*0.0255*	*20*	

The following samples were analyzed in this batch: 0604144-01A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab Analytical
QUALITY • INTEGRITY • SERVICE

10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

9352 [illegible] Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager: | e-Lab Work Order #: 0604144

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington Lea Refinery	A	BTEX 8021
Work Order		Project Number		B	
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	
Address	PO Box 159	Address	PO Box 159	E	
				F	
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	G	
Phone	(505) 748-3311	Phone	(505) 748-3311	H	
Fax	(505) 746-5421	Fax	(505) 746-5421	I	
e-Mail Address		e-Mail Address	Copy to dgbayer@yesi-nm.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-6R	4/10/06	0915	H_2O	1, 8	2	X										
2	South Well	4/10/06	0950	H_2O	1, 8	2	X										
3	North Well	4/10/06	0955	H_2O	1, 8	2	X										
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: [illegible] Kincaid

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☐ Std 10 WK Days ☑ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by: [signature] Date: 4/10/06 Time: 1605 Received by:

Notes:

Relinquished by: Date: Time: Received by (Laboratory): [signature] 4-11-06/0840

Logged by (Laboratory): Date: Time: Checked by (Laboratory):

e-lab Cooler ID | Cooler Temp.

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP CheckList
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.
2. Unless otherwise agreed in a formal contract, services provided by e-Lab Analytical, Inc. are expressly limited to the terms and conditions stated on the reverse.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING

Date/Time Received: 4/11/2006 8:40:00 AM

Work Order Number 0604144

Received by: RSZ

Checklist completed by _____ Signature 4/11/06 Date

Reviewed by _____ Initials 4/12/06 Date

Matrix: Liquid Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No	
Chain of custody signed when relinquished and received?	Yes ✔	No	
Chain of custody agrees with sample labels?	Yes ☑	No	
Samples in proper container/bottle?	Yes ☑	No	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.7c	002	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? _____ Checked by _____

Login Notes:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

0604144

...ill This portion can be removed for recipient's records.

Date 4/10/06 FedEx Tracking Number 856605239053

Sender's Name L. Boyer Phone 505-397-[illegible]

Company SEC

Address 703 E Clinton Ste #102

Dept./Floor/Suite/Room

City Hobbs State NM ZIP 88240

Your Internal Billing Reference NAWDA Lea

e-Lab ANALYTICAL
QUALITY · INTEGRITY · SERVICE

e-Lab Analytical, Inc.
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. 281.530.5656
Fax. 218.530.5887

Date: 4
Name:
Company:

TUE
Deliver By:
11APR06
A2

RS
4.11.06

e-Lab Analytical, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 281-530-5656 Fax 281-530-5887

July 11, 2006

Darrell Moore
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 397-0510
Fax: (505) 393-4388

Re: Lovington Refinery Work Order : **0607006**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 3 samples on 7/3/2006 8:05:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 14.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Patrina A. Dathorne

Jeffrey L Croston

ACCREDITED IN ACCORDANCE WITH nelac

Certificate No: LA 03087

e-Lab Analytical, Inc.

Date: *July 11, 2006*

CLIENT: Navajo Refining Company
Project: Lovington Refinery
Work Order: **0607006**

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0607006-01	North Water Well	Water		6/30/2006 14:10	7/3/2006 08:05	☐
0607006-02	South Water Well	Water		6/30/2006 14:20	7/3/2006 08:05	☐
0607006-03	MW-6R	Water		6/30/2006 15:43	7/3/2006 08:05	☐

e-Lab Analytical, Inc.

Date: *July 11, 2006*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	North Water Well
Work Order:	0607006	**Collection Date:**	6/30/2006 2:10:00 PM
Project:	Lovington Refinery		
Lab ID:	0607006-01	**Matrix:**	WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	7/6/2006 3:31:00 PM
Toluene	ND		1.0	µg/L	1	7/6/2006 3:31:00 PM
Ethylbenzene	ND		1.0	µg/L	1	7/6/2006 3:31:00 PM
Methyl tert-butyl ether	ND		5.0	µg/L	1	7/6/2006 3:31:00 PM
Xylenes, Total	ND		3.0	µg/L	1	7/6/2006 3:31:00 PM
Surr: 4-Bromofluorobenzene	*91.3*		*77-129*	*%REC*	1	7/6/2006 3:31:00 PM
Surr: Trifluorotoluene	*87.7*		*75-130*	*%REC*	1	7/6/2006 3:31:00 PM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 11, 2006*

CLIENT:	Navajo Refining Company	**Client Sample ID:**	South Water Well
Work Order:	0607006	**Collection Date:**	6/30/2006 2:20:00 PM
Project:	Lovington Refinery		
Lab ID:	0607006-02	**Matrix:**	WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	7/7/2006 4:42:00 PM
Toluene	**3.3**		**1.0**	**µg/L**	1	7/7/2006 4:42:00 PM
Ethylbenzene	**2.1**		**1.0**	**µg/L**	1	7/7/2006 4:42:00 PM
Methyl tert-butyl ether	ND		5.0	µg/L	1	7/7/2006 4:42:00 PM
Xylenes, Total	ND		3.0	µg/L	1	7/7/2006 4:42:00 PM
Surr: 4-Bromofluorobenzene	*98.6*		*77-129*	*%REC*	1	7/7/2006 4:42:00 PM
Surr: Trifluorotoluene	*92.9*		*75-130*	*%REC*	1	7/7/2006 4:42:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 11, 2006*

CLIENT: Navajo Refining Company
Work Order: 0607006
Project: Lovington Refinery
Lab ID: 0607006-03

Client Sample ID: MW-6R
Collection Date: 6/30/2006 3:43:00 PM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	**2.2**		**1.0**	**µg/L**	1	7/8/2006 10:59:00 AM
Toluene	ND		1.0	µg/L	1	7/8/2006 10:59:00 AM
Ethylbenzene	ND		1.0	µg/L	1	7/8/2006 10:59:00 AM
Methyl tert-butyl ether	ND		5.0	µg/L	1	7/8/2006 10:59:00 AM
Xylenes, Total	ND		3.0	µg/L	1	7/8/2006 10:59:00 AM
Surr: 4-Bromofluorobenzene	*92.4*		*77-129*	*%REC*	1	7/8/2006 10:59:00 AM
Surr: Trifluorotoluene	*93.2*		*75-130*	*%REC*	1	7/8/2006 10:59:00 AM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0607006
Project: Lovington Refinery

Date: *Jul 11 2006*

QC BATCH REPORT

Batch ID: **R39400** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-070606** Units: **µg/L** Analysis Date: **07/06/06 13:16**
Client ID: Run ID: **BTEX1_060705C** SeqNo: **899758** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*27.79*	1.0	*30*	0	*92.6*	*77-129*	0			
Surr: Trifluorotoluene	*27.61*	1.0	*30*	0	*92*	*75-130*	0			

LCS Sample ID: **BLCSW1-070606** Units: **µg/L** Analysis Date: **07/06/06 12:49**
Client ID: Run ID: **BTEX1_060705C** SeqNo: **899757** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.82	1.0	20	0	99.1	77-126	0			
Toluene	19.91	1.0	20	0	99.6	80-124	0			
Ethylbenzene	20.43	1.0	20	0	102	76-125	0			
Methyl tert-butyl ether	98.53	5.0	100	0	98.5	75-128	0			
Xylenes, Total	61.45	3.0	60	0	102	79-124	0			
Surr: 4-Bromofluorobenzene	*30.25*	1.0	*30*	0	*101*	*77-129*	0			
Surr: Trifluorotoluene	*28.94*	1.0	*30*	0	*96.5*	*75-130*	0			

MS Sample ID: **0607006-01AMS** Units: **µg/L** Analysis Date: **07/06/06 15:58**
Client ID: **North Water Well** Run ID: **BTEX1_060705C** SeqNo: **899764** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.64	1.0	20	0	93.2	77-126	0			
Toluene	18.38	1.0	20	0	91.9	80-124	0			
Ethylbenzene	18.9	1.0	20	0	94.5	76-125	0			
Methyl tert-butyl ether	92.49	5.0	100	0	92.5	75-128	0			
Xylenes, Total	57.39	3.0	60	0	95.7	79-124	0			
Surr: 4-Bromofluorobenzene	*28.54*	1.0	*30*	0	*95.1*	*77-129*	0			
Surr: Trifluorotoluene	*26.83*	1.0	*30*	0	*89.4*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0607006
Project: Lovington Refinery

QC BATCH REPORT

Batch ID: **R39400** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0607006-01AMSD** Units: **µg/L** Analysis Date: **07/06/06 16:24**

Client ID: **North Water Well** Run ID: **BTEX1_060705C** SeqNo: **899765** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	16.84	1.0	20	0	84.2	77-126	18.64	10.2	20	
Toluene	16.63	1.0	20	0	83.1	80-124	18.38	10	20	
Ethylbenzene	17.39	1.0	20	0	86.9	76-125	18.9	8.36	20	
Methyl tert-butyl ether	84.95	5.0	100	0	84.9	75-128	92.49	8.5	20	
Xylenes, Total	54.4	3.0	60	0	90.7	79-124	57.39	5.36	20	
Surr: 4-Bromofluorobenzene	*28.13*	1.0	*30*	0	*93.8*	*77-129*	28.54	*1.44*	*20*	
Surr: Trifluorotoluene	*25.05*	1.0	*30*	0	*83.5*	*75-130*	26.83	*6.83*	*20*	

The following samples were analyzed in this batch: 0607006-01A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0607006
Project: Lovington Refinery

QC BATCH REPORT

Batch ID: **R39427** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-070506** Units: **µg/L** Analysis Date: **07/07/06 16:15**
Client ID: Run ID: **BTEX1_060707A** SeqNo: **900408** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*28.51*	1.0	*30*	0	*95*	*77-129*	0			
Surr: Trifluorotoluene	*27.06*	1.0	*30*	0	*90.2*	*75-130*	0			

LCS Sample ID: **BLCSW1-070706** Units: **µg/L** Analysis Date: **07/07/06 15:21**
Client ID: Run ID: **BTEX1_060707A** SeqNo: **900407** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.39	1.0	20	0	91.9	77-126	0			
Toluene	18.71	1.0	20	0	93.5	80-124	0			
Ethylbenzene	19.5	1.0	20	0	97.5	76-125	0			
Methyl tert-butyl ether	94.92	5.0	100	0	94.9	75-128	0			
Xylenes, Total	57.95	3.0	60	0	96.6	79-124	0			
Surr: 4-Bromofluorobenzene	*29*	1.0	*30*	0	*96.7*	*77-129*	0			
Surr: Trifluorotoluene	*26.32*	1.0	*30*	0	*87.7*	*75-130*	0			

MS Sample ID: **0607006-02AMS** Units: **µg/L** Analysis Date: **07/07/06 17:09**
Client ID: **South Water Well** Run ID: **BTEX1_060707A** SeqNo: **900410** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.06	1.0	20	0	90.3	77-126	0			
Toluene	19.95	1.0	20	3.266	83.4	80-124	0			
Ethylbenzene	19.54	1.0	20	2.06	87.4	76-125	0			
Methyl tert-butyl ether	90.46	5.0	100	0	90.5	75-128	0			
Xylenes, Total	57.98	3.0	60	1.551	94.1	79-124	0			
Surr: 4-Bromofluorobenzene	*28.97*	1.0	*30*	0	*96.6*	*77-129*	0			
Surr: Trifluorotoluene	*26.55*	1.0	*30*	0	*88.5*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0607006
Project: Lovington Refinery

QC BATCH REPORT

Batch ID: **R39427** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0607006-02AMSD** Units: **µg/L** Analysis Date: **07/07/06 17:36**

Client ID: **South Water Well** Run ID: **BTEX1_060707A** SeqNo: **900411** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	17.86	1.0	20	0	89.3	77-126	18.06	1.09	20	
Toluene	19.78	1.0	20	3.266	82.6	80-124	19.95	0.846	20	
Ethylbenzene	19.35	1.0	20	2.06	86.5	76-125	19.54	0.974	20	
Methyl tert-butyl ether	90.56	5.0	100	0	90.6	75-128	90.46	0.111	20	
Xylenes, Total	57.5	3.0	60	1.551	93.3	79-124	57.98	0.832	20	
Surr: 4-Bromofluorobenzene	*28.91*	1.0	*30*	0	*96.4*	*77-129*	28.97	*0.206*	*20*	
Surr: Trifluorotoluene	*26.44*	1.0	*30*	0	*88.1*	*75-130*	26.55	*0.412*	*20*	

The following samples were analyzed in this batch: 0607006-02A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0607006
Project: Lovington Refinery

QC BATCH REPORT

Batch ID: **R39435** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-070806** Units: **µg/L** Analysis Date: **07/08/06 6:06**

Client ID: Run ID: **BTEX1_060707B** SeqNo: **900562** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*28.28*	1.0	*30*	0	*94.3*	*77-129*	0			
Surr: Trifluorotoluene	*27.25*	1.0	*30*	0	*90.8*	*75-130*	0			

LCS Sample ID: **BLCSW1-070806** Units: **µg/L** Analysis Date: **07/08/06 5:39**

Client ID: Run ID: **BTEX1_060707B** SeqNo: **900559** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.06	1.0	20	0	90.3	77-126	0			
Toluene	18.5	1.0	20	0	92.5	80-124	0			
Ethylbenzene	18.97	1.0	20	0	94.8	76-125	0			
Methyl tert-butyl ether	90.2	5.0	100	0	90.2	75-128	0			
Xylenes, Total	58.55	3.0	60	0	97.6	79-124	0			
Surr: 4-Bromofluorobenzene	*28.57*	1.0	*30*	0	*95.2*	*77-129*	0			
Surr: Trifluorotoluene	*26.38*	1.0	*30*	0	*87.9*	*75-130*	0			

MS Sample ID: **0607060-01AMS** Units: **µg/L** Analysis Date: **07/08/06 8:45**

Client ID: Run ID: **BTEX1_060707B** SeqNo: **900571** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.22	1.0	20	0	96.1	77-126	0			
Toluene	19.85	1.0	20	0	99.2	80-124	0			
Ethylbenzene	20.18	1.0	20	0	101	76-125	0			
Methyl tert-butyl ether	92.59	5.0	100	0	92.6	75-128	0			
Xylenes, Total	60.15	3.0	60	0	100	79-124	0			
Surr: 4-Bromofluorobenzene	*29.43*	1.0	*30*	0	*98.1*	*77-129*	0			
Surr: Trifluorotoluene	*28.11*	1.0	*30*	0	*93.7*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0607006
Project: Lovington Refinery

QC BATCH REPORT

Batch ID: **R39435** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0607060-01AMSD** Units: **µg/L** Analysis Date: **07/08/06 9:11**

Client ID: Run ID: **BTEX1_060707B** SeqNo: **900574** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.66	1.0	20	0	98.3	77-126	19.22	2.29	20	
Toluene	20.12	1.0	20	0	101	80-124	19.85	1.38	20	
Ethylbenzene	20.28	1.0	20	0	101	76-125	20.18	0.473	20	
Methyl tert-butyl ether	95.57	5.0	100	0	95.6	75-128	92.59	3.17	20	
Xylenes, Total	60.53	3.0	60	0	101	79-124	60.15	0.629	20	
Surr: 4-Bromofluorobenzene	*29.24*	1.0	*30*	0	*97.5*	*77-129*	29.43	*0.625*	*20*	
Surr: Trifluorotoluene	*28.58*	1.0	*30*	0	*95.3*	*75-130*	28.11	*1.66*	*20*	

The following samples were analyzed in this batch: 0607006-03A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab Analytical
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10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

5952 126th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

Page 1 of 1

e-Lab Project Manager:

e-Lab Work Order #: 16750C

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington Refinery	A	BTEX (8021)
Work Order		Project Number		B	
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	
Send Report To		Invoice Attn		D	
Address	PO Box 159	Address	PO Box 159	E	
				F	
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	G	
Phone	(505) 748-3311	Phone	(505) 748-3311	H	
Fax	(505) 746-5421	Fax	(505) 746-5421	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	North Water Well	6/30/06	1410	W	H_2O	3	X										
2	South Water Well	"	1420	W	H_2O	3	X										
3	MW-6R	"	1543	W	H_2O	3	X										
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: D Boyd D Boyd

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ Other ☐ 2 WK Days ☐ 24 Hour

Results Due Date:

Relinquished by: D Boyd Date: 6/30/06 Time: 1530

Received by:

Relinquished by: Date: Time:

Received by (Laboratory): 7/01/0805

Logged by (Laboratory): Date: Time:

Checked by (Laboratory):

Notes: 10 Work Day TAT.

e-lab Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP CheckList
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other _____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.
2. Unless otherwise agreed in a formal contract, services provided by e-Lab Analytical, Inc. are expressly limited to the terms and conditions stated on the reverse.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING | Date/Time Received: 7/3/2006 8:05:00 AM

Work Order Number 0607006 | Received by: RSZ

Checklist completed by [signature] 7/3/06 (Signature / Date) | Reviewed by [initials] 7/5/06 (Initials / Date)

Matrix: W | Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.8c	002	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? _____ Checked by _____

Login Notes: No trip blank was received.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

W.O.#66704

Form ID 0215 reviewed for recipient's records.

30/06 FedEx Tracking Number 856605239101

Royer Phone 505 [illegible]

[illegible] E. Clinton #102

[illegible] State NM ZIP 88[illegible] Dept./Floor/Suite/Room 4D

al Bill- ence Navajo Lea Refining

e-Lab Analytica, Inc.
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. 281.530.5656
Fax. 218.530.5887

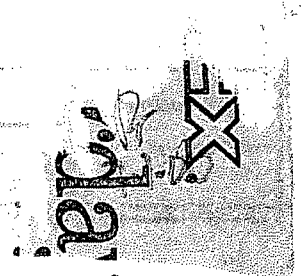
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Date:
Name:
Comp

CUSTODY SEAL

6/30/06 Time: 1630

any:



RS
7.1.06

argon laboratories

SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
703 E. CLINTON, SUITE 102
HOBBS, NM 88240

REPORT DATE: 10/06/06
SAMPLE DATE: 09/18/06

ATTN: BOB ALLEN
CLIENT PROJ. ID: NAV-00-019
LOVINGTON REFINERY

AL JOB #: A09161

Project Summary:

On September 18, 2006, this laboratory received 2 water samples.

The samples were analyzed according to instructions in accompanying chain-of-custody. Results of analysis are summarized on the following pages. Please see quality control report for a summary of QC data pertaining to this project.

The samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. The samples may be archived by prior arrangement.

If you have any questions, please contact Sample Control at (505) 397-0295

Hiram Cueto
Lab Manager

2126 W. Marland Ave., Hobbs, NM 88240 • Phone (505) 397-0295 • Fax (505) 397-0296
email: info@argonlabs.com

Argon Laboratories
CHAIN OF CUSTODY

Project Information:

Project No: NAV-00-019
Project Title: Lovington Refinary
Location: Lovington, NM
Sampler's Name: Brian Cuellar
(print)
Sampler's Signature:

Report To:

Consultant: Safety & Environmental Solutions, Inc.
Address: 703 E. Clinton, Suite 102
Hobbs, NM 88240
Contact: Bob Allen
Phone: (505)397-0510
Fax: (505)393-4388

Bill To:

Client: SAME
Address:

Samples Submitted To:

Laboratory:
Address:
Contact:
Phone:
Fax:
Date Results Required:
Date Report Required:

TURN AROUND TIME

RUSH	24 Hour	48 Hour	Standard (5 days)	Special (10-14 days)
☐	☐	☐	☒	☐

Sample ID.	Date	Time	# Containers	Matrix	TPH 418.1	BTEX	Chloride	TPH-8015M	Cation/Anion							COMMENTS / Preservative
South Well	9-18-06	1130	2	H2O		X										
East Well	9-18-06	1153	3	H2O		X			X							

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
B-Cuellar	9-18-06	3:15 pm			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
				9/18/06	15:30
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

SPECIAL INSTRUCTIONS:

Argon Laboratories Sample Receipt Checklist

Client Name: Safety & Environmental Solution Date & Time Received: 09/18/06 15:30

Project Name: Lovington Refinary Client Project Number: NAV-00-019

Received By: L.S. Matrix: Water ☑ Soil ☐

Sample Carrier: Client ☑ Laboratory ☐ Fed Ex ☐ UPS ☐ Other ☐

Argon Labs Project Number: A09161

Shipper Container in good condition?			Samples received in proper containers?	Yes ☑	No ☐
N/A____	Yes ☑	No ☐	Samples received intact?	Yes ☑	No ☐
Samples received under refrigeration?	Yes ☑	No ☐	Sufficient sample volume for requested tests?	Yes ☑	No ☐
Chain of custody present?	Yes ☑	No ☐	Samples received within holding time?	Yes ☑	No ☐
Chain of Custody signed by all parties?	Yes ☑	No ☐	Do samples contain proper preservative? N/A ☐	Yes ☑	No ☐
Chain of Custody matches all sample labels?	Yes ☑	No ☐	Do VOA vials contain zero headspace? (None submitted ☐)	Yes ☑	No ☐

ANY "No" RESPONSE MUST BE DETAILED IN THE COMMENTS SECTION BELOW

Date Client Contacted: _____ Person Contacted: _____

Contacted By: _____ Subject: _____

Comments: _____

Action Taken: _____

ADDITIONAL TEST(S) REQUEST / OTHER

Contacted By: _____ Date: _____ Time: _____

Call Received By: _____

Comments: _____

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Safety & Environmental Solutions, Inc.	Project Number: NAV-00-019	
703 E. Clinton	Project Name: Lovington Refinery	Work Order #:
Hobbs, NM 88240	Project Manager: Bob Allen	A09161

Water Quality Parameters Analytical Report

Analyte	Result	Rep. Lim. @ D.F.=1	Units	Analyzed	Method	Notes
East Well (A09162) Water	**Sampled: 09/18/06**	**Received: 09/18/06**				
Chloride	46	1.0	mg/L	09/20/06	EPA 300.0	
Sulfate	70	0.5	mg/L	09/20/06	EPA 300.0	
Calcium	61	10	mg/L	09/26/06	EPA 7000	
Magnesium	9.4	0.5	mg/L	09/26/06	EPA 7000	
Sodium	40	10	mg/L	09/26/06	EPA 7000	
Potassium	1.7	0.5	mg/L	09/26/06	EPA 7000	
Hardness	190	5.0	mg/L	09/26/06	SM2340B	
Total Alkalinity	170	5.0	mg/L	09/22/06	EPA 310.1	
Carbonate Alkalinity	<5.0	5.0	mg/L	09/22/06	EPA 310.1	
Bicarbonate Alkalinity	170	5.0	mg/L	09/22/06	EPA 310.1	
Total Dissolved Solids	410	10	mg/L	09/28/06	EPA 160.1	
Conductivity	570	5.0	uhmos/cm	09/19/06	EPA 120.1	
pH	7.9		pH units	09/18/06	EPA 150.1	

Approved By
Argon Laboratories

QC Officer

2126 W. Marland Ave., Hobbs, NM 88240 • Phone (505) 397-0295 • Fax (505) 397-0296
email: info@argonlabs.com

argon laboratories

Safety & Environmental Solutions, Inc.	Project Number: NAV-00-019	
703 E. Clinton	Project Name: Lovington Refinery	Work Order #:
Hobbs, NM 88240	Project Manager: Bob Allen	A09161

BTEX
EPA Method: 8021B

Analyte	Result	Rep. Lim. @ D.F.=1	Units	Analyzed	Method	Notes
South Well (A09161) Water	**Sampled: 09/18/06**	**Received: 09/18/06**				
Benzene	<0.5	0.5	ug/L	09/20/06	EPA 8021B	
Toluene	<0.5	"	"	"	"	
Ethyl Benzene	<0.5	"	"	"	"	
Xylenes	<1.0	1.0	"	"	"	
Surr. Rec.: *100%*						
East Well (A09162) Water	**Sampled: 09/18/06**	**Received: 09/18/06**				
Benzene	<0.5	0.5	ug/L	09/20/06	EPA 8021B	
Toluene	<0.5	"	"	"	"	
Ethyl Benzene	<0.5	"	"	"	"	
Xylenes	<1.0	1.0	"	"	"	
Surr. Rec.: *98%*						

Approved By
Argon Laboratories

QC Officer

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Safety & Environmental Solutions, Inc.	Project Number: NAV-00-019	
703 E.Clinton	Project Name: Lovington Refinery	Work Order #:
Hobbs, NM 88240	Project Manager: Bob Allen	A09161

Quality Control

Analyte	MS Rec	MSD Rec	RPD	Reporting Limit	Units	Notes
Matrix Spike / Matrix Spike Duplicate						
Chloride	91%	85%	7%	1.0	mg/L	
Sulfate	96%	91%	5%	0.5	"	
Calcium	83%	86%	3%	10	"	
Potassium	88%	85%	4%	0.5	"	
Alkalinity	98%	99%	1%	10	"	
Conductivity	101%	101%	0%	5.0	uhmos/cm	

Analyte	LCS Rec	Reporting Limit	Units	Notes
Laboratory Control Spike				
Chloride	95%	1.0	mg/L	
Sulfate	93%	0.5	"	
Calcium	90%	10	"	
Potassium	92%	0.5	"	
Alkalinity	100%	10	"	
Conductivity	102%	5.0	uhmos/cm	

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Safety & Environmental Solutions, Inc.	Project Number: NAV-00-019	
703 E.Clinton	Project Name: Lovington Refinery	Work Order #:
Hobbs, NM 88240	Project Manager: Bob Allen	A09161

EPA 8021B - BTEX - Quality Control

Analyte	MS Rec	MSD Rec	RPD	Reporting Limit	Units	Notes
Matrix Spike / Matrix Spike Duplicate						*Spiked Sample ID: A09162*
o-Xylene	92%	95%	3%	0.5	ug/L	

Analyte	LCS Rec	LCSD Rec	RPD	Reporting Limit	Units	Notes
Laboratory Control Spike / Laboratory Control Spike Duplicate						*LCS ID: LCS0920A*
Benzene	107%	104%	3%	0.5	ug/L	

Note: Daily method blank showed no contamination at or above the reporting limits.

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Safety & Environmental Solutions, Inc.	Project Number: NAV-00-019	
703 E. Clinton	Project Name: Lovington Refinery	Work Order#
Hobbs, NM 88240	Project Manager: Bob Allen	A09161

CATION ANION BALANCE SHEET FOR WATER ANALYSIS

East Well (A09162) Water **Sampled: 09/18/06** **Received: 09/18/06**

CATIONS	mg/L	meq/L
Sodium	40	1.74
Potassium	1.7	0.04
Calcium	61	3.04
Magnesium	9.4	0.77
Total Cations		5.59

ANIONS	mg/L	meq/L
Sulfate	70	1.46
Chloride	46	1.30
Bicarbonate (CaCO3)	170	2.81
Carbonate (CaCO3)		ND
Phosphate		ND
Nitrite		ND
Nitrate		ND
Fluoride		ND
Bromide		ND
Total Anions		5.57

Conductivity (uhmos/cm)	570	
CATION/ANION RATIO		1.00
% Difference		0.18

TOTAL DISSOLVED SOLIDS RATIOS		
TDS (measured)	410	
TDS (calculated)	330	
Ratio meas TDS:calc TDS		1.2
Ratio meas TDS:EC		0.72
Ratio calc TDS:EC		0.58
Ratio of anion sum:EC		0.98
Ratio of cation sum:EC		0.98

GENERALLY ACCEPTED RANGES

Cation/Anion balance: 0-3 meq/L = 0.2 meq/L; 3-10 meq/L = 2%; >10 meq/L = 5%

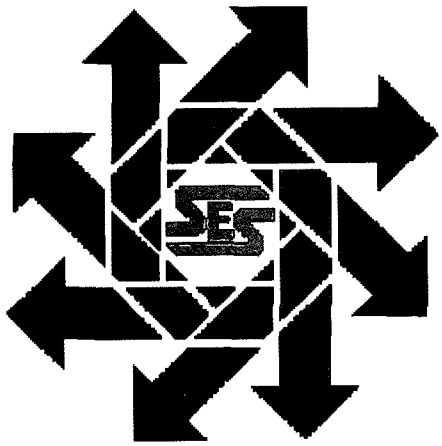
Ratio measured TDS:calculated TDS = 1.0 - 1.2; Ratio calculated TDS:EC = 0.55-0.70; Ratio measured TDS:EC = 0.55 - 0.70

Ratio of anion sum:EC = 0.9 - 1.1; Ratio of cation sum:EC = 0.9 - 1.1

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email: info@argonlabs.com

2007 Groundwater Monitoring Sampling Results
Navajo Refining Company – Lea Refinery
Lovington, New Mexico

RECEIVED
2008 APR 9 PM 1 06



Prepared for:

Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

By:

Safety & Environmental Solutions, Inc.
703 E. Clinton, Suite 102
Hobbs, New Mexico 88240
(505) 397-0510

e-Lab Analytical, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 (281) 530-5656 Fax (281) 530-5887

February 12, 2007

Darrell Moore
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: Lea Refinery Quarterly

Work Order : **0701397**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 5 samples on 1/27/2007 8:25:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 30.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Odette E. Elliston

Jeffrey L Croston
Project Manager

ACCREDITED IN ACCORDANCE WITH nelac

Certificate No: T104704231-06-TX

e-Lab Analytical, Inc.

Date: *February 12, 2007*

CLIENT: Navajo Refining Company
Project: Lea Refinery Quarterly
Work Order: **0701397**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0701397-01	MW#5	Water		1/26/2007 12:15	1/27/2007 08:25	☐
0701397-02	MW#6R	Water		1/26/2007 09:00	1/27/2007 08:25	☐
0701397-03	East Well	Water		1/26/2007 10:30	1/27/2007 08:25	☐
0701397-04	South Well	Water		1/26/2007 09:30	1/27/2007 08:25	☐
0701397-05	Trip Blank	Water		1/26/2007 09:30	1/27/2007 08:25	☐

e-Lab Analytical, Inc.

Date: *February 12, 2007*

CLIENT: Navajo Refining Company
Project: Lea Refinery Quarterly
Work Order: 0701397

Case Narrative

Batch 21765 Metals MS/MSD was an unrelated sample.

e-Lab Analytical, Inc.

Date: *February 12, 2007*

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly
Lab ID: 0701397-01

Client Sample ID: MW#5
Collection Date: 1/26/2007 12:15:00 PM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	1/30/2007 7:00:00 PM
Toluene	ND		1.0	µg/L	1	1/30/2007 7:00:00 PM
Ethylbenzene	ND		1.0	µg/L	1	1/30/2007 7:00:00 PM
Xylenes, Total	ND		3.0	µg/L	1	1/30/2007 7:00:00 PM
Surr: 4-Bromofluorobenzene	*92.2*		*77-129*	*%REC*	1	1/30/2007 7:00:00 PM
Surr: Trifluorotoluene	*88.6*		*75-130*	*%REC*	1	1/30/2007 7:00:00 PM
MERCURY, TOTAL			**SW7470**		Prep Date: **2/6/2007**	Analyst: **JCJ**
Mercury	ND		0.000200	mg/L	1	2/6/2007 5:08:15 PM
ICP METALS, TOTAL			**SW6020**		Prep Date: **1/29/2007**	Analyst: **ALR**
Aluminum	**0.141**		**0.0100**	**mg/L**	1	1/29/2007 10:02:00 PM
Arsenic	**0.00562**		**0.00500**	**mg/L**	1	1/29/2007 10:02:00 PM
Barium	**0.0945**		**0.00500**	**mg/L**	1	1/29/2007 10:02:00 PM
Beryllium	ND		0.00200	mg/L	1	1/29/2007 10:02:00 PM
Boron	**0.106**		**0.0200**	**mg/L**	1	1/29/2007 10:02:00 PM
Cadmium	ND		0.00200	mg/L	1	1/29/2007 10:02:00 PM
Calcium	**55.9**		**0.500**	**mg/L**	1	1/29/2007 10:02:00 PM
Chromium	ND		0.00500	mg/L	1	1/29/2007 10:02:00 PM
Cobalt	ND		0.00500	mg/L	1	1/29/2007 10:02:00 PM
Copper	ND		0.00500	mg/L	1	1/29/2007 10:02:00 PM
Iron	ND		0.200	mg/L	1	1/29/2007 10:02:00 PM
Lead	ND		0.00500	mg/L	1	1/29/2007 10:02:00 PM
Magnesium	**6.34**		**0.200**	**mg/L**	1	1/29/2007 10:02:00 PM
Manganese	**0.00830**		**0.00500**	**mg/L**	1	1/29/2007 10:02:00 PM
Molybdenum	ND		0.00500	mg/L	1	1/29/2007 10:02:00 PM
Nickel	ND		0.00500	mg/L	1	1/29/2007 10:02:00 PM
Potassium	**2.02**		**0.200**	**mg/L**	1	1/29/2007 10:02:00 PM
Selenium	ND		0.00500	mg/L	1	1/29/2007 10:02:00 PM
Silver	ND		0.00500	mg/L	1	1/29/2007 10:02:00 PM
Sodium	**156**		**0.200**	**mg/L**	1	1/29/2007 10:02:00 PM
Vanadium	**0.0262**		**0.00500**	**mg/L**	1	1/29/2007 10:02:00 PM
Zinc	ND		0.00500	mg/L	1	1/29/2007 10:02:00 PM
ANIONS BY ION CHROMATOGRAPHY			**E300**			Analyst: **LMD**
Chloride	**58.1**		**5.00**	**mg/L**	10	2/12/2007 1:46:00 AM
Fluoride	**1.08**		**0.100**	**mg/L**	1	2/12/2007 1:24:00 AM
Sulfate	**86.2**		**10.0**	**mg/L**	10	2/12/2007 1:46:00 AM
Nitrate/Nitrite (as N)	**0.526**		**0.500**	**mg/L**	5	2/11/2007 7:31:00 AM
Surr: Selenate (surr)	*99.2*		*80-120*	*%REC*	1	2/12/2007 1:24:00 AM
Surr: Selenate (surr)	*98.8*		*80-120*	*%REC*	10	2/12/2007 1:46:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *February 12, 2007*

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly
Lab ID: 0701397-01

Client Sample ID: MW#5
Collection Date: 1/26/2007 12:15:00 PM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Selenate (surr)	*104*		*80-120*	*%REC*	5	2/11/2007 7:31:00 AM
ALKALINITY			**E310.1**			Analyst: **RPM**
Alkalinity, Bicarbonate (As CaCO3)	**361**		**5.00**	**mg/L**	1	2/2/2007
Alkalinity, Carbonate (As CaCO3)	ND		5.00	mg/L	1	2/2/2007
Alkalinity, Hydroxide (As CaCO3)	ND		5.00	mg/L	1	2/2/2007
Alkalinity, Total (As CaCO3)	**361**		**5.00**	**mg/L**	1	2/2/2007
PH			**E150.1**			Analyst: **RPM**
pH	**7.13**		**0.100**	**pH units**	1	1/27/2007
TOTAL DISSOLVED SOLIDS			**E160.1**			Analyst: **MAM**
Total Dissolved Solids (Residue, Filterable)	**643**		**10.0**	**mg/L**	1	1/29/2007

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *February 12, 2007*

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly
Lab ID: 0701397-02

Client Sample ID: MW#6R
Collection Date: 1/26/2007 9:00:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	1/30/2007 8:19:00 PM
Toluene	ND		1.0	µg/L	1	1/30/2007 8:19:00 PM
Ethylbenzene	ND		1.0	µg/L	1	1/30/2007 8:19:00 PM
Xylenes, Total	ND		3.0	µg/L	1	1/30/2007 8:19:00 PM
Surr: 4-Bromofluorobenzene	*89.3*		*77-129*	*%REC*	1	1/30/2007 8:19:00 PM
Surr: Trifluorotoluene	*93.0*		*75-130*	*%REC*	1	1/30/2007 8:19:00 PM
MERCURY, TOTAL			**SW7470**		Prep Date: **2/6/2007**	Analyst: **JCJ**
Mercury	ND		0.000200	mg/L	1	2/6/2007 5:10:16 PM
ICP METALS, TOTAL			**SW6020**		Prep Date: **1/29/2007**	Analyst: **ALR**
Aluminum	ND		0.0100	mg/L	1	1/29/2007 10:08:00 PM
Arsenic	**0.0322**		**0.00500**	**mg/L**	1	1/29/2007 10:08:00 PM
Barium	**0.236**		**0.00500**	**mg/L**	1	1/29/2007 10:08:00 PM
Beryllium	ND		0.00200	mg/L	1	1/29/2007 10:08:00 PM
Boron	**0.272**		**0.0200**	**mg/L**	1	1/29/2007 10:08:00 PM
Cadmium	ND		0.00200	mg/L	1	1/29/2007 10:08:00 PM
Calcium	**211**		**25.0**	**mg/L**	50	1/30/2007 5:24:00 PM
Chromium	ND		0.00500	mg/L	1	1/29/2007 10:08:00 PM
Cobalt	ND		0.00500	mg/L	1	1/29/2007 10:08:00 PM
Copper	ND		0.00500	mg/L	1	1/29/2007 10:08:00 PM
Iron	**6.69**		**0.200**	**mg/L**	1	1/29/2007 10:08:00 PM
Lead	ND		0.00500	mg/L	1	1/29/2007 10:08:00 PM
Magnesium	**31.4**		**0.200**	**mg/L**	1	1/29/2007 10:08:00 PM
Manganese	**5.78**		**0.250**	**mg/L**	50	1/30/2007 5:24:00 PM
Molybdenum	ND		0.00500	mg/L	1	1/29/2007 10:08:00 PM
Nickel	**0.00564**		**0.00500**	**mg/L**	1	1/29/2007 10:08:00 PM
Potassium	**2.20**		**0.200**	**mg/L**	1	1/29/2007 10:08:00 PM
Selenium	ND		0.00500	mg/L	1	1/29/2007 10:08:00 PM
Silver	ND		0.00500	mg/L	1	1/29/2007 10:08:00 PM
Sodium	**121**		**0.200**	**mg/L**	1	1/29/2007 10:08:00 PM
Vanadium	ND		0.00500	mg/L	1	1/29/2007 10:08:00 PM
Zinc	ND		0.00500	mg/L	1	1/29/2007 10:08:00 PM
ANIONS BY ION CHROMATOGRAPHY			**E300**			Analyst: **LMD**
Chloride	**262**		**5.00**	**mg/L**	10	2/12/2007 2:30:00 AM
Fluoride	**0.123**		**0.100**	**mg/L**	1	2/12/2007 2:08:00 AM
Sulfate	**90.8**		**10.0**	**mg/L**	10	2/12/2007 2:30:00 AM
Nitrate/Nitrite (as N)	ND		0.500	mg/L	5	2/11/2007 7:53:00 AM
Surr: Selenate (surr)	*98.0*		*80-120*	*%REC*	1	2/12/2007 2:08:00 AM
Surr: Selenate (surr)	*99.4*		*80-120*	*%REC*	10	2/12/2007 2:30:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *February 12, 2007*

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly
Lab ID: 0701397-02

Client Sample ID: MW#6R
Collection Date: 1/26/2007 9:00:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Selenate (surr)	*105*		*80-120*	*%REC*	5	2/11/2007 7:53:00 AM
ALKALINITY			**E310.1**			Analyst: **RPM**
Alkalinity, Bicarbonate (As CaCO3)	**526**		**5.00**	**mg/L**	1	2/2/2007
Alkalinity, Carbonate (As CaCO3)	ND		5.00	mg/L	1	2/2/2007
Alkalinity, Hydroxide (As CaCO3)	ND		5.00	mg/L	1	2/2/2007
Alkalinity, Total (As CaCO3)	**526**		**5.00**	**mg/L**	1	2/2/2007
PH			**E150.1**			Analyst: **RPM**
pH	**6.71**		**0.100**	**pH units**	1	1/27/2007
TOTAL DISSOLVED SOLIDS			**E160.1**			Analyst: **MAM**
Total Dissolved Solids (Residue, Filterable)	**1,170**		**10.0**	**mg/L**	1	1/29/2007

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below *quantitation limits*
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *February 12, 2007*

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly
Lab ID: 0701397-03

Client Sample ID: East Well
Collection Date: 1/26/2007 10:30:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	1/30/2007 7:26:00 PM
Toluene	ND		1.0	µg/L	1	1/30/2007 7:26:00 PM
Ethylbenzene	ND		1.0	µg/L	1	1/30/2007 7:26:00 PM
Xylenes, Total	ND		3.0	µg/L	1	1/30/2007 7:26:00 PM
Surr: 4-Bromofluorobenzene	*89.6*		*77-129*	*%REC*	1	1/30/2007 7:26:00 PM
Surr: Trifluorotoluene	*88.2*		*75-130*	*%REC*	1	1/30/2007 7:26:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *February 12, 2007*

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly
Lab ID: 0701397-04

Client Sample ID: South Well
Collection Date: 1/26/2007 9:30:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	1/30/2007 7:53:00 PM
Toluene	**2.2**		**1.0**	**µg/L**	1	1/30/2007 7:53:00 PM
Ethylbenzene	**3.9**		**1.0**	**µg/L**	1	1/30/2007 7:53:00 PM
Xylenes, Total	**3.5**		**3.0**	**µg/L**	1	1/30/2007 7:53:00 PM
Surr: 4-Bromofluorobenzene	*93.3*		*77-129*	*%REC*	1	1/30/2007 7:53:00 PM
Surr: Trifluorotoluene	*92.4*		*75-130*	*%REC*	1	1/30/2007 7:53:00 PM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *February 12, 2007*

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly
Lab ID: 0701397-05

Client Sample ID: Trip Blank
Collection Date: 1/26/2007 9:30:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	1/29/2007 2:15:00 PM
Toluene	ND		1.0	µg/L	1	1/29/2007 2:15:00 PM
Ethylbenzene	ND		1.0	µg/L	1	1/29/2007 2:15:00 PM
Xylenes, Total	ND		3.0	µg/L	1	1/29/2007 2:15:00 PM
Surr: 4-Bromofluorobenzene	*94.2*		*77-129*	*%REC*	1	1/29/2007 2:15:00 PM
Surr: Trifluorotoluene	*90.9*		*75-130*	*%REC*	1	1/29/2007 2:15:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

Date: *Feb 12 2007*

QC BATCH REPORT

Batch ID: **R46244** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-012906** Units: **µg/L** Analysis Date: **01/29/07 9:23**
Client ID: Run ID: **BTEX1_070129A** SeqNo: **1040829** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*28.3*	1.0	*30*	0	*94.3*	*77-129*	0			
Surr: Trifluorotoluene	*28.54*	1.0	*30*	0	*95.1*	*75-130*	0			

LCS Sample ID: **BLCSW1-012907** Units: **µg/L** Analysis Date: **01/29/07 8:57**
Client ID: Run ID: **BTEX1_070129A** SeqNo: **1040828** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.4	1.0	20	0	97	77-126	0			
Toluene	20.93	1.0	20	0	105	80-124	0			
Ethylbenzene	20.95	1.0	20	0	105	76-125	0			
Xylenes, Total	59.27	3.0	60	0	98.8	79-124	0			
Surr: 4-Bromofluorobenzene	*29.96*	1.0	*30*	0	*99.9*	*77-129*	0			
Surr: Trifluorotoluene	*28.71*	1.0	*30*	0	*95.7*	*75-130*	0			

MS Sample ID: **0701392-02AMS** Units: **µg/L** Analysis Date: **01/29/07 10:16**
Client ID: Run ID: **BTEX1_070129A** SeqNo: **1040831** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.68	1.0	20	0	98.4	77-126	0			
Toluene	20.33	1.0	20	0	102	80-124	0			
Ethylbenzene	21.13	1.0	20	0	106	76-125	0			
Xylenes, Total	60.86	3.0	60	0	101	79-124	0			
Surr: 4-Bromofluorobenzene	*28.95*	1.0	*30*	0	*96.5*	*77-129*	0			
Surr: Trifluorotoluene	*26.84*	1.0	*30*	0	*89.5*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R46244** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0701392-02AMSD** Units: **µg/L** Analysis Date: **01/29/07 10:43**

Client ID: Run ID: **BTEX1_070129A** SeqNo: **1040832** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.17	1.0	20	0	101	77-126	19.68	2.45	20	
Toluene	20.92	1.0	20	0	105	80-124	20.33	2.86	20	
Ethylbenzene	21.44	1.0	20	0	107	76-125	21.13	1.47	20	
Xylenes, Total	60.71	3.0	60	0	101	79-124	60.86	0.25	20	
Surr: 4-Bromofluorobenzene	*29.18*	1.0	*30*	0	*97.3*	*77-129*	28.95	*0.779*	*20*	
Surr: Trifluorotoluene	*27.3*	1.0	*30*	0	*91*	*75-130*	26.84	*1.73*	*20*	

The following samples were analyzed in this batch: 0701397-05A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R46283** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-013006** Units: **µg/L** Analysis Date: **01/30/07 9:16**
Client ID: Run ID: **BTEX1_070130A** SeqNo: **1041437** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*27.06*	1.0	*30*	0	*90.2*	*77-129*	0			
Surr: Trifluorotoluene	*25.49*	1.0	*30*	0	*85*	*75-130*	0			

LCS Sample ID: **BLCSW1-013007** Units: **µg/L** Analysis Date: **01/30/07 8:49**
Client ID: Run ID: **BTEX1_070130A** SeqNo: **1041436** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.44	1.0	20	0	97.2	77-126	0			
Toluene	20.67	1.0	20	0	103	80-124	0			
Ethylbenzene	21.27	1.0	20	0	106	76-125	0			
Xylenes, Total	61.27	3.0	60	0	102	79-124	0			
Surr: 4-Bromofluorobenzene	*27.82*	1.0	*30*	0	*92.7*	*77-129*	0			
Surr: Trifluorotoluene	*26.15*	1.0	*30*	0	*87.2*	*75-130*	0			

MS Sample ID: **0701391-01AMS** Units: **µg/L** Analysis Date: **01/30/07 10:09**
Client ID: Run ID: **BTEX1_070130A** SeqNo: **1041439** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.69	1.0	20	0	98.5	77-126	0			
Toluene	20.8	1.0	20	0	104	80-124	0			
Ethylbenzene	20.79	1.0	20	0	104	76-125	0			
Xylenes, Total	59.05	3.0	60	0	98.4	79-124	0			
Surr: 4-Bromofluorobenzene	*30.83*	1.0	*30*	0	*103*	*77-129*	0			
Surr: Trifluorotoluene	*28.34*	1.0	*30*	0	*94.5*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R46283** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0701391-01AMSD** Units: **µg/L** Analysis Date: **01/30/07 10:35**

Client ID: Run ID: **BTEX1_070130A** SeqNo: **1041440** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.69	1.0	20	0	93.4	77-126	19.69	5.24	20	
Toluene	20.04	1.0	20	0	100	80-124	20.8	3.71	20	
Ethylbenzene	20.28	1.0	20	0	101	76-125	20.79	2.48	20	
Xylenes, Total	58.22	3.0	60	0	97	79-124	59.05	1.42	20	
Surr: 4-Bromofluorobenzene	*29.93*	1.0	*30*	0	*99.8*	*77-129*	30.83	*2.97*	*20*	
Surr: Trifluorotoluene	*26.87*	1.0	*30*	0	*89.6*	*75-130*	28.34	*5.33*	*20*	

The following samples were analyzed in this batch: 0701397-01A 0701397-02A 0701397-03A 0701397-04A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **21765** Instrument ID **ICPMS02** Method: **SW6020**

MBLK Sample ID: **MBLKW2-012907** Units: **mg/L** Analysis Date: **01/29/07 21:32**

Client ID: Run ID: **ICPMS02_070129A** SeqNo: **1040915** Prep Date: **1/29/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	ND	0.010								
Arsenic	ND	0.0050								
Barium	ND	0.0050								
Beryllium	ND	0.0020								
Boron	ND	0.020								
Cadmium	ND	0.0020								
Calcium	ND	0.50								
Chromium	ND	0.0050								
Cobalt	ND	0.0050								
Copper	ND	0.0050								
Iron	ND	0.20								
Lead	ND	0.0050								
Magnesium	ND	0.20								
Manganese	ND	0.0050								
Molybdenum	ND	0.0050								
Nickel	ND	0.0050								
Potassium	ND	0.20								
Selenium	ND	0.0050								
Silver	ND	0.0050								
Sodium	ND	0.20								
Vanadium	ND	0.0050								
Zinc	ND	0.0050								

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **21765** Instrument ID **ICPMS02** Method: **SW6020**

LCS Sample ID: **MLCSW2-012907** Units: **mg/L** Analysis Date: **01/29/07 21:38**

Client ID: Run ID: **ICPMS02_070129A** SeqNo: **1040916** Prep Date: **1/29/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.04489	0.010	0.05	0	89.8	80-120	0			
Arsenic	0.05036	0.0050	0.05	0	101	80-120	0			
Barium	0.04976	0.0050	0.05	0	99.5	80-120	0			
Beryllium	0.05048	0.0020	0.05	0	101	80-120	0			
Boron	0.4998	0.020	0.5	0	100	80-120	0			
Cadmium	0.05217	0.0020	0.05	0	104	80-120	0			
Calcium	4.861	0.50	5	0	97.2	80-120	0			
Chromium	0.04722	0.0050	0.05	0	94.4	80-120	0			
Cobalt	0.05144	0.0050	0.05	0	103	80-120	0			
Copper	0.04747	0.0050	0.05	0	94.9	80-120	0			
Iron	4.886	0.20	5	0	97.7	80-120	0			
Lead	0.05076	0.0050	0.05	0	102	80-120	0			
Magnesium	4.597	0.20	5	0	91.9	80-120	0			
Manganese	0.04832	0.0050	0.05	0	96.6	80-120	0			
Molybdenum	0.04888	0.0050	0.05	0	97.8	80-120	0			
Nickel	0.04849	0.0050	0.05	0	97	80-120	0			
Potassium	4.845	0.20	5	0	96.9	80-120	0			
Selenium	0.04993	0.0050	0.05	0	99.9	80-120	0			
Silver	0.04834	0.0050	0.05	0	96.7	80-120	0			
Sodium	4.636	0.20	5	0	92.7	80-120	0			
Vanadium	0.04837	0.0050	0.05	0	96.7	80-119	0			
Zinc	0.05156	0.0050	0.05	0	103	80-118	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **21765** Instrument ID **ICPMS02** Method: **SW6020**

MS Sample ID: **0701393-05EMS** Units: **mg/L** Analysis Date: **01/29/07 23:55**

Client ID: Run ID: **ICPMS02_070129A** SeqNo: **1040937** Prep Date: **1/29/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.2675	0.010	0.05	0.1909	153	80-120	0			S
Arsenic	0.04488	0.0050	0.05	0	89.8	80-120	0			
Barium	0.1021	0.0050	0.05	0.057	90.2	80-120	0			
Beryllium	0.0445	0.0020	0.05	0	89	80-120	0			
Boron	0.8004	0.020	0.5	0.3425	91.6	80-120	0			
Cadmium	0.04396	0.0020	0.05	0	87.9	80-120	0			
Calcium	36.57	0.50	5	30.97	112	80-120	0			O
Chromium	0.04124	0.0050	0.05	0	82.5	80-120	0			
Cobalt	0.04351	0.0050	0.05	0	87	80-120	0			
Copper	0.03918	0.0050	0.05	0.0003846	77.6	80-120	0			S
Iron	4.16	0.20	5	0.07836	81.6	80-120	0			
Lead	0.04447	0.0050	0.05	0	88.9	80-120	0			
Magnesium	19.32	0.20	5	14.84	89.6	80-120	0			
Manganese	0.04857	0.0050	0.05	0.006809	83.5	80-120	0			
Molybdenum	0.04568	0.0050	0.05	0.003347	84.7	80-120	0			
Nickel	0.04336	0.0050	0.05	0.001644	83.4	80-120	0			
Potassium	5.055	0.20	5	0.8222	84.7	80-120	0			
Selenium	0.04363	0.0050	0.05	0	87.3	80-120	0			
Silver	0.03977	0.0050	0.05	0	79.5	80-120	0			S
Sodium	107.1	0.20	5	97.88	184	80-120	0			SO
Vanadium	0.0462	0.0050	0.05	0.003138	86.1	80-119	0			
Zinc	0.04452	0.0050	0.05	0	89	80-118	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **21765** Instrument ID **ICPMS02** Method: **SW6020**

MSD Sample ID: **0701393-05EMSD** Units: **mg/L** Analysis Date: **01/30/07 17:53**

Client ID: Run ID: **ICPMS02_070130A** SeqNo: **1041477** Prep Date: **1/29/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.2687	0.010	0.05	0.1909	156	80-120	0.2675	0.448	15	S
Arsenic	0.04549	0.0050	0.05	0	91	80-120	0.04488	1.35	15	
Barium	0.1004	0.0050	0.05	0.057	86.8	80-120	0.1021	1.68	15	
Beryllium	0.04237	0.0020	0.05	0	84.7	80-120	0.0445	4.9	15	
Boron	0.7877	0.020	0.5	0.3425	89	80-120	0.8004	1.6	15	
Cadmium	0.04404	0.0020	0.05	0	88.1	80-120	0.04396	0.182	15	
Calcium	36.6	0.50	5	30.97	113	80-120	36.57	0.082	15	O
Chromium	0.04225	0.0050	0.05	0	84.5	80-120	0.04124	2.42	15	
Cobalt	0.04531	0.0050	0.05	0	90.6	80-120	0.04351	4.05	15	
Copper	0.041	0.0050	0.05	0.0003846	81.2	80-120	0.03918	4.54	15	
Iron	4.249	0.20	5	0.07836	83.4	80-120	4.16	2.12	15	
Lead	0.0437	0.0050	0.05	0	87.4	80-120	0.04447	1.75	15	
Magnesium	20.47	0.20	5	14.84	113	80-120	19.32	5.78	15	
Manganese	0.04901	0.0050	0.05	0.006809	84.4	80-120	0.04857	0.902	15	
Molybdenum	0.04789	0.0050	0.05	0.003347	89.1	80-120	0.04568	4.72	15	
Nickel	0.0448	0.0050	0.05	0.001644	86.3	80-120	0.04336	3.27	15	
Potassium	5.111	0.20	5	0.8222	85.8	80-120	5.055	1.1	15	
Selenium	0.04388	0.0050	0.05	0	87.8	80-120	0.04363	0.571	15	
Silver	0.04311	0.0050	0.05	0	86.2	80-120	0.03977	8.06	15	
Sodium	113.9	0.20	5	97.88	320	80-120	107.1	6.15	15	SO
Vanadium	0.04827	0.0050	0.05	0.003138	90.3	80-119	0.0462	4.38	15	
Zinc	0.0446	0.0050	0.05	0	89.2	80-118	0.04452	0.18	15	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **21765** Instrument ID **ICPMS02** Method: **SW6020**

DUP Sample ID: **0701393-05EDUP** Units: **mg/L** Analysis Date: **01/29/07 23:43**

Client ID: Run ID: **ICPMS02_070129A** SeqNo: **1040935** Prep Date: **1/29/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.1999	0.010	0	0	0	0-0	0.1909	4.61	25	
Arsenic	ND	0.0050	0	0	0	0-0	0.0009787	0	25	
Barium	0.055	0.0050	0	0	0	0-0	0.057	3.57	25	
Beryllium	ND	0.0020	0	0	0	0-0	-0.0003049	0	25	
Boron	0.3391	0.020	0	0	0	0-0	0.3425	0.998	25	
Cadmium	ND	0.0020	0	0	0	0-0	-0.0006362	0	25	
Calcium	30.5	0.50	0	0	0	0-0	30.97	1.53	25	
Chromium	ND	0.0050	0	0	0	0-0	-0.0004624	0	25	
Cobalt	ND	0.0050	0	0	0	0-0	-0.0005894	0	25	
Copper	0.0003502	0.0050	0	0	0	0-0	0.0003846	0	25	J
Iron	0.05816	0.20	0	0	0	0-0	0.07836	0	25	J
Lead	ND	0.0050	0	0	0	0-0	-0.0005256	0	25	
Magnesium	14.58	0.20	0	0	0	0-0	14.84	1.77	25	
Manganese	0.006554	0.0050	0	0	0	0-0	0.006809	3.82	25	
Molybdenum	0.002987	0.0050	0	0	0	0-0	0.003347	0	25	J
Nickel	0.001624	0.0050	0	0	0	0-0	0.001644	0	25	J
Potassium	0.7878	0.20	0	0	0	0-0	0.8222	4.27	25	
Selenium	ND	0.0050	0	0	0	0-0	-0.001623	0	25	
Silver	ND	0.0050	0	0	0	0-0	0.0000226	0	25	
Sodium	97.9	0.20	0	0	0	0-0	97.88	0.0204	25	
Vanadium	0.002929	0.0050	0	0	0	0-0	0.003138	0	25	J
Zinc	ND	0.0050	0	0	0	0-0	0.001384	0	25	

The following samples were analyzed in this batch: 0701397-01C 0701397-02C

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **21882** Instrument ID **Mercury** Method: **SW7470**

MBLK Sample ID: **GBLKW1-020607** Units: **mg/L** Analysis Date: **02/06/07 15:45**
Client ID: Run ID: **MERCURY_070206A** SeqNo: **1046503** Prep Date: **2/6/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020								

LCS Sample ID: **GLCSW1-020607** Units: **mg/L** Analysis Date: **02/06/07 15:47**
Client ID: Run ID: **MERCURY_070206A** SeqNo: **1046504** Prep Date: **2/6/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00493	0.00020	0.005	0	98.6	85-115		0		

LCSD Sample ID: **GLCSDW1-020607** Units: **mg/L** Analysis Date: **02/06/07 15:54**
Client ID: Run ID: **MERCURY_070206A** SeqNo: **1046505** Prep Date: **2/6/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00498	0.00020	0.005	0	99.6	85-115	0.00493	1.01	20	

MS Sample ID: **0702008-07IMS** Units: **mg/L** Analysis Date: **02/06/07 16:05**
Client ID: Run ID: **MERCURY_070206A** SeqNo: **1046508** Prep Date: **2/6/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00483	0.00020	0.005	0.000017	96.3	85-115		0		

MS Sample ID: **0702008-19IMS** Units: **mg/L** Analysis Date: **02/06/07 16:17**
Client ID: Run ID: **MERCURY_070206A** SeqNo: **1046514** Prep Date: **2/6/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00484	0.00020	0.005	0.000012	96.6	85-115		0		

MS Sample ID: **0702008-20IMS** Units: **mg/L** Analysis Date: **02/06/07 16:25**
Client ID: Run ID: **MERCURY_070206A** SeqNo: **1046518** Prep Date: **2/6/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.0049	0.00020	0.005	0	98	85-115		0		

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **21882** Instrument ID **Mercury** Method: **SW7470**

MSD Sample ID: **0702008-07IMSD** Units: **mg/L** Analysis Date: **02/06/07 16:07**
Client ID: Run ID: **MERCURY_070206A** SeqNo: **1046509** Prep Date: **2/6/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00481	0.00020	0.005	0.000017	95.9	85-115	0.00483	0.415	20	

MSD Sample ID: **0702008-19IMSD** Units: **mg/L** Analysis Date: **02/06/07 16:19**
Client ID: Run ID: **MERCURY_070206A** SeqNo: **1046515** Prep Date: **2/6/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.0048	0.00020	0.005	0.000012	95.8	85-115	0.00484	0.83	20	

MSD Sample ID: **0702008-20IMSD** Units: **mg/L** Analysis Date: **02/06/07 16:27**
Client ID: Run ID: **MERCURY_070206A** SeqNo: **1046519** Prep Date: **2/6/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00435	0.00020	0.005	0	87	85-115	0.0049	11.9	20	

DUP Sample ID: **0702008-07IDUP** Units: **mg/L** Analysis Date: **02/06/07 16:03**
Client ID: Run ID: **MERCURY_070206A** SeqNo: **1046507** Prep Date: **2/6/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020	0	0	0	0-0	0.000017	0	20	

DUP Sample ID: **0702008-19IDUP** Units: **mg/L** Analysis Date: **02/06/07 16:15**
Client ID: Run ID: **MERCURY_070206A** SeqNo: **1046513** Prep Date: **2/6/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020	0	0	0	0-0	0.000012	0	20	

DUP Sample ID: **0702008-20IDUP** Units: **mg/L** Analysis Date: **02/06/07 16:23**
Client ID: Run ID: **MERCURY_070206A** SeqNo: **1046517** Prep Date: **2/6/2007** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020	0	0	0	0-0	0	0	20	

The following samples were analyzed in this batch: 0701397-01C 0701397-02C

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R46195** Instrument ID **WetChem** Method: **E150.1**

LCS Sample ID: **WLCSW1-012707** Units: **pH units** Analysis Date: **01/27/07 0:00**

Client ID: Run ID: **WETCHEM_070127A** SeqNo: **1039936** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.02	0.10	6	0	100	90-110	0			

DUP Sample ID: **0701397-01DDUP** Units: **pH units** Analysis Date: **01/27/07 0:00**

Client ID: **MW#5** Run ID: **WETCHEM_070127A** SeqNo: **1039939** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.16	0.10	0	0	0	0-0	7.13	0.42	20	

The following samples were analyzed in this batch: 0701397-01D 0701397-02D

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R46261** Instrument ID **Balance1** Method: **E160.1**

MBLK Sample ID: **BLANK** Units: **mg/L** Analysis Date: **01/29/07 0:00**

Client ID: Run ID: **BALANCE1_070129B** SeqNo: **1041169** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	ND	10								

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **01/29/07 0:00**

Client ID: Run ID: **BALANCE1_070129B** SeqNo: **1041170** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	1043	10	1000	0	104	85-115	0			

DUP Sample ID: **0701397-01DUP** Units: **mg/L** Analysis Date: **01/29/07 0:00**

Client ID: **MW#5** Run ID: **BALANCE1_070129B** SeqNo: **1041167** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	619	10	0	0	0	0-0	643	3.8	20	

The following samples were analyzed in this batch: 0701397-01D 0701397-02D

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R46379** Instrument ID **WetChem** Method: **E310.1**

MBLK Sample ID: **WBLKW1-020207** Units: **mg/L** Analysis Date: **02/02/07 0:00**

Client ID: Run ID: **WETCHEM_070202A** SeqNo: **1043610** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	ND	5.0								
Alkalinity, Carbonate (As CaCO3)	ND	5.0								
Alkalinity, Hydroxide (As CaCO3)	ND	5.0								
Alkalinity, Total (As CaCO3)	ND	5.0								

LCS Sample ID: **WLCSW1-020207** Units: **mg/L** Analysis Date: **02/02/07 0:00**

Client ID: Run ID: **WETCHEM_070202A** SeqNo: **1043611** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	1032	5.0	1000	0	103	80-120	0			

DUP Sample ID: **0701417-01EDUP** Units: **mg/L** Analysis Date: **02/02/07 0:00**

Client ID: Run ID: **WETCHEM_070202A** SeqNo: **1043632** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	835.9	5.0	0	0	0	0-0	846.2	1.23	20	
Alkalinity, Carbonate (As CaCO3)	ND	5.0	0	0	0	0-0	0	0	20	
Alkalinity, Hydroxide (As CaCO3)	ND	5.0	0	0	0	0-0	0	0	20	
Alkalinity, Total (As CaCO3)	835.9	5.0	0	0	0	0-0	846.2	1.23	20	

The following samples were analyzed in this batch: 0701397-01D 0701397-02D

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R46665** Instrument ID **IC201** Method: **E300**

MBLK Sample ID: **WBLKW1-021007** Units: **mg/L** Analysis Date: **02/10/07 22:01**
Client ID: Run ID: **IC201_070210A** SeqNo: **1049449** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	ND	0.10								
Surr: Selenate (surr)	*5.174*	0.10	*5*	0	*103*	*85-115*		0		

LCS Sample ID: **WLCSW1-021007/** Units: **mg/L** Analysis Date: **02/10/07 22:23**
Client ID: Run ID: **IC201_070210A** SeqNo: **1049450** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	8.466	0.10	8	0	106	90-110		0		
Surr: Selenate (surr)	*5.18*	0.10	*5*	0	*104*	*85-115*		0		

MS Sample ID: **0701417-14EMS** Units: **mg/L** Analysis Date: **02/11/07 3:08**
Client ID: Run ID: **IC201_070210A** SeqNo: **1049463** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	20.23	0.50	20	0	101	80-120		0		
Surr: Selenate (surr)	*26.03*	0.50	*25*	0	*104*	*80-120*		0		

MSD Sample ID: **0701417-14EMSD** Units: **mg/L** Analysis Date: **02/11/07 3:30**
Client ID: Run ID: **IC201_070210A** SeqNo: **1049464** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	20.3	0.50	20	0	102	80-120	20.23	0.37	20	
Surr: Selenate (surr)	*25.82*	0.50	*25*	0	*103*	*80-120*	26.03	*0.799*	*20*	

DUP Sample ID: **0701417-14EDUP** Units: **mg/L** Analysis Date: **02/11/07 2:46**
Client ID: Run ID: **IC201_070210A** SeqNo: **1049462** Prep Date: DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	ND	0.50	0	0	0	0-0	0	0	20	
Surr: Selenate (surr)	*26.95*	0.50	*25*	0	*108*	*80-120*	26.49	*1.74*	*20*	

The following samples were analyzed in this batch: 0701397-01B 0701397-02B

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Refcrenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R46702** Instrument ID **IC201** Method: **E300**

MBLK Sample ID: **WBLKW1-021107** Units: **mg/L** Analysis Date: **02/11/07 20:39**

Client ID: Run ID: **IC201_070211C** SeqNo: **1050231** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	0.50								
Fluoride	ND	0.10								
Sulfate	ND	1.0								
Surr: Selenate (surr)	*5.208*	0.10	*5*	0	*104*	*85-115*	0			

LCS Sample ID: **WLCSW1-021107/** Units: **mg/L** Analysis Date: **02/11/07 21:01**

Client ID: Run ID: **IC201_070211C** SeqNo: **1050232** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	20.63	0.50	20	0	103	90-110	0			
Fluoride	4.283	0.10	4	0	107	90-110	0			
Sulfate	20.68	1.0	20	0	103	90-110	0			
Surr: Selenate (surr)	*5.166*	0.10	*5*	0	*103*	*85-115*	0			

MS Sample ID: **0702008-06EMS** Units: **mg/L** Analysis Date: **02/11/07 22:07**

Client ID: Run ID: **IC201_070211C** SeqNo: **1050235** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	17.52	0.50	10	7.304	102	80-120	0			
Fluoride	2.474	0.10	2	0.304	108	80-120	0			
Sulfate	51.42	1.0	10	41.87	95.4	80-120	0			EO
Surr: Selenate (surr)	*5.026*	0.10	*5*	0	*101*	*80-120*	0			

MSD Sample ID: **0702008-06EMSD** Units: **mg/L** Analysis Date: **02/11/07 22:29**

Client ID: Run ID: **IC201_070211C** SeqNo: **1050236** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	17.5	0.50	10	7.304	102	80-120	17.52	0.126	20	
Fluoride	2.479	0.10	2	0.304	109	80-120	2.474	0.202	20	
Sulfate	51.38	1.0	10	41.87	95	80-120	51.42	0.0778	20	EO
Surr: Selenate (surr)	*5.054*	0.10	*5*	0	*101*	*80-120*	5.026	*0.556*	*20*	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0701397
Project: Lea Refinery Quarterly

QC BATCH REPORT

Batch ID: **R46702** Instrument ID **IC201** Method: **E300**

DUP Sample ID: **0702008-06EDUP** Units: **mg/L** Analysis Date: **02/11/07 21:45**

Client ID: Run ID: **IC201_070211C** SeqNo: **1050234** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	7.301	0.50	0	0	0	0-0	7.304	0.0411	20	
Fluoride	0.305	0.10	0	0	0	0-0	0.304	0.328	20	
Sulfate	41.9	1.0	0	0	0	0-0	41.87	0.0668	20	
Surr: Selenate (surr)	*4.957*	0.10	*5*	0	*99.1*	*80-120*	4.968	*0.222*	*20*	

The following samples were analyzed in this batch: 0701397-01D 0701397-02D

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab Analytical
QUALITY • INTEGRITY • SERVICE
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Holland, Michigan 49424
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(Fax) 616.399.6185

Page 1 of 1

e-Lab Project Manager: [redacted] e-Lab Work Order #: 501397

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lea Refinery Quarterly	A	BTEX (8021)
Work Order		Project Number		B	Metals & Cations *
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	NO_2/NO_3
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	Anions, Alkalinity, pH, TDS *
Address	PO Box 159	Address	PO Box 159	E	
				F	
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	G	* See E-lab WO 0512428
Phone	(505) 748-3311	Phone	(505) 748-3311	H	for list of Metals, Cations &
Fax	(505) 746-5421	Fax	(505) 746-5421	I	anions
e-Mail Address		e-Mail Address	copy Results To dgboyer@secu-nm.com		

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW#5	1/26/07	1215	H_2O		6	✓	✓	✓	✓							
2	MW#6R	1/26/07	0900	H_2O		6	✓	✓	✓	✓							
3	East Well	1/26/07	1030	H_2O		3	✓										
4	South Well	1/26/07	0930	H_2O		3	✓										
5	TRIP BLANK 121406-72						✓										
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ Other ☐ 2 WK Days ☐ 24 Hour

Results Due Date:

Relinquished by: [signature] Date: 1/26/07 Time: 1400 Received by: [signature]

Relinquished by: [signature] Date: 1/26/07 Time: 1630 Received by (Laboratory):

Logged by (Laboratory): Date: Time: Checked by (Laboratory): [signature] 1/27/07 08:35

Notes: 10 Work Day TAT.

e-lab Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP CheckList
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other _____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-NaHSO 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.
2. Unless otherwise agreed in a formal contract, services provided by e-Lab Analytical, Inc. are expressly limited to the terms and conditions stated on the reverse.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name NAVAJO REFINING Date/Time Received: 1/27/2007 8:25:00 AM

Work Order Number 0701397 Received by: RNG

Checklist completed by [signature] 1/27/07 (Signature / Date) Reviewed by [initials] 1/29/07 (Initials / Date)

Matrix: W Carrier name FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.7c	002	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐

Adjusted? _____ Checked by _____

Login Notes:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

W.O. # 701397

ate 12-6-07 FedEx Tracking Number 856605198450

ander's ame Kyle Rayer Phone 505 390-7067

Company SEC-1

Address 703 E. Clinton

Dept./Floor/Suite/Room

ty Hobbs State NM ZIP 88240

our Internal Billing Reference NAD 27 to be Entered.

e-Lab A
10450 Stan
Houston, Te
Tel. 281.530
Fax. 218.53

QUALITY • INTEGRITY • SERVICE

nalytical, Inc.
cliff Rd., Suite 210
xas 77099
).5656
0.5887

CUSTODY SEAL

Date: 12-6-07 Time: 1630

Name: Kyle Rayer

Company: SEC-1

Seal Broken By:

Date: 12/7/07

e-Lab Analytical, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 (281) 530-5656 Fax (281) 530-5887

April 03, 2007

Darrell Moore
Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: Lovington Work Order : **0703488**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 4 samples on 3/28/2007 9:00:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 13.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Odette E. Elliston

Jeffrey L Croston
Project Manager

ACCREDITED IN ACCORDANCE WITH nelac

Certificate No: T104704231-06-TX

e-Lab Analytical, Inc.

Date: *April 03, 2007*

CLIENT: Navajo Refining Company
Project: Lovington
Work Order: **0703488**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0703488-01	MW# 6R	Water		3/27/2007 08:30	3/28/2007 09:00	☐
0703488-02	East Well	Water		3/27/2007 08:50	3/28/2007 09:00	☐
0703488-03	South Well	Water		3/27/2007 10:00	3/28/2007 09:00	☐
0703488-04	012407-67 Trip Blank	Water		3/27/2007 10:00	3/28/2007 09:00	☐

e-Lab Analytical, Inc.

Date: *April 03, 2007*

CLIENT: Navajo Refining Company
Work Order: 0703488
Project: Lovington
Lab ID: 0703488-01

Client Sample ID: MW# 6R
Collection Date: 3/27/2007 8:30:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	3/31/2007 1:05:00 AM
Toluene	ND		1.0	µg/L	1	3/31/2007 1:05:00 AM
Ethylbenzene	ND		1.0	µg/L	1	3/31/2007 1:05:00 AM
Methyl tert-butyl ether	ND		5.0	µg/L	1	3/31/2007 1:05:00 AM
Xylenes, Total	ND		3.0	µg/L	1	3/31/2007 1:05:00 AM
Surr: 4-Bromofluorobenzene	*93.9*		*77-129*	*%REC*	1	3/31/2007 1:05:00 AM
Surr: Trifluorotoluene	*92.0*		*75-130*	*%REC*	1	3/31/2007 1:05:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *April 03, 2007*

CLIENT: Navajo Refining Company
Work Order: 0703488
Project: Lovington
Lab ID: 0703488-02

Client Sample ID: East Well
Collection Date: 3/27/2007 8:50:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	3/30/2007 6:01:00 PM
Toluene	ND		1.0	µg/L	1	3/30/2007 6:01:00 PM
Ethylbenzene	ND		1.0	µg/L	1	3/30/2007 6:01:00 PM
Methyl tert-butyl ether	ND		5.0	µg/L	1	3/30/2007 6:01:00 PM
Xylenes, Total	ND		3.0	µg/L	1	3/30/2007 6:01:00 PM
Surr: 4-Bromofluorobenzene	*82.6*		*77-129*	*%REC*	1	3/30/2007 6:01:00 PM
Surr: Trifluorotoluene	*87.6*		*75-130*	*%REC*	1	3/30/2007 6:01:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *April 03, 2007*

CLIENT: Navajo Refining Company
Work Order: 0703488
Project: Lovington
Lab ID: 0703488-03

Client Sample ID: South Well
Collection Date: 3/27/2007 10:00:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	**1.2**		**1.0**	**µg/L**	1	3/30/2007 6:27:00 PM
Toluene	**4.8**		**1.0**	**µg/L**	1	3/30/2007 6:27:00 PM
Ethylbenzene	**5.1**		**1.0**	**µg/L**	1	3/30/2007 6:27:00 PM
Methyl tert-butyl ether	ND		5.0	µg/L	1	3/30/2007 6:27:00 PM
Xylenes, Total	**7.4**		**3.0**	**µg/L**	1	3/30/2007 6:27:00 PM
Surr: 4-Bromofluorobenzene	*86.8*		*77-129*	*%REC*	1	3/30/2007 6:27:00 PM
Surr: Trifluorotoluene	*87.2*		*75-130*	*%REC*	1	3/30/2007 6:27:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *April 03, 2007*

CLIENT: Navajo Refining Company
Work Order: 0703488
Project: Lovington
Lab ID: 0703488-04

Client Sample ID: 012407-67 Trip Blank
Collection Date: 3/27/2007 10:00:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	3/30/2007 8:16:00 AM
Toluene	ND		1.0	µg/L	1	3/30/2007 8:16:00 AM
Ethylbenzene	ND		1.0	µg/L	1	3/30/2007 8:16:00 AM
Methyl tert-butyl ether	ND		5.0	µg/L	1	3/30/2007 8:16:00 AM
Xylenes, Total	ND		3.0	µg/L	1	3/30/2007 8:16:00 AM
Surr: 4-Bromofluorobenzene	*83.7*		*77-129*	*%REC*	1	3/30/2007 8:16:00 AM
Surr: Trifluorotoluene	*88.6*		*75-130*	*%REC*	1	3/30/2007 8:16:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0703488
Project: Lovington

Date: *Apr 03 2007*

QC BATCH REPORT

Batch ID: **R48256** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-033007** Units: **µg/L** Analysis Date: **03/30/07 7:49**
Client ID: Run ID: **BTEX1_070326H** SeqNo: **1081923** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*25.54*	1.0	*30*	0	*85.1*	*77-129*	0			
Surr: Trifluorotoluene	*27.1*	1.0	*30*	0	*90.3*	*75-130*	0			

LCS Sample ID: **BLCSW1-033007** Units: **µg/L** Analysis Date: **03/30/07 7:23**
Client ID: Run ID: **BTEX1_070326H** SeqNo: **1081922** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.56	1.0	20	0	103	77-126	0			
Toluene	20.66	1.0	20	0	103	80-124	0			
Ethylbenzene	20.43	1.0	20	0	102	76-125	0			
Methyl tert-butyl ether	103	5.0	100	0	103	75-128	0			
Xylenes, Total	60.54	3.0	60	0	101	79-124	0			
Surr: 4-Bromofluorobenzene	*26.05*	1.0	*30*	0	*86.8*	*77-129*	0			
Surr: Trifluorotoluene	*26.06*	1.0	*30*	0	*86.9*	*75-130*	0			

MS Sample ID: **0703487-01AMS** Units: **µg/L** Analysis Date: **03/30/07 9:09**
Client ID: Run ID: **BTEX1_070326H** SeqNo: **1081926** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	26.5	1.0	20	4.685	109	77-126	0			
Toluene	21.26	1.0	20	0	106	80-124	0			
Ethylbenzene	20.77	1.0	20	0	104	76-125	0			
Methyl tert-butyl ether	105.9	5.0	100	0	106	75-128	0			
Xylenes, Total	62.8	3.0	60	0	105	79-124	0			
Surr: 4-Bromofluorobenzene	*26.08*	1.0	*30*	0	*86.9*	*77-129*	0			
Surr: Trifluorotoluene	*28.57*	1.0	*30*	0	*95.2*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0703488
Project: Lovington

QC BATCH REPORT

Batch ID: **R48256** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0703487-01AMSD** Units: **µg/L** Analysis Date: **03/30/07 9:35**

Client ID: Run ID: **BTEX1_070326H** SeqNo: **1081927** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	27.49	1.0	20	4.685	114	77-126	26.5	3.67	20	
Toluene	22.17	1.0	20	0	111	80-124	21.26	4.2	20	
Ethylbenzene	21.52	1.0	20	0	108	76-125	20.77	3.56	20	
Methyl tert-butyl ether	110.5	5.0	100	0	111	75-128	105.9	4.23	20	
Xylenes, Total	63.9	3.0	60	0	107	79-124	62.8	1.74	20	
Surr: 4-Bromofluorobenzene	*25.72*	1.0	*30*	0	*85.7*	*77-129*	26.08	*1.42*	*20*	
Surr: Trifluorotoluene	*26.29*	1.0	*30*	0	*87.6*	*75-130*	28.57	*8.3*	*20*	

The following samples were analyzed in this batch: 0703488-02A 0703488-03A 0703488-04A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0703488
Project: Lovington

QC BATCH REPORT

Batch ID: **R48257** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-033107** Units: **µg/L** Analysis Date: **03/30/07 21:33**

Client ID: Run ID: **BTEX1_070326I** SeqNo: **1081950** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*25.29*	1.0	*30*	0	*84.3*	*77-129*	0			
Surr: Trifluorotoluene	*26.95*	1.0	*30*	0	*89.8*	*75-130*	0			

LCS Sample ID: **BLCSW1-033107** Units: **µg/L** Analysis Date: **03/30/07 21:07**

Client ID: Run ID: **BTEX1_070326I** SeqNo: **1081949** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	*20.87*	1.0	*20*	0	*104*	77-126	0			
Toluene	21.28	1.0	20	0	106	80-124	0			
Ethylbenzene	20.69	1.0	20	0	103	76-125	0			
Methyl tert-butyl ether	103.4	5.0	100	0	103	75-128	0			
Xylenes, Total	59.96	3.0	60	0	99.9	79-124	0			
Surr: 4-Bromofluorobenzene	*27.08*	1.0	*30*	0	*90.3*	*77-129*	0			
Surr: Trifluorotoluene	*28.02*	1.0	*30*	0	*93.4*	*75-130*	0			

MS Sample ID: **0703490-01AMS** Units: **µg/L** Analysis Date: **03/30/07 22:53**

Client ID: Run ID: **BTEX1_070326I** SeqNo: **1081952** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20	1.0	20	0	100	77-126	0			
Toluene	19.84	1.0	20	0	99.2	80-124	0			
Ethylbenzene	19.53	1.0	20	0	97.7	76-125	0			
Methyl tert-butyl ether	98.6	5.0	100	0	98.6	75-128	0			
Xylenes, Total	56.71	3.0	60	0	94.5	79-124	0			
Surr: 4-Bromofluorobenzene	*26.56*	1.0	*30*	0	*88.5*	*77-129*	0			
Surr: Trifluorotoluene	*26.74*	1.0	*30*	0	*89.1*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0703488
Project: Lovington

QC BATCH REPORT

Batch ID: **R48257** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0703490-01AMSD** Units: **µg/L** Analysis Date: **03/30/07 23:19**

Client ID: Run ID: **BTEX1_070326I** SeqNo: **1081953** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.84	1.0	20	0	94.2	77-126	20	5.98	20	
Toluene	18.64	1.0	20	0	93.2	80-124	19.84	6.23	20	
Ethylbenzene	18.54	1.0	20	0	92.7	76-125	19.53	5.19	20	
Methyl tert-butyl ether	97.81	5.0	100	0	97.8	75-128	98.6	0.805	20	
Xylenes, Total	55.23	3.0	60	0	92.1	79-124	56.71	2.64	20	
Surr: 4-Bromofluorobenzene	*26.12*	1.0	*30*	0	*87.1*	*77-129*	26.56	*1.69*	*20*	
Surr: Trifluorotoluene	*24.93*	1.0	*30*	0	*83.1*	*75-130*	26.74	*6.99*	*20*	

The following samples were analyzed in this batch: 0703488-01A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab Analytical, Inc.
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page ____ of ____

e-Lab Analytical, Inc.
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager: | e-Lab Work Order #: 17084-88

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington	A	BTEX (8021)
Work Order		Project Number	nav-00-019	B	
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	
Address	PO Box 159	Address	PO Box 159	E	
				F	
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	G	
Phone	(505) 748-3311	Phone	(505) 748-3311	H	
Fax	(505) 746-5421	Fax	(505) 746-5421	I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW # 6R	3/27/07	0830	H_2O	HCl	2	✓										
2	EAST Well	3/27/07	0850	H_2O	HCl	2	✓										
3	South Well	3/27/07	1000	H_2O	HCl	2	✓										
4	Temperature Blank				HCl												
5	012407-67 Trip Blank				HCl		✓										
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Isaac Kinca

Shipment Method

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by: | Date: 3/27/07 | Time: 1330 | Received by:

Notes: 10 Work Day TAT.

Relinquished by: | Date: | Time: | Received by (Laboratory): | 3/28/07 09:06

e-lab Cooler ID | Cooler Temp. °

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP CheckList
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other _____

Logged by (Laboratory): | Date: | Time: | Checked by (Laboratory):

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.
2. Unless otherwise agreed in a formal contract, services provided by e-Lab Analytical, Inc. are expressly limited to the terms and conditions stated on the reverse.

Copyright 2004 by e-Lab Analytical, Inc.

e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name: **NAVAJO REFINING** Date/Time Received: **3/28/2007 9:00:00 AM**

Work Order Number **0703488** Received by: **RNG**

Checklist completed by _____ 3/28/07 Reviewed by _____ 3/29/07
Signature Date Initials Date

Matrix: W Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.6c	002	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? _____ Checked by _____

Login Notes:

Client contacted: _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

W.O.# 07034188

ate 3/27/07 FedEx Tracking Number 856605198509

ender's ame SESI Dave Boyer Phone 505 397-0510

Company Safety and Environmental Sol.

Address 703 E Clinton

Dept./Floor/Suite/Room

ity Hobbs, NM State NM ZIP 88240

our Internal Billing Reference

e-Lab Analytical, Inc.
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. 281.530.5656
Fax. 218.530.5887

QUALITY • INTEGRITY • SERVICE

Date:
Name:
Comp any: SESI

CUSTODY SEAL

3/27/07 Time: 1530
Esaac Rincon

Seal Broken By:
Date: 3.28.07

e-Lab Analytical, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 (281) 530-5656 Fax (281) 530-5887

July 25, 2007

Darrell Moore
Navajo Refining Company
PO Box 159
Artesia, NM 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: NAV-00-019/Lovington Refinery Work Order : **0707363**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 4 samples on 7/16/2007 08:35 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 16.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Rebecca L. Hunt

Jeffrey L Croston
Project Manager

ACCREDITED IN ACCORDANCE WITH nelac
Certificate No: T104704231-06-TX

e-Lab Analytical, Inc.

Date: *July 25, 2007*

CLIENT: Navajo Refining Company
Project: NAV-00-019/Lovington Refinery
Work Order: **0707363**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0707363-01	MW #6R	Water		7/13/2007 10:50	7/16/2007 08:35	☐
0707363-02	South Well	Water		7/13/2007 11:20	7/16/2007 08:35	☐
0707363-03	East Well	Water		7/13/2007 11:50	7/16/2007 08:35	☐
0707363-04	Trip Blank (033107-34)	Water		7/13/2007 11:50	7/16/2007 08:35	☐

e-Lab Analytical, Inc.

Date: *July 25, 2007*

CLIENT: Navajo Refining Company
Project: NAV-00-019/Lovington Refinery
Work Order: 0707363

Case Narrative

Samples were received outside of the recommended temperature.

e-Lab Analytical, Inc.

Date: *July 25, 2007*

CLIENT: Navajo Refining Company
Work Order: 0707363
Project: NAV-00-019/Lovington Refinery
Lab ID: 0707363-01

Client Sample ID: MW #6R
Collection Date: 7/13/2007 10:50:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	7/23/2007 6:51:00 PM
Toluene	ND		1.0	µg/L	1	7/23/2007 6:51:00 PM
Ethylbenzene	ND		1.0	µg/L	1	7/23/2007 6:51:00 PM
Xylenes, Total	ND		3.0	µg/L	1	7/23/2007 6:51:00 PM
Surr: 4-Bromofluorobenzene	*92.0*		*77-129*	*%REC*	1	7/23/2007 6:51:00 PM
Surr: Trifluorotoluene	*109*		*75-130*	*%REC*	1	7/23/2007 6:51:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 25, 2007*

CLIENT: Navajo Refining Company
Work Order: 0707363
Project: NAV-00-019/Lovington Refinery
Lab ID: 0707363-02

Client Sample ID: South Well
Collection Date: 7/13/2007 11:20:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	7/20/2007 9:34:00 PM
Toluene	**1.6**		**1.0**	**µg/L**	1	7/20/2007 9:34:00 PM
Ethylbenzene	ND		1.0	µg/L	1	7/20/2007 9:34:00 PM
Xylenes, Total	ND		3.0	µg/L	1	7/20/2007 9:34:00 PM
Surr: 4-Bromofluorobenzene	*96.4*		*77-129*	*%REC*	1	7/20/2007 9:34:00 PM
Surr: Trifluorotoluene	*92.6*		*75-130*	*%REC*	1	7/20/2007 9:34:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 25, 2007*

CLIENT: Navajo Refining Company
Work Order: 0707363
Project: NAV-00-019/Lovington Refinery
Lab ID: 0707363-03

Client Sample ID: East Well
Collection Date: 7/13/2007 11:50:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	7/20/2007 10:01:00 PM
Toluene	ND		1.0	µg/L	1	7/20/2007 10:01:00 PM
Ethylbenzene	ND		1.0	µg/L	1	7/20/2007 10:01:00 PM
Xylenes, Total	ND		3.0	µg/L	1	7/20/2007 10:01:00 PM
Surr: 4-Bromofluorobenzene	*97.6*		*77-129*	*%REC*	1	7/20/2007 10:01:00 PM
Surr: Trifluorotoluene	*91.4*		*75-130*	*%REC*	1	7/20/2007 10:01:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *July 25, 2007*

CLIENT: Navajo Refining Company
Work Order: 0707363
Project: NAV-00-019/Lovington Refinery
Lab ID: 0707363-04

Client Sample ID: Trip Blank (033107-34)
Collection Date: 7/13/2007 11:50:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	7/21/2007 1:33:00 AM
Toluene	ND		1.0	µg/L	1	7/21/2007 1:33:00 AM
Ethylbenzene	ND		1.0	µg/L	1	7/21/2007 1:33:00 AM
Xylenes, Total	ND		3.0	µg/L	1	7/21/2007 1:33:00 AM
Surr: 4-Bromofluorobenzene	*93.7*		*77-129*	*%REC*	1	7/21/2007 1:33:00 AM
Surr: Trifluorotoluene	*89.4*		*75-130*	*%REC*	1	7/21/2007 1:33:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0707363
Project: NAV-00-019/Lovington Refinery

Date: *Jul 25 2007*

QC BATCH REPORT

Batch ID: **R52376** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-072007** Units: **µg/L** Analysis Date: **07/20/07 11:50**
Client ID: Run ID: **BTEX1_070719C** SeqNo: **1170924** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*28.84*	1.0	*30*	0	*96.1*	*77-129*	0			
Surr: Trifluorotoluene	*27.6*	1.0	*30*	0	*92*	*75-130*	0			

LCS Sample ID: **BLCSW1-072007** Units: **µg/L** Analysis Date: **07/20/07 11:24**
Client ID: Run ID: **BTEX1_070719C** SeqNo: **1170921** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.33	1.0	20	0	96.7	77-126	0			
Toluene	20.29	1.0	20	0	101	80-124	0			
Ethylbenzene	20.49	1.0	20	0	102	76-125	0			
Xylenes, Total	60.32	3.0	60	0	101	79-124	0			
Surr: 4-Bromofluorobenzene	*29.48*	1.0	*30*	0	*98.3*	*77-129*	0			
Surr: Trifluorotoluene	*28.09*	1.0	*30*	0	*93.6*	*75-130*	0			

MS Sample ID: **0707365-16AMS** Units: **µg/L** Analysis Date: **07/20/07 13:36**
Client ID: Run ID: **BTEX1_070719C** SeqNo: **1170934** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.76	1.0	20	0	109	77-126	0			
Toluene	22.66	1.0	20	0	113	80-124	0			
Ethylbenzene	22.76	1.0	20	0	114	76-125	0			
Xylenes, Total	67.03	3.0	60	0	112	79-124	0			
Surr: 4-Bromofluorobenzene	*30.07*	1.0	*30*	0	*100*	*77-129*	0			
Surr: Trifluorotoluene	*28.24*	1.0	*30*	0	*94.1*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0707363
Project: NAV-00-019/Lovington Refinery

QC BATCH REPORT

Batch ID: **R52376** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0707365-16AMSD** Units: **µg/L** Analysis Date: **07/20/07 14:03**

Client ID: Run ID: **BTEX1_070719C** SeqNo: **1170937** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.07	1.0	20	0	105	77-126	21.76	3.24	20	
Toluene	22.49	1.0	20	0	112	80-124	22.66	0.757	20	
Ethylbenzene	22.9	1.0	20	0	115	76-125	22.76	0.642	20	
Xylenes, Total	67.45	3.0	60	0	112	79-124	67.03	0.615	20	
Surr: 4-Bromofluorobenzene	*30.24*	1.0	*30*	0	*101*	*77-129*	30.07	*0.583*	*20*	
Surr: Trifluorotoluene	*28.19*	1.0	*30*	0	*94*	*75-130*	28.24	*0.15*	*20*	

The following samples were analyzed in this batch: 0707363-02A 0707363-03A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0707363
Project: NAV-00-019/Lovington Refinery

QC BATCH REPORT

Batch ID: **R52378** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-072107** Units: **µg/L** Analysis Date: **07/21/07 1:06**

Client ID: Run ID: **BTEX1_070719D** SeqNo: **1170973** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*27.97*	1.0	*30*	0	*93.2*	*77-129*		0		
Surr: Trifluorotoluene	*27.23*	1.0	*30*	0	*90.8*	*75-130*		0		

LCS Sample ID: **BLCSW1-072107** Units: **µg/L** Analysis Date: **07/21/07 0:13**

Client ID: Run ID: **BTEX1_070719D** SeqNo: **1170972** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21	1.0	20	0	105	77-126		0		
Toluene	21.94	1.0	20	0	110	80-124		0		
Ethylbenzene	22.24	1.0	20	0	111	76-125		0		
Xylenes, Total	65.97	3.0	60	0	110	79-124		0		
Surr: 4-Bromofluorobenzene	*29.02*	1.0	*30*	0	*96.7*	*77-129*		0		
Surr: Trifluorotoluene	*27.76*	1.0	*30*	0	*92.5*	*75-130*		0		

MS Sample ID: **0707412-01AMS** Units: **µg/L** Analysis Date: **07/21/07 3:19**

Client ID: Run ID: **BTEX1_070719D** SeqNo: **1170978** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.49	1.0	20	0	107	77-126		0		
Toluene	22.26	1.0	20	0	111	80-124		0		
Ethylbenzene	21.66	1.0	20	0	108	76-125		0		
Xylenes, Total	65.07	3.0	60	0	108	79-124		0		
Surr: 4-Bromofluorobenzene	*29.33*	1.0	*30*	0	*97.8*	*77-129*		0		
Surr: Trifluorotoluene	*27.53*	1.0	*30*	0	*91.8*	*75-130*		0		

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0707363
Project: NAV-00-019/Lovington Refinery

QC BATCH REPORT

Batch ID: **R52378** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0707412-01AMSD** Units: **µg/L** Analysis Date: **07/21/07 3:45**

Client ID: Run ID: **BTEX1_070719D** SeqNo: **1170979** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	21.22	1.0	20	0	106	77-126	21.49	1.23	20	
Toluene	22.02	1.0	20	0	110	80-124	22.26	1.07	20	
Ethylbenzene	21.39	1.0	20	0	107	76-125	21.66	1.23	20	
Xylenes, Total	64.05	3.0	60	0	107	79-124	65.07	1.58	20	
Surr: 4-Bromofluorobenzene	*29.8*	1.0	*30*	0	*99.3*	*77-129*	29.33	*1.61*	*20*	
Surr: Trifluorotoluene	*28.07*	1.0	*30*	0	*93.6*	*75-130*	27.53	*1.92*	*20*	

The following samples were analyzed in this batch: 0707363-04A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0707363
Project: NAV-00-019/Lovington Refinery

QC BATCH REPORT

Batch ID: **R52453** Instrument ID **BTEX3** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-072307** Units: **µg/L** Analysis Date: **07/23/07 14:19**

Client ID: Run ID: **BTEX3_070723A** SeqNo: **1174121** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*27.18*	1.0	*30*	0	*90.6*	*77-129*	0			
Surr: Trifluorotoluene	*31.12*	1.0	*30*	0	*104*	*75-130*	0			

LCS Sample ID: **BLCSW1-072307** Units: **µg/L** Analysis Date: **07/23/07 13:25**

Client ID: Run ID: **BTEX3_070723A** SeqNo: **1174120** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	18.42	1.0	20	0	92.1	77-126	0			
Toluene	18.41	1.0	20	0	92.1	80-124	0			
Ethylbenzene	18.7	1.0	20	0	93.5	76-125	0			
Xylenes, Total	56.52	3.0	60	0	94.2	79-124	0			
Surr: 4-Bromofluorobenzene	*27.36*	1.0	*30*	0	*91.2*	*77-129*	0			
Surr: Trifluorotoluene	*31.44*	1.0	*30*	0	*105*	*75-130*	0			

MS Sample ID: **0707439-01AMS** Units: **µg/L** Analysis Date: **07/23/07 15:41**

Client ID: Run ID: **BTEX3_070723A** SeqNo: **1174124** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.88	1.0	20	0	99.4	77-126	0			
Toluene	19.81	1.0	20	0	99.1	80-124	0			
Ethylbenzene	20.13	1.0	20	0	101	76-125	0			
Xylenes, Total	60.61	3.0	60	0	101	79-124	0			
Surr: 4-Bromofluorobenzene	*28.18*	1.0	*30*	0	*93.9*	*77-129*	0			
Surr: Trifluorotoluene	*32.15*	1.0	*30*	0	*107*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0707363
Project: NAV-00-019/Lovington Refinery

QC BATCH REPORT

Batch ID: **R52453** Instrument ID **BTEX3** Method: **SW8021B**

MSD Sample ID: **0707439-01AMSD** Units: **µg/L** Analysis Date: **07/23/07 16:08**

Client ID: Run ID: **BTEX3_070723A** SeqNo: **1174125** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.74	1.0	20	0	98.7	77-126	19.88	0.707	20	
Toluene	19.63	1.0	20	0	98.2	80-124	19.81	0.906	20	
Ethylbenzene	19.94	1.0	20	0	99.7	76-125	20.13	0.937	20	
Xylenes, Total	59.83	3.0	60	0	99.7	79-124	60.61	1.29	20	
Surr: 4-Bromofluorobenzene	*28.39*	1.0	*30*	0	*94.6*	*77-129*	28.18	*0.728*	*20*	
Surr: Trifluorotoluene	*32.54*	1.0	*30*	0	*108*	*75-130*	32.15	*1.2*	*20*	

The following samples were analyzed in this batch: 0707363-01A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab Analytical
QUALITY • INTEGRITY • SERVICE

[redacted] #21
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

[redacted]
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

Page 1 of 1

e-Lab Project Manager: [redacted] e-Lab Work Order #: 670736

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Lovington Refinery	A	BTEX, 8021
Work Order		Project Number	NAV-00-019	B	
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	
Address	PO Box 159	Address	PO Box 159	E	
				F	
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	G	
Phone	(505) 748-3311	Phone	(505) 748-3311	H	
Fax	(505) 746-5421	Fax	(505) 746-5421	I	
e-Mail Address		e-Mail Address	Copy Results to dgboyer@sosi-NM.com	J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW #6R	7/13/07	1050	H_2O	1,8	3	X										
2	South Well	7/13/07	1120	H_2O	1,8	3	X										
3	East Well	7/15/07	1150	H_2O	1,8	3	X										
4	TRip Blank 033107-34			H_2O	1,8	3	X										
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Brian Cuellar

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

Results Due Date:

	Date:	Time:		
Relinquished by:	7/13/07	1405	Received by:	
Relinquished by:	7/14/07	1630	Received by (Laboratory):	7/17/07 08:35
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Notes: 10 Work Day TAT.

e-Lab Cooler ID	Cooler Temp.

QC Package: (Check One Box Below)
☑ Level II Std QC
☐ Level III Std QC/Raw Data
☐ Level IV SW846/CLP
☐ Other _____
☐ TRRP CheckList
☐ TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.
2. Unless otherwise agreed in a formal contract, services provided by e-Lab Analytical, Inc. are expressly limited to the terms and conditions stated on the reverse.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name: NAVAJO REFINING Date/Time Received: 7/16/2007 8:35:00 AM

Work Order Number 0707363 Received by: RDH

Checklist completed by [signature] Signature 7/17/07 Date Reviewed by [initials] Initials 7/18/07 Date

Matrix: Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):	11.1c	002	
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? _____ Checked by _____

Login Notes:

Client contacted: _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

orm This portion can be removed for Recipient's records.

Date 7/19/07 FedEx Tracking Number 856820177208

Sender's Name David Boyer Phone 397-0512

Company SESI

Address 702 E. Clinton

Dept/Floor/Suite/Room

City Hobbs State NM ZIP 88240

Your Internal Billing Reference NMOCD Low Pressure

e-Lab Analytical, Inc.
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. 281.530.5656
Fax. 218.530.5887

QUALITY • INTEGRITY • SERVICE

Date: 7/1
Name:
Company:

CUSTODY SEAL

Time: 12:30

Seal Broken By: B

Date: 7-19-07

e-Lab Analytical, Inc.

10450 Stancliff Rd, Suite 210 Houston, Texas 77099-4338 (281) 530-5656 Fax (281) 530-5887

September 19, 2007

Darrell Moore
Navajo Refining Company
PO Box 159
Artesia, NM 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: NAV-00-019/Lea Refinery Work Order : **0709203**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 3 samples on 9/13/2007 09:05 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 12.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Rebecca L. Hunt

Jeffrey L Croston
Project Manager

Certificate No: T104704231-06-TX

e-Lab Analytical, Inc.

Date: *September 19, 2007*

CLIENT: Navajo Refining Company
Project: NAV-00-019/Lea Refinery
Work Order: **0709203**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0709203-01	MW #6R	Water		9/12/2007 08:30	9/13/2007 09:05	☐
0709203-02	South Well	Water		9/12/2007 10:00	9/13/2007 09:05	☐
0709203-03	East Well	Water		9/12/2007 10:15	9/13/2007 09:05	☐

e-Lab Analytical, Inc.

Date: *September 19, 2007*

CLIENT: Navajo Refining Company
Work Order: 0709203
Project: NAV-00-019/Lea Refinery
Lab ID: 0709203-01

Client Sample ID: MW #6R
Collection Date: 9/12/2007 8:30:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	9/17/2007 2:20:00 PM
Toluene	**2.2**		**1.0**	**µg/L**	1	9/17/2007 2:20:00 PM
Ethylbenzene	**1.8**		**1.0**	**µg/L**	1	9/17/2007 2:20:00 PM
Xylenes, Total	ND		3.0	µg/L	1	9/17/2007 2:20:00 PM
Surr: 4-Bromofluorobenzene	*119*		*77-129*	*%REC*	1	9/17/2007 2:20:00 PM
Surr: Trifluorotoluene	*108*		*75-130*	*%REC*	1	9/17/2007 2:20:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *September 19, 2007*

CLIENT: Navajo Refining Company
Work Order: 0709203
Project: NAV-00-019/Lea Refinery
Lab ID: 0709203-02

Client Sample ID: South Well
Collection Date: 9/12/2007 10:00:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	9/13/2007 7:54:00 PM
Toluene	ND		1.0	µg/L	1	9/13/2007 7:54:00 PM
Ethylbenzene	ND		1.0	µg/L	1	9/13/2007 7:54:00 PM
Xylenes, Total	ND		3.0	µg/L	1	9/13/2007 7:54:00 PM
Surr: 4-Bromofluorobenzene	*92.9*		*77-129*	*%REC*	1	9/13/2007 7:54:00 PM
Surr: Trifluorotoluene	*88.6*		*75-130*	*%REC*	1	9/13/2007 7:54:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *September 19, 2007*

CLIENT: Navajo Refining Company
Work Order: 0709203
Project: NAV-00-019/Lea Refinery
Lab ID: 0709203-03

Client Sample ID: East Well
Collection Date: 9/12/2007 10:15:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		1.0	µg/L	1	9/13/2007 8:20:00 PM
Toluene	ND		1.0	µg/L	1	9/13/2007 8:20:00 PM
Ethylbenzene	ND		1.0	µg/L	1	9/13/2007 8:20:00 PM
Xylenes, Total	ND		3.0	µg/L	1	9/13/2007 8:20:00 PM
Surr: 4-Bromofluorobenzene	*92.1*		*77-129*	*%REC*	1	9/13/2007 8:20:00 PM
Surr: Trifluorotoluene	*89.0*		*75-130*	*%REC*	1	9/13/2007 8:20:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0709203
Project: NAV-00-019/Lea Refinery

Date: *Sep 19 2007*

QC BATCH REPORT

Batch ID: **R54396** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-091307** Units: **µg/L** Analysis Date: **09/13/07 15:29**
Client ID: Run ID: **BTEX1_070913A** SeqNo: **1209905** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether	ND	5.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*27.46*	1.0	*30*	0	*91.5*	*77-129*	0			
Surr: Trifluorotoluene	*26.29*	1.0	*30*	0	*87.6*	*75-130*	0			

LCS Sample ID: **BLCSW1-091307** Units: **µg/L** Analysis Date: **09/13/07 14:36**
Client ID: Run ID: **BTEX1_070913A** SeqNo: **1209904** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.73	1.0	20	0	98.6	77-126	0			
Toluene	20.24	1.0	20	0	101	80-124	0			
Ethylbenzene	20.33	1.0	20	0	102	76-125	0			
Methyl tert-butyl ether	94.6	5.0	100	0	94.6	75-128	0			
Xylenes, Total	59.53	3.0	60	0	99.2	79-124	0			
Surr: 4-Bromofluorobenzene	*29.83*	1.0	*30*	0	*99.4*	*77-129*	0			
Surr: Trifluorotoluene	*27.22*	1.0	*30*	0	*90.7*	*75-130*	0			

MS Sample ID: **0709182-01AMS** Units: **µg/L** Analysis Date: **09/13/07 17:15**
Client ID: Run ID: **BTEX1_070913A** SeqNo: **1209909** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.98	1.0	20	0	99.9	77-126	0			
Toluene	20.56	1.0	20	0	103	80-124	0			
Ethylbenzene	20.58	1.0	20	0	103	76-125	0			
Methyl tert-butyl ether	97.53	5.0	100	0	97.5	75-128	0			
Xylenes, Total	60.03	3.0	60	0	100	79-124	0			
Surr: 4-Bromofluorobenzene	*28.42*	1.0	*30*	0	*94.7*	*77-129*	0			
Surr: Trifluorotoluene	*26.59*	1.0	*30*	0	*88.6*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0709203
Project: NAV-00-019/Lea Refinery

QC BATCH REPORT

Batch ID: **R54396** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0709182-01AMSD** Units: **µg/L** Analysis Date: **09/13/07 17:42**

Client ID: Run ID: **BTEX1_070913A** SeqNo: **1209910** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.77	1.0	20	0	98.9	77-126	19.98	1.02	20	
Toluene	20.52	1.0	20	0	103	80-124	20.56	0.196	20	
Ethylbenzene	20.65	1.0	20	0	103	76-125	20.58	0.343	20	
Methyl tert-butyl ether	96.87	5.0	100	0	96.9	75-128	97.53	0.685	20	
Xylenes, Total	60.23	3.0	60	0	100	79-124	60.03	0.335	20	
Surr: 4-Bromofluorobenzene	*29.12*	1.0	*30*	0	*97.1*	*77-129*	28.42	*2.44*	*20*	
Surr: Trifluorotoluene	*26.81*	1.0	*30*	0	*89.4*	*75-130*	26.59	*0.83*	*20*	

The following samples were analyzed in this batch: 0709203-02A 0709203-03A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0709203
Project: NAV-00-019/Lea Refinery

QC BATCH REPORT

Batch ID: **R54521** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-091707** Units: **µg/L** Analysis Date: **09/17/07 9:55**
Client ID: Run ID: **BTEX1_070917A** SeqNo: **1212565** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*27.73*	1.0	*30*	0	*92.4*	*77-129*	0			
Surr: Trifluorotoluene	*26.73*	1.0	*30*	0	*89.1*	*75-130*	0			

LCS Sample ID: **BLCSW1-091707** Units: **µg/L** Analysis Date: **09/17/07 9:02**
Client ID: Run ID: **BTEX1_070917A** SeqNo: **1212564** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.4	1.0	20	0	102	77-126	0			
Toluene	21.36	1.0	20	0	107	80-124	0			
Ethylbenzene	21.48	1.0	20	0	107	76-125	0			
Xylenes, Total	63.15	3.0	60	0	105	79-124	0			
Surr: 4-Bromofluorobenzene	*30.1*	1.0	*30*	0	*100*	*77-129*	0			
Surr: Trifluorotoluene	*27.74*	1.0	*30*	0	*92.5*	*75-130*	0			

MS Sample ID: **0709263-02AMS** Units: **µg/L** Analysis Date: **09/17/07 12:33**
Client ID: Run ID: **BTEX1_070917A** SeqNo: **1212571** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.2	1.0	20	0	101	77-126	0			
Toluene	21.32	1.0	20	0	107	80-124	0			
Ethylbenzene	21.38	1.0	20	0	107	76-125	0			
Xylenes, Total	62.84	3.0	60	0	105	79-124	0			
Surr: 4-Bromofluorobenzene	*28.74*	1.0	*30*	0	*95.8*	*77-129*	0			
Surr: Trifluorotoluene	*27.36*	1.0	*30*	0	*91.2*	*75-130*	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0709203
Project: NAV-00-019/Lea Refinery

QC BATCH REPORT

Batch ID: **R54521** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0709263-02AMSD** Units: **µg/L** Analysis Date: **09/17/07 13:00**

Client ID: Run ID: **BTEX1_070917A** SeqNo: **1212572** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.31	1.0	20	0	102	77-126	20.2	0.547	20	
Toluene	21.44	1.0	20	0	107	80-124	21.32	0.522	20	
Ethylbenzene	21.66	1.0	20	0	108	76-125	21.38	1.32	20	
Xylenes, Total	62.98	3.0	60	0	105	79-124	62.84	0.222	20	
Surr: 4-Bromofluorobenzene	*28.51*	1.0	*30*	0	*95*	*77-129*	28.74	*0.813*	*20*	
Surr: Trifluorotoluene	*27.04*	1.0	*30*	0	*90.1*	*75-130*	27.36	*1.19*	*20*	

The following samples were analyzed in this batch: 0709203-01A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab Analytical
QUALITY • INTEGRITY • SERVICE

10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

e-Lab Project Manager:

e-Lab Work Order #: 610423

Customer Information

Purchase Order	
Work Order	
Company Name	Navajo Refining Company
Send Report To	Dg Boyer DARRELL MOORE
Address	PO Box 159
City/State/Zip	Artesia, NM 88211
Phone	(505) 748-3311
Fax	(505) 746-5421
e-Mail Address	DgBoyer@SESI-NM.com

Project Information

Project Name	Lea Refinery
Project Number	nav-00-019
Bill To Company	Navajo Refining Company
Invoice Attn	DARRELL MOORE
Address	PO Box 159
City/State/Zip	Artesia, NM 88211
Phone	(505) 748-3311
Fax	(505) 746-5421
e-Mail Address	Copy Report to DgBoyer@sesi-nm.com

Parameter/Method Request for Analysis

A: BTEX (8021)

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW #6R	9/12/07	0830	H2O	HCl	3	✓										
2	South Well	9/12/07	1000	H2O	HCl	3	✓										
3	East Well	9/12/07	1015	H2O	HCl	3	✓										
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Isaac Kincaid

Shipment Method: FedEx

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ Other ☐ 2 WK Days ☐ 24 Hour

Results Due Date:

Relinquished by: Date: 9/12/07 Time: 1215

Relinquished by: Date: Time:

Received by:

Received by (Laboratory): 9/13/07 0905

Notes: 10 Work Day TAT.

Logged by (Laboratory): Date: Time:

Checked by (Laboratory):

e-lab Cooler ID:

Cooler Temp.:

QC Package: (Check One Box Below)
☑ Level II Std QC ☐ TRRP CheckList
☐ Level III Std QC/Raw Data ☐ TRRP Level IV
☐ Level IV SW846/CLP
☐ Other

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.
2. Unless otherwise agreed in a formal contract, services provided by e-Lab Analytical, Inc. are expressly limited to the terms and conditions stated on the reverse.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name: NAVAJO REFINING | Date/Time Received: 9/13/2007 9:05:00 AM

Work Order Number 0709203 | Received by: RNG

Checklist completed by [signature] Signature 9/13/07 Date | Reviewed by [initials] 9/14/07 Date

Matrix: W | Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.5c	002	
Cooler(s)/Kit(s):	1989		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? _____ Checked by _____

Login Notes:

Client contacted: _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

U407805

FedEx Express USA Airbill

FedEx Tracking Number 8326 8446 3859

Form 0200 — Recipient's Copy

From
Date 9/12/00
Your Name Steve Baker Phone 505 397-0510
Company OCD
Address 2301 E. Lincoln #101
City Hobbs State NM ZIP 88240
Your Internal Billing Reference NMOCD Lea Refinery

To
Recipient's Name Temple Receiving Phone 281 578-5556
Company e-Lab Analytical Inc
Address 10450 Stancliff Rd #210
"HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.
Dept/Floor/Suite/Room
City Houston State TX ZIP 77099

8326 8446 3859

4a Express Package Service

Packages up to 150 lbs. Delivery commitment may be later in some areas.

- [X] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day — Second business day
- [ ] FedEx Express Saver — Third business day
- [ ] NEW FedEx Extra Hours* — Later drop-off with next business afternoon delivery for select locations

FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service

Packages over 150 lbs. Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging

* Declared value limit $500

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [X] Other Pkg. — Includes FedEx box, FedEx Tube, and customer pkg.

6 Special Handling

Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Available only for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [X] HOLD Weekday at FedEx Location — Not available with FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available only for FedEx Priority Overnight, and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods (incl. Dry Ice) cannot be shipped in FedEx packaging or with FedEx Extra Hours service.

- [ ] Cargo Aircraft Only

7 Payment

Bill to: Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed
- [X] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check
- [ ] Obtain Recip. Acct. No.

24

Total Packages	Total Weight	Total Declared Value†	Total Charges
		$ .00	

Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See back for details.

8 Release Signature

Sign to authorize delivery without obtaining signature.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

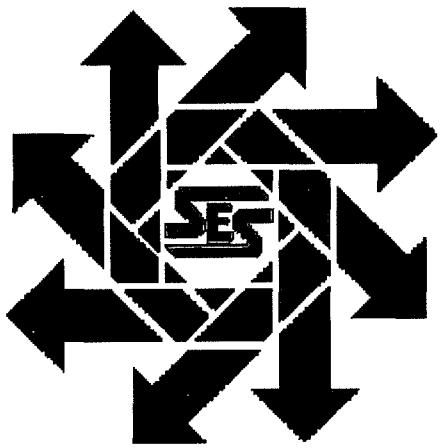
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446

2008 Groundwater Monitoring Sampling Results
Navajo Refining Company – Lea Refinery
Lovington, New Mexico

RECEIVED
2008 APR 9 PM 1 06



Prepared for:

Navajo Refining Company
P.O. Box 159
Artesia, New Mexico 88211

By:

Safety & Environmental Solutions, Inc.
703 E. Clinton, Suite 102
Hobbs, New Mexico 88240
(505) 397-0510

January 11, 2008

Darrell Moore
Navajo Refining Company
PO Box 159
Artesia, NM 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: Navajo Lea Refinery

Work Order : **0801003**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 6 samples on 1/2/2008 10:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 33.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Glenda H. Ramos

Jeffrey L Croston
Project Manager

Certificate No: T104704231-06-TX

e-Lab Analytical, Inc.

Date: January 11, 2008

Client: Navajo Refining Company
Project: Navajo Lea Refinery
Work Order: **0801003**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0801003-01	MW-6R	Water		12/31/2007 10:50	1/2/2008 10:00	☐
0801003-02	South Well	Water		12/31/2007 11:20	1/2/2008 10:00	☐
0801003-03	North Well	Water		12/31/2007 11:40	1/2/2008 10:00	☐
0801003-04	East Well	Water		12/31/2007 12:50	1/2/2008 10:00	☐
0801003-05	MW-5	Water		12/31/2007 13:50	1/2/2008 10:00	☐
0801003-06	Trip Blank 121707-28	Water		12/31/2007 13:50	1/2/2008 10:00	☐

e-Lab Analytical, Inc.

Date: January 11, 2008

Client: Navajo Refining Company
Project: Navajo Lea Refinery
Work Order: 0801003

Case Narrative

Batch's 27539 and 27540 Metals MS/MSD was an unrelated sample.

Batch R58531 Anions MSD was an unrelated sample.

pH samples were received outside of the recommened holding time. Analysis was performed immediately upon reciept.

e-Lab Analytical, Inc.

Date: *January 11, 2008*

Client: Navajo Refining Company
Project: Navajo Lea Refinery
Work Order: 0801003
Sample ID: MW-6R
Lab ID: 0801003-01
Collection Date: 12/31/2007 10:50:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	**0.060**		**0.0010**	**mg/L**	1	1/4/2008 6:31:00 PM
Toluene	**0.021**		**0.0010**	**mg/L**	1	1/4/2008 6:31:00 PM
Ethylbenzene	ND		0.0010	mg/L	1	1/4/2008 6:31:00 PM
Xylenes, Total	**0.0068**		**0.0030**	**mg/L**	1	1/4/2008 6:31:00 PM
Surr: 4-Bromofluorobenzene	*120*		*77-129*	*%REC*	1	1/4/2008 6:31:00 PM
Surr: Trifluorotoluene	*105*		*75-130*	*%REC*	1	1/4/2008 6:31:00 PM
MERCURY, DISSOLVED			**SW7470**		Prep Date: **1/8/2008**	Analyst: **JCJ**
Mercury	ND		0.000200	mg/L	1	1/8/2008 4:02:36 PM
MERCURY, TOTAL - SW 7470A			**SW7470**		Prep Date: **1/8/2008**	Analyst: **JCJ**
Mercury	ND		0.000200	mg/L	1	1/8/2008 4:42:57 PM
ICP METALS, DISSOLVED - SW6020A			**SW6020**		Prep Date: **1/3/2008**	Analyst: **ALR**
Aluminum	ND		0.0100	mg/L	1	1/4/2008 1:12:00 AM
Arsenic	**0.0381**		**0.00500**	**mg/L**	1	1/4/2008 1:12:00 AM
Barium	**0.192**		**0.00500**	**mg/L**	1	1/4/2008 1:12:00 AM
Beryllium	ND		0.00200	mg/L	1	1/4/2008 1:12:00 AM
Boron	**0.284**		**0.0200**	**mg/L**	1	1/4/2008 1:12:00 AM
Cadmium	ND		0.00200	mg/L	1	1/4/2008 1:12:00 AM
Calcium	**136**		**0.500**	**mg/L**	1	1/4/2008 1:12:00 AM
Chromium	ND		0.00500	mg/L	1	1/4/2008 1:12:00 AM
Cobalt	ND		0.00500	mg/L	1	1/4/2008 1:12:00 AM
Copper	**0.00875**		**0.00500**	**mg/L**	1	1/4/2008 1:12:00 AM
Iron	ND		0.200	mg/L	1	1/4/2008 1:12:00 AM
Lead	ND		0.00500	mg/L	1	1/4/2008 1:12:00 AM
Magnesium	**23.4**		**0.200**	**mg/L**	1	1/4/2008 1:12:00 AM
Manganese	**2.93**		**0.250**	**mg/L**	50	1/4/2008 4:18:00 PM
Molybdenum	ND		0.00500	mg/L	1	1/4/2008 1:12:00 AM
Nickel	**0.00521**		**0.00500**	**mg/L**	1	1/4/2008 1:12:00 AM
Potassium	**2.72**		**0.200**	**mg/L**	1	1/4/2008 1:12:00 AM
Selenium	ND		0.00500	mg/L	1	1/4/2008 1:12:00 AM
Silver	ND		0.00500	mg/L	1	1/4/2008 1:12:00 AM
Sodium	**156**		**0.200**	**mg/L**	1	1/4/2008 1:12:00 AM
Vanadium	ND		0.00500	mg/L	1	1/4/2008 1:12:00 AM
Zinc	**0.0487**		**0.00500**	**mg/L**	1	1/4/2008 1:12:00 AM
ICP METALS, TOTAL - SW6020A			**SW6020**		Prep Date: **1/3/2008**	Analyst: **ALR**
Calcium	**146**		**0.500**	**mg/L**	1	1/4/2008 6:40:00 AM
Magnesium	**24.0**		**0.200**	**mg/L**	1	1/4/2008 6:40:00 AM
Potassium	**3.00**		**0.200**	**mg/L**	1	1/4/2008 6:40:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *January 11, 2008*

Client: Navajo Refining Company
Project: Navajo Lea Refinery
Work Order: 0801003
Sample ID: MW-6R
Lab ID: 0801003-01
Collection Date: 12/31/2007 10:50:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Sodium	**160**		**0.200**	**mg/L**	1	1/4/2008 6:40:00 AM
ANIONS BY ION CHROMATOGRAPHY			**E300**			Analyst: **IGF**
Chloride	**229**		**5.00**	**mg/L**	10	1/3/2008 5:17:00 PM
Fluoride	ND		0.100	mg/L	1	1/3/2008 2:36:00 PM
Sulfate	**83.8**		**5.00**	**mg/L**	10	1/3/2008 5:17:00 PM
Nitrate/Nitrite (as N)	ND		0.100	mg/L	1	1/3/2008 10:08:00 PM
Surr: Selenate (surr)	*91.5*		*85-115*	*%REC*	1	1/3/2008 10:08:00 PM
Surr: Selenate (surr)	*87.5*		*85-115*	*%REC*	10	1/3/2008 5:17:00 PM
Surr: Selenate (surr)	*98.6*		*85-115*	*%REC*	1	1/3/2008 2:36:00 PM
ALKALINITY			**E310.1**			Analyst: **MAM**
Alkalinity, Bicarbonate (As CaCO3)	**481**		**5.00**	**mg/L**	1	1/4/2008
Alkalinity, Carbonate (As CaCO3)	ND		5.00	mg/L	1	1/4/2008
Alkalinity, Hydroxide (As CaCO3)	ND		5.00	mg/L	1	1/4/2008
Alkalinity, Total (As CaCO3)	**481**		**5.00**	**mg/L**	1	1/4/2008
PH			**E150.1**			Analyst: **MAM**
pH	**6.93**	H	**0.100**	**pH units**	1	1/2/2008 6:15:00 PM
TOTAL DISSOLVED SOLIDS			**E160.1**			Analyst: **KKP**
Total Dissolved Solids (Residue, Filterable)	**1,080**		**10.0**	**mg/L**	1	1/3/2008 3:00:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *January 11, 2008*

Client: Navajo Refining Company
Project: Navajo Lea Refinery
Sample ID: South Well
Collection Date: 12/31/2007 11:20:00 AM

Work Order: 0801003
Lab ID: 0801003-02
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		0.0010	mg/L	1	1/4/2008 2:59:00 PM
Toluene	ND		0.0010	mg/L	1	1/4/2008 2:59:00 PM
Ethylbenzene	ND		0.0010	mg/L	1	1/4/2008 2:59:00 PM
Xylenes, Total	ND		0.0030	mg/L	1	1/4/2008 2:59:00 PM
Surr: 4-Bromofluorobenzene	*108*		*77-129*	*%REC*	1	1/4/2008 2:59:00 PM
Surr: Trifluorotoluene	*101*		*75-130*	*%REC*	1	1/4/2008 2:59:00 PM
ICP METALS, TOTAL - SW6020A			**SW6020**		Prep Date: **1/3/2008**	Analyst: **ALR**
Calcium	**185**		**25.0**	**mg/L**	50	1/4/2008 4:43:00 PM
Magnesium	**26.5**		**0.200**	**mg/L**	1	1/4/2008 6:46:00 AM
Potassium	**3.24**		**0.200**	**mg/L**	1	1/4/2008 6:46:00 AM
Sodium	**126**		**0.200**	**mg/L**	1	1/4/2008 6:46:00 AM
ANIONS BY ION CHROMATOGRAPHY			**E300**			Analyst: **IGF**
Chloride	**469**		**5.00**	**mg/L**	10	1/3/2008 5:41:00 PM
Fluoride	**0.536**		**0.100**	**mg/L**	1	1/3/2008 2:59:00 PM
Sulfate	**95.5**		**5.00**	**mg/L**	10	1/3/2008 5:41:00 PM
Nitrate/Nitrite (as N)	**3.17**		**0.100**	**mg/L**	1	1/3/2008 10:31:00 PM
Surr: Selenate (surr)	*98.2*		*85-115*	*%REC*	1	1/3/2008 10:31:00 PM
Surr: Selenate (surr)	*92.8*		*85-115*	*%REC*	10	1/3/2008 5:41:00 PM
Surr: Selenate (surr)	*98.4*		*85-115*	*%REC*	1	1/3/2008 2:59:00 PM
ALKALINITY			**E310.1**			Analyst: **MAM**
Alkalinity, Bicarbonate (As CaCO3)	**208**		**5.00**	**mg/L**	1	1/4/2008
Alkalinity, Carbonate (As CaCO3)	ND		5.00	mg/L	1	1/4/2008
Alkalinity, Hydroxide (As CaCO3)	ND		5.00	mg/L	1	1/4/2008
Alkalinity, Total (As CaCO3)	**208**		**5.00**	**mg/L**	1	1/4/2008
PH			**E150.1**			Analyst: **MAM**
pH	**6.89**	H	**0.100**	**pH units**	1	1/2/2008 6:15:00 PM
TOTAL DISSOLVED SOLIDS			**E160.1**			Analyst: **KKP**
Total Dissolved Solids (Residue, Filterable)	**1,580**		**10.0**	**mg/L**	1	1/3/2008 3:00:00 PM

Qualifiers:

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- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *January 11, 2008*

Client: Navajo Refining Company
Project: Navajo Lea Refinery
Sample ID: North Well
Collection Date: 12/31/2007 11:40:00 AM

Work Order: 0801003
Lab ID: 0801003-03
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		0.0010	mg/L	1	1/4/2008 2:06:00 PM
Toluene	ND		0.0010	mg/L	1	1/4/2008 2:06:00 PM
Ethylbenzene	ND		0.0010	mg/L	1	1/4/2008 2:06:00 PM
Xylenes, Total	ND		0.0030	mg/L	1	1/4/2008 2:06:00 PM
Surr: 4-Bromofluorobenzene	*105*		*77-129*	*%REC*	1	1/4/2008 2:06:00 PM
Surr: Trifluorotoluene	*97.7*		*75-130*	*%REC*	1	1/4/2008 2:06:00 PM
ICP METALS, TOTAL - SW6020A			**SW6020**		Prep Date: **1/3/2008**	Analyst: **ALR**
Calcium	**106**		**0.500**	**mg/L**	1	1/4/2008 6:52:00 AM
Magnesium	**13.0**		**0.200**	**mg/L**	1	1/4/2008 6:52:00 AM
Potassium	**2.29**		**0.200**	**mg/L**	1	1/4/2008 6:52:00 AM
Sodium	**62.8**		**0.200**	**mg/L**	1	1/4/2008 6:52:00 AM
ANIONS BY ION CHROMATOGRAPHY			**E300**			Analyst: **IGF**
Chloride	**151**		**5.00**	**mg/L**	10	1/3/2008 6:04:00 PM
Fluoride	**0.724**		**0.100**	**mg/L**	1	1/3/2008 4:08:00 PM
Sulfate	**66.7**		**5.00**	**mg/L**	10	1/3/2008 6:04:00 PM
Nitrate/Nitrite (as N)	**2.61**		**0.100**	**mg/L**	1	1/4/2008 12:03:00 AM
Surr: Selenate (surr)	*97.6*		*85-115*	*%REC*	1	1/4/2008 12:03:00 AM
Surr: Selenate (surr)	*88.7*		*85-115*	*%REC*	10	1/3/2008 6:04:00 PM
Surr: Selenate (surr)	*97.4*		*85-115*	*%REC*	1	1/3/2008 4:08:00 PM
ALKALINITY			**E310.1**			Analyst: **MAM**
Alkalinity, Bicarbonate (As CaCO3)	**203**		**5.00**	**mg/L**	1	1/4/2008
Alkalinity, Carbonate (As CaCO3)	ND		5.00	mg/L	1	1/4/2008
Alkalinity, Hydroxide (As CaCO3)	ND		5.00	mg/L	1	1/4/2008
Alkalinity, Total (As CaCO3)	**203**		**5.00**	**mg/L**	1	1/4/2008
PH			**E150.1**			Analyst: **MAM**
pH	**7.31**	H	**0.100**	**pH units**	1	1/2/2008 6:15:00 PM
TOTAL DISSOLVED SOLIDS			**E160.1**			Analyst: **KKP**
Total Dissolved Solids (Residue, Filterable)	**695**		**10.0**	**mg/L**	1	1/3/2008 3:00:00 PM

Qualifiers:

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J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *January 11, 2008*

Client: Navajo Refining Company
Project: Navajo Lea Refinery
Work Order: 0801003
Sample ID: East Well
Lab ID: 0801003-04
Collection Date: 12/31/2007 12:50:00 PM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		0.0010	mg/L	1	1/4/2008 2:33:00 PM
Toluene	ND		0.0010	mg/L	1	1/4/2008 2:33:00 PM
Ethylbenzene	ND		0.0010	mg/L	1	1/4/2008 2:33:00 PM
Xylenes, Total	ND		0.0030	mg/L	1	1/4/2008 2:33:00 PM
Surr: 4-Bromofluorobenzene	*103*		*77-129*	*%REC*	1	1/4/2008 2:33:00 PM
Surr: Trifluorotoluene	*101*		*75-130*	*%REC*	1	1/4/2008 2:33:00 PM
ICP METALS, TOTAL - SW6020A			**SW6020**		Prep Date: **1/3/2008**	Analyst: **ALR**
Calcium	**88.1**		**0.500**	**mg/L**	1	1/4/2008 6:58:00 AM
Magnesium	**13.3**		**0.200**	**mg/L**	1	1/4/2008 6:58:00 AM
Potassium	**1.82**		**0.200**	**mg/L**	1	1/4/2008 6:58:00 AM
Sodium	**43.5**		**0.200**	**mg/L**	1	1/4/2008 6:58:00 AM
ANIONS BY ION CHROMATOGRAPHY			**E300**			Analyst: **IGF**
Chloride	**113**		**5.00**	**mg/L**	10	1/4/2008 9:55:00 PM
Fluoride	**0.814**		**0.100**	**mg/L**	1	1/3/2008 4:31:00 PM
Sulfate	**71.5**		**5.00**	**mg/L**	10	1/4/2008 9:55:00 PM
Nitrate/Nitrite (as N)	**2.46**		**0.100**	**mg/L**	1	1/4/2008 12:26:00 AM
Surr: Selenate (surr)	*96.7*		*85-115*	*%REC*	1	1/4/2008 12:26:00 AM
Surr: Selenate (surr)	*96.8*		*85-115*	*%REC*	10	1/4/2008 9:55:00 PM
Surr: Selenate (surr)	*96.2*		*85-115*	*%REC*	1	1/3/2008 4:31:00 PM
ALKALINITY			**E310.1**			Analyst: **MAM**
Alkalinity, Bicarbonate (As CaCO3)	**175**		**5.00**	**mg/L**	1	1/4/2008
Alkalinity, Carbonate (As CaCO3)	ND		5.00	mg/L	1	1/4/2008
Alkalinity, Hydroxide (As CaCO3)	ND		5.00	mg/L	1	1/4/2008
Alkalinity, Total (As CaCO3)	**175**		**5.00**	**mg/L**	1	1/4/2008
PH			**E150.1**			Analyst: **MAM**
pH	**7.36**	H	**0.100**	**pH units**	1	1/2/2008 6:15:00 PM
TOTAL DISSOLVED SOLIDS			**E160.1**			Analyst: **KKP**
Total Dissolved Solids (Residue, Filterable)	**575**		**10.0**	**mg/L**	1	1/3/2008 3:00:00 PM

Qualifiers:

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S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *January 11, 2008*

Client: Navajo Refining Company
Project: Navajo Lea Refinery
Sample ID: MW-5
Collection Date: 12/31/2007 1:50:00 PM

Work Order: 0801003
Lab ID: 0801003-05
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		0.0010	mg/L	1	1/4/2008 10:29:00 AM
Toluene	ND		0.0010	mg/L	1	1/4/2008 10:29:00 AM
Ethylbenzene	ND		0.0010	mg/L	1	1/4/2008 10:29:00 AM
Xylenes, Total	ND		0.0030	mg/L	1	1/4/2008 10:29:00 AM
Surr: 4-Bromofluorobenzene	*107*		*77-129*	*%REC*	1	1/4/2008 10:29:00 AM
Surr: Trifluorotoluene	*102*		*75-130*	*%REC*	1	1/4/2008 10:29:00 AM
MERCURY, DISSOLVED			**SW7470**		Prep Date: **1/8/2008**	Analyst: **JCJ**
Mercury	ND		0.000200	mg/L	1	1/8/2008 3:50:29 PM
MERCURY, TOTAL - SW 7470A			**SW7470**		Prep Date: **1/8/2008**	Analyst: **JCJ**
Mercury	ND		0.000200	mg/L	1	1/8/2008 4:44:58 PM
ICP METALS, DISSOLVED - SW6020A			**SW6020**		Prep Date: **1/3/2008**	Analyst: **ALR**
Aluminum	ND		0.0100	mg/L	1	1/4/2008 1:18:00 AM
Arsenic	ND		0.00500	mg/L	1	1/4/2008 1:18:00 AM
Barium	**0.0845**		**0.00500**	**mg/L**	1	1/4/2008 1:18:00 AM
Beryllium	ND		0.00200	mg/L	1	1/4/2008 1:18:00 AM
Boron	**0.107**		**0.0200**	**mg/L**	1	1/4/2008 1:18:00 AM
Cadmium	ND		0.00200	mg/L	1	1/4/2008 1:18:00 AM
Calcium	**66.6**		**0.500**	**mg/L**	1	1/4/2008 1:18:00 AM
Chromium	ND		0.00500	mg/L	1	1/4/2008 1:18:00 AM
Cobalt	ND		0.00500	mg/L	1	1/4/2008 1:18:00 AM
Copper	ND		0.00500	mg/L	1	1/4/2008 1:18:00 AM
Iron	ND		0.200	mg/L	1	1/4/2008 1:18:00 AM
Lead	ND		0.00500	mg/L	1	1/4/2008 1:18:00 AM
Magnesium	**8.08**		**0.200**	**mg/L**	1	1/4/2008 1:18:00 AM
Manganese	**0.00556**		**0.00500**	**mg/L**	1	1/4/2008 1:18:00 AM
Molybdenum	ND		0.00500	mg/L	1	1/4/2008 1:18:00 AM
Nickel	ND		0.00500	mg/L	1	1/4/2008 1:18:00 AM
Potassium	**2.18**		**0.200**	**mg/L**	1	1/4/2008 1:18:00 AM
Selenium	ND		0.00500	mg/L	1	1/4/2008 1:18:00 AM
Silver	ND		0.00500	mg/L	1	1/4/2008 1:18:00 AM
Sodium	**198**		**4.00**	**mg/L**	20	1/4/2008 4:24:00 PM
Vanadium	**0.0228**		**0.00500**	**mg/L**	1	1/4/2008 1:18:00 AM
Zinc	**0.00782**		**0.00500**	**mg/L**	1	1/4/2008 1:18:00 AM
ICP METALS, TOTAL - SW6020A			**SW6020**		Prep Date: **1/3/2008**	Analyst: **ALR**
Calcium	**68.8**		**0.500**	**mg/L**	1	1/4/2008 7:05:00 AM
Magnesium	**8.66**		**0.200**	**mg/L**	1	1/4/2008 7:05:00 AM
Potassium	**2.30**		**0.200**	**mg/L**	1	1/4/2008 7:05:00 AM

Qualifiers:

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* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *January 11, 2008*

Client: Navajo Refining Company
Project: Navajo Lea Refinery
Work Order: 0801003
Sample ID: MW-5
Lab ID: 0801003-05
Collection Date: 12/31/2007 1:50:00 PM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Sodium	**181**		**4.00**	**mg/L**	20	1/4/2008 4:49:00 PM
ANIONS BY ION CHROMATOGRAPHY			**E300**			Analyst: **IGF**
Chloride	**75.0**		**50.0**	**mg/L**	100	1/3/2008 6:50:00 PM
Fluoride	**0.465**		**0.100**	**mg/L**	1	1/3/2008 4:54:00 PM
Sulfate	**734**		**50.0**	**mg/L**	100	1/3/2008 6:50:00 PM
Nitrate/Nitrite (as N)	**3.35**		**0.100**	**mg/L**	1	1/4/2008 12:49:00 AM
Surr: Selenate (surr)	*97.3*		*85-115*	*%REC*	1	1/4/2008 12:49:00 AM
Surr: Selenate (surr)	*91.5*		*85-115*	*%REC*	100	1/3/2008 6:50:00 PM
Surr: Selenate (surr)	*96.2*		*85-115*	*%REC*	1	1/3/2008 4:54:00 PM
ALKALINITY			**E310.1**			Analyst: **MAM**
Alkalinity, Bicarbonate (As CaCO3)	**348**		**5.00**	**mg/L**	1	1/4/2008
Alkalinity, Carbonate (As CaCO3)	ND		5.00	mg/L	1	1/4/2008
Alkalinity, Hydroxide (As CaCO3)	ND		5.00	mg/L	1	1/4/2008
Alkalinity, Total (As CaCO3)	**348**		**5.00**	**mg/L**	1	1/4/2008
PH			**E150.1**			Analyst: **MAM**
pH	**7.36**	H	**0.100**	**pH units**	1	1/2/2008 6:15:00 PM
TOTAL DISSOLVED SOLIDS			**E160.1**			Analyst: **KKP**
Total Dissolved Solids (Residue, Filterable)	**809**		**10.0**	**mg/L**	1	1/3/2008 3:00:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *January 11, 2008*

Client: Navajo Refining Company
Project: Navajo Lea Refinery
Sample ID: Trip Blank 121707-28
Collection Date: 12/31/2007 1:50:00 PM

Work Order: 0801003
Lab ID: 0801003-06
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		0.0010	mg/L	1	1/4/2008 1:11:00 PM
Toluene	ND		0.0010	mg/L	1	1/4/2008 1:11:00 PM
Ethylbenzene	ND		0.0010	mg/L	1	1/4/2008 1:11:00 PM
Xylenes, Total	ND		0.0030	mg/L	1	1/4/2008 1:11:00 PM
Surr: 4-Bromofluorobenzene	*110*		*77-129*	*%REC*	1	1/4/2008 1:11:00 PM
Surr: Trifluorotoluene	*102*		*75-130*	*%REC*	1	1/4/2008 1:11:00 PM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

Date: *Jan 11 2008*

QC BATCH REPORT

Batch ID: **R58476** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-010408** Units: **µg/L** Analysis Date: **01/04/08 9:10**
Client ID: Run ID: **BTEX1_080104A** SeqNo: **1298426** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*31.68*	1.0	*30*	0	*106*	*77-129*		0		
Surr: Trifluorotoluene	*30.78*	1.0	*30*	0	*103*	*75-130*		0		

LCS Sample ID: **BLCSW1-010408** Units: **µg/L** Analysis Date: **01/04/08 8:17**
Client ID: Run ID: **BTEX1_080104A** SeqNo: **1298425** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.14	1.0	20	0	95.7	77-126		0		
Toluene	19.51	1.0	20	0	97.6	80-124		0		
Ethylbenzene	19.67	1.0	20	0	98.4	76-125		0		
Xylenes, Total	58.95	3.0	60	0	98.3	79-124		0		
Surr: 4-Bromofluorobenzene	*34.52*	1.0	*30*	0	*115*	*77-129*		0		
Surr: Trifluorotoluene	*31.35*	1.0	*30*	0	*105*	*75-130*		0		

MS Sample ID: **0801003-05AMS** Units: **µg/L** Analysis Date: **01/04/08 10:59**
Client ID: **MW-5** Run ID: **BTEX1_080104A** SeqNo: **1298719** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.67	1.0	20	0	103	77-126		0		
Toluene	21.06	1.0	20	0	105	80-124		0		
Ethylbenzene	21.29	1.0	20	0	106	76-125		0		
Xylenes, Total	64.58	3.0	60	0	108	79-124		0		
Surr: 4-Bromofluorobenzene	*34.38*	1.0	*30*	0	*115*	*77-129*		0		
Surr: Trifluorotoluene	*31.28*	1.0	*30*	0	*104*	*75-130*		0		

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **R58476** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0801003-05AMSD** Units: **µg/L** Analysis Date: **01/04/08 11:25**

Client ID: **MW-5** Run ID: **BTEX1_080104A** SeqNo: **1298720** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.31	1.0	20	0	102	77-126	20.67	1.76	20	
Toluene	20.67	1.0	20	0	103	80-124	21.06	1.86	20	
Ethylbenzene	20.91	1.0	20	0	105	76-125	21.29	1.83	20	
Xylenes, Total	62.99	3.0	60	0	105	79-124	64.58	2.5	20	
Surr: 4-Bromofluorobenzene	*34.63*	1.0	*30*	0	*115*	*77-129*	34.38	*0.715*	*20*	
Surr: Trifluorotoluene	*31.12*	1.0	*30*	0	*104*	*75-130*	31.28	*0.523*	*20*	

The following samples were analyzed in this batch:

0801003-01A	0801003-02A	0801003-03A
0801003-04A	0801003-05A	0801003-06A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **27539** Instrument ID **ICPMS02** Method: **SW6020** **(Dissolve)**

MBLK Sample ID: **MBLKW1-010308** Units: **mg/L** Analysis Date: **01/03/08 22:02**

Client ID: Run ID: **ICPMS02_080103A** SeqNo: **1298350** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.008627	0.010								J
Arsenic	ND	0.0050								
Barium	ND	0.0050								
Beryllium	0.0004092	0.0020								J
Boron	ND	0.020								
Cadmium	ND	0.0020								
Calcium	ND	0.50								
Chromium	ND	0.0050								
Cobalt	ND	0.0050								
Copper	ND	0.0050								
Iron	ND	0.20								
Lead	ND	0.0050								
Magnesium	ND	0.20								
Manganese	ND	0.0050								
Molybdenum	ND	0.0050								
Nickel	ND	0.0050								
Potassium	ND	0.20								
Selenium	ND	0.0050								
Silver	ND	0.0050								
Sodium	ND	0.20								
Vanadium	ND	0.0050								
Zinc	0.001696	0.0050								J

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **27539** Instrument ID **ICPMS02** Method: **SW6020** **(Dissolve)**

LCS Sample ID: **MLCSW1-010308** Units: **mg/L** Analysis Date: **01/03/08 22:08**

Client ID: Run ID: **ICPMS02_080103A** SeqNo: **1298351** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.05543	0.010	0.05	0	111	80-120	0			
Arsenic	0.05535	0.0050	0.05	0	111	80-120	0			
Barium	0.05391	0.0050	0.05	0	108	80-120	0			
Beryllium	0.05275	0.0020	0.05	0	106	80-120	0			
Boron	0.5365	0.020	0.5	0	107	80-120	0			
Cadmium	0.05503	0.0020	0.05	0	110	80-120	0			
Calcium	4.887	0.50	5	0	97.7	80-120	0			
Chromium	0.051	0.0050	0.05	0	102	80-120	0			
Cobalt	0.05606	0.0050	0.05	0	112	80-120	0			
Copper	0.05186	0.0050	0.05	0	104	80-120	0			
Iron	5.234	0.20	5	0	105	80-120	0			
Lead	0.05395	0.0050	0.05	0	108	80-120	0			
Magnesium	5.146	0.20	5	0	103	80-120	0			
Manganese	0.05091	0.0050	0.05	0	102	80-120	0			
Molybdenum	0.05311	0.0050	0.05	0	106	80-120	0			
Nickel	0.05282	0.0050	0.05	0	106	80-120	0			
Potassium	5.113	0.20	5	0	102	80-120	0			
Selenium	0.05498	0.0050	0.05	0	110	80-120	0			
Silver	0.05474	0.0050	0.05	0	109	80-120	0			
Sodium	4.926	0.20	5	0	98.5	80-120	0			
Vanadium	0.05241	0.0050	0.05	0	105	80-120	0			
Zinc	0.05466	0.0050	0.05	0	109	80-120	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **27539** Instrument ID **ICPMS02** Method: **SW6020** **(Dissolve)**

MS Sample ID: **0712610-04BMS** Units: **mg/L** Analysis Date: **01/03/08 23:12**

Client ID: Run ID: **ICPMS02_080103A** SeqNo: **1298358** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.04708	0.010	0.05	0.002757	88.6	75-125	0			
Arsenic	0.05426	0.0050	0.05	0.0007351	107	75-125	0			
Barium	0.1294	0.0050	0.05	0.07987	99.1	75-125	0			
Cadmium	0.05199	0.0020	0.05	0.0002537	103	75-125	0			
Calcium	93.56	0.50	5	91.28	45.6	75-125	0			SO
Chromium	0.04896	0.0050	0.05	0.0001762	97.6	75-125	0			
Cobalt	0.05313	0.0050	0.05	0.00004164	106	75-125	0			
Copper	0.06167	0.0050	0.05	0.01265	98	75-125	0			
Iron	4.815	0.20	5	-0.0238	96.8	75-125	0			
Lead	0.05212	0.0050	0.05	0.0003579	104	75-125	0			
Magnesium	14.31	0.20	5	10.08	84.6	75-125	0			
Manganese	0.04796	0.0050	0.05	0.0006495	94.6	75-125	0			
Molybdenum	0.05037	0.0050	0.05	0.0004523	99.8	75-125	0			
Nickel	0.04921	0.0050	0.05	0.001208	96	75-125	0			
Potassium	11.84	0.20	5	7.217	92.5	75-125	0			
Selenium	0.05083	0.0050	0.05	0.0009553	99.7	75-125	0			
Silver	0.05035	0.0050	0.05	-0.0001786	101	75-125	0			
Sodium	14.23	0.20	5	10.03	84	75-125	0			
Vanadium	0.05186	0.0050	0.05	0.0005316	103	75-125	0			
Zinc	0.07505	0.0050	0.05	0.02614	97.8	75-125	0			

MS Sample ID: **0712610-04BMS** Units: **mg/L** Analysis Date: **01/04/08 15:34**

Client ID: Run ID: **ICPMS02_080104A** SeqNo: **1299054** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	0.04866	0.0020	0.05	0.0005388	96.2	75-125	0			
Boron	1.002	0.020	0.5	0.4963	101	75-125	0			

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **27539** Instrument ID **ICPMS02** Method: **SW6020** **(Dissolve)**

MSD Sample ID: **0712610-04BMSD** Units: **mg/L** Analysis Date: **01/03/08 23:18**

Client ID: Run ID: **ICPMS02_080103A** SeqNo: **1298359** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.05544	0.010	0.05	0.002757	105	75-125	0.04708	16.3	25	
Arsenic	0.05223	0.0050	0.05	0.0007351	103	75-125	0.05426	3.81	25	
Barium	0.1311	0.0050	0.05	0.07987	102	75-125	0.1294	1.31	25	
Cadmium	0.0522	0.0020	0.05	0.0002537	104	75-125	0.05199	0.403	25	
Calcium	94.6	0.50	5	91.28	66.4	75-125	93.56	1.11	25	SO
Chromium	0.04771	0.0050	0.05	0.0001762	95.1	75-125	0.04896	2.59	25	
Cobalt	0.05117	0.0050	0.05	0.00004164	102	75-125	0.05313	3.76	25	
Copper	0.05985	0.0050	0.05	0.01265	94.4	75-125	0.06167	3	25	
Iron	4.815	0.20	5	-0.0238	96.8	75-125	4.815	0	25	
Lead	0.05209	0.0050	0.05	0.0003579	103	75-125	0.05212	0.0576	25	
Magnesium	14.62	0.20	5	10.08	90.8	75-125	14.31	2.14	25	
Manganese	0.04808	0.0050	0.05	0.0006495	94.9	75-125	0.04796	0.25	25	
Molybdenum	0.05019	0.0050	0.05	0.0004523	99.5	75-125	0.05037	0.358	25	
Potassium	11.88	0.20	5	7.217	93.3	75-125	11.84	0.337	25	
Selenium	0.05051	0.0050	0.05	0.0009553	99.1	75-125	0.05083	0.632	25	
Silver	0.05027	0.0050	0.05	-0.0001786	101	75-125	0.05035	0.159	25	
Sodium	14.48	0.20	5	10.03	89	75-125	14.23	1.74	25	
Vanadium	0.04986	0.0050	0.05	0.0005316	98.7	75-125	0.05186	3.93	25	

MSD Sample ID: **0712610-04BMSD** Units: **mg/L** Analysis Date: **01/04/08 15:40**

Client ID: Run ID: **ICPMS02_080104A** SeqNo: **1299055** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	0.04721	0.0020	0.05	0.0005388	93.3	75-125	0.04866	3.02	25	
Boron	0.9878	0.020	0.5	0.4963	98.3	75-125	1.002	1.43	25	

MSD Sample ID: **0712610-04BMSD** Units: **mg/L** Analysis Date: **01/08/08 12:48**

Client ID: Run ID: **ICP7500_080108A** SeqNo: **1300349** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nickel	0.05186	0.0050	0.05	0.001408	101	75-125	0.048	7.73	25	
Zinc	0.07794	0.0050	0.05	0.02612	104	75-125	0.07195	7.99	25	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **27539** Instrument ID **ICPMS02** Method: **SW6020** **(Dissolve)**

DUP Sample ID: **0712610-04BDUP** Units: **mg/L** Analysis Date: **01/03/08 22:59**

Client ID: Run ID: **ICPMS02_080103A** SeqNo: **1298356** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aluminum	0.002841	0.010	0	0	0	0-0	0.002757	0	25	J
Arsenic	ND	0.0050	0	0	0	0-0	0.0007351	0	25	
Barium	0.07997	0.0050	0	0	0	0-0	0.07987	0.125	25	
Cadmium	0.0002404	0.0020	0	0	0	0-0	0.0002537	0	25	J
Calcium	90.63	0.50	0	0	0	0-0	91.28	0.715	25	
Chromium	ND	0.0050	0	0	0	0-0	0.0001762	0	25	
Cobalt	ND	0.0050	0	0	0	0-0	0.00004164	0	25	
Copper	0.01269	0.0050	0	0	0	0-0	0.01265	0.316	25	
Iron	ND	0.20	0	0	0	0-0	-0.0238	0	25	
Lead	0.0002283	0.0050	0	0	0	0-0	0.0003579	0	25	J
Magnesium	10.02	0.20	0	0	0	0-0	10.08	0.597	25	
Manganese	ND	0.0050	0	0	0	0-0	0.0006495	0	25	
Molybdenum	0.0005399	0.0050	0	0	0	0-0	0.0004523	0	25	J
Nickel	0.001159	0.0050	0	0	0	0-0	0.001208	0	25	J
Potassium	7.191	0.20	0	0	0	0-0	7.217	0.361	25	
Selenium	ND	0.0050	0	0	0	0-0	0.0009553	0	25	
Silver	ND	0.0050	0	0	0	0-0	-0.0001786	0	25	
Sodium	9.977	0.20	0	0	0	0-0	10.03	0.53	25	
Vanadium	0.0004338	0.0050	0	0	0	0-0	0.0005316	0	25	J
Zinc	0.02654	0.0050	0	0	0	0-0	0.02614	1.52	25	

DUP Sample ID: **0712610-04BDUP** Units: **mg/L** Analysis Date: **01/04/08 15:21**

Client ID: Run ID: **ICPMS02_080104A** SeqNo: **1299052** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	0.0005124	0.0020	0	0	0	0-0	0.0005388	0	25	J
Boron	0.5018	0.020	0	0	0	0-0	0.4963	1.1	25	

The following samples were analyzed in this batch: 0801003-01C 0801003-05C

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **27540** Instrument ID **ICPMS02** Method: **SW6020**

MBLK Sample ID: **MBLKW2-010308** Units: **mg/L** Analysis Date: **01/04/08 1:49**

Client ID: Run ID: **ICPMS02_080103A** SeqNo: **1298380** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	0.08706	0.50								J
Magnesium	ND	0.20								
Potassium	ND	0.20								
Sodium	0.03243	0.20								J

LCS Sample ID: **MLCSW2-010308** Units: **mg/L** Analysis Date: **01/04/08 1:56**

Client ID: Run ID: **ICPMS02_080103A** SeqNo: **1298381** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	4.872	0.50	5	0	97.4	80-120	0			
Magnesium	5.1	0.20	5	0	102	80-120	0			
Potassium	4.982	0.20	5	0	99.6	80-120	0			
Sodium	5.017	0.20	5	0	100	80-120	0			

MS Sample ID: **0712610-04CMS** Units: **mg/L** Analysis Date: **01/04/08 3:12**

Client ID: Run ID: **ICPMS02_080103A** SeqNo: **1298390** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	96.86	0.50	5	94	57.2	80-120	0			SO
Magnesium	15.29	0.20	5	10.69	92	80-120	0			
Potassium	12.01	0.20	5	7.403	92.1	80-120	0			
Sodium	15.2	0.20	5	10.61	91.8	80-120	0			

MSD Sample ID: **0712610-04CMSD** Units: **mg/L** Analysis Date: **01/04/08 3:18**

Client ID: Run ID: **ICPMS02_080103A** SeqNo: **1298391** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	102.8	0.50	5	94	176	80-120	96.86	5.95	15	SO
Magnesium	15.87	0.20	5	10.69	104	80-120	15.29	3.72	15	
Potassium	12.54	0.20	5	7.403	103	80-120	12.01	4.32	15	
Sodium	15.74	0.20	5	10.61	103	80-120	15.2	3.49	15	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **27540** Instrument ID **ICPMS02** Method: **SW6020**

DUP Sample ID: **0712610-04CDUP** Units: **mg/L** Analysis Date: **01/04/08 2:40**

Client ID: Run ID: **ICPMS02_080103A** SeqNo: **1298386** Prep Date: **1/3/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calcium	95.6	0.50	0	0	0	0-0	94	1.69	25	
Magnesium	10.78	0.20	0	0	0	0-0	10.69	0.838	25	
Potassium	7.529	0.20	0	0	0	0-0	7.403	1.69	25	
Sodium	10.79	0.20	0	0	0	0-0	10.61	1.68	25	

The following samples were analyzed in this batch:

0801003-01D	0801003-02C	0801003-03C
0801003-04C	0801003-05D	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **27587** Instrument ID **Mercury** Method: **SW7470** **(Dissolve)**

MBLK Sample ID: **GBLKW1-010808** Units: **mg/L** Analysis Date: **01/08/08 15:41**
Client ID: Run ID: **MERCURY_080108B** SeqNo: **1300509** Prep Date: **1/8/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020								

LCS Sample ID: **GLCSW1-010808** Units: **mg/L** Analysis Date: **01/08/08 15:43**
Client ID: Run ID: **MERCURY_080108B** SeqNo: **1300510** Prep Date: **1/8/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00536	0.00020	0.005	0	107	80-120		0		

LCSD Sample ID: **GLCSDW1-010808** Units: **mg/L** Analysis Date: **01/08/08 15:45**
Client ID: Run ID: **MERCURY_080108B** SeqNo: **1300511** Prep Date: **1/8/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00524	0.00020	0.005	0	105	80-120	0.00536	2.26	20	

MS Sample ID: **0801003-05CMS** Units: **mg/L** Analysis Date: **01/08/08 15:54**
Client ID: **MW-5** Run ID: **MERCURY_080108B** SeqNo: **1300514** Prep Date: **1/8/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00525	0.00020	0.005	0.000012	105	80-120		0		

MSD Sample ID: **0801003-05CMSD** Units: **mg/L** Analysis Date: **01/08/08 15:56**
Client ID: **MW-5** Run ID: **MERCURY_080108B** SeqNo: **1300515** Prep Date: **1/8/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00516	0.00020	0.005	0.000012	103	80-120	0.00525	1.73	20	

DUP Sample ID: **0801003-05CDUP** Units: **mg/L** Analysis Date: **01/08/08 15:52**
Client ID: **MW-5** Run ID: **MERCURY_080108B** SeqNo: **1300513** Prep Date: **1/8/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020	0	0	0	0-0	0.000012	0	20	

The following samples were analyzed in this batch: 0801003-01C 0801003-05C

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **27588** Instrument ID **Mercury** Method: **SW7470**

MBLK Sample ID: **GBLKW2-010808** Units: **mg/L** Analysis Date: **01/08/08 16:18**
Client ID: Run ID: **MERCURY_080108C** SeqNo: **1300541** Prep Date: **1/8/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020								

LCS Sample ID: **GLCSW2-010808** Units: **mg/L** Analysis Date: **01/08/08 16:20**
Client ID: Run ID: **MERCURY_080108C** SeqNo: **1300542** Prep Date: **1/8/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00536	0.00020	0.005	0	107	85-115		0		

LCSD Sample ID: **GLCSDW2-010808** Units: **mg/L** Analysis Date: **01/08/08 16:22**
Client ID: Run ID: **MERCURY_080108C** SeqNo: **1300543** Prep Date: **1/8/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.0053	0.00020	0.005	0	106	85-115	0.00536	1.13	20	

MS Sample ID: **0712610-01CMS** Units: **mg/L** Analysis Date: **01/08/08 16:28**
Client ID: Run ID: **MERCURY_080108C** SeqNo: **1300546** Prep Date: **1/8/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00517	0.00020	0.005	0.000003	103	85-115		0		

MSD Sample ID: **0712610-01CMSD** Units: **mg/L** Analysis Date: **01/08/08 16:30**
Client ID: Run ID: **MERCURY_080108C** SeqNo: **1300547** Prep Date: **1/8/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00545	0.00020	0.005	0.000003	109	85-115	0.00517	5.27	20	

DUP Sample ID: **0712610-01CDUP** Units: **mg/L** Analysis Date: **01/08/08 16:26**
Client ID: Run ID: **MERCURY_080108C** SeqNo: **1300545** Prep Date: **1/8/2008** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.00020	0	0	0	0-0	0.000003	0	20	

The following samples were analyzed in this batch: 0801003-01D 0801003-05D

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **R58428** Instrument ID **WetChem** Method: **E150.1**

LCS Sample ID: **WLCSW1-010208** Units: **pH units** Analysis Date: **01/02/08 18:15**

Client ID: Run ID: **WETCHEM_080102H** SeqNo: **1297268** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	6.08	0.10	6	0	101	90-110	0			

DUP Sample ID: **0801003-05EDUP** Units: **pH units** Analysis Date: **01/02/08 18:15**

Client ID: **MW-5** Run ID: **WETCHEM_080102H** SeqNo: **1297281** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.33	0.10	0	0	0	0-0	7.36	0.408	20	H

The following samples were analyzed in this batch:

0801003-01E	0801003-02D	0801003-03D
0801003-04D	0801003-05E	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **R58488** Instrument ID **ICS3000** Method: **E300**

MBLK Sample ID: **WBLKW1-010208** Units: **mg/L** Analysis Date: **01/03/08 11:15**

Client ID: Run ID: **ICS3000_080103A** SeqNo: **1298615** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	0.50								
Fluoride	ND	0.10								
Sulfate	ND	0.50								
Surr: Selenate (surr)	*5.069*	0.10	*5*	0	*101*	*85-115*	0			

LCS Sample ID: **WLCSW1-010208** Units: **mg/L** Analysis Date: **01/03/08 11:38**

Client ID: Run ID: **ICS3000_080103A** SeqNo: **1298618** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	20.01	0.50	20	0	100	90-110	0			
Fluoride	4.093	0.10	4	0	102	90-110	0			
Sulfate	19.78	0.50	20	0	98.9	90-110	0			
Surr: Selenate (surr)	*4.806*	0.10	*5*	0	*96.1*	*85-115*	0			

MS Sample ID: **0712554-06DMS** Units: **mg/L** Analysis Date: **01/03/08 13:49**

Client ID: Run ID: **ICS3000_080103A** SeqNo: **1298633** Prep Date: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	260.5	5.0	100	166.8	93.7	80-120	0			
Fluoride	19.74	1.0	20	0.328	97	80-120	0			
Sulfate	234.5	5.0	100	141.1	93.4	80-120	0			
Surr: Selenate (surr)	*47.92*	1.0	*50*	0	*95.8*	*85-115*	0			

MSD Sample ID: **0712554-06DMSD** Units: **mg/L** Analysis Date: **01/03/08 14:13**

Client ID: Run ID: **ICS3000_080103A** SeqNo: **1298637** Prep Date: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	265.9	5.0	100	166.8	99.2	80-120	260.5	2.05	20	
Fluoride	22.16	1.0	20	0.328	109	80-120	19.74	11.6	20	
Sulfate	240.3	5.0	100	141.1	99.2	80-120	234.5	2.41	20	
Surr: Selenate (surr)	*50.7*	1.0	*50*	0	*101*	*85-115*	47.92	*5.63*	*20*	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **R58488** Instrument ID **ICS3000** Method: **E300**

DUP Sample ID: **0712554-06DDUP** Units: **mg/L** Analysis Date: **01/03/08 13:26**

Client ID: Run ID: **ICS3000_080103A** SeqNo: **1298629** Prep Date: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	180.4	5.0	0	0	0	0-0	166.8	7.88	20	
Fluoride	0.294	1.0	0	0	0	0-0	0.328	0	20	J
Sulfate	145	5.0	0	0	0	0-0	141.1	2.73	20	
Surr: Selenate (surr)	*102.1*	1.0	*100*	0	*102*	*85-115*	100.9	*1.22*	*20*	*E*

The following samples were analyzed in this batch:

0801003-01E	0801003-02D	0801003-03D
0801003-04D	0801003-05E	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **R58497** Instrument ID **Balance1** Method: **E160.1** **(Dissolve)**

MBLK Sample ID: **BLANK** Units: **mg/L** Analysis Date: **01/03/08 15:00**

Client ID: Run ID: **BALANCE1_080103F** SeqNo: **1298924** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	ND	10								

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **01/03/08 15:00**

Client ID: Run ID: **BALANCE1_080103F** SeqNo: **1298925** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	996	10	1000	0	99.6	85-115		0		

DUP Sample ID: **0801022-01EDUP** Units: **mg/L** Analysis Date: **01/03/08 15:00**

Client ID: Run ID: **BALANCE1_080103F** SeqNo: **1298923** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Dissolved Solids (Residue, Fil	12300	10	0	0	0	0-0	12380	0.616	20	

The following samples were analyzed in this batch:

0801003-01E	0801003-02D	0801003-03D
0801003-04D	0801003-05E	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **R58505** Instrument ID **ICS3000** Method: **E300**

MBLK Sample ID: **WBLKW2-010208(** Units: **mg/L** Analysis Date: **01/03/08 19:03**
Client ID: Run ID: **ICS3000_080103C** SeqNo: **1299150** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	ND	0.10								
Surr: Selenate (surr)	*4.856*	0.10	*5*	0	*97.1*	*85-115*		0		

LCS Sample ID: **WLCSW2-010208(** Units: **mg/L** Analysis Date: **01/03/08 19:26**
Client ID: Run ID: **ICS3000_080103C** SeqNo: **1299151** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	7.909	0.10	8	0	98.9	90-110		0		
Surr: Selenate (surr)	*4.702*	0.10	*5*	0	*94*	*85-115*		0		

MS Sample ID: **0712583-22AMS** Units: **mg/L** Analysis Date: **01/03/08 20:35**
Client ID: Run ID: **ICS3000_080103C** SeqNo: **1299154** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	4.082	0.10	4	0.214	96.7	80-120		0		H
Surr: Selenate (surr)	*4.994*	0.10	*5*	0	*99.9*	*85-115*		0		

MSD Sample ID: **0712583-22AMSD** Units: **mg/L** Analysis Date: **01/03/08 20:58**
Client ID: Run ID: **ICS3000_080103C** SeqNo: **1299155** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	4.012	0.10	4	0.214	95	80-120	4.082	1.73	20	H
Surr: Selenate (surr)	*4.944*	0.10	*5*	0	*98.9*	*85-115*	4.994	*1.01*	*20*	

DUP Sample ID: **0712583-22ADUP** Units: **mg/L** Analysis Date: **01/03/08 20:12**
Client ID: Run ID: **ICS3000_080103C** SeqNo: **1299153** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrate/Nitrite (as N)	0.216	0.10	0	0	0	0-0	0.214	0.93	20	H
Surr: Selenate (surr)	*4.979*	0.10	*5*	0	*99.6*	*85-115*	4.942	*0.746*	*20*	

The following samples were analyzed in this batch:

0801003-01B	0801003-02B	0801003-03B
0801003-04B	0801003-05B	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **R58514** Instrument ID **WetChem** Method: **E310.1**

MBLK Sample ID: **WBLKW1-010408** Units: **mg/L** Analysis Date: **01/04/08 0:00**

Client ID: Run ID: **WETCHEM_080104H** SeqNo: **1299247** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	ND	5.0								
Alkalinity, Carbonate (As CaCO3)	ND	5.0								
Alkalinity, Hydroxide (As CaCO3)	ND	5.0								
Alkalinity, Total (As CaCO3)	ND	5.0								

LCS Sample ID: **WLCSW1-010408** Units: **mg/L** Analysis Date: **01/04/08 0:00**

Client ID: Run ID: **WETCHEM_080104H** SeqNo: **1299248** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	992.8	5.0	1000	0	99.3	80-120	0			
Alkalinity, Total (As CaCO3)	992.8	5.0	1000	0	99.3	80-120	0			

DUP Sample ID: **0801003-02DDUP** Units: **mg/L** Analysis Date: **01/04/08 0:00**

Client ID: **South Well** Run ID: **WETCHEM_080104H** SeqNo: **1299261** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (As CaCO3)	209	5.0	0	0	0	0-0	208	0.501	20	
Alkalinity, Carbonate (As CaCO3)	ND	5.0	0	0	0	0-0	0	0	20	
Alkalinity, Hydroxide (As CaCO3)	ND	5.0	0	0	0	0-0	0	0	20	
Alkalinity, Total (As CaCO3)	209	5.0	0	0	0	0-0	208	0.501	20	

The following samples were analyzed in this batch:

0801003-01E	0801003-02D	0801003-03D
0801003-04D	0801003-05E	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **R58531** Instrument ID **ICS3000** Method: **E300**

MBLK Sample ID: **WBLKW1-010408** Units: **mg/L** Analysis Date: **01/04/08 10:34**
Client ID: Run ID: **ICS3000_080104A** SeqNo: **1299596** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	0.50								
Fluoride	ND	0.10								
Sulfate	ND	0.50								
Surr: Selenate (surr)	*5.157*	0.10	*5*	0	*103*	*85-115*		0		

LCS Sample ID: **WLCSW1-010408** Units: **mg/L** Analysis Date: **01/04/08 10:57**
Client ID: Run ID: **ICS3000_080104A** SeqNo: **1299597** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.88	0.50	20	0	99.4	90-110		0		
Fluoride	4.045	0.10	4	0	101	90-110		0		
Sulfate	19.57	0.50	20	0	97.9	90-110		0		
Surr: Selenate (surr)	*4.752*	0.10	*5*	0	*95*	*85-115*		0		

MS Sample ID: **0801063-01BMS** Units: **mg/L** Analysis Date: **01/04/08 12:07**
Client ID: Run ID: **ICS3000_080104A** SeqNo: **1299600** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	61.4	0.50	10	50.81	106	80-120		0		EO
Fluoride	2.041	0.10	2	-0.01	103	80-120		0		
Sulfate	14.17	0.50	10	4.168	100	80-120		0		
Surr: Selenate (surr)	*4.701*	0.10	*5*	0	*94*	*85-115*		0		

MSD Sample ID: **0801063-01BMSD** Units: **mg/L** Analysis Date: **01/04/08 12:30**
Client ID: Run ID: **ICS3000_080104A** SeqNo: **1299601** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	63.62	0.50	10	50.81	128	80-120	61.4	3.54	20	SEO
Fluoride	2.124	0.10	2	-0.01	107	80-120	2.041	3.99	20	
Sulfate	14.77	0.50	10	4.168	106	80-120	14.17	4.15	20	
Surr: Selenate (surr)	*4.899*	0.10	*5*	0	*98*	*85-115*	4.701	*4.12*	*20*	

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0801003
Project: Navajo Lea Refinery

QC BATCH REPORT

Batch ID: **R58531** Instrument ID **ICS3000** Method: **E300**

DUP Sample ID: **0801063-01BDUP** Units: **mg/L** Analysis Date: **01/04/08 11:43**

Client ID: Run ID: **ICS3000_080104A** SeqNo: **1299599** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	52.18	0.50	0	0	0	0-0	50.81	2.67	20	E
Fluoride	ND	0.10	0	0	0	0-0	-0.01	0	20	
Sulfate	4.334	0.50	0	0	0	0-0	4.168	3.9	20	
Surr: Selenate (surr)	*5.197*	0.10	*5*	0	*104*	*85-115*	5.02	*3.46*	*20*	

The following samples were analyzed in this batch: 0801003-04D

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab
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Page 1 of 1

The Chain of Custody is a Legal Document. All information must be completed accurately.

e-Lab Project Manager: [redacted]

e-Lab Work Order #: 07080063

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	NAVAJO Lea Refinery	A	BTEX (8021)
Work Order		Project Number	Annual	B	WQCC Metals (Dissolved)
Company Name	NAVAJO Refining Co	Bill to Company	NAVAJO Refining Co	C	Hg (Total)
Send Report To	DarRell Moore	Invoice Attn	DarRell Moore	D	Cations - Ca, Mg, Na, K
Address	P.O. Box 159	Address	Same	E	Anions Cl, F, SO4
				F	Anions NO3, NO2
City/State/Zip	Artesia, NM 88211	City/State/Zip		G	Alkalinity, CO3, HCO3
Phone	575 748-3311	Phone		H	pH
Fax	575 746-5421	Fax		I	TDS
e-Mail Address		e-Mail Address	Copy Results To:	J	dgoyer@Sesi-NM.Com

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-6R	12/31/07	1050	H_2O	1,2,3,8	6	X	X	X	X	X	X	X	X	X		
2	South Well		1120				X			X	X	X	X	X	X		
3	North Well		1140				X			X	X	X	X	X	X		
4	East Well		1250				X			X	X	X	X	X	X		
5	MW-5	12/31/07	1350	H_2O	1,2,3,8	6	X	X	X	X	X	X	X	X	X		
6	T.R.P Blank 121707-28	—	—	H_2O	1, 8	2	X										
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: [redacted]

Shipment Method: Fed Ex

Required Turnaround Time: (Check Box) ☒ STD 10 Wk Days ☐ 5 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
[redacted]	12-31-07	1500	[redacted]	
Relinquished by: [redacted]	Date: 12/31/07	Time: 1600	Received by (Laboratory): [redacted]	1-2-08 1000
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

e-Lab Analytical Cooler ID:

Trip Blank Number:

QC Package: (Check One Box Below)

- ☐ Level II Std QC
- ☐ Level III Std QC/Raw Data
- ☐ Level IV SW846/CLP
- ☐ Other _____
- ☐ TRRP Checklist
- ☐ TRRP Level IV

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.

2. Unless otherwise agreed in a formal contract, services provided by e-Lab Analytical, Inc. are expressly limited to the terms and conditions stated on the reverse.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name: NAVAJO REFINING

Date/Time Received: 1/2/2008 10:00:00 AM

Work Order Number 0801003

Received by: RSZ

Checklist completed by [signature] 1/2/08 (Signature / Date)

Reviewed by [initials] 1/3/08 (Initials / Date)

Matrix: W

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	1.2c	002	
Cooler(s)/Kit(s):	1324		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐

Adjusted? Checked by

Login Notes:

Client contacted: _____ Date contacted: Person contacted

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action

W.O.# 681003

From: Origin ID: HOBA (505)397-0510
Jerri Lee
SESI
703 E. CLINTON

HOBBS, NM 88240

FedEx Express

Ship Date: 31DEC07
ActWgt: 40 LB
System#: 1191638/INET7091
Account#: S *********

Delivery Address Bar Code

Ref #
Invoice #
PO #
Dept #

SHIP TO: (281)530-5656 BILL RECIPIENT

Sample Recieving
E-Labs
10450 Stancliff Road
Suite 210
Houston, TX 77099

TRK# 0201 7914 6690 7019

WED - 02JAN A2
PRIORITY OVERNIGHT

IAH
TX-US
77099

XH-JGQA

Shipping Label: Your shipment is complete

1. Use the 'Print' feature from your browser to send this page to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is $500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ALS e-Lab Analytical
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. 281.530.5656
Fax. 218.530.5887

Date
Name
Company

CUSTODY SEAL

Time: 1605

Seal Broken By:

Date: 1-2-08

April 04, 2008

Darrell Moore
Navajo Refining Company
PO Box 159
Artesia, NM 88211

Tel: (505) 746-5281
Fax: (505) 746-5421

Re: Navajo-Lea Refinery

Work Order : **0803532**

Dear Darrell Moore,

e-Lab Analytical, Inc. received 5 samples on 3/28/2008 09:20 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by e-Lab Analytical, Inc. and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by e-Lab Analytical, Inc. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 10.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Jeffrey L Croston

Electronically approved by: Patricia L. Lynch

Jeffrey L Croston
Project Manager

Certificate No: T104704231-06-TX

e-Lab Analytical, Inc.

Date: April 04, 2008

Client: Navajo Refining Company
Project: Navajo-Lea Refinery
Work Order: **0803532**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
0803532-01	MW# 6R	Water		3/26/2008 11:00	3/28/2008 09:20	☐
0803532-02	East Well	Water		3/26/2008 11:30	3/28/2008 09:20	☐
0803532-03	North Well	Water		3/26/2008 11:45	3/28/2008 09:20	☐
0803532-04	South Well	Water		3/26/2008 11:55	3/28/2008 09:20	☐
0803532-05	Trip Blank	Water		3/26/2008 11:55	3/28/2008 09:20	☑

e-Lab Analytical, Inc.

Date: *April 04, 2008*

Client: Navajo Refining Company
Project: Navajo-Lea Refinery
Work Order: 0803532
Sample ID: MW# 6R
Lab ID: 0803532-01
Collection Date: 3/26/2008 11:00:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		0.0010	mg/L	1	4/4/2008 10:22:00 AM
Toluene	ND		0.0010	mg/L	1	4/4/2008 10:22:00 AM
Ethylbenzene	**0.0052**		**0.0010**	**mg/L**	1	4/4/2008 10:22:00 AM
Xylenes, Total	ND		0.0030	mg/L	1	4/4/2008 10:22:00 AM
Surr: 4-Bromofluorobenzene	*108*		*77-129*	*%REC*	1	4/4/2008 10:22:00 AM
Surr: Trifluorotoluene	*102*		*75-130*	*%REC*	1	4/4/2008 10:22:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *April 04, 2008*

Client: Navajo Refining Company
Project: Navajo-Lea Refinery
Work Order: 0803532
Sample ID: East Well
Lab ID: 0803532-02
Collection Date: 3/26/2008 11:30:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		0.0010	mg/L	1	4/4/2008 9:56:00 AM
Toluene	ND		0.0010	mg/L	1	4/4/2008 9:56:00 AM
Ethylbenzene	ND		0.0010	mg/L	1	4/4/2008 9:56:00 AM
Xylenes, Total	ND		0.0030	mg/L	1	4/4/2008 9:56:00 AM
Surr: 4-Bromofluorobenzene	*88.0*		*77-129*	*%REC*	1	4/4/2008 9:56:00 AM
Surr: Trifluorotoluene	*95.9*		*75-130*	*%REC*	1	4/4/2008 9:56:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *April 04, 2008*

Client: Navajo Refining Company
Project: Navajo-Lea Refinery
Work Order: 0803532
Sample ID: North Well
Lab ID: 0803532-03
Collection Date: 3/26/2008 11:45:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		0.0010	mg/L	1	4/4/2008 9:29:00 AM
Toluene	ND		0.0010	mg/L	1	4/4/2008 9:29:00 AM
Ethylbenzene	ND		0.0010	mg/L	1	4/4/2008 9:29:00 AM
Xylenes, Total	ND		0.0030	mg/L	1	4/4/2008 9:29:00 AM
Surr: 4-Bromofluorobenzene	*90.0*		*77-129*	*%REC*	1	4/4/2008 9:29:00 AM
Surr: Trifluorotoluene	*97.2*		*75-130*	*%REC*	1	4/4/2008 9:29:00 AM

Qualifiers:

- ND - Not Detected at the Reporting Limit
- J - Analyte detected below quantitation limits
- B - Analyte detected in the associated Method Blank
- * - Value exceeds Maximum Contaminant Level
- S - Spike Recovery outside accepted recovery limits
- P - Dual Column results percent difference > 40%
- E - Value above quantitation range
- H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

Date: *April 04, 2008*

Client: Navajo Refining Company
Project: Navajo-Lea Refinery
Work Order: 0803532
Sample ID: South Well
Lab ID: 0803532-04
Collection Date: 3/26/2008 11:55:00 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
BTEX, WATER			**SW8021B**			Analyst: **WLR**
Benzene	ND		0.0010	mg/L	1	4/4/2008 9:03:00 AM
Toluene	ND		0.0010	mg/L	1	4/4/2008 9:03:00 AM
Ethylbenzene	ND		0.0010	mg/L	1	4/4/2008 9:03:00 AM
Xylenes, Total	ND		0.0030	mg/L	1	4/4/2008 9:03:00 AM
Surr: 4-Bromofluorobenzene	*92.4*		*77-129*	*%REC*	1	4/4/2008 9:03:00 AM
Surr: Trifluorotoluene	*97.7*		*75-130*	*%REC*	1	4/4/2008 9:03:00 AM

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
P - Dual Column results percent difference > 40%
E - Value above quantitation range
H - Analyzed outside of Hold Time

e-Lab Analytical, Inc.

CLIENT: Navajo Refining Company
Work Order: 0803532
Project: Navajo-Lea Refinery

Date: *Apr 04 2008*

QC BATCH REPORT

Batch ID: **R61544** Instrument ID **BTEX1** Method: **SW8021B**

MBLK Sample ID: **BBLKW1-040408** Units: **µg/L** Analysis Date: **04/04/08 8:36**
Client ID: Run ID: **BTEX1_080404A** SeqNo: **1359787** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 4-Bromofluorobenzene	*27.54*	1.0	*30*	0	*91.8*	*77-129*		0		
Surr: Trifluorotoluene	*29.23*	1.0	*30*	0	*97.4*	*75-130*		0		

LCS Sample ID: **BLCSW1-040408** Units: **µg/L** Analysis Date: **04/04/08 8:10**
Client ID: Run ID: **BTEX1_080404A** SeqNo: **1359786** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	20.03	1.0	20	0	100	77-126		0		
Toluene	20.45	1.0	20	0	102	80-124		0		
Ethylbenzene	20.85	1.0	20	0	104	76-125		0		
Xylenes, Total	63.37	3.0	60	0	106	79-124		0		
Surr: 4-Bromofluorobenzene	*28.89*	1.0	*30*	0	*96.3*	*77-129*		0		
Surr: Trifluorotoluene	*29.63*	1.0	*30*	0	*98.8*	*75-130*		0		

MS Sample ID: **0804077-01AMS** Units: **µg/L** Analysis Date: **04/04/08 11:42**
Client ID: Run ID: **BTEX1_080404A** SeqNo: **1359945** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.17	1.0	20	0	95.8	77-126		0		
Toluene	19.64	1.0	20	0	98.2	80-124		0		
Ethylbenzene	20.17	1.0	20	0	101	76-125		0		
Xylenes, Total	60.23	3.0	60	0	100	79-124		0		
Surr: 4-Bromofluorobenzene	*28.73*	1.0	*30*	0	*95.8*	*77-129*		0		
Surr: Trifluorotoluene	*29.68*	1.0	*30*	0	*98.9*	*75-130*		0		

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

CLIENT: Navajo Refining Company
Work Order: 0803532
Project: Navajo-Lea Refinery

QC BATCH REPORT

Batch ID: **R61544** Instrument ID **BTEX1** Method: **SW8021B**

MSD Sample ID: **0804077-01AMSD** Units: **µg/L** Analysis Date: **04/04/08 12:09**

Client ID: Run ID: **BTEX1_080404A** SeqNo: **1359947** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	19.08	1.0	20	0	95.4	77-126	19.17	0.451	20	
Toluene	19.4	1.0	20	0	97	80-124	19.64	1.19	20	
Ethylbenzene	19.96	1.0	20	0	99.8	76-125	20.17	1.04	20	
Xylenes, Total	60.38	3.0	60	0	101	79-124	60.23	0.257	20	
Surr: 4-Bromofluorobenzene	*28.69*	1.0	*30*	0	*95.6*	*77-129*	28.73	*0.126*	*20*	
Surr: Trifluorotoluene	*29.61*	1.0	*30*	0	*98.7*	*75-130*	29.68	*0.257*	*20*	

The following samples were analyzed in this batch: 0803532-01A 0803532-02A 0803532-03A 0803532-04A

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
O - Referenced analyte value is > 4 times amount spiked
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
P - Dual Column results percent difference > 40%
B - Analyte detected in assoc. Method Blank
U - Analyzed for but not detected
E - Value above quantitation range

e-Lab Analytical
QUALITY • INTEGRITY • SERVICE
[redacted] Rd. [redacted]
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

[redacted] Chain of Custody Form

Page ____ of ____

[redacted] 352 [redacted] Ave [redacted]
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185
ALS

Project Manager: [redacted] Work Order #: 165232

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order		Project Name	Navajo-Lea Refinery	A	VOC (8260) TCL
Work Order		Project Number		B	
Company Name	Navajo Refining Company	Bill To Company	Navajo Refining Company	C	
Send Report To	Darrell Moore	Invoice Attn	Darrell Moore	D	
Address	P.O. Box 159	Address	P.O. Box 159	E	
City/State/Zip	Artesia, NM 88211	City/State/Zip	Artesia, NM 88211	F	
Phone	(505) 748-3311	Phone	(505) 748-3311	G	
Fax	(505) 746-5421	Fax	(505) 746-5421	H	
e-Mail Address		e-Mail Address		I	
				J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW #6R	3/26/08	1100	H_2O	1	3	✓										
2	East well	3/26/08	1130	H_2O	1	3	✓										
3	North well	3/26/08	1145	H_2O	1	3	✓										
4	South well	3/26/08	1155	H_2O	1	3	✓										
5	Trip Blank																
6	Temp Blank																
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: I. Sgac K. McCall

Shipment Method

Required Turnaround Time: (Check Box) ☐ Quote ☑ Std. 10 Day ☐ 5 Wk Day ☐ 2 Wk Day ☐ 24 Hour

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes:
[signature]	3/26/08	1430	[signature]	10 Day TAT.
Relinquished by:	Date:	Time:	Received by (Laboratory): 3-28-08/0920	Cooler ID: / Cooler Temp:
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

QC Package: (Check One Box Below)
- ☑ Level II Std QC
- ☐ Level III Std QC/Raw Data
- ☐ Level IV SW846/CLP
- ☐ Other _____
- ☐ TRRP Checklis
- ☐ TRRP Level IV

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to e-Lab Analytical, Inc.
2. Unless otherwise agreed in a formal contract, services provided by e-Lab Analytical, Inc. are expressly limited to the terms and conditions stated on the reverse.

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e-Lab Analytical, Inc.

Sample Receipt Checklist

Client Name: NAVAJO REFINING

Date/Time Received: 3/28/2008 9:20:00 AM

Work Order Number 0803532

Received by: RSZ

Checklist completed by [signature] 3/28/08 (Signature / Date)

Reviewed by [initials] 3/31/08 (Initials / Date)

Matrix: W

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):	17.6c	002	
Cooler(s)/Kit(s):	2240		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑

Adjusted? Checked by

Login Notes: Samples were received out of temperature; logged in samples with analysis and placed on hold.

Client contacted: Date contacted: Person contacted

Contacted by: Regarding:

Comments:

Corrective Action