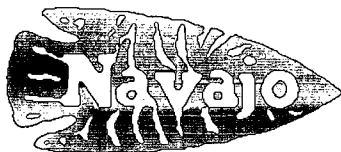


GW - 28

MONITORING REPORTS

DATE:
2001-2000



REFINING COMPANY

FAX

(505) 746-5283 DIV. ORDERS
(505) 746-5481 TRUCKING
(505) 746-5458 PERSONNEL

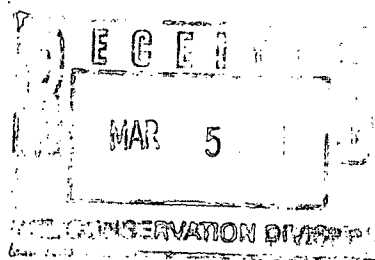
501 EAST MAIN STREET • P. O. BOX 159
ARTESIA, NEW MEXICO 88211-0159
TELEPHONE (505) 748-3311

FAX

(505) 746-5419 ACCOUNTING
(505) 746-5451 EXECUTIVE
(505) 746-5421 ENGINEERING
(505) 746-5480 P / L

February 28, 2001

Mr. Bill Olson
Hydrogeologist
Environmental Bureau
Oil Conservation Division
1220 South St. Francis
Santa Fe, NM 87505-5472



RE: 2000 Annual Ground Water and Treatment System Monitoring Report, Navajo Refining

Dear Bill,

The referenced report is enclosed. It consists of the following:

- four ground water potentiometric maps,
- four product thickness maps,
- eleven graphs depicting elevation and thickness vs. time,
- printouts showing hits on wells,
- the analysis from monitor, residential, and irrigation wells relating to the Ground Water and Treatment System Monitoring

Per your agency's letter of June 14, 1996, the reporting frequency of this report was changed from quarterly to yearly.

For 2000, Navajo pumped approximately 5,660,383 gallons of water out of our recovery wells and 123,710 gallons of product. The amount that came from each well is detailed as follows:

	Total Gal Product	Total Gal Water
Well #1	20514	301842
Well #2	5346	314241
Well #4	7537	236230
Well #5	33566	146080
Well #7	17983	1342514
Well #8	13223	962859
Well #9	0	0
Well #10	8	18820
Well #11	0	44706
Well #12	2553	130440
Well #13	5644	1088334
Well #14	9029	1074317
ToolPushers	8307	0

All water that is pumped out of these wells is sent to our waste water plant to be treated and then to the Injection Wells to be disposed. Product is taken to the various API oil/water separators and is eventually introduced back into the refinery for reprocessing. In 2000, the amount of product that was recovered fell considerably as did the amount of water that was pumped. This is attributed to the fact that there is just not much product left to be recovered. Several of the trenches (#'s 9, 10, 11) were shut down for most of the year because there is not any product in them to recover. The Bolton Road Trenches are run on an as needed basis. Again, there is just no product there to recover. We check all trenches once a week. If there is product the pumps are started. This not only recovers any product, but we also let the water pumps create the cone of depression that will allow any product to migrate to the pumps.

In the water analysis spreadsheets which show hits in the offsite wells, you will notice that several wells had very minor hits of BTEX. However, none of the wells showed a consistent or increasing pattern of contamination. This leads us to believe that the contamination came from an outside source (lab or during the sampling) and is not a true indication of any contamination in the water supply.

We also continue to see the leading edge of the plume reaching KWB-7 and KWB-11. These monitor wells are both east of Bolton Road. If you remember, we sited the recovery wells on Bolton Road knowing that part of the plume was past this point. We believe what we are seeing in KWB-7 and KWB-11 is that part of the plume that was already east of Bolton Road.

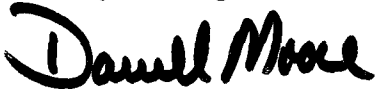
Monitor wells KWB-4 and KWB-6 continue to show very thick sections of hydrocarbons. We have started pumping these wells on a regular basis to see if the product continues to accumulate in them. If product continues to accumulate in this area, it might be prudent to install additional recovery wells to recover the product.

Finally, the three new trenches that were installed at the same time as the ToolPushers Trench, have never accumulated any product. These trenches are located as follows: 1) on the northeast corner of the refinery property on our farm, 2) along Eagle Draw just east of the North Colony Landfarm, and 3) just west of our former trickling filter. The latter two were installed as part of the North Colony Landfarm clean-up. These trenches are checked regularly for any accumulation of product. If product is found, they will be pumped, and if warranted, hard piped into our recovery system.

The recovery of product and remediation of groundwater under the refinery is progressing very favorably. The drop in thickness of product around the North Colony Landfarm and Tetra-Ethyl Lead Impoundment are testament to the recovery system's effectiveness.

If you have any questions concerning this submission, please call me at 505-748-3311.

Sincerely,
Navajo Refining Co.

A handwritten signature in black ink that reads "Darrell Moore". The signature is written in a cursive, flowing style.

Darrell Moore
Environmental Mgr. for Water and Waste

Encl.



NOTES	
TRENCHES	_____
POSSIBLE FUTURE TRENCHES	-----

REFERENCE DRAWINGS	

NO.	REVISIONS
15	2000 READINGS
14	SEPT. 1999 READINGS
13	JUN. 1999 READINGS
12	MAR. 1999 READINGS
11	JAN. 1999 READINGS
10	SEPT. 1998 READINGS
9	JUN. 1998 READINGS

BY	CHK.	DATE	APPR.	APPR.	NO.	REVISIONS	BY	CHK.	DATE	APPR.	APPR.	NO.	REVISIONS
					8	MAR. 1998 READINGS	LGR	DGM	2/2/99	DGM	DGJ	8	
					7	JAN. 1998 READINGS	LGR	DGM	2/18/99	DGM	DGJ	7	
BHR	DGM	2/2/99	DGM		6	OCT. 1996 READINGS	DLW	DGM	2/28/99	DGM	DGJ	6	
LGR	DGM	2/28/99	DGM	DGJ	5	AUGUST, 1996 READINGS	DLW	DGM	2/11/99	DGM	DGJ	5	
LGR	DGM	2/28/99	DGM	DGJ	4	MAY, 1996 READINGS	DLW	DGM	2/11/99	DGM	DGJ	4	
LGR	DGM	2/24/99	DGM	DGJ	3	JANUARY, 1996 READINGS	DLW	DGM	2/11/99	DGM	DGJ	3	
LGR	DGM	2/24/99	DGM	DGJ	2	SEPTEMBER, 1995 READINGS	PETE	DGM	2/13/99	DGM	DGJ	2	
LGR	DGM	2/24/99	DGM	DGJ	1	JUNE, 1995 READINGS	PETE	DGM	2/27/99	DGM	DGJ	1	
LGR	DGM	2/24/99	DGM	DGJ	0	ISSUED WITH MARCH, 1995 READINGS						0	

DRAWING TITLE	
GROUNDWATER POTENTIOMETRIC MAP NAVAJO REFINING 1st QTR.	

DRAWING NUMBER	
90-44-D	

SCALE	
AS SHOWN	

DATE	
3-17-95	

DRAWING NUMBER	
90-44-D	

SCALE	
AS SHOWN	

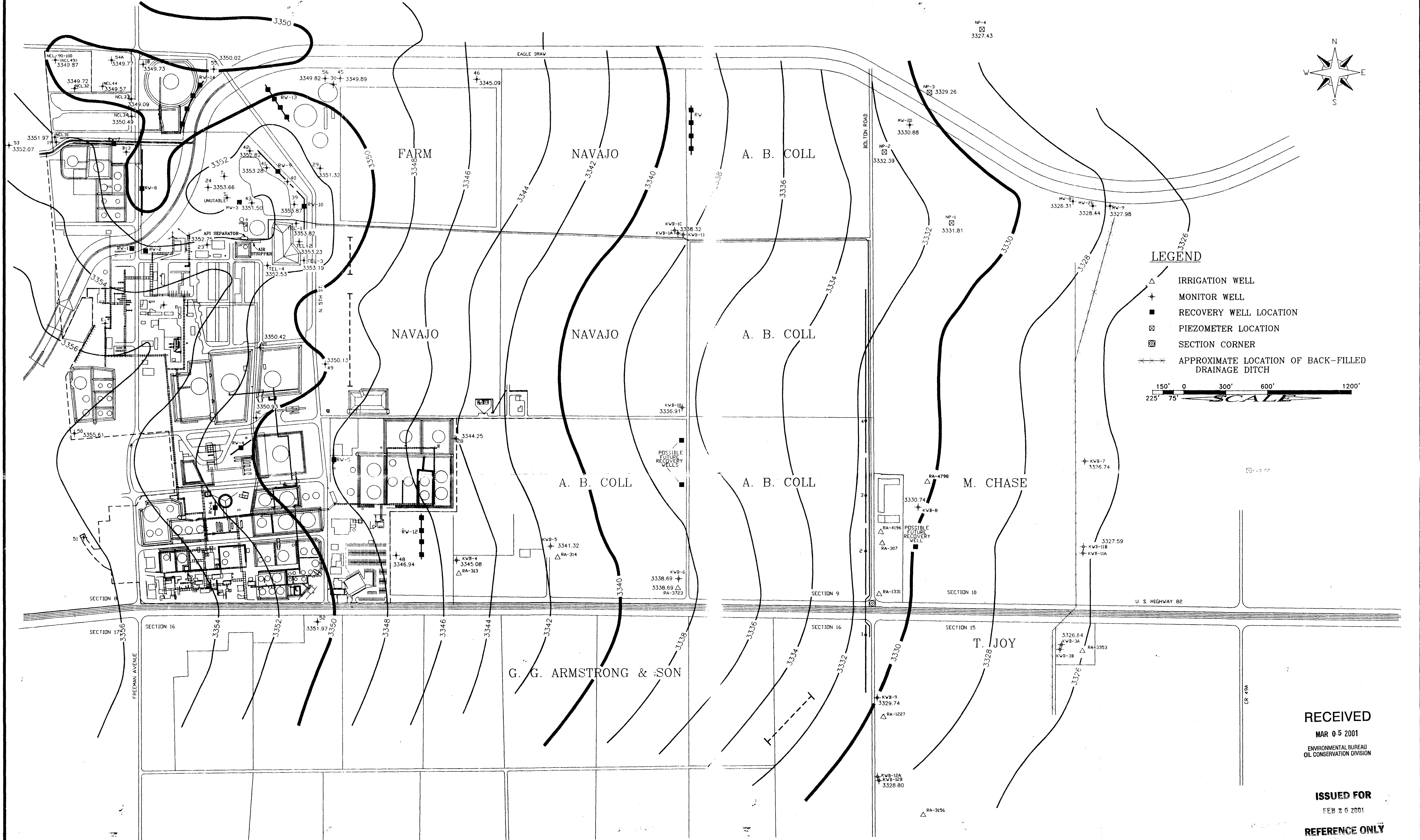
RECEIVED
 MAR 05 2001
 ENVIRONMENTAL BUREAU
 OIL CONSERVATION DIVISION

ISSUED FOR
 FEB 26 2001
REFERENCE ONLY

NAVAJO REFINING CO.
 ENGINEERING DEPARTMENT
 P.O. DRAWER 159
 ARTESIA, NEW MEXICO

DRAWN BY	CHK'D BY	SCALE
DLW	DGM	AS SHOWN

DATE	APPR. BY	DRAWING NUMBER
3-17-95	DLW	90-44-D



RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

ISSUED FOR

FEB 26 2001

REFERENCE ONLY

NOTES

TRENCHES
POSSIBLE FUTURE TRENCHES

REFERENCE DRAWINGS

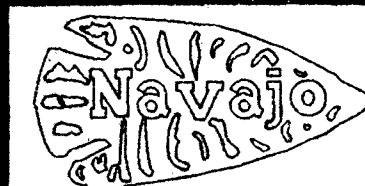
ND. REVISIONS

ND.	REVISIONS
15	2000 READINGS
14	SEPT. 1999 READINGS
13	JUN. 1999 READINGS
12	MAR. 1999 READINGS
11	JAN. 1999 READINGS
10	SEPT. 1998 READINGS
9	JUN. 1998 READINGS

BY	CHK.	DATE	APPR.	APPR.	ND.	REVISIONS	BY	CHK.	DATE	APPR.	APPR.
					8	MAR. 1998 READINGS	LGR	DGM	2/20/99	DGM	DGJ
					7	JAN. 1998 READINGS	LGR	DGM	2/20/99	DGM	DGJ
					6	OCT., 1996 READINGS	DLW	DGJ	8/17/96	DGM	DGJ
					5	AUGUST, 1996 READINGS	DLW	DGJ	8/17/96	DGM	DGJ
					4	MAY, 1996 READINGS	DLW	DGJ	8/17/96	DGM	DGJ
					3	JANUARY, 1996 READINGS	PETE	DGJ	10-7-95	DGM	DGJ
					2	SEPTEMBER, 1995 READINGS	PETE	DGJ	10-7-95	DGM	DGJ
					1	JUNE, 1995 READINGS	PETE	DGJ	10-7-95	DGM	DGJ
					0	ISSUED WITH MARCH, 1995 READINGS	PETE	DGJ	10-7-95	DGM	DGJ

DRAWING TITLE

GROUNDWATER
POTENTIOMETRIC MAP
NAVAJO REFINING
2nd QTR.



NAVAJO REFINING CO.
ENGINEERING DEPARTMENT
P.O. DRAWER 159
ARTESIA, NEW MEXICO

DRAWN BY	CHK'D BY	SCALE
DLW	DGM	AS SHOWN
DATE	APPR BY	DRAWING NUMBER
3-17-95	ILS	90-44-D
		REV. 15



NOTES

TRENCHES _____

POSSIBLE FUTURE TRENCHES - - - - -

REFERENCE DRAWINGS	

REVISIONS						REVISIONS					
NO.						NO.					
						8	MAR. 1998 READINGS	LGR	DGM	2/2/98	DGM
						7	JAN. 1998 READINGS	LGR	DGM	2/2/98	DGM
						6	OCT. , 1996 READINGS	DLW	DGJ	10/2/96	DGM
15	2000 READINGS	BHR	DGM	2/2/00	DGM	5	AUGUST, 1996 READINGS	DLW	DGJ	8/1/96	DGM
14	SEPT. 1999 READINGS	LGR	DGM	2/2/99	DGM	4	MAY, 1996 READINGS	DLW	DGJ	5/1/96	DGM
13	JUN. 1999 READINGS	LGR	DGM	2/2/99	DGM	3	JANUARY, 1996 READINGS	DLW	DGJ	1/1/96	DGM
12	MAR. 1999 READINGS	LGR	DGM	2/2/99	DGM	2	SEPTEMBER, 1995 READINGS	PETE	DGJ	9/7/95	DGM
11	JAN. 1999 READINGS	LGR	DGM	2/2/99	DGM	1	JUNE, 1995 READINGS	PETE	DGJ	7/12/95	DGM
10	SEPT. 1998 READINGS	LGR	DGM	2/2/98	DGM	0	ISSUED WITH MARCH, 1995 READINGS	PETE	DGJ	3/27/95	DGM
9	JUN. 1998 READINGS	LGR	DGM	2/2/98	DGM						

DRAWING TITLE

GROUNDWATER
POTENTIOMETRIC MAP
NAVAJO REFINING
3rd QTR.

NAVAJO REFINING CO.
ENGINEERING DEPARTMENT
P.O. DRAWER 159
ARTESIA, NEW MEXICO

DRAWN BY	CHK'D BY	SCALE
DLW	DGM	AS SHOWN
DATE	APPR BY	DRAWING NUMBER
3-17-95	ILS	90-44-D
REV.		
15		

RECEIVED

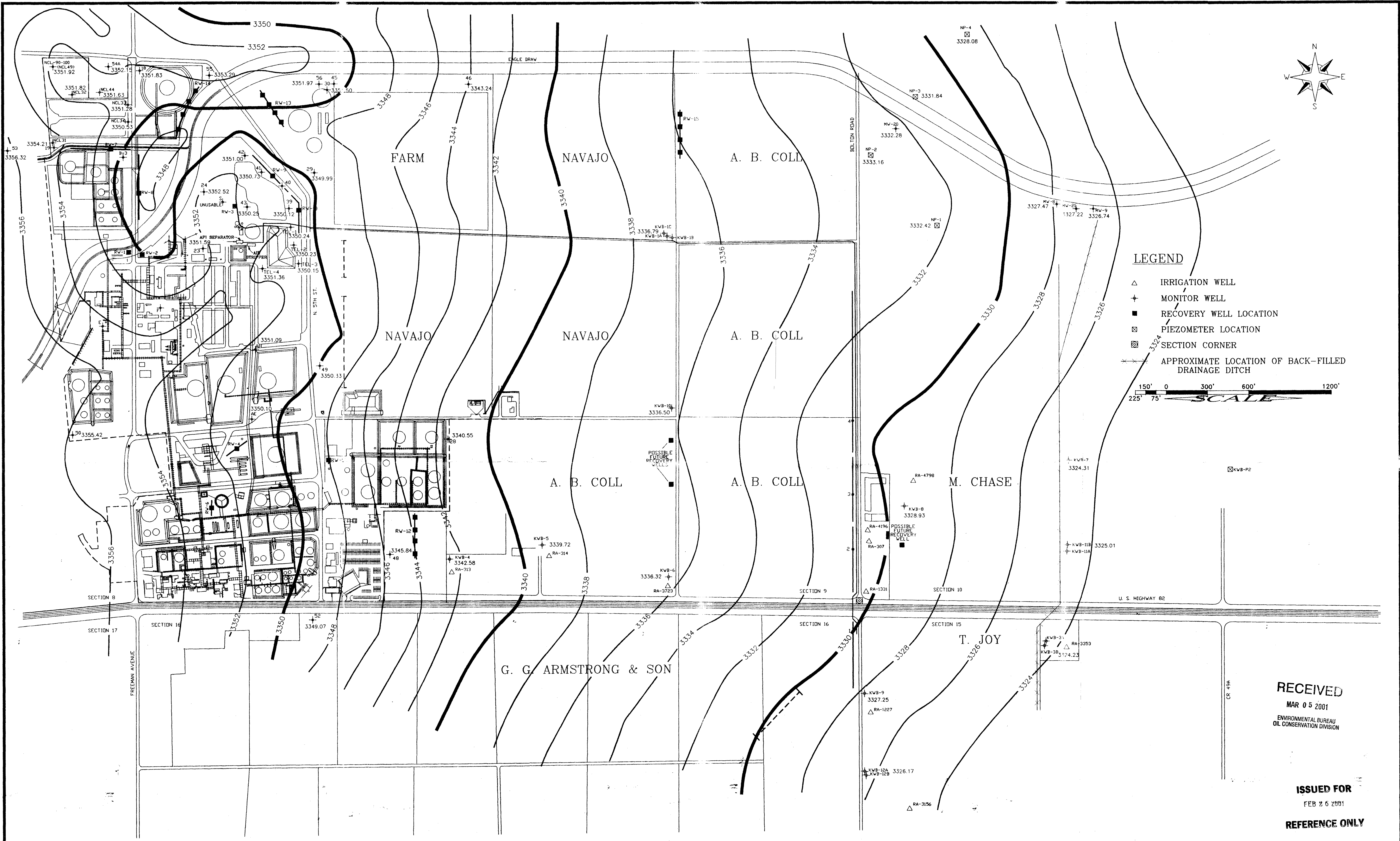
MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

ISSUED FOR

FEB 26 2001

REFERENCE ONLY



NOTES

TRENCHES —————

POSSIBLE FUTURE TRENCHES - - - - -

REFERENCE DRAWINGS

NO.	REVISIONS
15	2000 READINGS
14	SEPT. 1999 READINGS
13	JUN. 1999 READINGS
12	MAR. 1999 READINGS
11	JAN. 1999 READINGS
10	SEPT. 1998 READINGS
9	JUN. 1998 READINGS

BY	CHK.	DATE	APPR.	APPR.	NO.	REVISIONS
BHR	DGM	2/21/98	DGM	DGJ	8	MAR. 1998 READINGS
LGR	DGM	2/28/98	DGM	DGJ	7	JAN. 1998 READINGS
LGR	DGM	2/28/98	DGM	DGJ	6	DEC. 1996 READINGS
LGR	DGM	2/28/98	DGM	DGJ	5	AUGUST, 1996 READINGS
LGR	DGM	2/28/98	DGM	DGJ	4	MAY, 1996 READINGS
LGR	DGM	2/28/98	DGM	DGJ	3	JANUARY, 1996 READINGS
LGR	DGM	2/28/98	DGM	DGJ	2	SEPTEMBER, 1995 READINGS
LGR	DGM	2/28/98	DGM	DGJ	1	JUNE, 1995 READINGS
LGR	DGM	2/28/98	DGM	DGJ	0	ISSUED WITH MARCH, 1995 READINGS

BY	CHK.	DATE	APPR.	APPR.
LGR	DGM	2/24/99	DGM	DGJ
LGR	DGM	2/28/99	DGM	DGJ
DLW	DGJ	2/28/99	DGM	DGJ
DLW	DGJ	2/28/99	DGM	DGJ
DLW	DGJ	2/28/99	DGM	DGJ
DLW	DGJ	2/28/99	DGM	DGJ
PETE	DGJ	2/28/99	DGM	DGJ
PETE	DGJ	2/28/99	DGM	DGJ
PETE	DGJ	2/28/99	DGM	DGJ

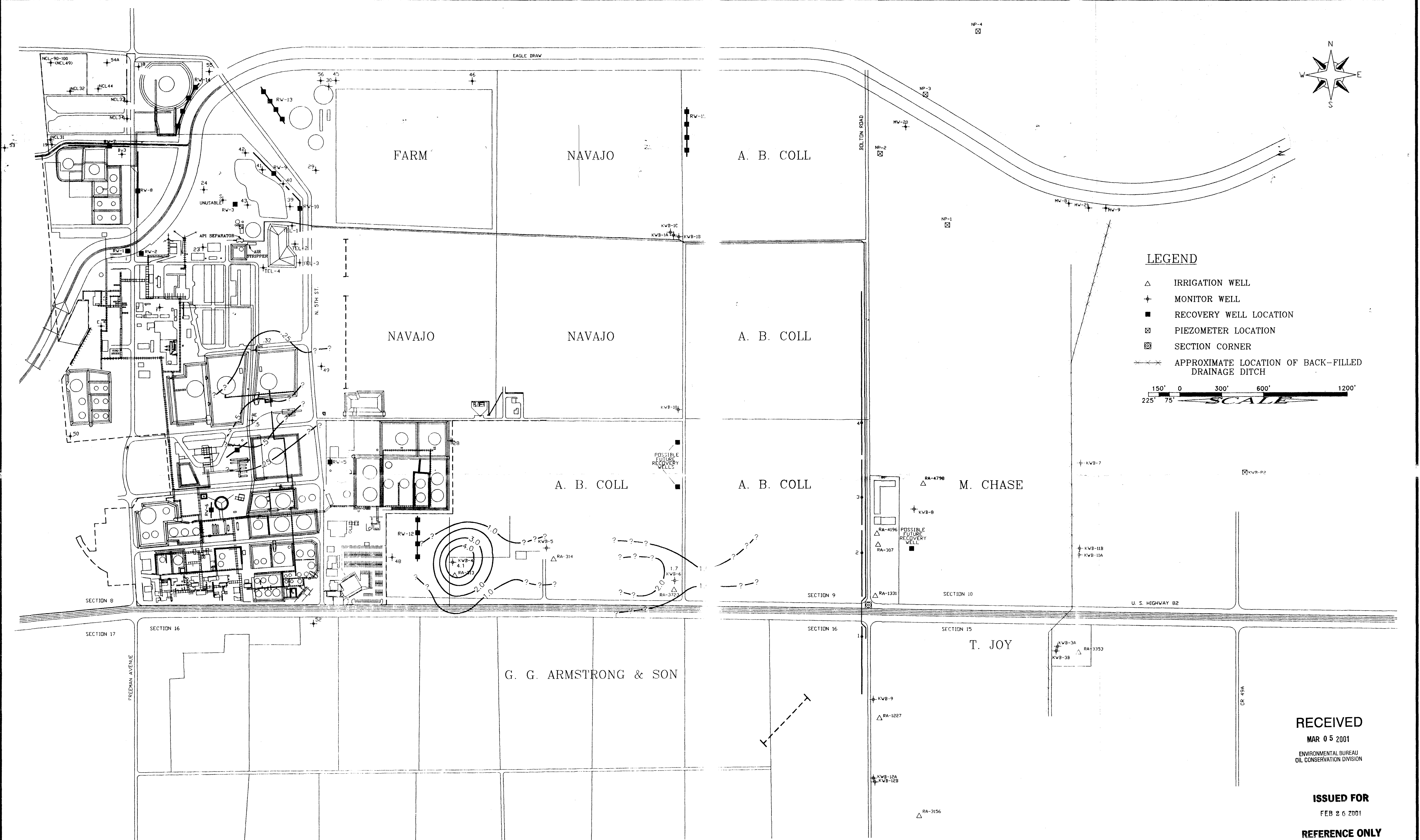
DRAWING TITLE

GROUNDWATER
POTENTIOMETRIC MAP
NAVAJO REFINING
4th QTR.



NAVAJO REFINING CO.
ENGINEERING DEPARTMENT
P.O. DRAWER 159
ARTESIA, NEW MEXICO

DRAWN BY DLW	CHK'D BY DGM	SCALE AS SHOWN
DATE 3-17-95	APPR BY ILS	DRAWING NUMBER 90-44-D
		REV. 15



NOTES

TRENCHES _____

POSSIBLE FUTURE TRENCHES - - - - -

REFERENCE DRAWINGS

NO.	REVISIONS
16	2000 READINGS
15	'95-'99 READINGS
14	SEPT. 1999 READINGS
13	JUN. 1999 READINGS
12	MAR. 1999 READINGS
11	JAN. 1999 READINGS
10	SEPT. 1998 READINGS
9	JUN. 1998 READINGS

NO.	REVISIONS	BY	CHK.	DATE	APPR.	APPR.
8	MAR. 1998 READINGS	BHR	DGM	01/26/98	DGM	
7	JAN. 1998 READINGS	LGR	DGM	01/07/98	DGM	DGJ
6	OCT. 1996 READINGS	LGR	DGM	07/28/96	DGM	DGJ
5	AUGUST, 1996 READINGS	LGR	DGM	07/28/96	DGM	DGJ
4	MAY, 1996 READINGS	LGR	DGM	07/28/96	DGM	DGJ
3	JANUARY, 1996 READINGS	LGR	DGM	07/28/96	DGM	DGJ
2	SEPTEMBER, 1995 READINGS	LGR	DGM	07/28/96	DGM	DGJ
1	JUNE, 1995 READINGS	LGR	DGM	07/28/96	DGM	DGJ
0	ISSUED WITH MARCH, 1995 READINGS	LGR	DGM	07/28/96	DGM	DGJ

NO.	REVISIONS	BY	CHK.	DATE	APPR.	APPR.
8	MAR. 1998 READINGS	LGR	DGM	01/26/98	DGM	DGJ
7	JAN. 1998 READINGS	LGR	DGM	01/07/98	DGM	DGJ
6	OCT. 1996 READINGS	DLW	DGJ	10/28/96	DGM	DGJ
5	AUGUST, 1996 READINGS	DLW	DGJ	9/11/96	DGM	DGJ
4	MAY, 1996 READINGS	DLW	DGJ	05/14/96	DGM	DGJ
3	JANUARY, 1996 READINGS	DLW	DGJ	01-18-96	DGM	DGJ
2	SEPTEMBER, 1995 READINGS	PETE	DGJ	10-17-95	DGM	DGJ
1	JUNE, 1995 READINGS	PETE	DGJ	7-18-95	DGM	ILS
0	ISSUED WITH MARCH, 1995 READINGS	PETE	DGJ	5-27-95	DGM	ILS

DRAWING TITLE

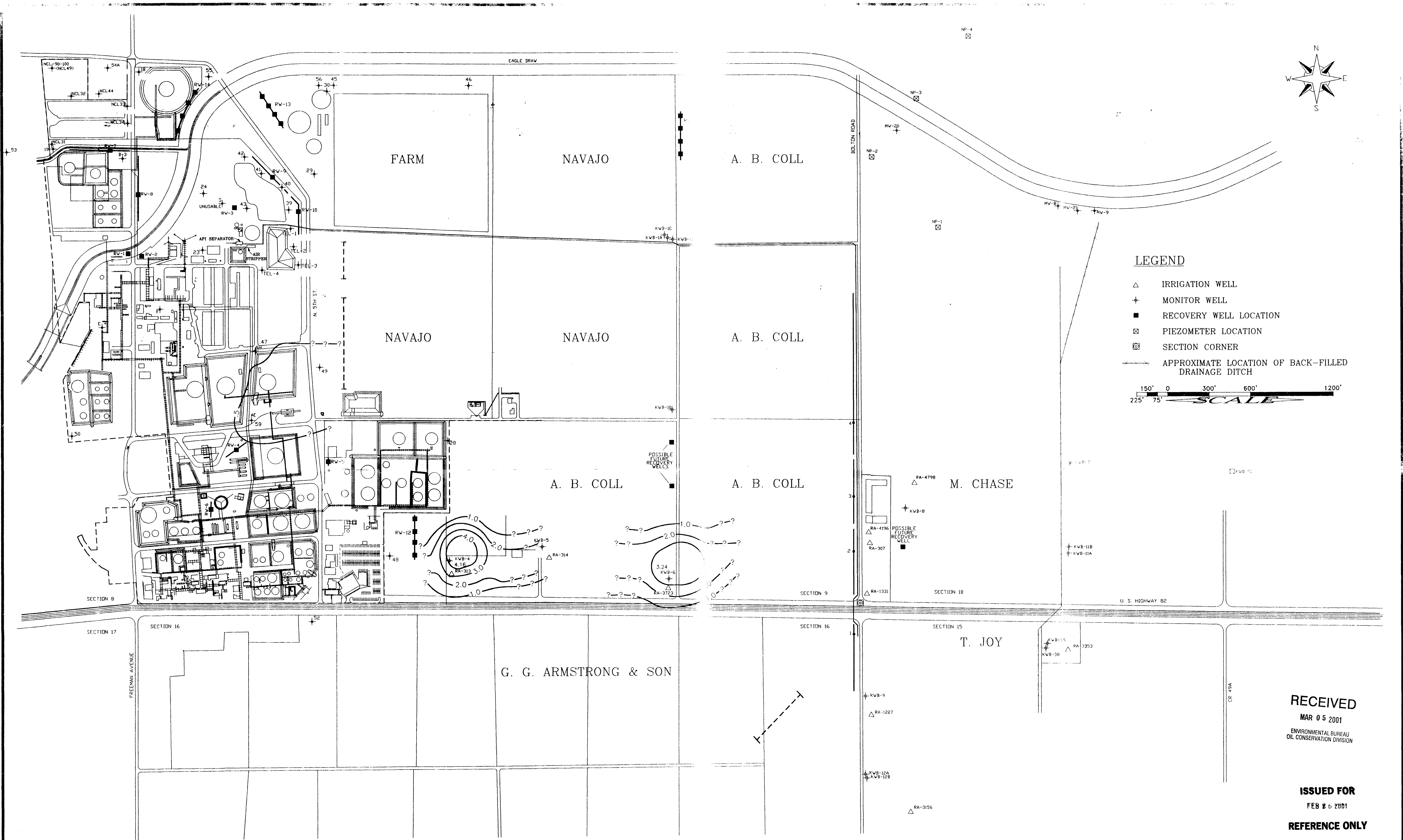
PRODUCT THICKNESS
MAP
NAVAJO REFINING
3rd QTR.

RECEIVED
MAR 05 2001
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

ISSUED FOR
FEB 26 2001
REFERENCE ONLY

NAVAJO REFINING CO.
ENGINEERING DEPARTMENT
P.D. DRAWER 159
ARTESIA, NEW MEXICO

DRAWN BY	CHK'D BY	SCALE
DLW	DGM	AS SHOWN
DATE	APPR BY	DRAWING NUMBER
3-17-95	ILS	90-45-D
		REV. 16



NOTES

TRENCHES

POSSIBLE FUTURE TRENCHES

REFERENCE DRAWINGS

NO.	REVISIONS
16	2000 READINGS
15	'95-'99 READINGS
14	SEPT. 1999 READINGS
13	JUN. 1999 READINGS
12	MAR. 1999 READINGS
11	JAN. 1999 READINGS
10	SEPT. 1998 READINGS
9	JUN. 1998 READINGS

BY	CHK.	DATE	APPR.	APPR.	NO.	REVISIONS
BHR	DGM	02/06/01	DGM	DGJ	8	MAR. 1998 READINGS
LGR	DGM	02/07/01	DGM	DGJ	7	JAN. 1998 READINGS
LGR	DGM	02/07/01	DGM	DGJ	6	OCT. 1996 READINGS
LGR	DGM	02/07/01	DGM	DGJ	5	AUGUST, 1996 READINGS
LGR	DGM	02/07/01	DGM	DGJ	4	MAY, 1996 READINGS
LGR	DGM	02/07/01	DGM	DGJ	3	JANUARY, 1996 READINGS
LGR	DGM	02/07/01	DGM	DGJ	2	SEPTEMBER, 1995 READINGS
LGR	DGM	02/07/01	DGM	DGJ	1	JUNE, 1995 READINGS
LGR	DGM	02/07/01	DGM	DGJ	0	ISSUED WITH MARCH, 1995 READINGS

BY	CHK.	DATE	APPR.	APPR.	DRAWING TITLE
LGR	DGM	02/07/01	DGM	DGJ	PRODUCT THICKNESS MAP
LGR	DGM	02/07/01	DGM	DGJ	NAVAJO REFINING
LGR	DGM	02/07/01	DGM	DGJ	4th QTR.

RECEIVED
MAR 05 2001
ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

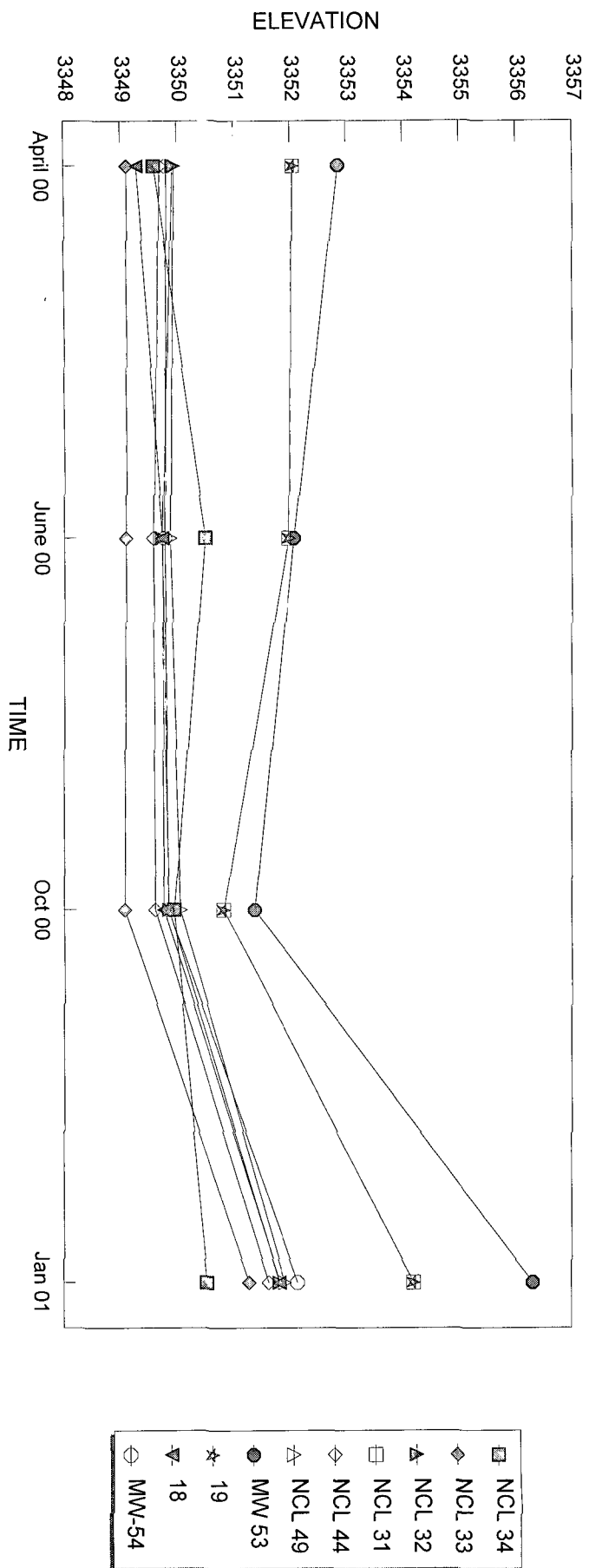
ISSUED FOR
FEB 26 2001
REFERENCE ONLY

NAVAJO REFINING CO.
ENGINEERING DEPARTMENT
P.O. DRAWER 159
ARTESIA, NEW MEXICO

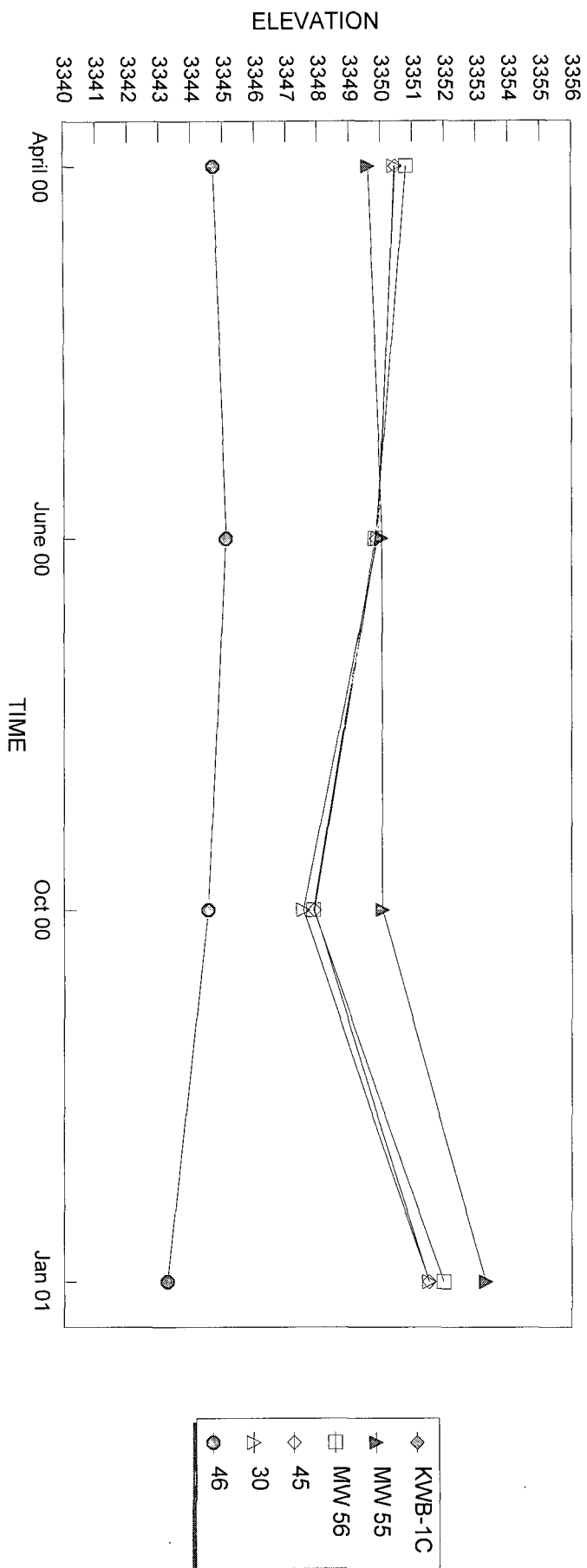
DRAWN BY	CHK'D BY	SCALE
DLW	DGM	AS SHOWN

DATE	APPR BY	DRAWING NUMBER	REV.
3-17-95	ILS	90-45-D	16

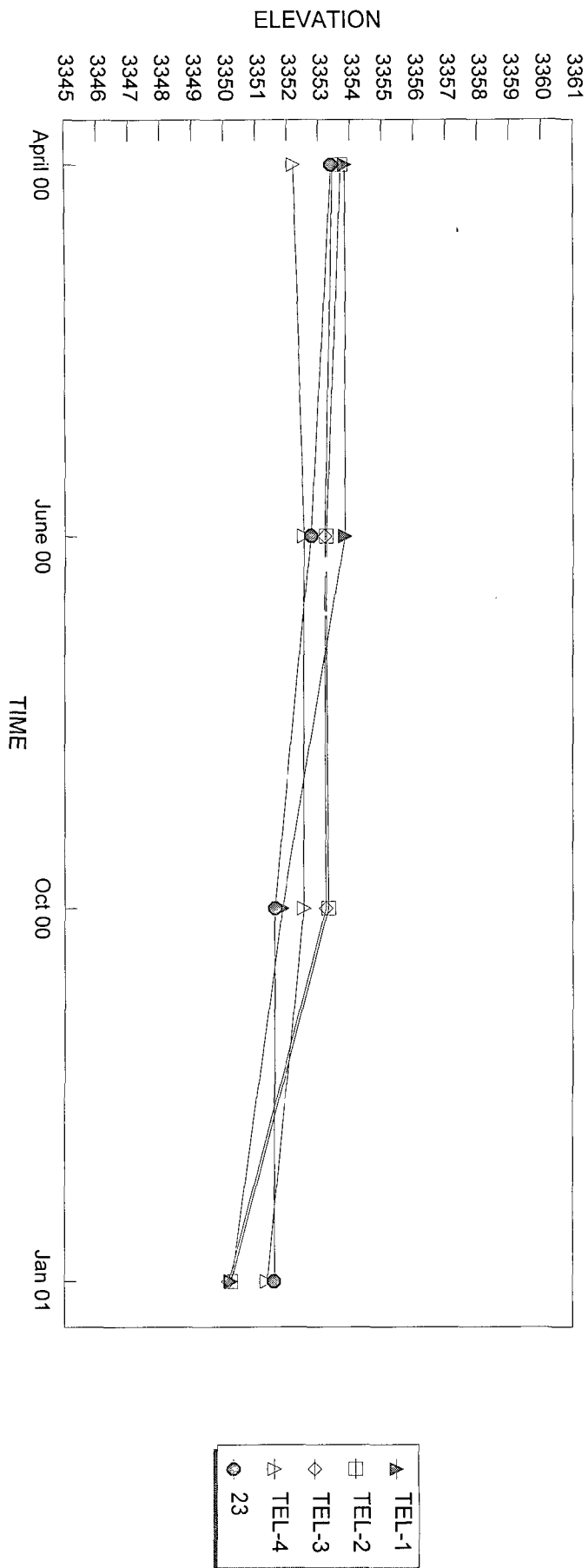
ELEVATION VS. TIME



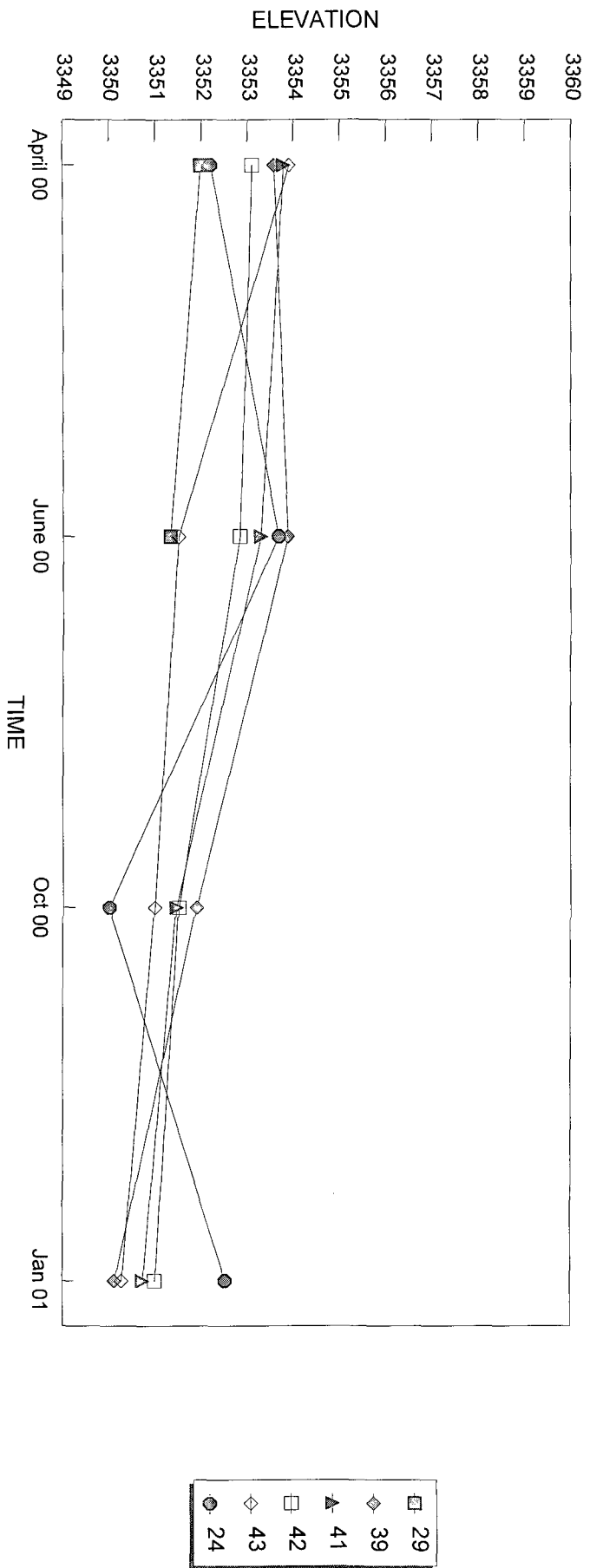
ELEVATION VS. TIME



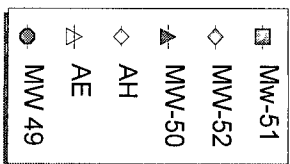
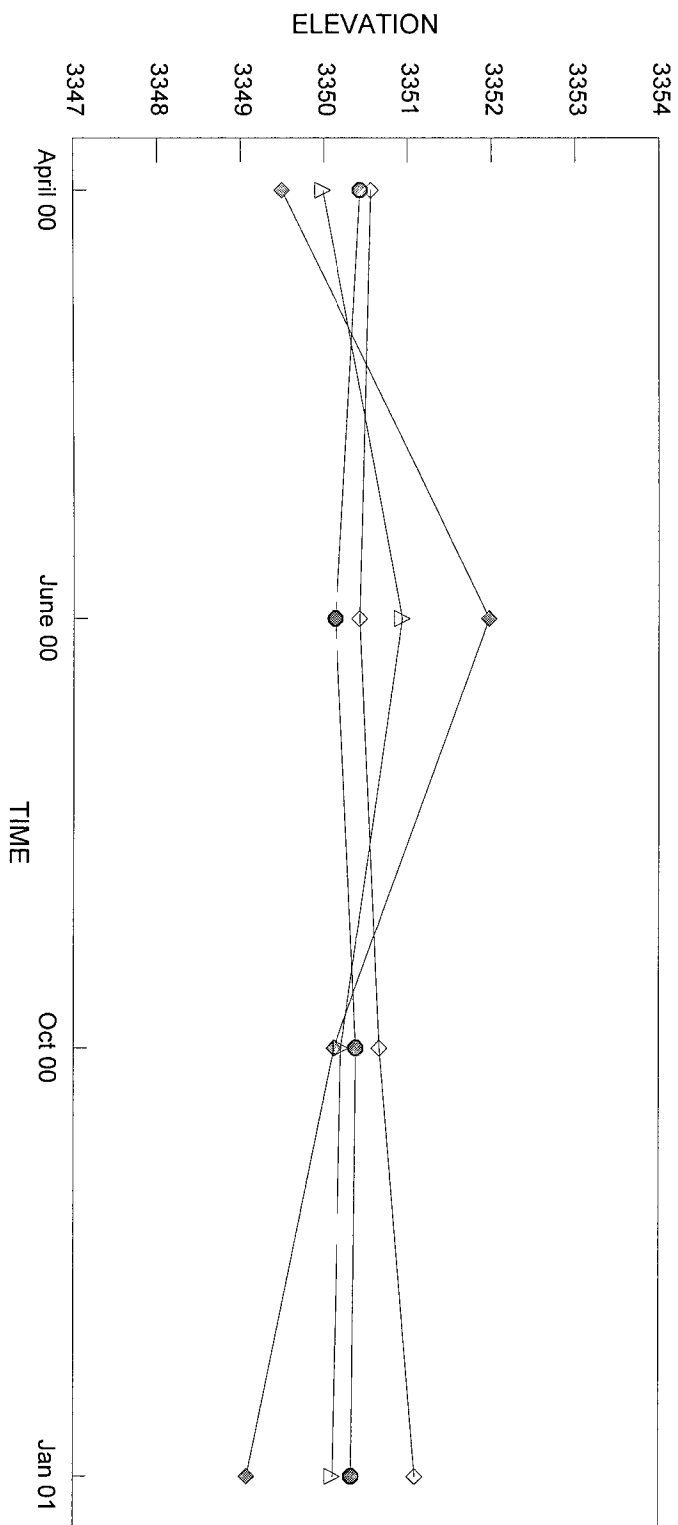
ELEVATION VS. TIME



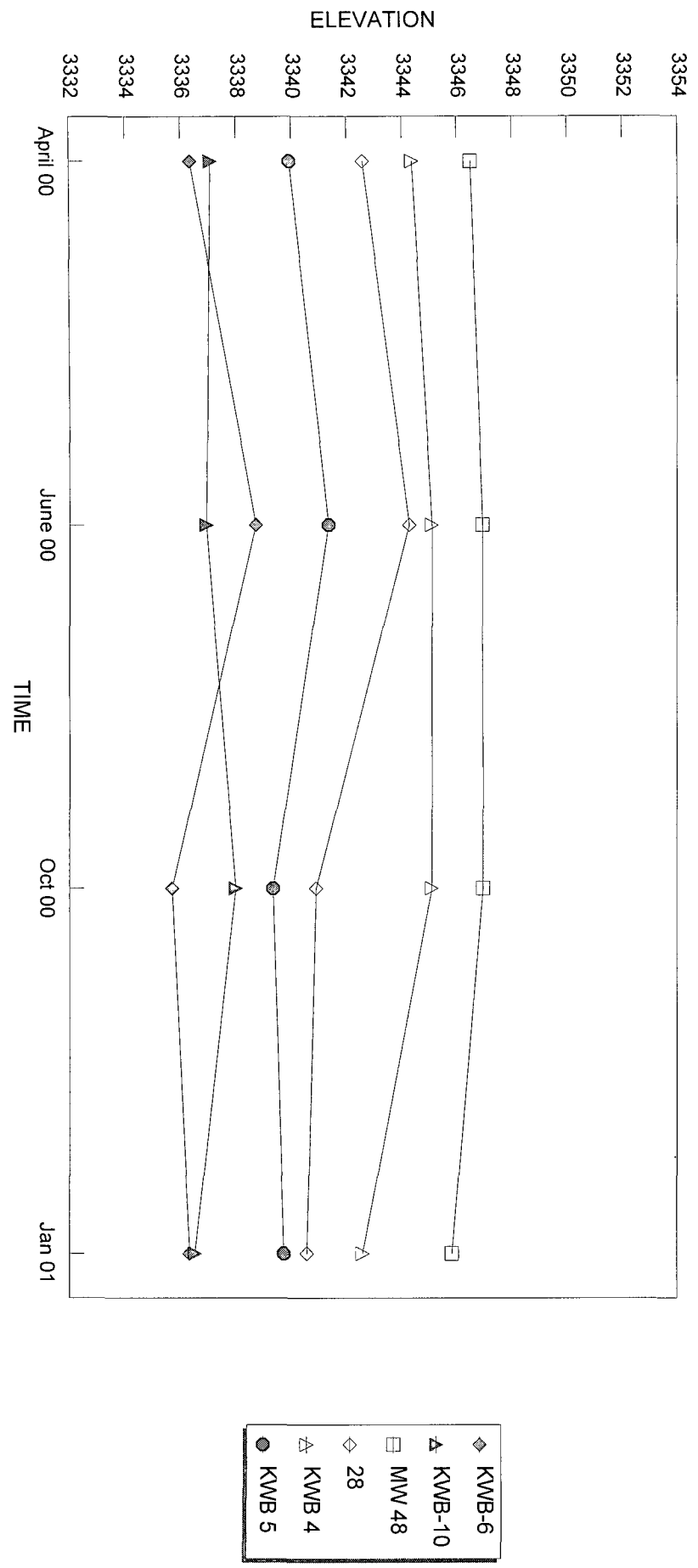
ELEVATION VS. TIME



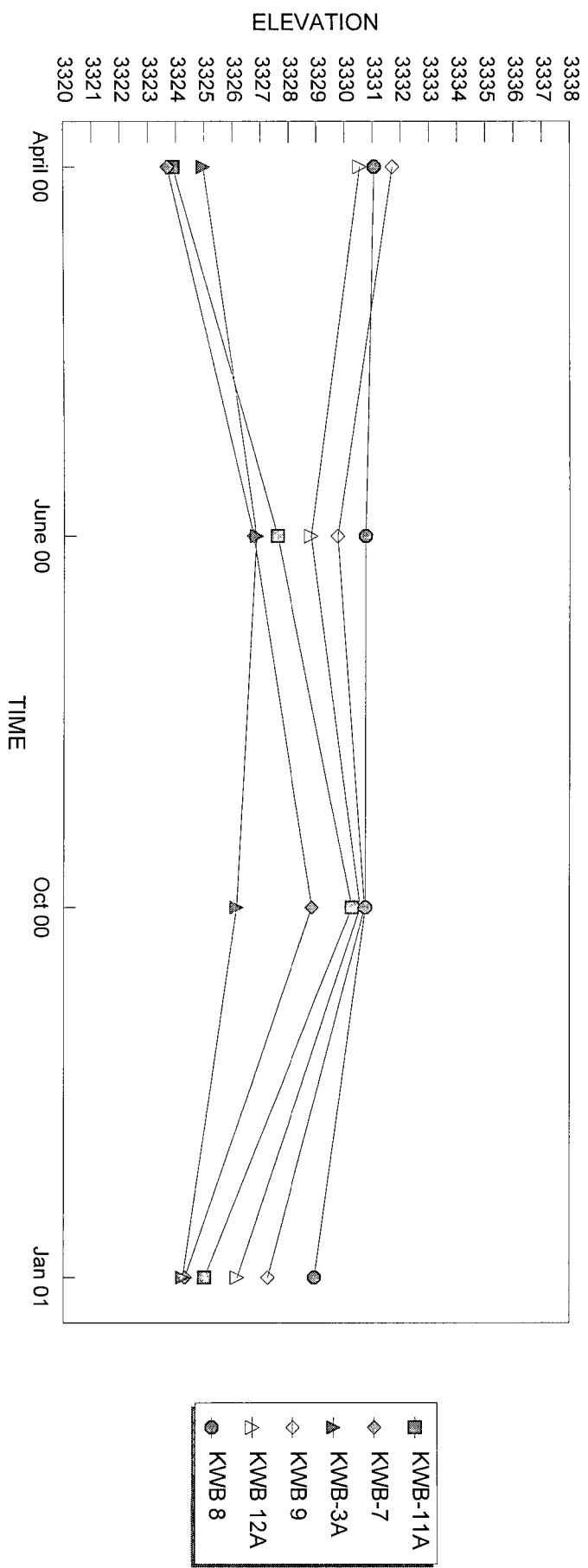
ELEVATION VS. TIME



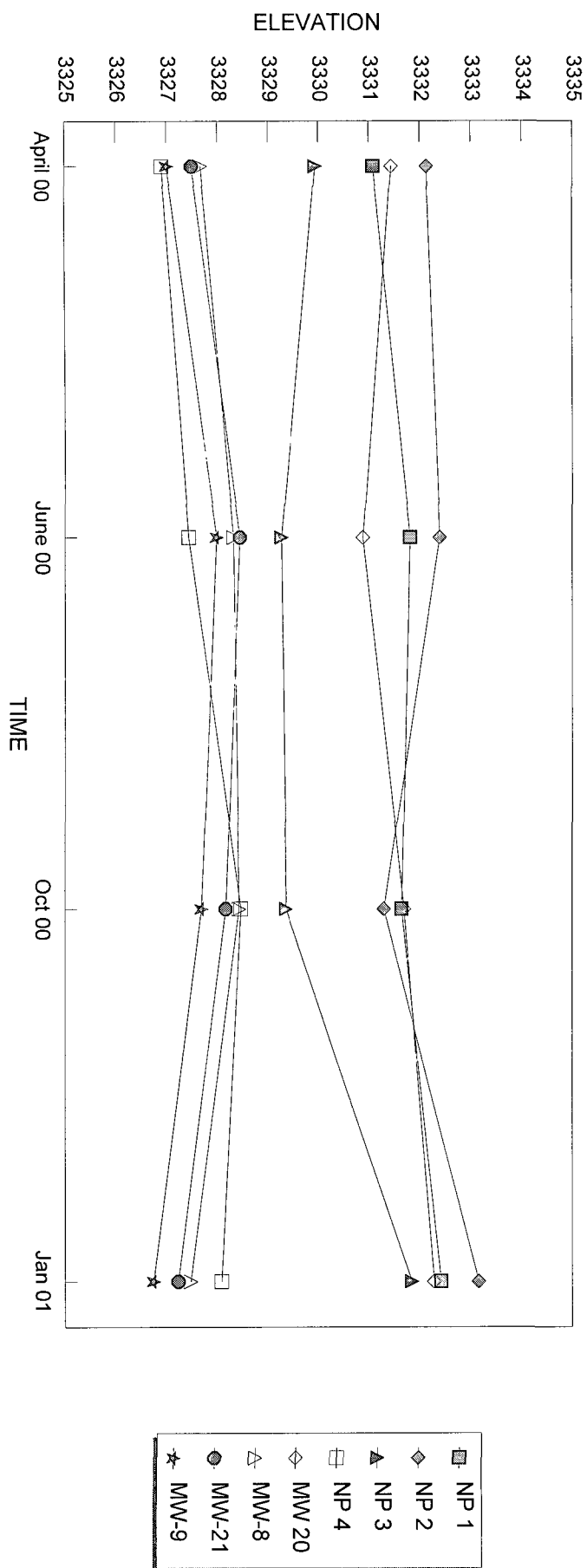
ELEVATION VS. TIME



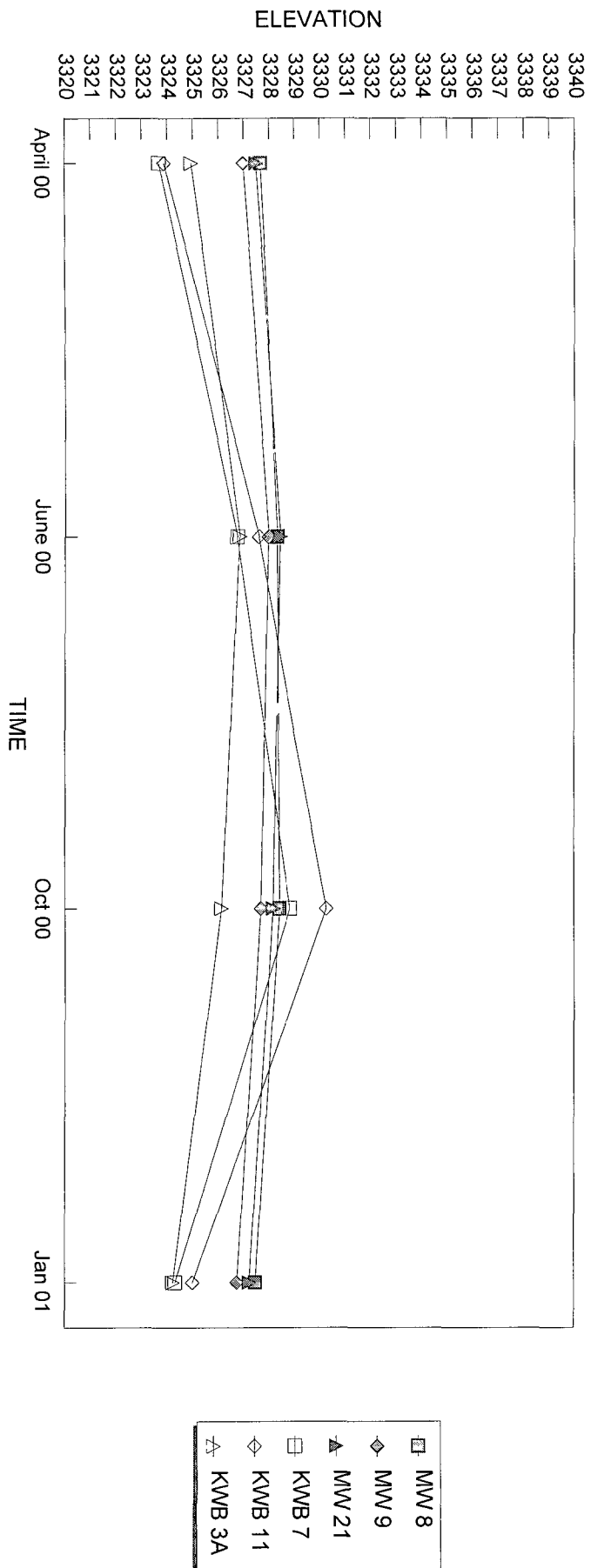
ELEVATION VS. TIME



ELEVATION VS. TIME

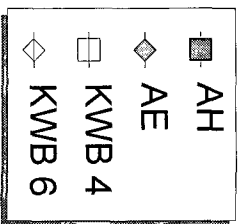
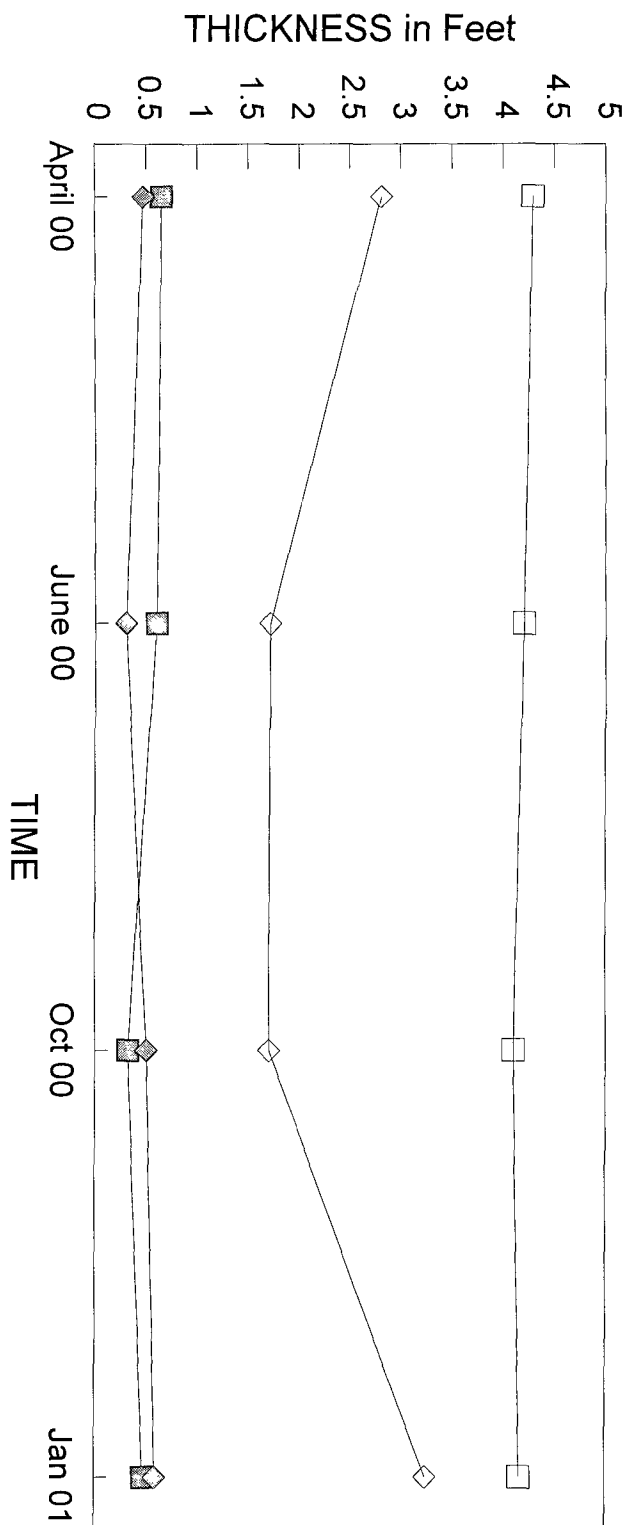


ELEVATION VS. TIME



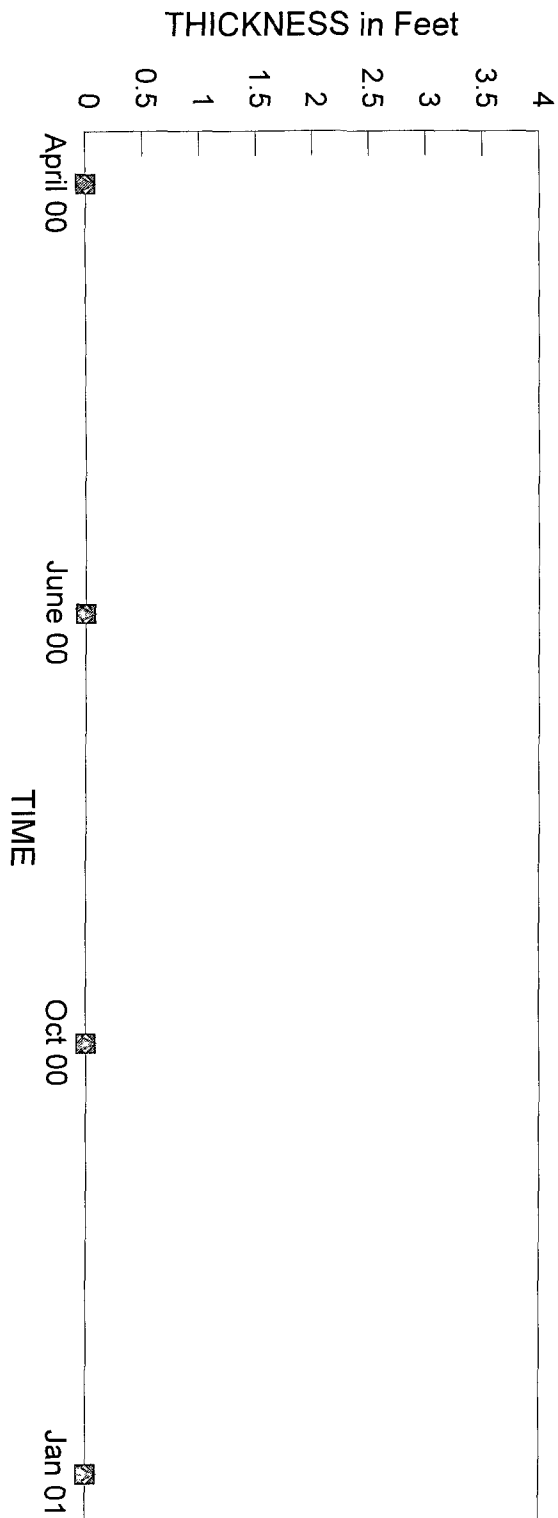
PRODUCT THICKNESS VS. TIME

Southeast Part of Refinery



PRODUCT THICKNESS VS. TIME

NCL and TEL Areas



TEL 3
TEL 1
NCL 34

RA-313						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M, P, O Xylene (mg/l)	Total BTEX (mg/l)
03/31/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
04/17/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
08/05/97	N/A	N/A	N/A	N/A	N/A	N/A
08/26/97	N/A	N/A	N/A	N/A	N/A	N/A
03/20/98	.007 mg/L	N/A	N/A	N/A	N/A	N/A
06/26/98	N/A	N/A	N/A	N/A	N/A	N/A
08/25/98	N/A	N/A	N/A	N/A	N/A	N/A
09/30/98	N/A	N/A	N/A	N/A	N/A	N/A
05/21/99	N/A	N/A	N/A	N/A	N/A	N/A
06/08/99	N/A	N/A	N/A	N/A	N/A	N/A
08/09/99	N/A	N/A	N/A	N/A	N/A	N/A
08/31/99	N/A	N/A	N/A	N/A	N/A	N/A
09/09/99	N/A	N/A	N/A	N/A	N/A	N/A
11/08/99	N/A	N/A	N/A	N/A	N/A	N/A
03/06/00	N/A	N/A	N/A	N/A	N/A	N/A
04/18/00	N/A	N/A	N/A	N/A	N/A	N/A
05/23/00	N/A	N/A	N/A	N/A	N/A	N/A
06/20/00	N/A	N/A	N/A	N/A	.001 ug/L	.001 ug/L
07/27/00	N/A	N/A	N/A	N/A	N/A	N/A
08/30/00	N/A	N/A	N/A	N/A	N/A	N/A
09/27/00	N/A	N/A	N/A	N/A	N/A	N/A
10/25/00	N/A	N/A	N/A	N/A	N/A	N/A

RA-4196						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M.P.O Xylene (mg/l)	Total BTEX (mg/l)
02/28/97	N/A	N/A	N/A	N/A	N/A	N/A
04/01/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
04/17/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
05/30/97	N/A	N/A	N/A	N/A	N/A	N/A
07/31/97	N/A	N/A	N/A	N/A	N/A	N/A
08/26/97	N/A	N/A	N/A	N/A	N/A	N/A
09/30/97	N/A	N/A	N/A	N/A	N/A	N/A
10/30/97	N/A	N/A	N/A	N/A	N/A	N/A
11/24/97	.002 mg/L	N/A	N/A	N/A	N/A	N/A
01/05/98	N/A	N/A	N/A	N/A	N/A	N/A
01/30/98	N/A	N/A	N/A	N/A	N/A	N/A
02/18/98	.002 mg/L	N/A	N/A	N/A	N/A	N/A
03/20/98	N/A	N/A	N/A	N/A	N/A	N/A
04/27/98	N/A	N/A	N/A	N/A	N/A	N/A
05/26/98	N/A	N/A	N/A	N/A	N/A	N/A
06/18/98	N/A	N/A	N/A	N/A	N/A	N/A
07/27/98	N/A	N/A	N/A	N/A	N/A	N/A
08/25/98	N/A	N/A	N/A	N/A	N/A	N/A
09/16/98	N/A	N/A	N/A	N/A	N/A	N/A
10/26/98	N/A	N/A	N/A	N/A	N/A	N/A
11/23/98	N/A	N/A	N/A	N/A	N/A	N/A
12/11/98	N/A	N/A	N/A	N/A	N/A	N/A
01/28/99	N/A	N/A	N/A	N/A	N/A	N/A
02/25/99	N/A	N/A	N/A	N/A	N/A	N/A
03/08/99	N/A	N/A	N/A	N/A	N/A	N/A
04/30/99	N/A	N/A	N/A	N/A	N/A	N/A
05/21/99	N/A	N/A	N/A	N/A	N/A	N/A
06/08/99	N/A	N/A	N/A	N/A	N/A	N/A
08/09/99	N/A	N/A	N/A	N/A	N/A	N/A
08/31/99	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
11/08/99	N/A	N/A	N/A	N/A	N/A	N/A
12/15/99	N/A	N/A	N/A	N/A	N/A	N/A
03/06/00	N/A	N/A	N/A	N/A	.001 mg/L	.001 mg/L
04/18/00	N/A	N/A	N/A	N/A	N/A	N/A
05/23/00	N/A	N/A	N/A	N/A	N/A	N/A
06/20/00	N/A	N/A	N/A	N/A	N/A	N/A
07/27/00	N/A	N/A	N/A	N/A	N/A	N/A
08/30/00	N/A	N/A	N/A	N/A	N/A	N/A
09/19/00	N/A	N/A	N/A	N/A	N/A	N/A
10/26/00	N/A	N/A	N/A	N/A	N/A	N/A
01/08/01	N/A	N/A	N/A	N/A	N/A	N/A

RA-4798						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
02/28/97	N/A	N/A	N/A	N/A	N/A	N/A
04/01/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
04/17/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
05/30/97	N/A	N/A	N/A	N/A	N/A	N/A
07/31/97	N/A	N/A	N/A	N/A	N/A	N/A
08/26/97	N/A	N/A	N/A	N/A	N/A	N/A
09/30/97	N/A	N/A	N/A	N/A	N/A	N/A
10/30/97	N/A	N/A	N/A	N/A	N/A	N/A
11/24/97	N/A	N/A	N/A	N/A	N/A	N/A
01/05/98	N/A	N/A	N/A	N/A	N/A	N/A
01/30/98	N/A	N/A	N/A	N/A	N/A	N/A
02/18/98	N/A	N/A	N/A	N/A	N/A	N/A
03/20/98	N/A	N/A	N/A	N/A	N/A	N/A
04/27/98	N/A	N/A	N/A	N/A	N/A	N/A
06/12/98	N/A	N/A	N/A	N/A	N/A	N/A
06/18/98	N/A	N/A	N/A	N/A	N/A	N/A
07/27/98	N/A	N/A	N/A	N/A	N/A	N/A
09/01/98	N/A	N/A	N/A	N/A	N/A	N/A
09/16/98	N/A	N/A	N/A	N/A	N/A	N/A
10/26/98	N/A	N/A	N/A	N/A	N/A	N/A
11/23/98	N/A	N/A	N/A	N/A	N/A	N/A
12/10/98	N/A	N/A	N/A	N/A	N/A	N/A
01/21/99	N/A	N/A	N/A	N/A	N/A	N/A
02/25/99	N/A	N/A	N/A	N/A	N/A	N/A
03/08/99	N/A	N/A	N/A	N/A	N/A	N/A
04/30/99	N/A	N/A	N/A	N/A	N/A	N/A
05/21/99	N/A	N/A	N/A	N/A	N/A	N/A
06/08/99	N/A	N/A	N/A	N/A	N/A	N/A
08/09/99	N/A	N/A	N/A	N/A	N/A	N/A
08/31/99	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
11/08/99	N/A	N/A	N/A	N/A	N/A	N/A
12/15/99	N/A	N/A	N/A	N/A	N/A	N/A
03/06/00	N/A	N/A	N/A	N/A	N/A	N/A
04/24/00	N/A	N/A	N/A	N/A	N/A	N/A
05/23/00	N/A	N/A	N/A	N/A	N/A	N/A
06/20/00	N/A	N/A	N/A	N/A	N/A	N/A
07/27/00	N/A	N/A	N/A	N/A	N/A	N/A
08/30/00	N/A	N/A	N/A	N/A	N/A	N/A
09/19/00	N/A	N/A	N/A	N/A	N/A	N/A
01/08/01	N/A	N/A	N/A	N/A	N/A	N/A

RA-307						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M, P, O Xylene (mg/l)	Total BTEX (mg/l)
04/17/97	OT TESTE	N/A	N/A	N/A	N/A	NOT TESTED
05/30/97	N/A	N/A	N/A	N/A	N/A	N/A
07/31/97	N/A	N/A	N/A	N/A	N/A	N/A
08/26/97	N/A	N/A	N/A	N/A	N/A	N/A
09/30/97	N/A	N/A	N/A	N/A	N/A	N/A
03/20/98	N/A	N/A	N/A	N/A	N/A	N/A
05/06/98	N/A	N/A	N/A	N/A	N/A	N/A
05/26/98	N/A	N/A	N/A	N/A	N/A	N/A
06/18/98	N/A	N/A	N/A	N/A	N/A	N/A
07/27/98	N/A	N/A	N/A	N/A	N/A	N/A
09/01/98	N/A	N/A	N/A	N/A	N/A	N/A
09/16/98	N/A	N/A	N/A	N/A	N/A	N/A
04/30/99	N/A	N/A	N/A	N/A	N/A	N/A
05/21/99	N/A	N/A	N/A	N/A	N/A	N/A
08/09/99	N/A	.002 mg/L	N/A	N/A	N/A	.002 mg/L
08/31/99	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
03/06/00	N/A	N/A	N/A	N/A	N/A	N/A
04/18/00	N/A	N/A	N/A	N/A	N/A	N/A
06/20/00	N/A	N/A	N/A	N/A	N/A	N/A
05/23/00	N/A	N/A	N/A	N/A	N/A	N/A
07/27/00	N/A	N/A	N/A	N/A	N/A	N/A
08/29/00	N/A	N/A	N/A	N/A	N/A	N/A
09/19/00	N/A	N/A	N/A	N/A	N/A	N/A
10/27/00	N/A	N/A	N/A	N/A	N/A	N/A

RA-1331						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
04/17/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
05/30/97	N/A	N/A	N/A	N/A	N/A	N/A
07/31/97	N/A	N/A	N/A	N/A	N/A	N/A
08/26/97	N/A	N/A	N/A	N/A	N/A	N/A
09/30/97	N/A	N/A	N/A	N/A	N/A	N/A
03/20/98	N/A	N/A	N/A	N/A	N/A	N/A
05/06/98	N/A	N/A	N/A	N/A	N/A	N/A
05/26/98	N/A	N/A	N/A	N/A	N/A	N/A
06/18/98	N/A	N/A	N/A	N/A	N/A	N/A
07/27/98	N/A	N/A	N/A	N/A	N/A	N/A
09/01/98	N/A	N/A	N/A	N/A	N/A	N/A
09/16/98	N/A	N/A	N/A	N/A	N/A	N/A
04/30/99	N/A	N/A	N/A	N/A	N/A	N/A
05/21/99	N/A	N/A	N/A	N/A	N/A	N/A
08/09/99	N/A	N/A	N/A	N/A	N/A	N/A
08/31/99	.001 mg/L	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
11/08/99	N/A	N/A	N/A	N/A	N/A	N/A
03/06/00	N/A	N/A	N/A	N/A	N/A	N/A
04/18/00	N/A	N/A	N/A	N/A	N/A	N/A
05/23/00	N/A	N/A	N/A	N/A	N/A	N/A
06/20/00	N/A	N/A	N/A	N/A	N/A	N/A
07/27/00	N/A	N/A	N/A	N/A	N/A	N/A
08/29/00	N/A	N/A	N/A	N/A	N/A	N/A
09/27/00	N/A	N/A	N/A	N/A	N/A	N/A

RA-1227						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
03/31/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
04/23/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
05/30/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
07/31/97	.002 mg/L	N/A	N/A	N/A	N/A	N/A
09/08/97	.001 mg/L	N/A	N/A	N/A	N/A	N/A
03/24/98	N/A	N/A	N/A	N/A	N/A	N/A
04/27/98	N/A	N/A	N/A	N/A	N/A	N/A
05/26/98	N/A	N/A	N/A	N/A	N/A	N/A
06/26/98	N/A	N/A	N/A	N/A	N/A	N/A
07/29/98	.002 mg/L	N/A	N/A	N/A	N/A	N/A
08/28/98	.002 mg/L	N/A	N/A	N/A	N/A	N/A
09/30/98	.003 mg/L	N/A	N/A	N/A	N/A	N/A
04/30/99	N/A	N/A	N/A	N/A	N/A	N/A
05/21/99	N/A	N/A	N/A	N/A	N/A	N/A
06/08/99	N/A	N/A	N/A	N/A	N/A	N/A
08/09/99	N/A	N/A	N/A	N/A	N/A	N/A
08/31/99	.002 mg/L	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
11/08/99	N/A	N/A	N/A	N/A	N/A	N/A
04/18/00	N/A	N/A	N/A	N/A	N/A	N/A
05/23/00	N/A	N/A	N/A	N/A	N/A	N/A
06/20/00	N/A	N/A	N/A	N/A	.002 ug/L	.002 ug/L
07/27/00	N/A	N/A	N/A	N/A	N/A	N/A
08/29/00	N/A	N/A	N/A	N/A	N/A	N/A
09/19/00	N/A	N/A	N/A	N/A	N/A	N/A
10/26/00	N/A	N/A	N/A	N/A	N/A	N/A

RA-314					M,P,O	
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylene (mg/l)	Total BTEX (mg/l)
04/21/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
05/30/97	N/A	N/A	N/A	N/A	N/A	N/A
06/16/97	N/A	N/A	N/A	N/A	N/A	N/A
07/31/97	N/A	N/A	N/A	N/A	N/A	N/A
09/08/97	N/A	N/A	N/A	N/A	N/A	N/A
04/27/98	N/A	N/A	N/A	N/A	N/A	N/A
05/26/98	N/A	N/A	N/A	N/A	N/A	N/A
06/18/98	N/A	N/A	N/A	N/A	N/A	N/A
07/27/98	N/A	N/A	N/A	N/A	N/A	N/A
08/25/98	N/A	N/A	N/A	N/A	N/A	N/A
09/25/98	N/A	N/A	N/A	N/A	N/A	N/A
04/30/99	N/A	N/A	N/A	N/A	N/A	N/A
05/21/99	N/A	N/A	N/A	N/A	N/A	N/A
08/09/99	N/A	N/A	N/A	N/A	N/A	N/A
11/08/99	N/A	N/A	N/A	N/A	N/A	N/A
03/06/00	N/A	N/A	N/A	N/A	N/A	N/A
04/18/00	N/A	N/A	N/A	N/A	N/A	N/A
05/23/00	N/A	N/A	N/A	N/A	N/A	N/A
06/20/00	N/A	N/A	N/A	N/A	N/A	N/A
07/27/00	N/A	N/A	N/A	N/A	N/A	N/A
08/30/00	N/A	N/A	N/A	N/A	N/A	N/A
09/27/00	N/A	N/A	N/A	N/A	N/A	N/A
10/26/00	N/A	1.45 ug/L	N/A	N/A	N/A	N/A

RA-2723						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
02/14/97	N/A	N/A	N/A	N/A	N/A	N/A
02/28/97	N/A	N/A	N/A	N/A	N/A	N/A
04/01/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
04/07/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
04/17/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
07/02/97	N/A	N/A	N/A	N/A	N/A	N/A
06/12/98	N/A	N/A	N/A	N/A	N/A	N/A
06/18/98	N/A	N/A	N/A	N/A	N/A	N/A
07/06/98	N/A	N/A	N/A	N/A	N/A	N/A
07/27/98	N/A	N/A	N/A	N/A	N/A	N/A
08/10/98	N/A	N/A	N/A	N/A	N/A	N/A
08/25/98	N/A	N/A	N/A	N/A	N/A	N/A
09/25/98	N/A	N/A	N/A	N/A	N/A	N/A
10/09/98	N/A	N/A	N/A	N/A	N/A	N/A
10/26/98	N/A	N/A	N/A	N/A	N/A	N/A
11/16/98	N/A	N/A	N/A	N/A	N/A	N/A
12/03/98	N/A	N/A	N/A	N/A	N/A	N/A

KWB-11A						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
04/01/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
07/02/97	.004 mg/L	N/A	N/A	N/A	N/A	N/A
09/30/97	N/A	N/A	N/A	N/A	N/A	N/A
01/05/98	.001 mg/L	0.001	0.001	0.001	0.001	0.001
03/20/98	.002 mg/L	N/A	N/A	N/A	N/A	N/A
07/06/98	N/A	N/A	N/A	N/A	N/A	N/A
09/16/98	N/A	N/A	N/A	N/A	N/A	N/A
12/11/98	N/A	N/A	N/A	N/A	N/A	N/A
03/08/99	.001 mg/L	N/A	N/A	N/A	N/A	N/A
06/17/99	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
12/15/99	N/A	N/A	N/A	N/A	N/A	N/A
03/14/00	2.19 ug/L	N/A	N/A	N/A	N/A	N/A
06/27/00	N/A	N/A	N/A	N/A	N/A	N/A
01/08/01	1.30 ug/L	N/A	N/A	N/A	N/A	N/A

KWB-12A						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
04/01/97	NOT TESTED	2 ug/L	N/A	N/A	N/A	NOT TESTED
07/02/97	N/A	N/A	N/A	N/A	N/A	N/A
09/30/97	N/A	N/A	N/A	N/A	N/A	N/A
01/02/98	N/A	N/A	N/A	N/A	N/A	N/A
03/23/98	N/A	N/A	N/A	N/A	N/A	N/A
07/06/98	N/A	N/A	N/A	N/A	N/A	N/A
09/25/98	N/A	N/A	N/A	N/A	N/A	N/A
12/10/98	N/A	N/A	N/A	N/A	N/A	N/A
03/08/99	N/A	N/A	N/A	N/A	N/A	N/A
06/08/99	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
12/15/99	N/A	N/A	N/A	N/A	N/A	N/A
06/27/00	N/A	N/A	N/A	N/A	N/A	N/A
09/19/00	N/A	2.39 ug/L	N/A	5.79 ug/L	N/A	N/A
01/08/01	N/A	N/A	N/A	N/A	N/A	N/A

KWB-9						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
04/01/97	NOT TESTED	4 ug/L	N/A	N/A	N/A	NOT TESTED
07/02/97	N/A	N/A	N/A	N/A	N/A	N/A
09/30/97	N/A	N/A	N/A	N/A	N/A	N/A
01/05/98	.001 mg/L	N/A	N/A	N/A	N/A	N/A
03/23/98	N/A	N/A	N/A	N/A	N/A	N/A
06/26/98	N/A	N/A	N/A	N/A	N/A	N/A
09/30/98	N/A	N/A	N/A	N/A	N/A	N/A
12/10/98	N/A	N/A	N/A	N/A	N/A	N/A
03/08/99	N/A	N/A	N/A	N/A	N/A	N/A
06/08/99	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
12/15/99	N/A	N/A	N/A	N/A	N/A	N/A
03/14/00	N/A	N/A	N/A	N/A	N/A	N/A
06/27/00	N/A	N/A	N/A	N/A	N/A	N/A
09/19/00	N/A	2.19 ug/L	N/A	N/A	5.43 ug/L	N/A
01/08/01	N/A	N/A	N/A	N/A	N/A	N/A

MW-18						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
04/01/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
07/02/97	N/A	N/A	N/A	N/A	N/A	N/A
09/30/97	N/A	N/A	N/A	N/A	N/A	N/A
01/02/98	N/A	N/A	N/A	N/A	N/A	N/A
03/24/98	N/A	N/A	N/A	N/A	N/A	N/A
07/06/98	N/A	N/A	N/A	N/A	N/A	N/A
09/30/98	N/A	N/A	N/A	N/A	N/A	N/A
12/16/98	N/A	N/A	N/A	N/A	N/A	N/A
03/09/99	N/A	N/A	N/A	N/A	N/A	N/A
06/10/99	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
12/15/99	N/A	N/A	N/A	N/A	N/A	N/A
03/15/00	N/A	N/A	N/A	N/A	N/A	N/A
06/27/00	N/A	N/A	N/A	N/A	N/A	N/A
09/27/00	N/A	N/A	N/A	N/A	N/A	N/A
01/11/01	N/A	16.4 ug/L	N/A	18.4 ug/L	N/A	N/A

MMW-45						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
04/01/97	NOT TESTED	N/A	1 ug/L	N/A	N/A	NOT TESTED
07/02/97	.004 mg/L	N/A	N/A	N/A	N/A	N/A
09/30/97	.007 mg/L	N/A	.002 mg/L	.001 mg/L	.003 mg/L	.006 mg/L
01/05/98	.005 mg/L	N/A	.001 mg/L	N/A	.003 mg/L	.004 mg/L
03/24/98	N/A	N/A	N/A	N/A	N/A	N/A
06/26/98	.006 mg/L	N/A	N/A	N/A	N/A	N/A
09/30/98	N/A	N/A	N/A	N/A	N/A	N/A
12/16/98	N/A	N/A	N/A	N/A	N/A	N/A
03/09/99	.003 mg/L	N/A	.002 mg/L	.001 mg/L	.004 mg/L	.007 mg/L
06/10/99	.001 mg/L	N/A	N/A	N/A	N/A	N/A
09/10/99	.006 mg/L	N/A	N/A	N/A	N/A	N/A
12/15/99	.005 mg/l	N/A	N/A	N/A	N/A	N/A
03/15/00	6.85 ug/L	N/A	N/A	N/A	2.80 ug/L	N/A
06/27/00	8.08 ug/L	N/A	N/A	N/A	N/A	N/A
09/27/00	10.2 ug/L	N/A	4.72 ug/L	N/A	N/A	N/A
01/11/01	8.42 ug/L	8.56 ug/L	N/A	9.79 ug/L	4.19 ug/L	N/A

KWB-2A						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
04/01/97	NOT TESTED	N/A	1 ug/L	N/A	N/A	NOT TESTED
07/02/97	N/A	N/A	N/A	N/A	N/A	N/A
09/30/97	N/A	N/A	N/A	N/A	N/A	N/A
01/02/98	N/A	N/A	N/A	N/A	N/A	N/A
03/20/98	N/A	N/A	N/A	N/A	N/A	N/A
07/06/98	N/A	N/A	N/A	N/A	N/A	N/A
09/30/98	N/A	N/A	N/A	N/A	N/A	N/A
12/10/98	N/A	N/A	N/A	N/A	N/A	N/A
06/08/99	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
12/15/99	N/A	N/A	N/A	N/A	N/A	N/A

KWB-7						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
04/02/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
07/02/97	.007 mg/L	N/A	N/A	N/A	N/A	N/A
09/30/97	.015 mg/L	N/A	N/A	N/A	N/A	N/A
01/05/98	.006 mg/L	N/A	N/A	N/A	N/A	N/A
03/20/98	.011 mg/l	N/A	N/A	N/A	N/A	N/A
07/06/98	.005 mg/L	N/A	N/A	N/A	N/A	N/A
09/16/98	.005 mg/L	N/A	N/A	N/A	N/A	N/A
12/15/98	.044 mg/L	.004 mg/L	N/A	N/A	N/A	.004 mg/L
03/08/99	.074 mg/L	N/A	N/A	N/A	N/A	N/A
06/17/99	.013 mg/L	N/A	N/A	N/A	N/A	N/A
09/07/99	.046 mg/L	N/A	N/A	N/A	N/A	N/A
12/15/99	.024 mg/L	N/A	N/A	N/A	N/A	N/A
04/24/00	N/A	N/A	N/A	N/A	N/A	N/A
06/27/00	N/A	N/A	N/A	N/A	N/A	N/A
01/11/01	25. ug/L	N/A	N/A	N/A	N/A	N/A

KWB-3A						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
04/02/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
07/02/97	N/A	N/A	N/A	N/A	N/A	N/A
09/30/97	N/A	N/A	N/A	N/A	N/A	N/A
01/02/98	N/A	N/A	N/A	N/A	N/A	N/A
03/20/98	N/A	N/A	N/A	N/A	N/A	N/A
07/06/98	N/A	N/A	N/A	N/A	N/A	N/A
09/16/98	N/A	N/A	N/A	N/A	N/A	N/A
12/11/98	N/A	N/A	N/A	N/A	N/A	N/A
03/08/99	N/A	N/A	N/A	N/A	N/A	N/A
06/10/99	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
12/15/99	N/A	N/A	N/A	N/A	N/A	N/A
03/14/00	N/A	N/A	N/A	N/A	N/A	N/A
06/27/00	N/A	N/A	N/A	N/A	N/A	N/A
09/27/00	N/A	N/A	N/A	4.44 ug./L	N/A	N/A
01/08/01	N/A	N/A	N/A	N/A	N/A	N/A

RA-3353						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
04/02/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
07/02/97	N/A	N/A	N/A	N/A	N/A	N/A
09/30/97	N/A	N/A	N/A	N/A	N/A	N/A
01/02/98	N/A	N/A	N/A	N/A	N/A	N/A
06/18/98	N/A	N/A	N/A	N/A	N/A	N/A
09/16/98	N/A	N/A	N/A	N/A	N/A	N/A
12/11/98	N/A	N/A	N/A	N/A	N/A	N/A
03/08/99	N/A	N/A	N/A	N/A	N/A	N/A
06/10/99	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
12/13/99	N/A	N/A	N/A	N/A	N/A	N/A
03/06/00	N/A	N/A	N/A	N/A	N/A	N/A
09/27/00	N/A	N/A	N/A	N/A	N/A	N/A
01/08/01	N/A	N/A	N/A	N/A	N/A	N/A

RA-3156						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
04/02/97	NOT TESTED	N/A	N/A	N/A	N/A	NOT TESTED
07/02/97	N/A	N/A	N/A	N/A	N/A	N/A
09/30/97	N/A	N/A	N/A	N/A	N/A	N/A
03/23/98	N/A	N/A	N/A	N/A	N/A	N/A
06/18/98	N/A	N/A	N/A	N/A	N/A	N/A
09/25/98	N/A	N/A	N/A	N/A	N/A	N/A
12/10/98	N/A	N/A	N/A	N/A	N/A	N/A
03/08/99	N/A	N/A	N/A	N/A	N/A	N/A
06/08/99	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	.001 mg/l	N/A	N/A	N/A	N/A	N/A
12/15/99	N/A	N/A	N/A	N/A	N/A	N/A
03/06/00	N/A	N/A	N/A	N/A	N/A	N/A
06/27/00	N/A	N/A	N/A	N/A	N/A	N/A
09/19/00	N/A	N/A	N/A	N/A	N/A	N/A
01/08/01	N/A	N/A	N/A	N/A	N/A	N/A

kwb 1A					
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)
					Total BTEX (mg/l)
04/01/97	NOT TESTED	NA	NA	NA	NA
07/02/97	.021 mg/L	N/A	N/A	N/A	N/A
09/30/97	.012 mg/L	N/A	N/A	N/A	N/A
01/02/98	.031 mg/L	N/A	N/A	N/A	N/A
03/24/98	.038 mg/L	N/A	N/A	N/A	N/A
07/06/98	.037 mg/L	N/A	N/A	N/A	N/A
09/30/98	.067 mg/L	.002 mg/L	N/A	N/A	N/A
12/10/98	.117 mg/L	N/A	N/A	N/A	N/A
03/08/99	.076 mg/L	N/A	N/A	N/A	N/A
06/10/99	.011 mg/L	N/A	N/A	N/A	N/A
09/07/99	.046 mg/L	.001 mg/L	N/A	N/A	N/A
12/15/99	.029 mg/L	N/A	N/A	N/A	N/A
03/14/00	30.80 ug/L	N/A	N/A	N/A	N/A
06/27/00	12.23 ug/L	N/A	N/A	3.74	N/A
09/27/00	11.47 ug/L	N/A	N/A	3.74 ug/L	N/A
01/11/01	17.7 ug/L	N/A	N/A	N/A	N/A

kwb 1C							
		MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEX (mg/l)
04/01/97	NOT TESTED	2 ug/L	NA	NA	NA	NA	NOT TESTED
07/02/97	.060 mg/L	.004 mg/L	N/A	N/A	N/A	N/A	.004 mg/L
09/30/97	.079 mg/L	.003 mg/L	N/A	N/A	N/A	.001 mg/L	.004 mg/L
01/02/98	.041 mg/L	.002 mg/L	N/A	N/A	N/A	N/A	.002 mg/L
03/24/98	.053 mg/L	N/A	N/A	N/A	N/A	N/A	N/A
07/06/98	.095 mg/L	N/A	N/A	N/A	N/A	N/A	N/A
09/30/98	.098 mg/L	.002 mg/L	N/A	N/A	N/A	N/A	.002 mg/L
12/10/98	.120 mg/L	.002 mg/L	N/A	N/A	N/A	N/A	.002 mg/L
03/08/99	.079 mg/L	.002 mg/L	N/A	N/A	N/A	N/A	.002 mg/L
06/10/99	.009 mg/L	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	.037 mg/L	.002 mg/L	N/A	N/A	N/A	N/A	.002 mg/L
12/15/99	.030 mg/L	N/A	N/A	N/A	N/A	N/A	N/A
03/14/00	34.55 ug/L	N/A	N/A	N/A	N/A	N/A	N/A
06/27/00	16.32 ug/L	N/A	N/A	N/A	N/A	N/A	N/A
09/27/00	22.98 ug/L	N/A	N/A	N/A	3.43 ug/L	N/A	N/A

NP-2						
	MTBE (mg/l)	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	M,P,O Xylene (mg/l)	Total BTEx (mg/l)
03/24/98	N/A	N/A	N/A	N/A	N/A	N/A
07/27/98	002 mg/L	N/A	N/A	N/A	N/A	N/A
09/30/98	N/A	N/A	N/A	N/A	N/A	N/A
12/15/98	002 mg/L	N/A	N/A	N/A	N/A	N/A
03/08/99	001 mg/L	N/A	N/A	N/A	N/A	N/A
06/10/99	N/A	N/A	N/A	N/A	N/A	N/A
09/07/99	N/A	N/A	N/A	N/A	N/A	N/A
12/15/99	N/A	N/A	N/A	N/A	N/A	N/A
03/15/00	3.29 ug/L	N/A	N/A	N/A	N/A	N/A
06/27/00	5.52 ug/L	N/A	N/A	N/A	N/A	N/A
09/27/00	9.52 ug/l	N/A	N/A	N/A	N/A	N/A
01/11/01	7.73 ug/L	N/A	N/A	N/A	N/A	N/A

well NP1					
	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	M,P,O XYLENE
					BTEX
04/03/98	N/A	N/A	N/A	N/A	N/A
07/07/98	N/A	N/A	N/A	N/A	N/A
09/30/98	N/A	N/A	N/A	N/A	N/A
12/15/98	N/A	N/A	N/A	N/A	N/A
03/09/99	.001 mg/L	N/A	N/A	N/A	N/A
06/10/99	N/A	N/A	N/A	N/A	N/A
12/15/99	N/A	N/A	N/A	N/A	N/A
03/15/00	N/A	N/A	N/A	N/A	N/A
06/27/00	3.79 ug/L	N/A	N/A	N/A	N/A
09/27/00	22. ug/L	N/A	N/A	N/A	N/A
01/11/01	7.47 ug/L	N/A	N/A	N/A	N/A

KWB 2R						
	MTBE	BENZENE	TOLUENE	ETHYLBENZENE	M,P,O XYLENE	BTEX
09/27/00	N/A	932 ug/L	N/A	N/A	348 ug/L	N/A
11/01/01	N/A	1037 ug/L	N/A	1323 ug/L	N/A	N/A



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

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: January 15, 2001

Order ID Number: A01010904

Project Number: Qtrly Offsite
Project Name: N/A
Project Location: 501 E Main, Artesia, 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
162119	RA 4798	Water	1/8/01	10:22	1/9/01
162120	RA 3353	Water	1/8/01	10:35	1/9/01
162121	KWB 7	Water	1/8/01	11:30	1/9/01
162122	RA 4196	Water	1/8/01	10:20	1/9/01
162123	KWB 9	Water	1/8/01	10:05	1/9/01
162124	RA 3156	Water	1/8/01	10:00	1/9/01
162125	KWB 3A	Water	1/8/01	10:30	1/9/01
162126	KWB 12A	Water	1/8/01	9:52	1/9/01
162127	KWB 11A	Water	1/8/01	11:00	1/9/01

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


Dr. Blair Leftwich, Director

... Continued Sample: 162120 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		2.24	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		4.01	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.97	µg/L	1	50	99	84 - 116
Toluene-d8		51.84	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		50.86	µg/L	1	50	101	80 - 110

Sample: 162121 - KWB 7

Analysis: 624 Analytical Method: E 624 QC Batch: QC08064 Date Analyzed: 1/11/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07050 Date Prepared: 1/11/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		25.0	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162121 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.43	µg/L	1	50	100	84 - 116
Toluene-d8		52.05	µg/L	1	50	104	92 - 108
4-Bromofluorobenzene		51.45	µg/L	1	50	102	80 - 110

Sample: 162122 - RA 4196

Analysis: 624 Analytical Method: E 624 QC Batch: QC08064 Date Analyzed: 1/11/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07050 Date Prepared: 1/11/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5

Continued ...

... Continued Sample: 162122 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162122 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.80	µg/L	1	50	101	84 - 116
Toluene-d8		52.17	µg/L	1	50	104	92 - 108
4-Bromofluorobenzene		51.44	µg/L	1	50	102	80 - 110

Sample: 162123 - KWB 9

Analysis: 624 Analytical Method: E 624 QC Batch: QC08064 Date Analyzed: 1/11/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07050 Date Prepared: 1/11/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		1.92	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162124 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162124 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.33	µg/L	1	50	102	84 - 116
Toluene-d8		51.74	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		51.60	µg/L	1	50	103	80 - 110

Sample: 162125 - KWB 3A

Analysis: 624 Analytical Method: E 624 QC Batch: QC08064 Date Analyzed: 1/11/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07050 Date Prepared: 1/11/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162125 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.82	µg/L	1	50	101	84 - 116
Toluene-d8		51.83	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		51.74	µg/L	1	50	103	80 - 110

Sample: 162126 - KWB 12A

Analysis: 624 Analytical Method: E 624 QC Batch: QC08064 Date Analyzed: 1/11/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07050 Date Prepared: 1/11/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162126 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162126 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.94	µg/L	1	50	101	84 - 116
Toluene-d8		51.59	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		51.77	µg/L	1	50	103	80 - 110

Sample: 162127 - KWB 11A

Analysis: 624 Analytical Method: E 624 QC Batch: QC08064 Date Analyzed: 1/11/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07050 Date Prepared: 1/11/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		1.30	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162127 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.87	µg/L	1	50	101	84 - 116
Toluene-d8		51.22	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		51.63	µg/L	1	50	103	80 - 110

Quality Control Report Method Blank

Sample: Method Blank

QCBatch: QC08064

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<1.00	µg/L	1
Dichlorodifluoromethane		<1.00	µg/L	1
Chloromethane (methyl chloride)		<1.00	µg/L	1
Vinyl Chloride		<1.00	µg/L	1
Bromomethane (methyl bromide)		<1.00	µg/L	1
Chloroethane		<1.00	µg/L	1
Trichlorofluoromethane		<1.00	µg/L	1
Acetone		<10.0	µg/L	10
Iodomethane (methyl iodide)		<1.00	µg/L	1
Carbon Disulfide		<1.00	µg/L	1
Acrylonitrile		<1.00	µg/L	1
2-Butanone (MEK)		<5.00	µg/L	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	5
2-hexanone		<5.00	µg/L	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	10
1,1-Dichloroethene		<1.00	µg/L	1
Methylene chloride		<5.00	µg/L	5
MTBE		<1.00	µg/L	1
trans-1,2-Dichloroethene		<1.00	µg/L	1
1,1-Dichloroethane		<1.00	µg/L	1
cis-1,2-dichloroethene		<1.00	µg/L	1
2,2-Dichloropropane		<1.00	µg/L	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1
Chloroform		<1.00	µg/L	1
1,1,1-Trichloroethane		<1.00	µg/L	1
1,1-Dichloropropene		<1.00	µg/L	1
Benzene		<1.00	µg/L	1
Carbon Tetrachloride		<1.00	µg/L	1
1,2-Dichloropropane		<1.00	µg/L	1
Trichloroethene (TCE)		<1.00	µg/L	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1
Bromodichloromethane		<1.00	µg/L	1
2-Chloroethyl vinyl ether		<5.00	µg/L	5
cis-1,3-Dichloropropene		<1.00	µg/L	1
trans-1,3-Dichloropropene		<1.00	µg/L	1
Toluene		<1.00	µg/L	1
1,1,2-Trichloroethane		<1.00	µg/L	1
1,3-Dichloropropane		<1.00	µg/L	1
Dibromochloromethane		<1.00	µg/L	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1
Tetrachloroethene (PCE)		<1.00	µg/L	1
Chlorobenzene		<1.00	µg/L	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1
Ethylbenzene		<1.00	µg/L	1
m,p-Xylene		<1.00	µg/L	1
Bromoform		<1.00	µg/L	1
Styrene		<1.00	µg/L	1
o-Xylene		<1.00	µg/L	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1
2-Chlorotoluene		<1.00	µg/L	1
1,2,3-Trichloropropane		<1.00	µg/L	1
Isopropylbenzene		<1.00	µg/L	1
Bromobenzene		<1.00	µg/L	1

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
n-Propylbenzene		<1.00	µg/L	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1
tert-Butylbenzene		<1.00	µg/L	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1
sec-Butylbenzene		<1.00	µg/L	1
1,3-Dichlorobenzene		<1.00	µg/L	1
p-Isopropyltoluene		<1.00	µg/L	1
4-Chlorotoluene		<1.00	µg/L	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1
n-Butylbenzene		<1.00	µg/L	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<1.00	µg/L	1
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		49.74	µg/L	50	99	84 - 116
Toluene-d8		51.99	µg/L	50	103	92 - 108
4-Bromofluorobenzene		50.02	µg/L	50	100	80 - 110

Quality Control Report Lab Control Spikes and Duplicate Spikes

Sample: LCS

QC Batch: QC08064

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		93	µg/L	1	100	<1.00	93		73 - 154	20
Benzene		88	µg/L	1	100	<1.00	88		84 - 126	20
Trichloroethene (TCE)		87	µg/L	1	100	<1.00	87		82 - 123	20
Toluene		87	µg/L	1	100	<1.00	87		81 - 122	20
Chlorobenzene		100	µg/L	1	100	<1.00	100		86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		50.23	µg/L	1	50	100	84 - 116
Toluene-d8		51.43	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		50.74	µg/L	1	50	101	80 - 110

Sample: LCSD

QC Batch: QC08064

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		94	µg/L	1	100	<1.00	94	1	73 - 154	20
Benzene		89	µg/L	1	100	<1.00	89	1	84 - 126	20
Trichloroethene (TCE)		88	µg/L	1	100	<1.00	88	1	82 - 123	20
Toluene		90	µg/L	1	100	<1.00	90	3	81 - 122	20
Chlorobenzene		101	µg/L	1	100	<1.00	101	1	86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		50.37	µg/L	1	50	100	84 - 116
Toluene-d8		51.03	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		51.22	µg/L	1	50	102	80 - 110

Quality Control Report Continuing Calibration Verification Standards

Sample: CCV (1)

QC Batch: QC08064

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	93	93	80 - 120	1/11/01
1,1-Dichloroethene		µg/L	100	91	91	80 - 120	1/11/01
Chloroform		µg/L	100	99	99	80 - 120	1/11/01
1,2-Dichloropropane		µg/L	100	92	92	80 - 120	1/11/01
Toluene		µg/L	100	92	92	80 - 120	1/11/01
Chlorobenzene		µg/L	100	97	97	80 - 120	1/11/01
Ethylbenzene		µg/L	100	98	98	80 - 120	1/11/01
Dibromofluoromethane		µg/L	50	52.31	104	80 - 120	1/11/01
Toluene-d8		µg/L	50	50.62	101	80 - 120	1/11/01
4-Bromofluorobenzene		µg/L	50	54.49	108	80 - 120	1/11/01

162119-27

Page of

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

TraceAnalysis, Inc.

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

A01010904

Company Name:

PAVARJO

Phone #:

505-7483311

Address:

(Street, City, Zip)

501 E. Main

Fax #:

505-7463454

Contact Person:

Russell Moore or Charlie Phymale

Invoice to:

(If different from above)

Project #:

Project Name:

Artesia

Project Location:

Artesia

Sampler Signature:

Atrlyobtsite

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD					SAMPLING		DATE	TIME		
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	ICE	NONE	DATE	TIME					
162119	RA 4798	2	40mL	X						X	X	X	X	1/8/01	1022			
120	RA 3353	2	40mL	X						X	X	X	X	1/8/01	1035			
121	Kwb 7	2	40mL	X						X	X	X	X	1/8/01	1130			
122	RA 4196	2	40mL	X						X	X	X	X	1/8/01	1020			
123	Kwb 9	2	40mL	X						X	X	X	X	1/8/01	1005			
124	RA 3156	2	40mL	X						X	X	X	X	1/8/01	1000			
125	Kwb 3A	2	40mL	X						X	X	X	X	1/8/01	1030			
126	Kwb 12H	2	40mL	X						X	X	X	X	1/8/01	952			
127	Kwb 11A	2	40mL	X						X	X	X	X	1/8/01	11:00			
See list																	MTBE 8021B/602	
																	BTEX 8021B/602	
																	TPH 418.1/TX1005	
																	PAH 8270C	
																	Total Metals Ag As Ba	
																	TCLP Metals Ag As Ba	
																	TCLP Volatiles	
																	TCLP Semi Volatiles	
																	TCLP Pesticides	
																	RCI	
GC-MS Vol. 8260B/62																		
GC/MS Semi. Vol. 827																		
PCB's 8082/608																		
Pesticides 8081A/608																		
BOD, TSS, PH																		

Relinquished by:

Chaffin

Date:

1/8/01

Received by:

Date:

Time:

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Relinquished by:

Date:

Time:

Received by:

Date:

Time:

Received at Laboratory by: Jicki Dwyer 1-9-01 10:00

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8021B/602	
BTEX 8021B/602	
TPH 418.1/TK1005	
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	
PCBs 8082/608	
Pesticides 8081A/608	
BOD, TSS, pH	
Hold	

Turn Around Time if different from standard

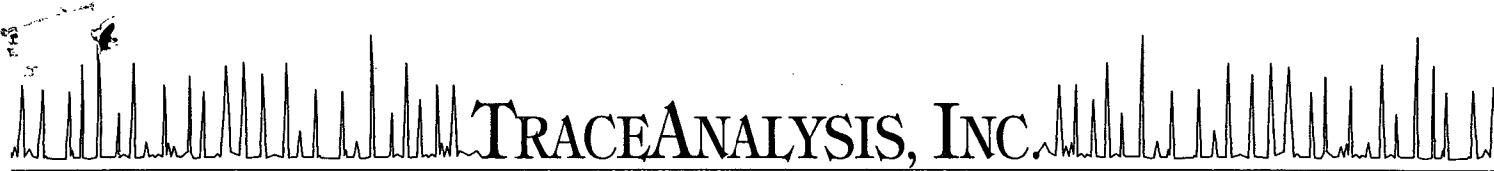
REMARKS:

LAB USE ONLY

Intact ☒ Y ☐ NHeadspace ☐ Y ☒ NTemp ☐ 1° ☒ 0°Log-In Review ☒ MS

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

Carrier # 744 312-2209-176



TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296
888•588•3443

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: January 23, 2001

Order ID Number: A01011217

Project Number: Qtrly Offsite
Project Name: N/A
Project Location: 501 E Main, Artesia, 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
162383	KWB 2R	Water	1/11/01	10:30	1/12/01
162384	MW 45	Water	1/11/01	14:00	1/12/01
162385	MW 18	Water	1/11/01	11:05	1/12/01
162386	KWB K1c	Water	1/11/01	10:20	1/12/01
162387	NP-1	Water	1/11/01	9:15	1/12/01
162388	MW-28	Water	1/11/01	14:45	1/12/01
162389	NP-2	Water	1/11/01	9:00	1/12/01
162390	KWB 1A	Water	1/11/01	10:10	1/12/01
162391	MW 29	Water	1/11/01	14:20	1/12/01

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 21 pages and shall not be reproduced except in its entirety, without written approval of Trace Analysis, Inc.



Dr. Blair Leftwich, Director

Analytical Report

Sample: 162383 - KWB 2R

Analysis: 624	Analytical Method: E 624	QC Batch: QC08202	Date Analyzed: 1/16/01
Analyst: JG	Preparation Method: N/A	Prep Batch: PB07154	Date Prepared: 1/16/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<50.0	µg/L	50	1
Dichlorodifluoromethane		<50.0	µg/L	50	1
Chloromethane (methyl chloride)		<50.0	µg/L	50	1
Vinyl Chloride		<50.0	µg/L	50	1
Bromomethane (methyl bromide)		<50.0	µg/L	50	1
Chloroethane		<50.0	µg/L	50	1
Trichlorofluoromethane		<50.0	µg/L	50	1
Acetone		<500	µg/L	50	10
Iodomethane (methyl iodide)		<50.0	µg/L	50	1
Carbon Disulfide		<50.0	µg/L	50	1
Acrylonitrile		<50.0	µg/L	50	1
2-Butanone (MEK)		<250	µg/L	50	5
4-methyl-2-pentanone (MIBK)		<250	µg/L	50	5
2-hexanone		<250	µg/L	50	5
trans 1,4-Dichloro-2-butene		<500	µg/L	50	10
1,1-Dichloroethene		<50.0	µg/L	50	1
Methylene chloride		<250	µg/L	50	5
MTBE		<50.0	µg/L	50	1
trans-1,2-Dichloroethene		<50.0	µg/L	50	1
1,1-Dichloroethane		<50.0	µg/L	50	1
cis-1,2-dichloroethene		<50.0	µg/L	50	1
2,2-Dichloropropane		<50.0	µg/L	50	1
1,2-Dichloroethane (EDC)		<50.0	µg/L	50	1
Chloroform		<50.0	µg/L	50	1
1,1,1-Trichloroethane		<50.0	µg/L	50	1
1,1-Dichloropropene		<50.0	µg/L	50	1
Benzene		1037	µg/L	50	1
Carbon Tetrachloride		<50.0	µg/L	50	1
1,2-Dichloropropane		<50.0	µg/L	50	1
Trichloroethene (TCE)		<50.0	µg/L	50	1
Dibromomethane (methylene bromide)		<50.0	µg/L	50	1
Bromodichloromethane		<50.0	µg/L	50	1
2-Chloroethyl vinyl ether		<250	µg/L	50	5
cis-1,3-Dichloropropene		<50.0	µg/L	50	1
trans-1,3-Dichloropropene		<50.0	µg/L	50	1
Toluene		<50.0	µg/L	50	1
1,1,2-Trichloroethane		<50.0	µg/L	50	1
1,3-Dichloropropane		<50.0	µg/L	50	1
Dibromochloromethane		<50.0	µg/L	50	1
1,2-Dibromoethane (EDB)		<50.0	µg/L	50	1
Tetrachloroethene (PCE)		<50.0	µg/L	50	1
Chlorobenzene		<50.0	µg/L	50	1
1,1,1,2-Tetrachloroethane		<50.0	µg/L	50	1
Ethylbenzene		1323	µg/L	50	1
m,p-Xylene		<50.0	µg/L	50	1
Bromoform		<50.0	µg/L	50	1
Styrene		<50.0	µg/L	50	1
o-Xylene		<50.0	µg/L	50	1

Continued ...

... Continued Sample: 162383 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1,2,2-Tetrachloroethane		<50.0	µg/L	50	1
2-Chlorotoluene		<50.0	µg/L	50	1
1,2,3-Trichloropropane		<50.0	µg/L	50	1
Isopropylbenzene		78.5	µg/L	50	1
Bromobenzene		<50.0	µg/L	50	1
n-Propylbenzene		166	µg/L	50	1
1,3,5-Trimethylbenzene		<50.0	µg/L	50	1
tert-Butylbenzene		<50.0	µg/L	50	1
1,2,4-Trimethylbenzene		740	µg/L	50	1
1,4-Dichlorobenzene (para)		<50.0	µg/L	50	1
sec-Butylbenzene		<50.0	µg/L	50	1
1,3-Dichlorobenzene		<50.0	µg/L	50	1
p-Isopropyltoluene		<50.0	µg/L	50	1
4-Chlorotoluene		<50.0	µg/L	50	1
1,2-Dichlorobenzene (ortho)		<50.0	µg/L	50	1
n-Butylbenzene		<50.0	µg/L	50	1
1,2-Dibromo-3-chloropropane		<250	µg/L	50	5
1,2,3-Trichlorobenzene		<250	µg/L	50	5
1,2,4-Trichlorobenzene		<250	µg/L	50	5
Naphthalene		289	µg/L	50	1
Hexachlorobutadiene		<250	µg/L	50	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.23	µg/L	50	50	100	84 - 116
Toluene-d8		50.21	µg/L	50	50	100	92 - 108
4-Bromofluorobenzene		52.74	µg/L	50	50	105	80 - 110

Sample: 162384 - MW 45

Analysis: 624 Analytical Method: E 624 QC Batch: QC08267 Date Analyzed: 1/17/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07211 Date Prepared: 1/17/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		8.42	µg/L	1	1

Continued ...

... Continued Sample: 162384 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		8.56	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		1.97	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		9.79	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		4.19	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		2.52	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.03	µg/L	1	50	106	84 - 116
Toluene-d8		49.32	µg/L	1	50	98	92 - 108
4-Bromofluorobenzene		53.91	µg/L	1	50	107	80 - 110

Sample: 162385 - MW 18

Analysis: 624 Analytical Method: E 624 QC Batch: QC08202 Date Analyzed: 1/16/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07154 Date Prepared: 1/16/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		16.4	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		18.4	µg/L	1	1

Continued ...

... Continued Sample: 162385 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		4.68	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.66	µg/L	1	50	101	84 - 116
Toluene-d8		50.35	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		51.99	µg/L	1	50	103	80 - 110

Sample: 162386 - KWB K \ C

Analysis: 624 Analytical Method: E 624 QC Batch: QC08202 Date Analyzed: 1/16/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07154 Date Prepared: 1/16/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5

Continued ...

... Continued Sample: 162386 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		22.9	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162386 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.51	µg/L	1	50	101	84 - 116
Toluene-d8		50.32	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		51.72	µg/L	1	50	103	80 - 110

Sample: 162387 - NP-1

Analysis: 624 Analytical Method: E 624 QC Batch: QC08202 Date Analyzed: 1/16/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07154 Date Prepared: 1/16/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		7.47	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162387 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.09	µg/L	1	50	102	84 - 116
Toluene-d8		50.42	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		52.39	µg/L	1	50	104	80 - 110

Sample: 162388 - MW-28

Analysis: 624 Analytical Method: E 624 QC Batch: QC08267 Date Analyzed: 1/17/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07211 Date Prepared: 1/17/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<5.00	µg/L	5	1
Dichlorodifluoromethane		<5.00	µg/L	5	1
Chloromethane (methyl chloride)		<5.00	µg/L	5	1
Vinyl Chloride		<5.00	µg/L	5	1
Bromomethane (methyl bromide)		<5.00	µg/L	5	1
Chloroethane		<5.00	µg/L	5	1
Trichlorofluoromethane		<5.00	µg/L	5	1
Acetone		<50.0	µg/L	5	10

Continued ...

... Continued Sample: 162388 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Iodomethane (methyl iodide)		<5.00	µg/L	5	1
Carbon Disulfide		<5.00	µg/L	5	1
Acrylonitrile		<5.00	µg/L	5	1
2-Butanone (MEK)		<25.0	µg/L	5	5
4-methyl-2-pentanone (MIBK)		<25.0	µg/L	5	5
2-hexanone		<25.0	µg/L	5	5
trans 1,4-Dichloro-2-butene		<50.0	µg/L	5	10
1,1-Dichloroethene		<5.00	µg/L	5	1
Methylene chloride		<25.0	µg/L	5	5
MTBE		2508	µg/L	5	1
trans-1,2-Dichloroethene		<5.00	µg/L	5	1
1,1-Dichloroethane		<5.00	µg/L	5	1
cis-1,2-dichloroethene		<5.00	µg/L	5	1
2,2-Dichloropropane		<5.00	µg/L	5	1
1,2-Dichloroethane (EDC)		<5.00	µg/L	5	1
Chloroform		<5.00	µg/L	5	1
1,1,1-Trichloroethane		<5.00	µg/L	5	1
1,1-Dichloropropene		<5.00	µg/L	5	1
Benzene		30.5	µg/L	5	1
Carbon Tetrachloride		<5.00	µg/L	5	1
1,2-Dichloropropane		<5.00	µg/L	5	1
Trichloroethene (TCE)		<5.00	µg/L	5	1
Dibromomethane (methylene bromide)		<5.00	µg/L	5	1
Bromodichloromethane		<5.00	µg/L	5	1
2-Chloroethyl vinyl ether		<25.0	µg/L	5	5
cis-1,3-Dichloropropene		<5.00	µg/L	5	1
trans-1,3-Dichloropropene		<5.00	µg/L	5	1
Toluene		<5.00	µg/L	5	1
1,1,2-Trichloroethane		<5.00	µg/L	5	1
1,3-Dichloropropane		<5.00	µg/L	5	1
Dibromochloromethane		<5.00	µg/L	5	1
1,2-Dibromoethane (EDB)		<5.00	µg/L	5	1
Tetrachloroethene (PCE)		<5.00	µg/L	5	1
Chlorobenzene		<5.00	µg/L	5	1
1,1,1,2-Tetrachloroethane		<5.00	µg/L	5	1
Ethylbenzene		<5.00	µg/L	5	1
m,p-Xylene		<5.00	µg/L	5	1
Bromoform		<5.00	µg/L	5	1
Styrene		<5.00	µg/L	5	1
o-Xylene		<5.00	µg/L	5	1
1,1,2,2-Tetrachloroethane		<5.00	µg/L	5	1
2-Chlorotoluene		<5.00	µg/L	5	1
1,2,3-Trichloropropane		<5.00	µg/L	5	1
Isopropylbenzene		18.6	µg/L	5	1
Bromobenzene		<5.00	µg/L	5	1
n-Propylbenzene		26.3	µg/L	5	1
1,3,5-Trimethylbenzene		<5.00	µg/L	5	1
tert-Butylbenzene		<5.00	µg/L	5	1
1,2,4-Trimethylbenzene		<5.00	µg/L	5	1
1,4-Dichlorobenzene (para)		<5.00	µg/L	5	1
sec-Butylbenzene		<5.00	µg/L	5	1
1,3-Dichlorobenzene		<5.00	µg/L	5	1
p-Isopropyltoluene		<5.00	µg/L	5	1
4-Chlorotoluene		<5.00	µg/L	5	1

Continued ...

... Continued Sample: 162388 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,2-Dichlorobenzene (ortho)		<5.00	µg/L	5	1
n-Butylbenzene		<5.00	µg/L	5	1
1,2-Dibromo-3-chloropropane		<25.0	µg/L	5	5
1,2,3-Trichlorobenzene		<25.0	µg/L	5	5
1,2,4-Trichlorobenzene		<25.0	µg/L	5	5
Naphthalene		<5.00	µg/L	5	1
Hexachlorobutadiene		<25.0	µg/L	5	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.82	µg/L	1	50	103	84 - 116
Toluene-d8		50.06	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		52.58	µg/L	1	50	105	80 - 110

Sample: 162389 - NP-2

Analysis: 624 Analytical Method: E 624 QC Batch: QC08202 Date Analyzed: 1/16/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07154 Date Prepared: 1/16/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		7.73	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162389 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.86	µg/L	1	50	101	84 - 116
Toluene-d8		50.73	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		50.79	µg/L	1	50	101	80 - 110

Sample: 162390 - KWB 1A

Analysis: 624 Analytical Method: E 624 QC Batch: QC08202 Date Analyzed: 1/16/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07154 Date Prepared: 1/16/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162390 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		17.7	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162390 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		1.41	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.77	µg/L	1	50	101	84 - 116
Toluene-d8		50.61	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		52.27	µg/L	1	50	104	80 - 110

Sample: 162391 - MW 29

Analysis: 624 Analytical Method: E 624 QC Batch: QC08267 Date Analyzed: 1/17/01
Analyst: JG Preparation Method: N/A Prep Batch: PB07211 Date Prepared: 1/17/01

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 162391 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		8.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		5.87	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.10	µg/L	1	50	104	84 - 116
Toluene-d8		49.82	µg/L	1	50	99	92 - 108
4-Bromofluorobenzene		54.18	µg/L	1	50	108	80 - 110

Quality Control Report Method Blank

Method Blank

QCBatch: QC08202

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<1.00	µg/L	1
Dichlorodifluoromethane		<1.00	µg/L	1
Chloromethane (methyl chloride)		<1.00	µg/L	1
Vinyl Chloride		<1.00	µg/L	1
Bromomethane (methyl bromide)		<1.00	µg/L	1
Chloroethane		<1.00	µg/L	1
Trichlorofluoromethane		<1.00	µg/L	1
Acetone		<10.0	µg/L	10
Iodomethane (methyl iodide)		<1.00	µg/L	1
Carbon Disulfide		<1.00	µg/L	1
Acrylonitrile		<1.00	µg/L	1
2-Butanone (MEK)		<5.00	µg/L	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	5
2-hexanone		<5.00	µg/L	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	10
1,1-Dichloroethene		<1.00	µg/L	1
Methylene chloride		<5.00	µg/L	5
MTBE		<1.00	µg/L	1
trans-1,2-Dichloroethene		<1.00	µg/L	1
1,1-Dichloroethane		<1.00	µg/L	1
cis-1,2-dichloroethene		<1.00	µg/L	1
2,2-Dichloropropane		<1.00	µg/L	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1
Chloroform		<1.00	µg/L	1
1,1,1-Trichloroethane		<1.00	µg/L	1
1,1-Dichloropropene		<1.00	µg/L	1
Benzene		<1.00	µg/L	1
Carbon Tetrachloride		<1.00	µg/L	1
1,2-Dichloropropane		<1.00	µg/L	1
Trichloroethene (TCE)		<1.00	µg/L	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1
Bromodichloromethane		<1.00	µg/L	1
2-Chloroethyl vinyl ether		<5.00	µg/L	5
cis-1,3-Dichloropropene		<1.00	µg/L	1
trans-1,3-Dichloropropene		<1.00	µg/L	1
Toluene		<1.00	µg/L	1
1,1,2-Trichloroethane		<1.00	µg/L	1
1,3-Dichloropropane		<1.00	µg/L	1
Dibromochloromethane		<1.00	µg/L	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1
Tetrachloroethene (PCE)		<1.00	µg/L	1
Chlorobenzene		<1.00	µg/L	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1
Ethylbenzene		<1.00	µg/L	1
m,p-Xylene		<1.00	µg/L	1
Bromoform		<1.00	µg/L	1
Styrene		<1.00	µg/L	1
o-Xylene		<1.00	µg/L	1

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1
2-Chlorotoluene		<1.00	µg/L	1
1,2,3-Trichloropropane		<1.00	µg/L	1
Isopropylbenzene		<1.00	µg/L	1
Bromobenzene		<1.00	µg/L	1
n-Propylbenzene		<1.00	µg/L	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1
tert-Butylbenzene		<1.00	µg/L	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1
sec-Butylbenzene		<1.00	µg/L	1
1,3-Dichlorobenzene		<1.00	µg/L	1
p-Isopropyltoluene		<1.00	µg/L	1
4-Chlorotoluene		<1.00	µg/L	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1
n-Butylbenzene		<1.00	µg/L	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<1.00	µg/L	1
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		48.52	µg/L	50	97	84 - 116
Toluene-d8		51.87	µg/L	50	103	92 - 108
4-Bromofluorobenzene		49.48	µg/L	50	98	80 - 110

Method Blank

QCBatch: QC08267

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<1.00	µg/L	1
Dichlorodifluoromethane		<1.00	µg/L	1
Chloromethane (methyl chloride)		<1.00	µg/L	1
Vinyl Chloride		<1.00	µg/L	1
Bromomethane (methyl bromide)		<1.00	µg/L	1
Chloroethane		<1.00	µg/L	1
Trichlorofluoromethane		<1.00	µg/L	1
Acetone		<10.0	µg/L	10
Iodomethane (methyl iodide)		<1.00	µg/L	1
Carbon Disulfide		<1.00	µg/L	1
Acrylonitrile		<1.00	µg/L	1
2-Butanone (MEK)		<5.00	µg/L	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	5
2-hexanone		<5.00	µg/L	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	10
1,1-Dichloroethene		<1.00	µg/L	1
Methylene chloride		<5.00	µg/L	5
MTBE		<1.00	µg/L	1

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
trans-1,2-Dichloroethene		<1.00	µg/L	1
1,1-Dichloroethane		<1.00	µg/L	1
cis-1,2-dichloroethene		<1.00	µg/L	1
2,2-Dichloropropane		<1.00	µg/L	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1
Chloroform		<1.00	µg/L	1
1,1,1-Trichloroethane		<1.00	µg/L	1
1,1-Dichloropropene		<1.00	µg/L	1
Benzene		<1.00	µg/L	1
Carbon Tetrachloride		<1.00	µg/L	1
1,2-Dichloropropane		<1.00	µg/L	1
Trichloroethene (TCE)		<1.00	µg/L	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1
Bromodichloromethane		<1.00	µg/L	1
2-Chloroethyl vinyl ether		<5.00	µg/L	5
cis-1,3-Dichloropropene		<1.00	µg/L	1
trans-1,3-Dichloropropene		<1.00	µg/L	1
Toluene		<1.00	µg/L	1
1,1,2-Trichloroethane		<1.00	µg/L	1
1,3-Dichloropropane		<1.00	µg/L	1
Dibromochloromethane		<1.00	µg/L	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1
Tetrachloroethene (PCE)		<1.00	µg/L	1
Chlorobenzene		<1.00	µg/L	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1
Ethylbenzene		<1.00	µg/L	1
m,p-Xylene		<1.00	µg/L	1
Bromoform		<1.00	µg/L	1
Styrene		<1.00	µg/L	1
o-Xylene		<1.00	µg/L	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1
2-Chlorotoluene		<1.00	µg/L	1
1,2,3-Trichloropropane		<1.00	µg/L	1
Isopropylbenzene		<1.00	µg/L	1
Bromobenzene		<1.00	µg/L	1
n-Propylbenzene		<1.00	µg/L	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1
tert-Butylbenzene		<1.00	µg/L	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1
sec-Butylbenzene		<1.00	µg/L	1
1,3-Dichlorobenzene		<1.00	µg/L	1
p-Isopropyltoluene		<1.00	µg/L	1
4-Chlorotoluene		<1.00	µg/L	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1
n-Butylbenzene		<1.00	µg/L	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<1.00	µg/L	1
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		52.36	µg/L	50	104	84 - 116
Toluene-d8		51.48	µg/L	50	102	92 - 108
4-Bromofluorobenzene		49.77	µg/L	50	99	80 - 110

Quality Control Report Lab Control Spikes and Duplicate Spikes

LCS QC Batch: QC08202

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		91	µg/L	1	100	<1.00	91		73 - 154	20
Benzene		88	µg/L	1	100	<1.00	88		84 - 126	20
Trichloroethene (TCE)		86	µg/L	1	100	<1.00	86		82 - 123	20
Toluene		87	µg/L	1	100	<1.00	87		81 - 122	20
Chlorobenzene		97	µg/L	1	100	<1.00	97		86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		48.56	µg/L	1	50	97	84 - 116
Toluene-d8		50.45	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		50.67	µg/L	1	50	101	80 - 110

LCSD QC Batch: QC08202

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		91	µg/L	1	100	<1.00	91	0	73 - 154	20
Benzene		87	µg/L	1	100	<1.00	87	1	84 - 126	20
Trichloroethene (TCE)		85	µg/L	1	100	<1.00	85	1	82 - 123	20
Toluene		87	µg/L	1	100	<1.00	87	0	81 - 122	20
Chlorobenzene		96	µg/L	1	100	<1.00	96	1	86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		49.07	µg/L	1	50	98	84 - 116
Toluene-d8		50.33	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		50.21	µg/L	1	50	100	80 - 110

LCS QC Batch: QC08267

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		95	µg/L	1	100	<1.00	95		73 - 154	20
Benzene		89	µg/L	1	100	<1.00	89		84 - 126	20
Trichloroethene (TCE)		91	µg/L	1	100	<1.00	91		82 - 123	20
Toluene		90	µg/L	1	100	<1.00	90		81 - 122	20
Chlorobenzene		101	µg/L	1	100	<1.00	101		86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		52.61	µg/L	1	50	105	84 - 116
Toluene-d8		50.25	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		50.89	µg/L	1	50	101	80 - 110

LCSD

QC Batch: QC08267

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		97	µg/L	1	100	<1.00	97	2	73 - 154	20
Benzene		90	µg/L	1	100	<1.00	90	1	84 - 126	20
Trichloroethene (TCE)		92	µg/L	1	100	<1.00	92	1	82 - 123	20
Toluene		91	µg/L	1	100	<1.00	91	1	81 - 122	20
Chlorobenzene		103	µg/L	1	100	<1.00	103	2	86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		52.69	µg/L	1	50	105	84 - 116
Toluene-d8		50.58	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		50.56	µg/L	1	50	101	80 - 110

Quality Control Report Continuing Calibration Verification Standards

CCV (1)

QC Batch: QC08202

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	88	88	80 - 120	1/16/01
1,1-Dichloroethene		µg/L	100	88	88	80 - 120	1/16/01
Chloroform		µg/L	100	95	95	80 - 120	1/16/01
1,2-Dichloropropane		µg/L	100	88	88	80 - 120	1/16/01
Toluene		µg/L	100	90	90	80 - 120	1/16/01
Chlorobenzene		µg/L	100	93	93	80 - 120	1/16/01
Ethylbenzene		µg/L	100	95	95	80 - 120	1/16/01
Dibromofluoromethane		µg/L	50	49.54	99	80 - 120	1/16/01

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene-d8		µg/L	50	49.93	99	80 - 120	1/16/01
4-Bromofluorobenzene		µg/L	50	53.65	107	80 - 120	1/16/01

CCV (1)

QC Batch: QC08267

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	89	89	80 - 120	1/17/01
1,1-Dichloroethene		µg/L	100	92	92	80 - 120	1/17/01
Chloroform		µg/L	100	105	105	80 - 120	1/17/01
1,2-Dichloropropane		µg/L	100	89	89	80 - 120	1/17/01
Toluene		µg/L	100	95	95	80 - 120	1/17/01
Chlorobenzene		µg/L	100	97	97	80 - 120	1/17/01
Ethylbenzene		µg/L	100	99	99	80 - 120	1/17/01
Dibromofluoromethane		µg/L	50	52.99	105	80 - 120	1/17/01
Toluene-d8		µg/L	50	49.14	98	80 - 120	1/17/01
4-Bromofluorobenzene		µg/L	50	54.09	108	80 - 120	1/17/01

Equiva Services, LLC

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Phone #:

11/11/50

Fax #:

5012. Marin

Equiva Contact:

Equiva Contact: Darrell Moore or Charlie Plymate

Incident #

Location Address:

Project Task:

Project Task: Qtrly off site

Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD						SAMPLING	
				WATER	SOIL	AIR	SLUDGE	HCL	HNO ₃	NaHSO ₄	H ₂ SO ₄	ICE	NONE	DATE	TIME
162383	Kwb 2R	2	40ml	X				X					X	1/11/01	1030
84	MW 45	2	40ml	X									X	1/11/01	1400
85	MW 18	2	40ml	X						X	X		X	1/11/01	11:05
86	Kwb 1C	2	40ml	X						X			X	1/11/01	1020
87	NP-1	2	40ml	X						X				1/11/01	915
88	MW-28	2	40ml	X						X	X		X	1/11/01	1445
89	NP-2	2	40ml	X						X	X		X	1/11/01	700
90	Kwb 1A	2	40ml	X						X	X		X	1/11/01	1010
91	MW 29	2	40ml	X						X	X		X	1/11/01	1420

Relinquished by:

Date: , Time: 1:15

Received by:

~~Date: _____ Time: _____~~

Relinquished by:

Date: _____ Time: _____

Received by:

Date: _____ Time: _____

Relinquished by:

Date: _____ Time: _____

Received at U

Date: Time:

Received at Laboratory by: John D. Dwyer Date: 1-13-71 Time: 1:00

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of COC

(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	
PCBs 8082/608	
Pesticides 8081A/608	
BOD, TSS, pH	
Turn Around Time if different from standard	
Hold	

LAB USE ONLY

REMARKS:

☐ Check if special reporting limits needed.

Intact	Y/N

Headspace Y/N

Temp. 2

Log-In Review

Carrier # 7545-197



TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: November 24, 2000

Order ID Number: A00102628

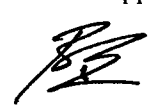
Project Number: N/A
Project Name: Mo Off -Site
Project Location: Artesia, NM

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
157111	RA 313	Water	10/25/00	13:40	10/26/00
157112	RA 314	Water	10/25/00	13:45	10/26/00
157113	RA 4196	Water	10/25/00	14:25	10/26/00
157114	RA 1227	Water	10/25/00	13:50	10/26/00
157115	RA 307	Water	10/25/00	14:00	10/26/00

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

This report consists of a total of 13 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 157111 - RA 313

Analysis: 624 Analytical Method: E 624 QC Batch: QC06406 Date Analyzed: 11/7/00
Analyst: JG Preparation Method: N/A Prep Batch: PB05595 Date Prepared: 11/7/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 157111 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.74	µg/L	1	50	105	84 - 116
Toluene-d8		50.95	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		47.56	µg/L	1	50	95	80 - 110

Sample: 157112 - RA 314

Analysis: 624 Analytical Method: E 624 QC Batch: QC06406 Date Analyzed: 11/7/00
Analyst: JG Preparation Method: N/A Prep Batch: PB05595 Date Prepared: 11/7/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5

Continued ...

... Continued Sample: 157112 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		1.45	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 157112 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.03	µg/L	1	50	106	84 - 116
Toluene-d8		50.63	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		47.56	µg/L	1	50	95	80 - 110

Sample: 157113 - RA 4196

Analysis: 624 Analytical Method: E 624 QC Batch: QC06406 Date Analyzed: 11/7/00
Analyst: JG Preparation Method: N/A Prep Batch: PB05595 Date Prepared: 11/7/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 157113 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.83	µg/L	1	50	105	84 - 116
Toluene-d8		50.14	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		47.42	µg/L	1	50	94	80 - 110

Sample: 157114 - RA 1227

Analysis: 624 Analytical Method: E 624
Analyst: JG Preparation Method: N/A

QC Batch: QC06406
Prep Batch: PB05595

Date Analyzed: 11/7/00
Date Prepared: 11/7/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 157114 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.98	µg/L	1	50	105	84 - 116
Toluene-d8		50.53	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		47.11	µg/L	1	50	94	80 - 110

Sample: 157115 - RA 307

Analysis: 624 Analytical Method: E 624 QC Batch: QC06406 Date Analyzed: 11/7/00
Analyst: JG Preparation Method: N/A Prep Batch: PB05595 Date Prepared: 11/7/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<1.00	µg/L	1	1
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<1.00	µg/L	1	1
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1

Continued ...

... Continued Sample: 157115 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		<1.00	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		<1.00	µg/L	1	1
m,p-Xylene		<1.00	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		<1.00	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		<1.00	µg/L	1	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		<1.00	µg/L	1	1
1,3-Dichlorobenzene		<1.00	µg/L	1	1
p-Isopropyltoluene		<1.00	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		<1.00	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<1.00	µg/L	1	1
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		53.47	µg/L	1	50	106	84 - 116
Toluene-d8		50.62	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		46.63	µg/L	1	50	93	80 - 110

Quality Control Report Method Blank

Sample: Method Blank

QCBatch: QC06406

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<1.00	µg/L	1
Dichlorodifluoromethane		<1.00	µg/L	1
Chloromethane (methyl chloride)		<1.00	µg/L	1
Vinyl Chloride		<1.00	µg/L	1
Bromomethane (methyl bromide)		<1.00	µg/L	1
Chloroethane		<1.00	µg/L	1
Trichlorofluoromethane		<1.00	µg/L	1
Acetone		<10.0	µg/L	10
Iodomethane (methyl iodide)		<1.00	µg/L	1
Carbon Disulfide		<1.00	µg/L	1
Acrylonitrile		<1.00	µg/L	1
2-Butanone (MEK)		<5.00	µg/L	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	5
2-hexanone		<5.00	µg/L	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	10
1,1-Dichloroethene		<1.00	µg/L	1
Methylene chloride		<5.00	µg/L	5
MTBE		<1.00	µg/L	1
trans-1,2-Dichloroethene		<1.00	µg/L	1
1,1-Dichloroethane		<1.00	µg/L	1
cis-1,2-dichloroethene		<1.00	µg/L	1
2,2-Dichloropropane		<1.00	µg/L	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1
Chloroform		<1.00	µg/L	1
1,1,1-Trichloroethane		<1.00	µg/L	1
1,1-Dichloropropene		<1.00	µg/L	1
Benzene		<1.00	µg/L	1
Carbon Tetrachloride		<1.00	µg/L	1
1,2-Dichloropropane		<1.00	µg/L	1
Trichloroethene (TCE)		<1.00	µg/L	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1
Bromodichloromethane		<1.00	µg/L	1
2-Chloroethyl vinyl ether		<5.00	µg/L	5
cis-1,3-Dichloropropene		<1.00	µg/L	1
trans-1,3-Dichloropropene		<1.00	µg/L	1
Toluene		<1.00	µg/L	1

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
1,1,2-Trichloroethane		<1.00	µg/L	1
1,3-Dichloropropane		<1.00	µg/L	1
Dibromochloromethane		<1.00	µg/L	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1
Tetrachloroethene (PCE)		<1.00	µg/L	1
Chlorobenzene		<1.00	µg/L	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1
Ethylbenzene		<1.00	µg/L	1
m,p-Xylene		<1.00	µg/L	1
Bromoform		<1.00	µg/L	1
Styrene		<1.00	µg/L	1
o-Xylene		<1.00	µg/L	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1
2-Chlorotoluene		<1.00	µg/L	1
1,2,3-Trichloropropane		<1.00	µg/L	1
Isopropylbenzene		<1.00	µg/L	1
Bromobenzene		<1.00	µg/L	1
n-Propylbenzene		<1.00	µg/L	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1
tert-Butylbenzene		<1.00	µg/L	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1
sec-Butylbenzene		<1.00	µg/L	1
1,3-Dichlorobenzene		<1.00	µg/L	1
p-Isopropyltoluene		<1.00	µg/L	1
4-Chlorotoluene		<1.00	µg/L	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1
n-Butylbenzene		<1.00	µg/L	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<1.00	µg/L	1
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		52.50	µg/L	50	105	84 - 116
Toluene-d8		51.22	µg/L	50	102	92 - 108
4-Bromofluorobenzene		46.75	µg/L	50	93	80 - 110

Quality Control Report Lab Control Spikes and Duplicate Spikes

Sample: LCS

QC Batch: QC06406

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		97	µg/L	1	100	<1.00	97		73 - 154	20
Benzene		96	µg/L	1	100	<1.00	96		84 - 126	20
Trichloroethene (TCE)		90	µg/L	1	100	<1.00	90		82 - 123	20
Toluene		91	µg/L	1	100	<1.00	91		81 - 122	20
Chlorobenzene		93	µg/L	1	100	<1.00	93		86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		52.19	µg/L	1	50	104	84 - 116
Toluene-d8		50.57	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		47.67	µg/L	1	50	95	80 - 110

Sample: LCSD

QC Batch: QC06406

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		95	µg/L	1	100	<1.00	95	2	73 - 154	20
Benzene		92	µg/L	1	100	<1.00	92	4	84 - 126	20
Trichloroethene (TCE)		87	µg/L	1	100	<1.00	87	3	82 - 123	20
Toluene		88	µg/L	1	100	<1.00	88	3	81 - 122	20
Chlorobenzene		90	µg/L	1	100	<1.00	90	3	86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		52.60	µg/L	1	50	105	84 - 116
Toluene-d8		50.50	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		47.78	µg/L	1	50	95	80 - 110

Quality Control Report Continuing Calibration Verification Standards

Sample: CCV (1)

QC Batch: QC06406

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	111	111	80 - 120	11/7/00
1,1-Dichloroethene		µg/L	100	104	104	73 - 154	11/7/00
Chloroform		µg/L	100	109	109	80 - 120	11/7/00
1,2-Dichloropropane		µg/L	100	109	109	80 - 120	11/7/00
Toluene		µg/L	100	103	103	81 - 122	11/7/00

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chlorobenzene		µg/L	100	103	103	86 - 121	11/7/00
Ethylbenzene		µg/L	100	106	106	80 - 120	11/7/00
Dibromofluoromethane		µg/L	50	52.91	105	80 - 120	11/7/00
Toluene-d8		µg/L	50	50.02	100	80 - 120	11/7/00
4-Bromofluorobenzene		µg/L	50	50.28	100	80 - 120	11/7/00



TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296
888•588•3443

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: July 7, 2000

Order ID Number: A00062915

Project Number: Qtrly Offsite
Project Name: N/A
Project Location: 501 E Main, Artesia, NM

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
148978	MW-28	Water	6/28/00	8:45	6/29/00
148979	MW-29	Water	6/28/00	8:20	6/29/00

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

This report consists of a total of 10 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Analytical and Quality Control Report

Sample: 148978 - MW-28

Analysis: 624 Analytical Method: E 624 QC Batch: QC03593 Date Analyzed: 7/5/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03091 Date Prepared: 7/5/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		1213.47	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		10.85	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148978 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		3.83	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.67	µg/L	1	50	105	84 - 116
Toluene-d8		50.53	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		48.82	µg/L	1	50	97	80 - 110

Sample: 148979 - MW-29

Analysis: 624 Analytical Method: E 624 QC Batch: QC03575 Date Analyzed: 7/3/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03080 Date Prepared: 7/3/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10

Continued ...

... Continued Sample: 148979 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		12.75	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		18.02	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148979 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.83	µg/L	1	50	103	84 - 116
Toluene-d8		51.03	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		48.47	µg/L	1	50	96	80 - 110

Quality Control Report Method Blank

Sample: Method Blank

QCBatch: QC03575

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<2.00	µg/L	2
Dichlorodifluoromethane		<2.00	µg/L	2
Chloromethane (methyl chloride)		<2.00	µg/L	2
Vinyl Chloride		<2.00	µg/L	2
Bromomethane (methyl bromide)		<5.00	µg/L	5
Chloroethane		<2.00	µg/L	2
Trichlorofluoromethane		<2.00	µg/L	2
Acetone		<10.00	µg/L	10
Iodomethane (methyl iodide)		<2.00	µg/L	2
Carbon Disulfide		<2.00	µg/L	2
Acrylonitrile		<2.00	µg/L	2
2-Butanone (MEK)		<2.00	µg/L	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	10
2-hexanone		<2.00	µg/L	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	10
1,1-Dichloroethene		<2.00	µg/L	2
Methylene chloride		<5.00	µg/L	5
MTBE		<2.00	µg/L	2
trans-1,2-Dichloroethene		<2.00	µg/L	2
1,1-Dichloroethane		<2.00	µg/L	2
cis-1,2-dichloroethene		<2.00	µg/L	2
2,2-Dichloropropane		<2.00	µg/L	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	2
Chloroform		<2.00	µg/L	2
1,1,1-Trichloroethane		<2.00	µg/L	2
1,1-Dichloropropene		<2.00	µg/L	2
Benzene		<2.00	µg/L	2

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
Carbon Tetrachloride		<2.00	µg/L	2
1,2-Dichloropropane		<2.00	µg/L	2
Trichloroethene (TCE)		<2.00	µg/L	2
Dibromomethane (methylene bromide)		<2.00	µg/L	2
Bromodichloromethane		<2.00	µg/L	2
2-Chloroethyl vinyl ether		<10.00	µg/L	10
cis-1,3-Dichloropropene		<2.00	µg/L	2
trans-1,3-Dichloropropene		<2.00	µg/L	2
Toluene		<2.00	µg/L	2
1,1,2-Trichloroethane		<2.00	µg/L	2
1,3-Dichloropropane		<2.00	µg/L	2
Dibromochloromethane		<2.00	µg/L	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	2
Tetrachloroethene (PCE)		<2.00	µg/L	2
Chlorobenzene		<2.00	µg/L	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	2
Ethylbenzene		<2.00	µg/L	2
m,p-Xylene		<2.00	µg/L	2
Bromoform		<2.00	µg/L	2
Styrene		<2.00	µg/L	2
o-Xylene		<2.00	µg/L	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	2
2-Chlorotoluene		<2.00	µg/L	2
1,2,3-Trichloropropane		<2.00	µg/L	2
Isopropylbenzene		<2.00	µg/L	2
Bromobenzene		<2.00	µg/L	2
n-Propylbenzene		<2.00	µg/L	2
1,3,5-Trimethylbenzene		<2.00	µg/L	2
tert-Butylbenzene		<2.00	µg/L	2
1,2,4-Trimethylbenzene		<2.00	µg/L	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	2
sec-Butylbenzene		<2.00	µg/L	2
1,3-Dichlorobenzene		<2.00	µg/L	2
p-Isopropyltoluene		<2.00	µg/L	2
4-Chlorotoluene		<2.00	µg/L	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	2
n-Butylbenzene		<2.00	µg/L	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<2.00	µg/L	2
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		52.46	µg/L	50	104	84 - 116
Toluene-d8		52.57	µg/L	50	105	92 - 108
4-Bromofluorobenzene		45.41	µg/L	50	90	80 - 110

Sample: Method Blank

QCBatch: QC03593

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<2.00	µg/L	2
Dichlorodifluoromethane		<2.00	µg/L	2
Chloromethane (methyl chloride)		<2.00	µg/L	2
Vinyl Chloride		<2.00	µg/L	2
Bromomethane (methyl bromide)		<5.00	µg/L	5
Chloroethane		<2.00	µg/L	2
Trichlorofluoromethane		<2.00	µg/L	2
Acetone		<10.00	µg/L	10
Iodomethane (methyl iodide)		<2.00	µg/L	2
Carbon Disulfide		<2.00	µg/L	2
Acrylonitrile		<2.00	µg/L	2
2-Butanone (MEK)		<2.00	µg/L	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	10
2-hexanone		<2.00	µg/L	2
1,1-Dichloroethene		<2.00	µg/L	2
Methylene chloride		<5.00	µg/L	5
MTBE		<2.00	µg/L	2
trans-1,2-Dichloroethene		<2.00	µg/L	2
1,1-Dichloroethane		<2.00	µg/L	2
cis-1,2-dichloroethene		<2.00	µg/L	2
2,2-Dichloropropane		<2.00	µg/L	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	2
Chloroform		<2.00	µg/L	2
1,1,1-Trichloroethane		<2.00	µg/L	2
1,1-Dichloropropene		<2.00	µg/L	2
Benzene		<2.00	µg/L	2
Carbon Tetrachloride		<2.00	µg/L	2
1,2-Dichloropropane		<2.00	µg/L	2
Trichloroethene (TCE)		<2.00	µg/L	2
Dibromomethane (methylene bromide)		<2.00	µg/L	2
Bromodichloromethane		<2.00	µg/L	2
2-Chloroethyl vinyl ether		<10.00	µg/L	10
cis-1,3-Dichloropropene		<2.00	µg/L	2
trans-1,3-Dichloropropene		<2.00	µg/L	2
Toluene		<2.00	µg/L	2
1,1,2-Trichloroethane		<2.00	µg/L	2
1,3-Dichloropropane		<2.00	µg/L	2
Dibromochloromethane		<2.00	µg/L	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	2
Tetrachloroethene (PCE)		<2.00	µg/L	2
Chlorobenzene		<2.00	µg/L	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	2
Ethylbenzene		<2.00	µg/L	2
m,p-Xylene		<2.00	µg/L	2
Bromoform		<2.00	µg/L	2
Styrene		<2.00	µg/L	2
o-Xylene		<2.00	µg/L	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	2
2-Chlorotoluene		<2.00	µg/L	2
1,2,3-Trichloropropane		<2.00	µg/L	2

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
Isopropylbenzene		<2.00	µg/L	2
Bromobenzene		<2.00	µg/L	2
n-Propylbenzene		<2.00	µg/L	2
1,3,5-Trimethylbenzene		<2.00	µg/L	2
tert-Butylbenzene		<2.00	µg/L	2
1,2,4-Trimethylbenzene		<2.00	µg/L	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	2
sec-Butylbenzene		<2.00	µg/L	2
1,3-Dichlorobenzene		<2.00	µg/L	2
p-Isopropyltoluene		<2.00	µg/L	2
4-Chlorotoluene		<2.00	µg/L	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	2
n-Butylbenzene		<2.00	µg/L	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<2.00	µg/L	2
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		52.59	µg/L	50	105	84 - 116
Toluene-d8		52.00	µg/L	50	104	92 - 108
4-Bromofluorobenzene		44.53	µg/L	50	89	80 - 110

Quality Control Report Lab Control Spikes and Duplicate Spikes

Sample: LCS

QC Batch: QC03575

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		99	µg/L	1	100	<2.00	99		73 - 154	20
Benzene		98	µg/L	1	100	<2.00	98		84 - 126	20
Trichloroethene (TCE)		94	µg/L	1	100	<2.00	94		82 - 123	20
Toluene		95	µg/L	1	100	<2.00	95		81 - 122	20
Chlorobenzene		96	µg/L	1	100	<2.00	96		86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		51.97	µg/L	1	50	103	84 - 116
Toluene-d8		51.09	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		45.59	µg/L	1	50	91	80 - 110

Sample: LCSD

QC Batch: QC03575

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		103	µg/L	1	100	<2.00	103	3.96	73 - 154	20
Benzene		101	µg/L	1	100	<2.00	101	3.01	84 - 126	20
Trichloroethene (TCE)		97	µg/L	1	100	<2.00	97	3.14	82 - 123	20
Toluene		99	µg/L	1	100	<2.00	99	4.12	81 - 122	20
Chlorobenzene		98	µg/L	1	100	<2.00	98	2.06	86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		51.88	µg/L	1	50	103	84 - 116
Toluene-d8		50.74	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		45.67	µg/L	1	50	91	80 - 110

Sample: LCS

QC Batch: QC03593

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		111	µg/L	1	100	<2.00	111		73 - 154	20
Benzene		107	µg/L	1	100	<2.00	107		84 - 126	20
Trichloroethene (TCE)		103	µg/L	1	100	<2.00	103		82 - 123	20
Toluene		103	µg/L	1	100	<2.00	103		81 - 122	20
Chlorobenzene		102	µg/L	1	100	<2.00	102		86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		52.38	µg/L	1	50	104	84 - 116
Toluene-d8		50.93	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		44.71	µg/L	1	50	89	80 - 110

Sample: LCSD

QC Batch: QC03593

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		111	µg/L	1	100	<2.00	111	0.00	73 - 154	20
Benzene		106	µg/L	1	100	<2.00	106	0.93	84 - 126	20
Trichloroethene (TCE)		103	µg/L	1	100	<2.00	103	0.00	82 - 123	20
Toluene		103	µg/L	1	100	<2.00	103	0.00	81 - 122	20
Chlorobenzene		102	µg/L	1	100	<2.00	102	0.00	86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		52.81	µg/L	1	50	105	84 - 116
Toluene-d8		50.56	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		44.87	µg/L	1	50	89	80 - 110

Quality Control Report Continuing Calibration Verification Standards

Sample: CCV (1)

QC Batch: QC03575

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	112	112	80 - 120	7/3/00
1,1-Dichloroethene		µg/L	100	104	104	73 - 154	7/3/00
Chloroform		µg/L	100	109	109	80 - 120	7/3/00
1,2-Dichloropropane		µg/L	100	107	107	80 - 120	7/3/00
Toluene		µg/L	100	104	104	81 - 122	7/3/00
Chlorobenzene		µg/L	100	100	100	86 - 121	7/3/00
Ethylbenzene		µg/L	100	104	104	80 - 120	7/3/00
Dibromofluoromethane		µg/L	50	52.22	104	80 - 120	7/3/00
Toluene-d8		µg/L	50	48.98	97	80 - 120	7/3/00
4-Bromofluorobenzene		µg/L	50	51.57	103	80 - 120	7/3/00

Sample: CCV (1)

QC Batch: QC03593

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	112	112	80 - 120	7/5/00
1,1-Dichloroethene		µg/L	100	108	108	73 - 154	7/5/00
Chloroform		µg/L	100	109	109	80 - 120	7/5/00
1,2-Dichloropropane		µg/L	100	104	104	80 - 120	7/5/00
Toluene		µg/L	100	100	100	81 - 122	7/5/00
Chlorobenzene		µg/L	100	95	95	86 - 121	7/5/00
Ethylbenzene		µg/L	100	99	99	80 - 120	7/5/00
Dibromofluoromethane		µg/L	50	56.89	113	80 - 120	7/5/00
Toluene-d8		µg/L	50	49.19	98	80 - 120	7/5/00
4-Bromofluorobenzene		µg/L	50	51.59	103	80 - 120	7/5/00

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: September 12, 2000

Order ID Number: A00083018

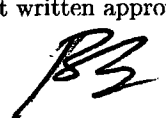
Project Number: N/A
Project Name: Mo Off -Site
Project Location: Artesia, NM

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
152554	RA 4196	Water	8/29/00	9:40	8/30/00
152555	RA 4798	Water	8/29/00	9:55	8/30/00
152556	RA 313	Water	8/29/00	9:30	8/30/00
152557	RA 314	Water	8/29/00	9:35	8/30/00
152558	RA 1331	Water	8/29/00	10:00	8/30/00
152559	RA 1227	Water	8/29/00	9:50	8/30/00
152560	RA 307	Water	8/29/00	9:45	8/30/00

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

This report consists of a total of 12 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.


Dr. Blair Leftwich, Director

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Analytical and Quality Control Report

Sample: 152554 - RA 4196

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC04662 Date Analyzed: 9/2/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB04065 Date Prepared: 9/2/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.001	mg/L	1	0.001
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		0.091	mg/L	1	0.10	91	72 - 128
4-BFB		0.076	mg/L	1	0.10	76	72 - 128

Sample: 152555 - RA 4798

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC04769 Date Analyzed: 9/7/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB04150 Date Prepared: 9/7/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.001	mg/L	1	0.001
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		0.123	mg/L	1	0.10	123	72 - 128
4-BFB		0.105	mg/L	1	0.10	105	72 - 128

Sample: 152556 - RA 313

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC04800 Date Analyzed: 9/8/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB04174 Date Prepared: 9/8/00

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

Continued ...

Report Date: September 12, 2000
N/A

Order Number: A00083018
Mo Off -Site

Page Number: 3 of 12
Artesia,NM

... Continued Sample: 152556 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
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	72 - 128
4-BFB		0.088	mg/L	1	0.10	88	72 - 128

Sample: 152557 - RA 314

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC04800 Date Analyzed: 9/8/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB04174 Date Prepared: 9/8/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.001	mg/L	1	0.001
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		0.09	mg/L	1	0.10	90	72 - 128
4-BFB		0.086	mg/L	1	0.10	86	72 - 128

Sample: 152558 - RA 1331

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC04662 Date Analyzed: 9/2/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB04065 Date Prepared: 9/2/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.001	mg/L	1	0.001
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		0.074	mg/L	1	0.10	74	72 - 128
4-BFB		0.072	mg/L	1	0.10	72	72 - 128

Report Date: September 12, 2000
N/A

Order Number: A00083018
Mo Off -Site

Page Number: 4 of 12
Artesia,NM

Sample: 152559 - RA 1227

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC04800 Date Analyzed: 9/8/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB04174 Date Prepared: 9/8/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.001	mg/L	1	0.001
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	72 - 128
4-BFB		0.095	mg/L	1	0.10	95	72 - 128

Sample: 152560 - RA 307

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC04725 Date Analyzed: 9/5/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB04115 Date Prepared: 9/5/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.001	mg/L	1	0.001
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		0.113	mg/L	1	0.10	113	72 - 128
4-BFB		0.119	mg/L	1	0.10	119	72 - 128

Quality Control Report Method Blank

Sample: Method Blank

QCBatch: QC04662

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

Continued ...

Report Date: September 12, 2000
N/A

Order Number: A00083018
Mo Off -Site

Page Number: 5 of 12
Artesia,NM

... Continued

Param	Flag	Results	Units	Reporting Limit
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		0.094	mg/L	0.10	94	72 - 128
4-BFB		0.079	mg/L	0.10	79	72 - 128

Sample: Method Blank

QCBatch: QC04725

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	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.095	mg/L	0.10	95	72 - 128
4-BFB		0.1	mg/L	0.10	100	72 - 128

Sample: Method Blank

QCBatch: QC04769

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	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.11	mg/L	0.10	120	72 - 128
4-BFB		0.105	mg/L	0.10	105	72 - 128

Sample: Method Blank

QCBatch: QC04800

Report Date: September 12, 2000
N/A

Order Number: A00083018
Mo Off -Site

Page Number: 6 of 12
Artesia, NM

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	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.1	mg/L	0.10	100	72 - 128
4-BFB		0.096	mg/L	0.10	96	72 - 128

Quality Control Report Lab Control Spikes and Duplicate Spikes

Sample: LCS

QC Batch: QC04662

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.099	mg/L	1	0.10	<0.001	99	3	80 - 120	20
Benzene		0.094	mg/L	1	0.10	<0.001	94	0	80 - 120	20
Toluene		0.095	mg/L	1	0.10	<0.001	95	1	80 - 120	20
Ethylbenzene		0.093	mg/L	1	0.10	<0.001	93	2	80 - 120	20
M,P,O-Xylene		0.277	mg/L	1	0.30	<0.001	92	2	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.09	mg/L	1	0.10	90	72 - 128
4-BFB		0.074	mg/L	1	0.10	74	72 - 128

Sample: LCSD

QC Batch: QC04662

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.099	mg/L	1	0.10	<0.001	99	0	80 - 120	20
Benzene		0.094	mg/L	1	0.10	<0.001	94	0	80 - 120	20
Toluene		0.094	mg/L	1	0.10	<0.001	94	1	80 - 120	20
Ethylbenzene		0.093	mg/L	1	0.10	<0.001	93	0	80 - 120	20
M,P,O-Xylene		0.276	mg/L	1	0.30	<0.001	92	0	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.091	mg/L	1	0.10	91	72 - 128
4-BFB		0.074	mg/L	1	0.10	74	72 - 128

Sample: LCS

QC Batch: QC04725

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.08	mg/L	1	0.10	<0.001	80		80 - 120	20
Benzene		0.084	mg/L	1	0.10	<0.001	84		80 - 120	20
Toluene		0.084	mg/L	1	0.10	<0.001	84		80 - 120	20
Ethylbenzene		0.084	mg/L	1	0.10	<0.001	84		80 - 120	20
M,P,O-Xylene		0.25	mg/L	1	0.30	<0.001	83		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.096	mg/L	1	0.10	96	72 - 128
4-BFB		0.1	mg/L	1	0.10	100	72 - 128

Sample: LCSD

QC Batch: QC04725

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.084	mg/L	1	0.10	<0.001	84	5	80 - 120	20
Benzene		0.088	mg/L	1	0.10	<0.001	88	5	80 - 120	20
Toluene		0.088	mg/L	1	0.10	<0.001	88	5	80 - 120	20
Ethylbenzene		0.086	mg/L	1	0.10	<0.001	86	2	80 - 120	20
M,P,O-Xylene		0.26	mg/L	1	0.30	<0.001	86	4	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.092	mg/L	1	0.10	92	72 - 128
4-BFB		0.095	mg/L	1	0.10	95	72 - 128

Sample: LCS

QC Batch: QC04769

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.104	mg/L	1	0.10	<0.001	104		80 - 120	20
Benzene		0.116	mg/L	1	0.10	<0.001	116		80 - 120	20
Toluene		0.116	mg/L	1	0.10	<0.001	116		80 - 120	20

Continued ...

... Continued

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ethylbenzene		0.116	mg/L	1	0.10	<0.001	116		80 - 120	20
M,P,O-Xylene		0.359	mg/L	1	0.30	<0.001	119		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.126	mg/L	1	0.10	126	72 - 128
4-BFB		0.115	mg/L	1	0.10	115	72 - 128

Sample: LCSD

QC Batch: QC04769

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	1	80 - 120	20
Benzene		0.117	mg/L	1	0.10	<0.001	117	1	80 - 120	20
Toluene		0.118	mg/L	1	0.10	<0.001	118	2	80 - 120	20
Ethylbenzene		0.118	mg/L	1	0.10	<0.001	118	2	80 - 120	20
M,P,O-Xylene		0.357	mg/L	1	0.30	<0.001	119	0	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.127	mg/L	1	0.10	127	72 - 128
4-BFB		0.115	mg/L	1	0.10	115	72 - 128

Sample: LCS

QC Batch: QC04800

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.097	mg/L	1	0.10	<0.001	97		80 - 120	20
Benzene		0.096	mg/L	1	0.10	<0.001	96		80 - 120	20
Toluene		0.097	mg/L	1	0.10	<0.001	97		80 - 120	20
Ethylbenzene		0.098	mg/L	1	0.10	<0.001	98		80 - 120	20
M,P,O-Xylene		0.293	mg/L	1	0.30	<0.001	97		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.099	mg/L	1	0.10	99	72 - 128
4-BFB		0.099	mg/L	1	0.10	99	72 - 128

Sample: LCSD

QC Batch: QC04800

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.102	mg/L	1	0.10	<0.001	102	5	80 - 120	20
Benzene		0.103	mg/L	1	0.10	<0.001	103	7	80 - 120	20
Toluene		0.103	mg/L	1	0.10	<0.001	103	6	80 - 120	20
Ethylbenzene		0.103	mg/L	1	0.10	<0.001	103	5	80 - 120	20
M,P,O-Xylene		0.31	mg/L	1	0.30	<0.001	103	6	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.101	mg/L	1	0.10	101	72 - 128
4-BFB		0.101	mg/L	1	0.10	101	72 - 128

Quality Control Report Continuing Calibration Verification Standards

Sample: CCV (1)

QC Batch: QC04662

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	80 - 120	9/2/00
Benzene		mg/L	0.10	0.097	97	80 - 120	9/2/00
Toluene		mg/L	0.10	0.097	97	80 - 120	9/2/00
Ethylbenzene		mg/L	0.10	0.094	94	80 - 120	9/2/00
M,P,O-Xylene		mg/L	0.30	0.309	103	80 - 120	9/2/00

Sample: CCV (2)

QC Batch: QC04662

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.091	91	80 - 120	9/2/00
Benzene		mg/L	0.10	0.106	106	80 - 120	9/2/00
Toluene		mg/L	0.10	0.107	107	80 - 120	9/2/00
Ethylbenzene		mg/L	0.10	0.11	110	80 - 120	9/2/00
M,P,O-Xylene		mg/L	0.30	0.305	101	80 - 120	9/2/00

Sample: ICV (1)

QC Batch: QC04662

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	80 - 120	9/2/00
Benzene		mg/L	0.10	0.093	93	80 - 120	9/2/00
Toluene		mg/L	0.10	0.094	94	80 - 120	9/2/00
Ethylbenzene		mg/L	0.10	0.093	93	80 - 120	9/2/00
M,P,O-Xylene		mg/L	0.30	0.279	93	80 - 120	9/2/00

Sample: CCV (1)

QC Batch: QC04725

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	80 - 120	9/5/00
Benzene		mg/L	0.10	0.097	97	80 - 120	9/5/00
Toluene		mg/L	0.10	0.097	97	80 - 120	9/5/00
Ethylbenzene		mg/L	0.10	0.097	97	80 - 120	9/5/00
M,P,O-Xylene		mg/L	0.30	0.289	96	80 - 120	9/5/00

Sample: CCV (2)

QC Batch: QC04725

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.099	99	80 - 120	9/5/00
Benzene		mg/L	0.10	0.094	94	80 - 120	9/5/00
Toluene		mg/L	0.10	0.094	94	80 - 120	9/5/00
Ethylbenzene		mg/L	0.10	0.091	91	80 - 120	9/5/00
M,P,O-Xylene		mg/L	0.30	0.272	90	80 - 120	9/5/00

Sample: ICV (1)

QC Batch: QC04725

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	80 - 120	9/5/00
Benzene		mg/L	0.10	0.11	110	80 - 120	9/5/00
Toluene		mg/L	0.10	0.11	110	80 - 120	9/5/00
Ethylbenzene		mg/L	0.10	0.112	112	80 - 120	9/5/00
M,P,O-Xylene		mg/L	0.30	0.338	112	80 - 120	9/5/00

Sample: CCV (1)

QC Batch: QC04769

Report Date: September 12, 2000
N/A

Order Number: A00083018
Mo Off -Site

Page Number: 11 of 12
Artesia,NM

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	80 - 120	9/7/00
Benzene		mg/L	0.10	0.115	115	80 - 120	9/7/00
Toluene		mg/L	0.10	0.115	115	80 - 120	9/7/00
Ethylbenzene		mg/L	0.10	0.116	116	80 - 120	9/7/00
M,P,O-Xylene		mg/L	0.30	0.36	120	80 - 120	9/7/00

Sample: CCV (2)

QC Batch: QC04769

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.105	105	80 - 120	9/7/00
Benzene		mg/L	0.10	0.107	107	80 - 120	9/7/00
Toluene		mg/L	0.10	0.107	107	80 - 120	9/7/00
Ethylbenzene		mg/L	0.10	0.107	107	80 - 120	9/7/00
M,P,O-Xylene		mg/L	0.30	0.322	107	80 - 120	9/7/00

Sample: ICV (1)

QC Batch: QC04769

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.107	107	80 - 120	9/7/00
Benzene		mg/L	0.10	0.116	116	80 - 120	9/7/00
Toluene		mg/L	0.10	0.116	116	80 - 120	9/7/00
Ethylbenzene		mg/L	0.10	0.117	117	80 - 120	9/7/00
M,P,O-Xylene		mg/L	0.30	0.358	119	80 - 120	9/7/00

Sample: CCV (1)

QC Batch: QC04800

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.099	99	80 - 120	9/8/00
Benzene		mg/L	0.10	0.098	98	80 - 120	9/8/00
Toluene		mg/L	0.10	0.098	98	80 - 120	9/8/00
Ethylbenzene		mg/L	0.10	0.098	98	80 - 120	9/8/00
M,P,O-Xylene		mg/L	0.30	0.293	97	80 - 120	9/8/00

Sample: ICV (1)

QC Batch: QC04800

Report Date: September 12, 2000
N/A

Order Number: A00083018
Mo Off -Site

Page Number: 12 of 12
Artesia,NM

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	80 - 120	9/8/00
Benzene		mg/L	0.10	0.098	98	80 - 120	9/8/00
Toluene		mg/L	0.10	0.098	98	80 - 120	9/8/00
Ethylbenzene		mg/L	0.10	0.098	98	80 - 120	9/8/00
M,P,O-Xylene		mg/L	0.30	0.294	98	80 - 120	9/8/00

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 70082018

Phone #: 505-748-3311

Fax #:

12h5 9hL 505

Invoice to:
(If different from above)

Project Name: Monthly office

Sampler Signature: 

[illegible]

Date: _____ Time: _____

Date: _____ Time: _____

Date: Time:

Carrier # Feb 298-2131 336

• 2000: 100th Anniversary of the National Aeronautics and Space Administration (NASA)



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

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: August 4, 2000

Order ID Number: A00072704

Project Number: N/A
Project Name: Mo Off -Site
Project Location: Artesia,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
150449	RA 4196	Water	7/26/00	10:15	7/27/00
150450	RA 4798	Water	7/26/00	10:20	7/27/00
150451	RA 313	Water	7/26/00	11:00	7/27/00
150452	RA 314	Water	7/26/00	10:05	7/27/00
150453	RA 1331	Water	7/26/00	10:10	7/27/00
150454	RA 1227	Water	7/26/00	13:55	7/27/00
150455	RA 307	Water	7/26/00	10:13	7/27/00

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

This report consists of a total of 8 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 150449 - RA 4196

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC03999 Date Analyzed: 7/31/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB03458 Date Prepared: 7/31/00

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		0.413	mg/L	1	0.10	82	72 - 128
4-BFB		0.42	mg/L	1	0.10	84	72 - 128

Sample: 150450 - RA 4798

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC03999 Date Analyzed: 7/31/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB03458 Date Prepared: 7/31/00

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		0.45	mg/L	1	0.10	90	72 - 128
4-BFB		0.454	mg/L	1	0.10	90	72 - 128

Sample: 150451 - RA 313

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC03999 Date Analyzed: 7/31/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB03458 Date Prepared: 7/31/00

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

Continued ...

Report Date: August 4, 2000
N/A

Order Number: A00072704
Mo Off -Site

Page Number: 3 of 8
Artesia,NM

... Continued Sample: 150451 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
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	1	0.10	83	72 - 128
4-BFB		0.42	mg/L	1	0.10	84	72 - 128

Sample: 150452 - RA 314

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC04077 Date Analyzed: 8/3/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB03540 Date Prepared: 8/3/00

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		0.487	mg/L	5	0.10	97	72 - 128
4-BFB		0.426	mg/L	5	0.10	85	72 - 128

Sample: 150453 - RA 1331

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC03999 Date Analyzed: 7/31/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB03458 Date Prepared: 7/31/00

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		0.437	mg/L	1	0.10	87	72 - 128
4-BFB		0.434	mg/L	1	0.10	86	72 - 128

Sample: 150454 - RA 1227

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC03999 Date Analyzed: 7/31/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB03458 Date Prepared: 7/31/00

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		0.369	mg/L	1	0.10	73	72 - 128
4-BFB		0.378	mg/L	1	0.10	75	72 - 128

Sample: 150455 - RA 307

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC03999 Date Analyzed: 7/31/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB03458 Date Prepared: 7/31/00

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		0.454	mg/L	1	0.10	90	72 - 128
4-BFB		0.461	mg/L	1	0.10	92	72 - 128

Quality Control Report Method Blank

Sample: Method Blank

QCBatch: QC03999

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

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
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		0.094	mg/L	0.10	94	72 - 128
4-BFB		0.091	mg/L	0.10	91	72 - 128

Sample: Method Blank QCBatch: QC04077

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	Spike Amount	Percent Recovery	Recovery Limit
TFT		0.099	mg/L	0.10	99	72 - 128
4-BFB		0.086	mg/L	0.10	86	72 - 128

Quality Control Report Lab Control Spikes and Duplicate Spikes

Sample: LCS QC Batch: QC03999

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.096	mg/L	1	0.10	<0.001	96		80 - 120	20
Benzene		0.112	mg/L	1	0.10	<0.001	112		80 - 120	20
Toluene		0.112	mg/L	1	0.10	<0.001	112		80 - 120	20
Ethylbenzene		0.096	mg/L	1	0.10	<0.001	96		80 - 120	20
M,P,O-Xylene		0.309	mg/L	1	0.30	<0.001	103		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.09	mg/L	1	0.10	90	72 - 128

Continued ...

... Continued

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
4-BFB		0.085	mg/L	1	0.10	85	72 - 128

Sample: LCSD

QC Batch: QC03999

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.097	mg/L	1	0.10	<0.001	97	1	80 - 120	20
Benzene		0.112	mg/L	1	0.10	<0.001	112	1	80 - 120	20
Toluene		0.112	mg/L	1	0.10	<0.001	112	1	80 - 120	20
Ethylbenzene		0.1	mg/L	1	0.10	<0.001	100	4	80 - 120	20
M,P,O-Xylene		0.312	mg/L	1	0.30	<0.001	104	1	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.092	mg/L	1	0.10	92	72 - 128
4-BFB		0.087	mg/L	1	0.10	87	72 - 128

Sample: LCS

QC Batch: QC04077

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.113	mg/L	1	0.10	<0.001	113		80 - 120	20
Benzene		0.105	mg/L	1	0.10	<0.001	105		80 - 120	20
Toluene		0.102	mg/L	1	0.10	<0.001	102		80 - 120	20
Ethylbenzene		0.104	mg/L	1	0.10	<0.001	104		80 - 120	20
M,P,O-Xylene		0.302	mg/L	1	0.30	<0.001	100		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		0.093	mg/L	1	0.10	93	72 - 128

Sample: LCSD

QC Batch: QC04077

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		0.113	mg/L	1	0.10	<0.001	113	0	80 - 120	20
Benzene		0.104	mg/L	1	0.10	<0.001	104	1	80 - 120	20
Toluene		0.101	mg/L	1	0.10	<0.001	101	1	80 - 120	20

Continued ...

... Continued

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Ethylbenzene		0.102	mg/L	1	0.10	<0.001	102	2	80 - 120	20
M,P,O-Xylene		0.294	mg/L	1	0.30	<0.001	98	3	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		0.101	mg/L	1	0.10	101	72 - 128
4-BFB		0.092	mg/L	1	0.10	92	72 - 128

Quality Control Report Continuing Calibration Verification Standards

Sample: CCV (1)

QC Batch: QC03999

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.099	99	80 - 120	7/31/00
Benzene		mg/L	0.10	0.11	110	80 - 120	7/31/00
Toluene		mg/L	0.10	0.11	110	80 - 120	7/31/00
Ethylbenzene		mg/L	0.10	0.104	104	80 - 120	7/31/00
M,P,O-Xylene		mg/L	0.30	0.328	109	80 - 120	7/31/00

Sample: CCV (2)

QC Batch: QC03999

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.08	80	80 - 120	7/31/00
Benzene		mg/L	0.10	0.104	104	80 - 120	7/31/00
Toluene		mg/L	0.10	0.103	103	80 - 120	7/31/00
Ethylbenzene		mg/L	0.10	0.089	89	80 - 120	7/31/00
M,P,O-Xylene		mg/L	0.30	0.284	94	80 - 120	7/31/00

Sample: ICV (1)

QC Batch: QC03999

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	80 - 120	7/31/00
Benzene		mg/L	0.10	0.116	116	80 - 120	7/31/00

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Toluene		mg/L	0.10	0.116	116	80 - 120	7/31/00
Ethylbenzene		mg/L	0.10	0.098	98	80 - 120	7/31/00
M,P,O-Xylene		mg/L	0.30	0.317	105	80 - 120	7/31/00

Sample: CCV (1)

QC Batch: QC04077

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.12	120	80 - 120	8/3/00
Benzene		mg/L	0.10	0.11	110	80 - 120	8/3/00
Toluene		mg/L	0.10	0.106	106	80 - 120	8/3/00
Ethylbenzene		mg/L	0.10	0.107	107	80 - 120	8/3/00
M,P,O-Xylene		mg/L	0.30	0.308	102	80 - 120	8/3/00

Sample: CCV (2)

QC Batch: QC04077

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.119	119	80 - 120	8/3/00
Benzene		mg/L	0.10	0.11	110	80 - 120	8/3/00
Toluene		mg/L	0.10	0.105	105	80 - 120	8/3/00
Ethylbenzene		mg/L	0.10	0.105	105	80 - 120	8/3/00
M,P,O-Xylene		mg/L	0.30	0.305	101	80 - 120	8/3/00

Sample: ICV (1)

QC Batch: QC04077

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.116	116	80 - 120	8/3/00
Benzene		mg/L	0.10	0.11	110	80 - 120	8/3/00
Toluene		mg/L	0.10	0.107	107	80 - 120	8/3/00
Ethylbenzene		mg/L	0.10	0.109	109	80 - 120	8/3/00
M,P,O-Xylene		mg/L	0.30	0.317	105	80 - 120	8/3/00

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

TraceAnalysis, Inc.

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # PO0072704

Company Name: NAVARO Phone #: 505 748 3311

Address: 507 E. Main Fax #: 505 748 9077

Contact Person:

ANALYSIS REQUEST
(Circle or Specify Method No.)

GC-MS Vol. 8260B/624
GC/MS Semi. Vol. 8270C/625
PCBs 8082/608
Pesticides 8081A/608
BOD, TSS, pH

Invoice to: (If different from above)

Project #:

Project Location: Artesia

Project Name: Monthly effs. fee

Sampler Signature:

TPH 418.1/TX1005
BTX 8021B/602
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 Semi Volatiles
TCLP Pesticides
RCI
GC-MS Vol. 8260B/624
GC/MS Semi. Vol. 8270C/625
PCBs 8082/608
Pesticides 8081A/608
BOD, TSS, pH

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD						SAMPLING		
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	NaHSO ₄	H ₂ SO ₄	NaOH	ICE	NONE	DATE	TIME
150449	RA 4196	2	40ml	X						X	X		X	X	7/26/00	1015
50	RA 4798	2	40ml	X						X	X		X	X	7/26/00	1020
51	RA 313	2	40ml	X						X	X		X	X	7/26/00	1100
52	RA 314	2	40ml	X						X	X		X	X	7/26/00	1005
53	RA 1331	2	40ml	X						X	X		X	X	7/26/00	1010
54	RA 1227	2	40ml	X						X	X		X	X	7/26/00	1055
55	RA 307	2	40ml	X						X	X		X	X	7/26/00	1013

MTBE 8021B/602																
BTX 8021B/602																
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 Semi Volatiles																
TCLP Pesticides																
RCI																
GC-MS Vol. 8260B/624																
GC/MS Semi. Vol. 8270C/625																
PCBs 8082/608																
Pesticides 8081A/608																
BOD, TSS, pH																
Turn Around Time if different from standard																

Relinquished by: Date: 7/26/00 Time: 16:15

Received by: Date: Time:

Relinquished by: Date: Time:

Received by: Date: Time:

Relinquished by: Date: Time:

Received by: Date: Time:

LAB USE ONLY

Intact Y / N

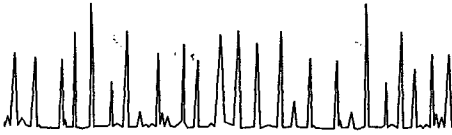
Headspace Y / N

Temp 2 °C

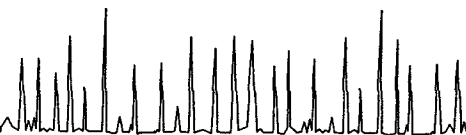
Log-in Review ms

Carrier # F00072704 290 4548 744

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



TRACE ANALYSIS, INC.



6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296

806•794•1296

FAX 806•794•1298

888•588•3443

915•585•3443

FAX 915•585•4944

E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

RECEIVED

MAR 05 2001

Report Date: September 28, 2000

Order ID Number: A00092013

Project Number: Qtrly Offsite

Project Name: N/A

Project Location: 501 E Main, Artesia, NM

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

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
153877	KWB-12A	Water	9/19/00	9:40	9/20/00
153878	RA-315 6	Water	9/19/00	9:30	9/20/00
153879	RA 122 7	Water	9/19/00	9:50	9/20/00
153880	KWB-9	Water	9/19/00	9:55	9/20/00
153881	RA 4196	Water	9/19/00	10:20	9/20/00
153882	RA 4798	Water	9/19/00	10:30	9/20/00
153883	RA 307	Water	9/19/00	10:15	9/20/00
153884	RA 1331	Water	9/19/00	10:10	9/20/00
153885	KWB 3A	Water	9/19/00	10:45	9/20/00
153886	RA 3353	Water	9/19/00	10:50	9/20/00
153887	KWB 1A	Water	9/19/00	11:10	9/20/00
153888	KWB-1C	Water	9/19/00	11:25	9/20/00
153889	MW-18	Water	9/19/00	14:45	9/20/00
153890	NP-2	Water	9/19/00	14:00	9/20/00
153891	RA-313	Water	9/19/00	9:20	9/20/00
153892	MW-29	Water	9/19/00	15:00	9/20/00
153893	MW-28	Water	9/19/00	15:30	9/20/00
153894	NP-1	Water	9/19/00	13:55	9/20/00
153895	MW-45	Water	9/19/00	14:20	9/20/00
153896	RA-314	Water	9/19/00	9:25	9/20/00
153897	KWB-2R	Water	9/19/00	9:15	9/20/00

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

This report consists of a total of 45 pages and shall not be reproduced except in its entirety, without written approval of Trace Analysis, Inc.



Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 153877 - KWB-12A

Analysis: 624 Analytical Method: E 624 QC Batch: QC05095 Date Analyzed: 9/23/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04445 Date Prepared: 9/23/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.0	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		2.39	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.0	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		5.79	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153877 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.88	µg/L	1	50	101	84 - 116
Toluene-d8		51.63	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		47.58	µg/L	1	50	95	80 - 110

Sample: 153878 - RA-315 6

Analysis: 624 Analytical Method: E 624 QC Batch: QC05095 Date Analyzed: 9/23/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04445 Date Prepared: 9/23/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153878 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
4-methyl-2-pentanone (MIBK)		<10.0	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.0	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153878 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.01	µg/L	1	50	102	84 - 116
Toluene-d8		51.65	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		46.13	µg/L	1	50	92	80 - 110

Sample: 153879 - RA 122 7

Analysis: 624 Analytical Method: E 624 QC Batch: QC05095 Date Analyzed: 9/23/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04445 Date Prepared: 9/23/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.0	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153879 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.0	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.31	µg/L	1	50	102	84 - 116
Toluene-d8		51.22	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		46.70	µg/L	1	50	93	80 - 110

Sample: 153880 - KWB-9

Analysis: 624	Analytical Method: E 624	QC Batch: QC05095	Date Analyzed: 9/23/00
Analyst: JG	Preparation Method: N/A	Prep Batch: PB04445	Date Prepared: 9/23/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.0	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		2.02	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		2.19	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.0	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		5.43	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153880 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.84	µg/L	1	50	101	84 - 116
Toluene-d8		51.37	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		47.45	µg/L	1	50	94	80 - 110

Sample: 153881 - RA 4196

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153881 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.33	µg/L	1	50	100	84 - 116
Toluene-d8		51.78	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		46.88	µg/L	1	50	93	80 - 110

Sample: 153882 - RA 4798

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		2.39	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153882 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.54	µg/L	1	50	101	84 - 116
Toluene-d8		51.91	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		45.80	µg/L	1	50	91	80 - 110

Sample: 153883 - RA 307

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10

Continued ...

... Continued Sample: 153883 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153883 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.18	µg/L	1	50	102	84 - 116
Toluene-d8		51.58	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		46.09	µg/L	1	50	92	80 - 110

Sample: 153884 - RA 1331

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153884 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.24	µg/L	1	50	102	84 - 116
Toluene-d8		51.57	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		46.52	µg/L	1	50	93	80 - 110

Sample: 153885 - KWB 3A

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		4.44	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153885 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.76	µg/L	1	50	103	84 - 116
Toluene-d8		51.44	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		47.42	µg/L	1	50	94	80 - 110

Sample: 153886 - RA 3353

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10

Continued ...

... Continued Sample: 153886 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5

Continued ...

... Continued Sample: 153886 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.41	µg/L	1	50	102	84 - 116
Toluene-d8		51.29	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		46.88	µg/L	1	50	93	80 - 110

Sample: 153887 - KWB 1A

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		11.47	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10

Continued ...

... Continued Sample: 153887 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		3.74	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.49	µg/L	1	50	102	84 - 116
Toluene-d8		51.51	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		46.37	µg/L	1	50	92	80 - 110

Sample: 153888 - KWB-1C

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153888 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		22.98	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		3.43	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153888 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.41	µg/L	1	50	102	84 - 116
Toluene-d8		52.16	µg/L	1	50	104	92 - 108
4-Bromofluorobenzene		46.84	µg/L	1	50	93	80 - 110

Sample: 153889 - MW-18

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153889 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.57	µg/L	1	50	103	84 - 116
Toluene-d8		50.76	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		46.94	µg/L	1	50	93	80 - 110

Sample: 153890 - NP-2

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		9.52	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153890 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.15	µg/L	1	50	104	84 - 116
Toluene-d8		50.42	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		47.67	µg/L	1	50	95	80 - 110

Sample: 153891 - RA-313

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10

Continued ...

... Continued Sample: 153891 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153891 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		52.14	µg/L	1	50	104	84 - 116
Toluene-d8		50.54	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		47.22	µg/L	1	50	94	80 - 110

Sample: 153892 - MW-29

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153892 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		12.43	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		16.04	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.10	µg/L	1	50	102	84 - 116
Toluene-d8		50.73	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		50.17	µg/L	1	50	100	80 - 110

Sample: 153893 - MW-28

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<10.0	µg/L	5	2
Dichlorodifluoromethane		<10.0	µg/L	5	2
Chloromethane (methyl chloride)		<10.0	µg/L	5	2
Vinyl Chloride		<10.0	µg/L	5	2
Bromomethane (methyl bromide)		<25.0	µg/L	5	5
Chloroethane		<10.0	µg/L	5	2
Trichlorofluoromethane		<10.0	µg/L	5	2
Acetone		<50.0	µg/L	5	10
Iodomethane (methyl iodide)		<10.0	µg/L	5	2
Carbon Disulfide		<10.0	µg/L	5	2
Acrylonitrile		<25.0	µg/L	5	2
2-Butanone (MEK)		<25.0	µg/L	5	2
4-methyl-2-pentanone (MIBK)		<25.0	µg/L	5	10
2-hexanone		<10.0	µg/L	5	2
trans 1,4-Dichloro-2-butene		<25.0	µg/L	5	10
1,1-Dichloroethene		<10.0	µg/L	5	2
Methylene chloride		<25.0	µg/L	5	5
MTBE		2573	µg/L	5	2
trans-1,2-Dichloroethene		<10.0	µg/L	5	2
1,1-Dichloroethane		<10.0	µg/L	5	2
cis-1,2-dichloroethene		<10.0	µg/L	5	2
2,2-Dichloropropane		<10.0	µg/L	5	2
1,2-Dichloroethane (EDC)		<10.0	µg/L	5	2
Chloroform		<10.0	µg/L	5	2
1,1,1-Trichloroethane		<10.0	µg/L	5	2
1,1-Dichloropropene		<10.0	µg/L	5	2
Benzene		27.6	µg/L	5	2
Carbon Tetrachloride		<10.0	µg/L	5	2
1,2-Dichloropropane		<10.0	µg/L	5	2
Trichloroethene (TCE)		<10.0	µg/L	5	2
Dibromomethane (methylene bromide)		<10.0	µg/L	5	2
Bromodichloromethane		<10.0	µg/L	5	2
2-Chloroethyl vinyl ether		<25.0	µg/L	5	10
cis-1,3-Dichloropropene		<10.0	µg/L	5	2
trans-1,3-Dichloropropene		<10.0	µg/L	5	2
Toluene		<10.0	µg/L	5	2
1,1,2-Trichloroethane		<10.0	µg/L	5	2
1,3-Dichloropropane		<10.0	µg/L	5	2
Dibromochloromethane		<10.0	µg/L	5	2
1,2-Dibromoethane (EDB)		<10.0	µg/L	5	2
Tetrachloroethene (PCE)		<10.0	µg/L	5	2
Chlorobenzene		<10.0	µg/L	5	2
1,1,1,2-Tetrachloroethane		<10.0	µg/L	5	2
Ethylbenzene		<10.0	µg/L	5	2
m,p-Xylene		<10.0	µg/L	5	2
Bromoform		<10.0	µg/L	5	2
Styrene		<10.0	µg/L	5	2
o-Xylene		<10.0	µg/L	5	2

Continued ...

... Continued Sample: 153893 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1,2,2-Tetrachloroethane		<10.0	µg/L	5	2
2-Chlorotoluene		<10.0	µg/L	5	2
1,2,3-Trichloropropane		<10.0	µg/L	5	2
Isopropylbenzene		14.2	µg/L	5	2
Bromobenzene		<10.0	µg/L	5	2
n-Propylbenzene		18.5	µg/L	5	2
1,3,5-Trimethylbenzene		<10.0	µg/L	5	2
tert-Butylbenzene		<10.0	µg/L	5	2
1,2,4-Trimethylbenzene		<10.0	µg/L	5	2
1,4-Dichlorobenzene (para)		<10.0	µg/L	5	2
sec-Butylbenzene		<10.0	µg/L	5	2
1,3-Dichlorobenzene		<10.0	µg/L	5	2
p-Isopropyltoluene		<10.0	µg/L	5	2
4-Chlorotoluene		<10.0	µg/L	5	2
1,2-Dichlorobenzene (ortho)		<10.0	µg/L	5	2
n-Butylbenzene		<10.0	µg/L	5	2
1,2-Dibromo-3-chloropropane		<25.0	µg/L	5	5
1,2,3-Trichlorobenzene		<25.0	µg/L	5	5
1,2,4-Trichlorobenzene		<25.0	µg/L	5	5
Naphthalene		<10.0	µg/L	5	2
Hexachlorobutadiene		<25.0	µg/L	5	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.34	µg/L	1	50	100	84 - 116
Toluene-d8		51.10	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		47.93	µg/L	1	50	95	80 - 110

Sample: 153894 - NP-1

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10

Continued ...

... Continued Sample: 153894 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		22.0	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5

Continued ...

... Continued Sample: 153894 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.73	µg/L	1	50	101	84 - 116
Toluene-d8		51.10	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		47.40	µg/L	1	50	94	80 - 110

Sample: 153895 - MW-45

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		10.2	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10

Continued ...

... Continued Sample: 153895 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		4.72	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.52	µg/L	1	50	103	84 - 116
Toluene-d8		50.01	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		49.87	µg/L	1	50	99	80 - 110

Sample: 153896 - RA-314

Analysis: 624 Analytical Method: E 624 QC Batch: QC05124 Date Analyzed: 9/24/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04472 Date Prepared: 9/24/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153896 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<5.00	µg/L	1	2
2-Butanone (MEK)		<5.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<5.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 153896 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.91	µg/L	1	50	103	84 - 116
Toluene-d8		50.88	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		47.69	µg/L	1	50	95	80 - 110

Sample: 153897 - KWB-2R

Analysis: 624 Analytical Method: E 624 QC Batch: QC05155 Date Analyzed: 9/25/00
Analyst: JG Preparation Method: N/A Prep Batch: PB04494 Date Prepared: 9/25/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<100	µg/L	50	2
Dichlorodifluoromethane		<100	µg/L	50	2
Chloromethane (methyl chloride)		<100	µg/L	50	2
Vinyl Chloride		<100	µg/L	50	2
Bromomethane (methyl bromide)		<250	µg/L	50	5
Chloroethane		<100	µg/L	50	2
Trichlorofluoromethane		<100	µg/L	50	2
Acetone		<500	µg/L	50	10
Iodomethane (methyl iodide)		<100	µg/L	50	2
Carbon Disulfide		<100	µg/L	50	2
Acrylonitrile		<250	µg/L	50	2
2-Butanone (MEK)		<250	µg/L	50	2
4-methyl-2-pentanone (MIBK)		<250	µg/L	50	10
2-hexanone		<100	µg/L	50	2
trans 1,4-Dichloro-2-butene		<250	µg/L	50	10
1,1-Dichloroethene		<100	µg/L	50	2
Methylene chloride		<250	µg/L	50	5
MTBE		<100	µg/L	50	2
trans-1,2-Dichloroethene		<100	µg/L	50	2

Continued ...

... Continued Sample: 153897 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1-Dichloroethane		<100	µg/L	50	2
cis-1,2-dichloroethene		<100	µg/L	50	2
2,2-Dichloropropane		<100	µg/L	50	2
1,2-Dichloroethane (EDC)		<100	µg/L	50	2
Chloroform		<100	µg/L	50	2
1,1,1-Trichloroethane		<100	µg/L	50	2
1,1-Dichloropropene		<100	µg/L	50	2
Benzene		932	µg/L	50	2
Carbon Tetrachloride		<100	µg/L	50	2
1,2-Dichloropropane		<100	µg/L	50	2
Trichloroethene (TCE)		<100	µg/L	50	2
Dibromomethane (methylene bromide)		<100	µg/L	50	2
Bromodichloromethane		<100	µg/L	50	2
2-Chloroethyl vinyl ether		<250	µg/L	50	10
cis-1,3-Dichloropropene		<100	µg/L	50	2
trans-1,3-Dichloropropene		<100	µg/L	50	2
Toluene		<100	µg/L	50	2
1,1,2-Trichloroethane		<100	µg/L	50	2
1,3-Dichloropropane		<100	µg/L	50	2
Dibromochloromethane		<100	µg/L	50	2
1,2-Dibromoethane (EDB)		<100	µg/L	50	2
Tetrachloroethene (PCE)		<100	µg/L	50	2
Chlorobenzene		<100	µg/L	50	2
1,1,1,2-Tetrachloroethane		<100	µg/L	50	2
Ethylbenzene		1129	µg/L	50	2
m,p-Xylene		348	µg/L	50	2
Bromoform		<100	µg/L	50	2
Styrene		<100	µg/L	50	2
o-Xylene		<100	µg/L	50	2
1,1,2,2-Tetrachloroethane		<100	µg/L	50	2
2-Chlorotoluene		<100	µg/L	50	2
1,2,3-Trichloropropane		<100	µg/L	50	2
Isopropylbenzene		<100	µg/L	50	2
Bromobenzene		<100	µg/L	50	2
n-Propylbenzene		106	µg/L	50	2
1,3,5-Trimethylbenzene		<100	µg/L	50	2
tert-Butylbenzene		<100	µg/L	50	2
1,2,4-Trimethylbenzene		463	µg/L	50	2
1,4-Dichlorobenzene (para)		<100	µg/L	50	2
sec-Butylbenzene		<100	µg/L	50	2
1,3-Dichlorobenzene		<100	µg/L	50	2
p-Isopropyltoluene		<100	µg/L	50	2
4-Chlorotoluene		<100	µg/L	50	2
1,2-Dichlorobenzene (ortho)		<100	µg/L	50	2
n-Butylbenzene		<100	µg/L	50	2
1,2-Dibromo-3-chloropropane		<250	µg/L	50	5
1,2,3-Trichlorobenzene		<250	µg/L	50	5
1,2,4-Trichlorobenzene		<250	µg/L	50	5
Naphthalene		<100	µg/L	50	2
Hexachlorobutadiene		<250	µg/L	50	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.48	µg/L	1	50	100	84 - 116
Toluene-d8		51.17	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		48.34	µg/L	1	50	96	80 - 110

Quality Control Report Method Blank

Sample: Method Blank

QCBatch: QC05095

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<2.00	µg/L	2
Dichlorodifluoromethane		<2.00	µg/L	2
Chloromethane (methyl chloride)		<2.00	µg/L	2
Vinyl Chloride		<2.00	µg/L	2
Bromomethane (methyl bromide)		<5.00	µg/L	5
Chloroethane		<2.00	µg/L	2
Trichlorofluoromethane		<2.00	µg/L	2
Acetone		<10.0	µg/L	10
Iodomethane (methyl iodide)		<2.00	µg/L	2
Carbon Disulfide		<2.00	µg/L	2
Acrylonitrile		<2.00	µg/L	2
2-Butanone (MEK)		<2.00	µg/L	2
4-methyl-2-pentanone (MIBK)		<10.0	µg/L	10
2-hexanone		<2.00	µg/L	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	10
1,1-Dichloroethene		<2.00	µg/L	2
Methylene chloride		<5.00	µg/L	5
MTBE		<2.00	µg/L	2
trans-1,2-Dichloroethene		<2.00	µg/L	2
1,1-Dichloroethane		<2.00	µg/L	2
cis-1,2-dichloroethene		<2.00	µg/L	2
2,2-Dichloropropane		<2.00	µg/L	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	2
Chloroform		<2.00	µg/L	2
1,1,1-Trichloroethane		<2.00	µg/L	2
1,1-Dichloropropene		<2.00	µg/L	2
Benzene		<2.00	µg/L	2
Carbon Tetrachloride		<2.00	µg/L	2
1,2-Dichloropropane		<2.00	µg/L	2
Trichloroethene (TCE)		<2.00	µg/L	2
Dibromomethane (methylene bromide)		<2.00	µg/L	2
Bromodichloromethane		<2.00	µg/L	2
2-Chloroethyl vinyl ether		<10.0	µg/L	10
cis-1,3-Dichloropropene		<2.00	µg/L	2
trans-1,3-Dichloropropene		<2.00	µg/L	2
Toluene		<2.00	µg/L	2

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
1,1,2-Trichloroethane		<2.00	µg/L	2
1,3-Dichloropropane		<2.00	µg/L	2
Dibromochloromethane		<2.00	µg/L	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	2
Tetrachloroethene (PCE)		<2.00	µg/L	2
Chlorobenzene		<2.00	µg/L	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	2
Ethylbenzene		<2.00	µg/L	2
m,p-Xylene		<2.00	µg/L	2
Bromoform		<2.00	µg/L	2
Styrene		<2.00	µg/L	2
o-Xylene		<2.00	µg/L	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	2
2-Chlorotoluene		<2.00	µg/L	2
1,2,3-Trichloropropane		<2.00	µg/L	2
Isopropylbenzene		<2.00	µg/L	2
Bromobenzene		<2.00	µg/L	2
n-Propylbenzene		<2.00	µg/L	2
1,3,5-Trimethylbenzene		<2.00	µg/L	2
tert-Butylbenzene		<2.00	µg/L	2
1,2,4-Trimethylbenzene		<2.00	µg/L	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	2
sec-Butylbenzene		<2.00	µg/L	2
1,3-Dichlorobenzene		<2.00	µg/L	2
p-Isopropyltoluene		<2.00	µg/L	2
4-Chlorotoluene		<2.00	µg/L	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	2
n-Butylbenzene		<2.00	µg/L	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<2.00	µg/L	2
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		48.87	µg/L	50	97	84 - 116
Toluene-d8		51.91	µg/L	50	103	92 - 108
4-Bromofluorobenzene		47.23	µg/L	50	94	80 - 110

Sample: Method Blank

QCBatch: QC05124

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<2.00	µg/L	2
Dichlorodifluoromethane		<2.00	µg/L	2
Chloromethane (methyl chloride)		<2.00	µg/L	2

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
Vinyl Chloride		<2.00	µg/L	2
Bromomethane (methyl bromide)		<5.00	µg/L	5
Chloroethane		<2.00	µg/L	2
Trichlorofluoromethane		<2.00	µg/L	2
Acetone		<10.0	µg/L	10
Iodomethane (methyl iodide)		<2.00	µg/L	2
Carbon Disulfide		<2.00	µg/L	2
Acrylonitrile		<5.00	µg/L	2
2-Butanone (MEK)		<5.00	µg/L	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	10
2-hexanone		<2.00	µg/L	2
trans 1,4-Dichloro-2-butene		<10.0	µg/L	10
1,1-Dichloroethene		<2.00	µg/L	2
Methylene chloride		<5.00	µg/L	5
MTBE		<2.00	µg/L	2
trans-1,2-Dichloroethene		<2.00	µg/L	2
1,1-Dichloroethane		<2.00	µg/L	2
cis-1,2-dichloroethene		<2.00	µg/L	2
2,2-Dichloropropane		<2.00	µg/L	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	2
Chloroform		<2.00	µg/L	2
1,1,1-Trichloroethane		<2.00	µg/L	2
1,1-Dichloropropene		<2.00	µg/L	2
Benzene		<2.00	µg/L	2
Carbon Tetrachloride		<2.00	µg/L	2
1,2-Dichloropropane		<2.00	µg/L	2
Trichloroethene (TCE)		<2.00	µg/L	2
Dibromomethane (methylene bromide)		<2.00	µg/L	2
Bromodichloromethane		<2.00	µg/L	2
2-Chloroethyl vinyl ether		<5.00	µg/L	10
cis-1,3-Dichloropropene		<2.00	µg/L	2
trans-1,3-Dichloropropene		<2.00	µg/L	2
Toluene		<2.00	µg/L	2
1,1,2-Trichloroethane		<2.00	µg/L	2
1,3-Dichloropropane		<2.00	µg/L	2
Dibromochloromethane		<2.00	µg/L	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	2
Tetrachloroethene (PCE)		<2.00	µg/L	2
Chlorobenzene		<2.00	µg/L	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	2
Ethylbenzene		<2.00	µg/L	2
m,p-Xylene		<2.00	µg/L	2
Bromoform		<2.00	µg/L	2
Styrene		<2.00	µg/L	2
o-Xylene		<2.00	µg/L	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	2
2-Chlorotoluene		<2.00	µg/L	2
1,2,3-Trichloropropane		<2.00	µg/L	2
Isopropylbenzene		<2.00	µg/L	2
Bromobenzene		<2.00	µg/L	2

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
n-Propylbenzene		<2.00	µg/L	2
1,3,5-Trimethylbenzene		<2.00	µg/L	2
tert-Butylbenzene		<2.00	µg/L	2
1,2,4-Trimethylbenzene		<2.00	µg/L	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	2
sec-Butylbenzene		<2.00	µg/L	2
1,3-Dichlorobenzene		<2.00	µg/L	2
p-Isopropyltoluene		<2.00	µg/L	2
4-Chlorotoluene		<2.00	µg/L	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	2
n-Butylbenzene		<2.00	µg/L	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<2.00	µg/L	2
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		50.59	µg/L	50	101	84 - 116
Toluene-d8		51.61	µg/L	50	103	92 - 108
4-Bromofluorobenzene		47.15	µg/L	50	94	80 - 110

Sample: Method Blank

QCBatch: QC05155

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<2.00	µg/L	2
Dichlorodifluoromethane		<2.00	µg/L	2
Chloromethane (methyl chloride)		<2.00	µg/L	2
Vinyl Chloride		<2.00	µg/L	2
Bromomethane (methyl bromide)		<5.00	µg/L	5
Chloroethane		<2.00	µg/L	2
Trichlorofluoromethane		<2.00	µg/L	2
Acetone		<10.0	µg/L	10
Iodomethane (methyl iodide)		<2.00	µg/L	2
Carbon Disulfide		<2.00	µg/L	2
Acrylonitrile		<5.00	µg/L	2
2-Butanone (MEK)		<5.00	µg/L	2
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	10
2-hexanone		<2.00	µg/L	2
trans 1,4-Dichloro-2-butene		<2.00	µg/L	10
1,1-Dichloroethene		<2.00	µg/L	2
Methylene chloride		<5.00	µg/L	5
MTBE		<2.00	µg/L	2
trans-1,2-Dichloroethene		<2.00	µg/L	2
1,1-Dichloroethane		<2.00	µg/L	2

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
cis-1,2-dichloroethene		<2.00	µg/L	2
2,2-Dichloropropane		<2.00	µg/L	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	2
Chloroform		<2.00	µg/L	2
1,1,1-Trichloroethane		<2.00	µg/L	2
1,1-Dichloropropene		<2.00	µg/L	2
Benzene		<2.00	µg/L	2
Carbon Tetrachloride		<2.00	µg/L	2
1,2-Dichloropropane		<2.00	µg/L	2
Trichloroethene (TCE)		<2.00	µg/L	2
Dibromomethane (methylene bromide)		<2.00	µg/L	2
Bromodichloromethane		<2.00	µg/L	2
2-Chloroethyl vinyl ether		<5.00	µg/L	10
cis-1,3-Dichloropropene		<2.00	µg/L	2
trans-1,3-Dichloropropene		<2.00	µg/L	2
Toluene		<2.00	µg/L	2
1,1,2-Trichloroethane		<2.00	µg/L	2
1,3-Dichloropropane		<2.00	µg/L	2
Dibromochloromethane		<2.00	µg/L	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	2
Tetrachloroethene (PCE)		<2.00	µg/L	2
Chlorobenzene		<2.00	µg/L	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	2
Ethylbenzene		<2.00	µg/L	2
m,p-Xylene		<2.00	µg/L	2
Bromoform		<2.00	µg/L	2
Styrene		<2.00	µg/L	2
o-Xylene		<2.00	µg/L	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	2
2-Chlorotoluene		<2.00	µg/L	2
1,2,3-Trichloropropane		<2.00	µg/L	2
Isopropylbenzene		<2.00	µg/L	2
Bromobenzene		<2.00	µg/L	2
n-Propylbenzene		<2.00	µg/L	2
1,3,5-Trimethylbenzene		<2.00	µg/L	2
tert-Butylbenzene		<2.00	µg/L	2
1,2,4-Trimethylbenzene		<2.00	µg/L	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	2
sec-Butylbenzene		<2.00	µg/L	2
1,3-Dichlorobenzene		<2.00	µg/L	2
p-Isopropyltoluene		<2.00	µg/L	2
4-Chlorotoluene		<2.00	µg/L	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	2
n-Butylbenzene		<2.00	µg/L	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<2.00	µg/L	2
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		50.01	µg/L	50	100	84 - 116
Toluene-d8		52.04	µg/L	50	104	92 - 108
4-Bromofluorobenzene		46.67	µg/L	50	93	80 - 110

Quality Control Report Lab Control Spikes and Duplicate Spikes

Sample: LCS

QC Batch: QC05095

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		95	µg/L	1	100	<2.00	95		73 - 154	20
Benzene		99	µg/L	1	100	<2.00	99		84 - 126	20
Trichloroethene (TCE)		98	µg/L	1	100	<2.00	98		82 - 123	20
Toluene		99	µg/L	1	100	<2.00	99		81 - 122	20
Chlorobenzene		102	µg/L	1	100	<2.00	102		86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		48.88	µg/L	1	50	97	84 - 116
Toluene-d8		50.35	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		47.86	µg/L	1	50	95	80 - 110

Sample: LCSD

QC Batch: QC05095

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		96	µg/L	1	100	<2.00	96	1	73 - 154	20
Benzene		100	µg/L	1	100	<2.00	100	1	84 - 126	20
Trichloroethene (TCE)		99	µg/L	1	100	<2.00	99	1	82 - 123	20
Toluene		99	µg/L	1	100	<2.00	99	0	81 - 122	20
Chlorobenzene		102	µg/L	1	100	<2.00	102	0	86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		48.76	µg/L	1	50	97	84 - 116
Toluene-d8		50.72	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		47.01	µg/L	1	50	94	80 - 110

Sample: LCS QC Batch: QC05124

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		99	µg/L	1	100	<2.00	99		73 - 154	20
Benzene		103	µg/L	1	100	<2.00	103		84 - 126	20
Trichloroethene (TCE)		102	µg/L	1	100	<2.00	102		82 - 123	20
Toluene		101	µg/L	1	100	<2.00	101		81 - 122	20
Chlorobenzene		105	µg/L	1	100	<2.00	105		86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		50.46	µg/L	1	50	100	84 - 116
Toluene-d8		50.69	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		47.84	µg/L	1	50	95	80 - 110

Sample: LCSD QC Batch: QC05124

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		98	µg/L	1	100	<2.00	98	1	73 - 154	20
Benzene		103	µg/L	1	100	<2.00	103	0	84 - 126	20
Trichloroethene (TCE)		102	µg/L	1	100	<2.00	102	0	82 - 123	20
Toluene		102	µg/L	1	100	<2.00	102	1	81 - 122	20
Chlorobenzene		105	µg/L	1	100	<2.00	105	0	86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		50.24	µg/L	1	50	100	84 - 116
Toluene-d8		50.81	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		46.59	µg/L	1	50	93	80 - 110

Sample: LCS QC Batch: QC05155

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		95	µg/L	1	100	<2.00	95		73 - 154	20
Benzene		98	µg/L	1	100	<2.00	98		84 - 126	20
Trichloroethene (TCE)		98	µg/L	1	100	<2.00	98		82 - 123	20
Toluene		98	µg/L	1	100	<2.00	98		81 - 122	20
Chlorobenzene		100	µg/L	1	100	<2.00	100		86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		49.79	µg/L	1	50	99	84 - 116
Toluene-d8		50.36	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		47.36	µg/L	1	50	94	80 - 110

Sample: LCSD

QC Batch: QC05155

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		92	µg/L	1	100	<2.00	92	3	73 - 154	20
Benzene		97	µg/L	1	100	<2.00	97	1	84 - 126	20
Trichloroethene (TCE)		96	µg/L	1	100	<2.00	96	2	82 - 123	20
Toluene		97	µg/L	1	100	<2.00	97	1	81 - 122	20
Chlorobenzene		99	µg/L	1	100	<2.00	99	1	86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		49.29	µg/L	1	50	98	84 - 116
Toluene-d8		50.18	µg/L	1	50	100	92 - 108
4-Bromofluorobenzene		47.61	µg/L	1	50	95	80 - 110

Quality Control Report Continuing Calibration Verification Standards

Sample: CCV (1)

QC Batch: QC05095

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	95	95	80 - 120	9/23/00
1,1-Dichloroethene		µg/L	100	97	97	73 - 154	9/23/00
Chloroform		µg/L	100	97	97	80 - 120	9/23/00
1,2-Dichloropropane		µg/L	100	100	100	80 - 120	9/23/00
Toluene		µg/L	100	96	96	81 - 122	9/23/00
Chlorobenzene		µg/L	100	96	96	86 - 121	9/23/00
Ethylbenzene		µg/L	100	98	98	80 - 120	9/23/00
Dibromofluoromethane		µg/L	50	50.11	100	80 - 120	9/23/00
Toluene-d8		µg/L	50	49.76	99	80 - 120	9/23/00
4-Bromofluorobenzene		µg/L	50	50.80	101	80 - 120	9/23/00

Sample: CCV (1)

QC Batch: QC05124

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	101	101	80 - 120	9/24/00
1,1-Dichloroethene		µg/L	100	101	101	73 - 154	9/24/00
Chloroform		µg/L	100	102	102	80 - 120	9/24/00
1,2-Dichloropropane		µg/L	100	104	104	80 - 120	9/24/00
Toluene		µg/L	100	101	101	81 - 122	9/24/00
Chlorobenzene		µg/L	100	100	100	86 - 121	9/24/00
Ethylbenzene		µg/L	100	102	102	80 - 120	9/24/00
Dibromofluoromethane		µg/L	50	51.54	103	80 - 120	9/24/00
Toluene-d8		µg/L	50	49.21	98	80 - 120	9/24/00
4-Bromofluorobenzene		µg/L	50	50.27	100	80 - 120	9/24/00

Sample: CCV (1)

QC Batch: QC05155

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	98	98	80 - 120	9/25/00
1,1-Dichloroethene		µg/L	100	100	100	73 - 154	9/25/00
Chloroform		µg/L	100	104	104	80 - 120	9/25/00
1,2-Dichloropropane		µg/L	100	105	105	80 - 120	9/25/00
Toluene		µg/L	100	103	103	81 - 122	9/25/00
Chlorobenzene		µg/L	100	100	100	86 - 121	9/25/00
Ethylbenzene		µg/L	100	111	111	80 - 120	9/25/00
Dibromofluoromethane		µg/L	50	51.40	102	80 - 120	9/25/00
Toluene-d8		µg/L	50	48.87	97	80 - 120	9/25/00
4-Bromofluorobenzene		µg/L	50	51.60	103	80 - 120	9/25/00

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

Trace Analysis, Inc.

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

100092013

Company Name:

NAVA50

Phone #:

505-748-1331

Address:

(Street, City, Zip)

501 E. main

Fax #:

505-746-5421

Contact Person:

Darrell Moore or Charlie Pymale

Invoice to:

(If different from above)

Project #:

Project Name:

Quantity of site samples

Project Location:

Artesia

Sampler Signature:

Charlie Pymale

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING	
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	ICE	NONE	DATE	TIME
153888	Kwb-1C	2	40ml							X	X	1125	
89	MW-18	2	40ml							X	X	1445	
90	NP-2	2	40ml							X	X	1400	
91	RA-313	2	40ml							X	X	920	
92	MW-29	2	40ml							X	X	1500	
93	MW-28	2	40ml							X	X	1530	
94	NP-1	2	40ml							X	X	1355	
95	MW-45	2	40ml							X	X	1420	
96	RA-314	2	40ml							X	X	925	
97	Kwb-2R	2	40ml							X	X	915	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Charlie Pymale	9/19/00	16:15			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:
			Willi Dwyer	92000	1500

LAB USE ONLY

REMARKS:

Intact	Y/N
Headspace	Y/N
Temp	-20
Log-in Review	9

Carrier # 724 298 3901-645

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



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

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: July 6, 2000

Order ID Number: A00062809

Project Number: Qtrly Offsite
Project Name: N/A
Project Location: 501 E Main, Artesia, NM

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
148863	KWB-12A	Water	6/27/00	9:40	6/28/00
148864	KWB-9	Water	6/27/00	9:50	6/28/00
148865	KWB-11A	Water	6/27/00	10:55	6/28/00
148866	KWB-7	Water	6/27/00	10:40	6/28/00
148867	KWB-3A	Water	6/27/00	10:15	6/28/00
148868	KWB-1A	Water	6/27/00	11:05	6/28/00
148869	KWB-1C	Water	6/27/00	11:20	6/28/00
148870	MW-18	Water	6/27/00	14:40	6/28/00
148871	NP-2	Water	6/27/00	13:55	6/28/00
148872	NP-1	Water	6/27/00	13:40	6/28/00
148873	MW-45	Water	6/27/00	14:25	6/28/00
148874	RA-3353	Water	6/27/00	10:05	6/28/00
148875	RA-3156	Water	6/27/00	9:30	6/28/00

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

This report consists of a total of 28 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION


Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 148863 - KWB-12A

Analysis: 624 Analytical Method: E 624 QC Batch: QC03490 Date Analyzed: 6/29/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03004 Date Prepared: 6/29/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148863 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.65	µg/L	1	50	97	84 - 116
Toluene-d8		52.90	µg/L	1	50	105	92 - 108
4-Bromofluorobenzene		44.55	µg/L	1	50	89	80 - 110

Sample: 148864 - KWB-9

Analysis: 624 Analytical Method: E 624 QC Batch: QC03490 Date Analyzed: 6/29/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03004 Date Prepared: 6/29/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148864 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148864 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.06	µg/L	1	50	98	84 - 116
Toluene-d8		53.60	µg/L	1	50	107	92 - 108
4-Bromofluorobenzene		44.62	µg/L	1	50	89	80 - 110

Sample: 148865 - KWB-11A

Analysis: 624 Analytical Method: E 624 QC Batch: QC03490 Date Analyzed: 6/29/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03004 Date Prepared: 6/29/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148865 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.66	µg/L	1	50	97	84 - 116
Toluene-d8		53.49	µg/L	1	50	106	92 - 108
4-Bromofluorobenzene		44.10	µg/L	1	50	88	80 - 110

Sample: 148866 - KWB-7

Analysis: 624	Analytical Method: E 624	QC Batch: QC03490	Date Analyzed: 6/29/00
Analyst: JG	Preparation Method: N/A	Prep Batch: PB03004	Date Prepared: 6/29/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		27.60	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148866 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		48.75	µg/L	1	50	97	84 - 116
Toluene-d8		53.26	µg/L	1	50	106	92 - 108
4-Bromofluorobenzene		44.23	µg/L	1	50	88	80 - 110

Sample: 148867 - KWB-3A

Analysis: 624 Analytical Method: E 624 QC Batch: QC03490 Date Analyzed: 6/29/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03004 Date Prepared: 6/29/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148867 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.47	µg/L	1	50	98	84 - 116
Toluene-d8		53.22	µg/L	1	50	106	92 - 108
4-Bromofluorobenzene		44.59	µg/L	1	50	89	80 - 110

Sample: 148868 - KWB-1A

Analysis: 624 Analytical Method: E 624 QC Batch: QC03490 Date Analyzed: 6/29/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03004 Date Prepared: 6/29/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		12.23	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148868 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.08	µg/L	1	50	98	84 - 116
Toluene-d8		53.65	µg/L	1	50	107	92 - 108
4-Bromofluorobenzene		44.65	µg/L	1	50	89	80 - 110

Sample: 148869 - KWB-1C

Analysis: 624 Analytical Method: E 624 QC Batch: QC03490 Date Analyzed: 6/29/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03004 Date Prepared: 6/29/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10

Continued ...

... Continued Sample: 148869 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		16.32	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148869 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.67	µg/L	1	50	99	84 - 116
Toluene-d8		53.53	µg/L	1	50	107	92 - 108
4-Bromofluorobenzene		44.65	µg/L	1	50	89	80 - 110

Sample: 148870 - MW-18

Analysis: 624 Analytical Method: E 624 QC Batch: QC03522 Date Analyzed: 6/30/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03035 Date Prepared: 6/30/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148870 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.95	µg/L	1	50	99	84 - 116
Toluene-d8		51.56	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		46.86	µg/L	1	50	93	80 - 110

Sample: 148871 - NP-2

Analysis: 624 Analytical Method: E 624 QC Batch: QC03522 Date Analyzed: 6/30/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03035 Date Prepared: 6/30/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		5.52	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148871 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		49.96	µg/L	1	50	99	84 - 116
Toluene-d8		52.97	µg/L	1	50	105	92 - 108
4-Bromofluorobenzene		44.94	µg/L	1	50	89	80 - 110

Sample: 148872 - NP-1

Analysis: 624 Analytical Method: E 624 QC Batch: QC03522 Date Analyzed: 6/30/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03035 Date Prepared: 6/30/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10

Continued ...

... Continued Sample: 148872 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		3.79	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5

Continued ...

... Continued Sample: 148872 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.41	µg/L	1	50	100	84 - 116
Toluene-d8		53.42	µg/L	1	50	106	92 - 108
4-Bromofluorobenzene		45.05	µg/L	1	50	90	80 - 110

Sample: 148873 - MW-45

Analysis: 624 Analytical Method: E 624 QC Batch: QC03522 Date Analyzed: 6/30/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03035 Date Prepared: 6/30/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		8.08	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10

Continued ...

... Continued Sample: 148873 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		51.38	µg/L	1	50	102	84 - 116
Toluene-d8		50.58	µg/L	1	50	101	92 - 108
4-Bromofluorobenzene		49.44	µg/L	1	50	98	80 - 110

Sample: 148874 - RA-3353

Analysis: 624 Analytical Method: E 624 QC Batch: QC03522 Date Analyzed: 6/30/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03035 Date Prepared: 6/30/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148874 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148874 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.04	µg/L	1	50	100	84 - 116
Toluene-d8		53.52	µg/L	1	50	107	92 - 108
4-Bromofluorobenzene		44.29	µg/L	1	50	88	80 - 110

Sample: 148875 - RA-3156

Analysis: 624 Analytical Method: E 624 QC Batch: QC03522 Date Analyzed: 6/30/00
Analyst: JG Preparation Method: N/A Prep Batch: PB03035 Date Prepared: 6/30/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<2.00	µg/L	1	2
Dichlorodifluoromethane		<2.00	µg/L	1	2
Chloromethane (methyl chloride)		<2.00	µg/L	1	2
Vinyl Chloride		<2.00	µg/L	1	2
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<2.00	µg/L	1	2
Trichlorofluoromethane		<2.00	µg/L	1	2
Acetone		<10.00	µg/L	1	10
Iodomethane (methyl iodide)		<2.00	µg/L	1	2
Carbon Disulfide		<2.00	µg/L	1	2
Acrylonitrile		<2.00	µg/L	1	2
2-Butanone (MEK)		<2.00	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	1	10
2-hexanone		<2.00	µg/L	1	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	1	10
1,1-Dichloroethene		<2.00	µg/L	1	2
Methylene chloride		<5.00	µg/L	1	5
MTBE		<2.00	µg/L	1	2
trans-1,2-Dichloroethene		<2.00	µg/L	1	2

Continued ...

... Continued Sample: 148875 Analysis: 624

Param	Flag	Result	Units	Dilution	RDL
1,1-Dichloroethane		<2.00	µg/L	1	2
cis-1,2-dichloroethene		<2.00	µg/L	1	2
2,2-Dichloropropane		<2.00	µg/L	1	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	1	2
Chloroform		<2.00	µg/L	1	2
1,1,1-Trichloroethane		<2.00	µg/L	1	2
1,1-Dichloropropene		<2.00	µg/L	1	2
Benzene		<2.00	µg/L	1	2
Carbon Tetrachloride		<2.00	µg/L	1	2
1,2-Dichloropropane		<2.00	µg/L	1	2
Trichloroethene (TCE)		<2.00	µg/L	1	2
Dibromomethane (methylene bromide)		<2.00	µg/L	1	2
Bromodichloromethane		<2.00	µg/L	1	2
2-Chloroethyl vinyl ether		<10.00	µg/L	1	10
cis-1,3-Dichloropropene		<2.00	µg/L	1	2
trans-1,3-Dichloropropene		<2.00	µg/L	1	2
Toluene		<2.00	µg/L	1	2
1,1,2-Trichloroethane		<2.00	µg/L	1	2
1,3-Dichloropropane		<2.00	µg/L	1	2
Dibromochloromethane		<2.00	µg/L	1	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	1	2
Tetrachloroethene (PCE)		<2.00	µg/L	1	2
Chlorobenzene		<2.00	µg/L	1	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	1	2
Ethylbenzene		<2.00	µg/L	1	2
m,p-Xylene		<2.00	µg/L	1	2
Bromoform		<2.00	µg/L	1	2
Styrene		<2.00	µg/L	1	2
o-Xylene		<2.00	µg/L	1	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	1	2
2-Chlorotoluene		<2.00	µg/L	1	2
1,2,3-Trichloropropane		<2.00	µg/L	1	2
Isopropylbenzene		<2.00	µg/L	1	2
Bromobenzene		<2.00	µg/L	1	2
n-Propylbenzene		<2.00	µg/L	1	2
1,3,5-Trimethylbenzene		<2.00	µg/L	1	2
tert-Butylbenzene		<2.00	µg/L	1	2
1,2,4-Trimethylbenzene		<2.00	µg/L	1	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	1	2
sec-Butylbenzene		<2.00	µg/L	1	2
1,3-Dichlorobenzene		<2.00	µg/L	1	2
p-Isopropyltoluene		<2.00	µg/L	1	2
4-Chlorotoluene		<2.00	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	1	2
n-Butylbenzene		<2.00	µg/L	1	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		<2.00	µg/L	1	2
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.30	µg/L	1	50	100	84 - 116
Toluene-d8		54.18	µg/L	1	50	108	92 - 108
4-Bromofluorobenzene		44.30	µg/L	1	50	88	80 - 110

Quality Control Report Method Blank

Sample: Method Blank

QCBatch: QC03490

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<2.00	µg/L	2
Dichlorodifluoromethane		<2.00	µg/L	2
Chloromethane (methyl chloride)		<2.00	µg/L	2
Vinyl Chloride		<2.00	µg/L	2
Bromomethane (methyl bromide)		<5.00	µg/L	5
Chloroethane		<2.00	µg/L	2
Trichlorofluoromethane		<2.00	µg/L	2
Acetone		<10.00	µg/L	10
Iodomethane (methyl iodide)		<2.00	µg/L	2
Carbon Disulfide		<2.00	µg/L	2
Acrylonitrile		<2.00	µg/L	2
2-Butanone (MEK)		<2.00	µg/L	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	10
2-hexanone		<2.00	µg/L	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	10
1,1-Dichloroethene		<2.00	µg/L	2
Methylene chloride		<5.00	µg/L	5
MTBE		<2.00	µg/L	2
trans-1,2-Dichloroethene		<2.00	µg/L	2
1,1-Dichloroethane		<2.00	µg/L	2
cis-1,2-dichloroethene		<2.00	µg/L	2
2,2-Dichloropropane		<2.00	µg/L	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	2
Chloroform		<2.00	µg/L	2
1,1,1-Trichloroethane		<2.00	µg/L	2
1,1-Dichloropropene		<2.00	µg/L	2
Benzene		<2.00	µg/L	2
Carbon Tetrachloride		<2.00	µg/L	2
1,2-Dichloropropane		<2.00	µg/L	2
Trichloroethene (TCE)		<2.00	µg/L	2
Dibromomethane (methylene bromide)		<2.00	µg/L	2
Bromodichloromethane		<2.00	µg/L	2
2-Chloroethyl vinyl ether		<10.00	µg/L	10
cis-1,3-Dichloropropene		<2.00	µg/L	2
trans-1,3-Dichloropropene		<2.00	µg/L	2
Toluene		<2.00	µg/L	2

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
1,1,2-Trichloroethane		<2.00	µg/L	2
1,3-Dichloropropane		<2.00	µg/L	2
Dibromochloromethane		<2.00	µg/L	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	2
Tetrachloroethene (PCE)		<2.00	µg/L	2
Chlorobenzene		<2.00	µg/L	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	2
Ethylbenzene		<2.00	µg/L	2
m,p-Xylene		<2.00	µg/L	2
Bromoform		<2.00	µg/L	2
Styrene		<2.00	µg/L	2
o-Xylene		<2.00	µg/L	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	2
2-Chlorotoluene		<2.00	µg/L	2
1,2,3-Trichloropropane		<2.00	µg/L	2
Isopropylbenzene		<2.00	µg/L	2
Bromobenzene		<2.00	µg/L	2
n-Propylbenzene		<2.00	µg/L	2
1,3,5-Trimethylbenzene		<2.00	µg/L	2
tert-Butylbenzene		<2.00	µg/L	2
1,2,4-Trimethylbenzene		<2.00	µg/L	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	2
sec-Butylbenzene		<2.00	µg/L	2
1,3-Dichlorobenzene		<2.00	µg/L	2
p-Isopropyltoluene		<2.00	µg/L	2
4-Chlorotoluene		<2.00	µg/L	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	2
n-Butylbenzene		<2.00	µg/L	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<2.00	µg/L	2
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		48.22	µg/L	50	96	84 - 116
Toluene-d8		52.84	µg/L	50	105	92 - 108
4-Bromofluorobenzene		44.69	µg/L	50	89	80 - 110

Sample: Method Blank

QCBatch: QC03522

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<2.00	µg/L	2
Dichlorodifluoromethane		<2.00	µg/L	2
Chloromethane (methyl chloride)		<2.00	µg/L	2

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
Vinyl Chloride		<2.00	µg/L	2
Bromomethane (methyl bromide)		<5.00	µg/L	5
Chloroethane		<2.00	µg/L	2
Trichlorofluoromethane		<2.00	µg/L	2
Acetone		<10.00	µg/L	10
Iodomethane (methyl iodide)		<2.00	µg/L	2
Carbon Disulfide		<2.00	µg/L	2
Acrylonitrile		<2.00	µg/L	2
2-Butanone (MEK)		<2.00	µg/L	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	10
2-hexanone		<2.00	µg/L	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	10
1,1-Dichloroethene		<2.00	µg/L	2
Methylene chloride		<5.00	µg/L	5
MTBE		<2.00	µg/L	2
trans-1,2-Dichloroethene		<2.00	µg/L	2
1,1-Dichloroethane		<2.00	µg/L	2
cis-1,2-dichloroethene		<2.00	µg/L	2
2,2-Dichloropropane		<2.00	µg/L	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	2
Chloroform		<2.00	µg/L	2
1,1,1-Trichloroethane		<2.00	µg/L	2
1,1-Dichloropropene		<2.00	µg/L	2
Benzene		<2.00	µg/L	2
Carbon Tetrachloride		<2.00	µg/L	2
1,2-Dichloropropane		<2.00	µg/L	2
Trichloroethene (TCE)		<2.00	µg/L	2
Dibromomethane (methylene bromide)		<2.00	µg/L	2
Bromodichloromethane		<2.00	µg/L	2
2-Chloroethyl vinyl ether		<10.00	µg/L	10
cis-1,3-Dichloropropene		<2.00	µg/L	2
trans-1,3-Dichloropropene		<2.00	µg/L	2
Toluene		<2.00	µg/L	2
1,1,2-Trichloroethane		<2.00	µg/L	2
1,3-Dichloropropane		<2.00	µg/L	2
Dibromochloromethane		<2.00	µg/L	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	2
Tetrachloroethene (PCE)		<2.00	µg/L	2
Chlorobenzene		<2.00	µg/L	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	2
Ethylbenzene		<2.00	µg/L	2
m,p-Xylene		<2.00	µg/L	2
Bromoform		<2.00	µg/L	2
Styrene		<2.00	µg/L	2
o-Xylene		<2.00	µg/L	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	2
2-Chlorotoluene		<2.00	µg/L	2
1,2,3-Trichloropropane		<2.00	µg/L	2
Isopropylbenzene		<2.00	µg/L	2
Bromobenzene		<2.00	µg/L	2

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
n-Propylbenzene		<2.00	µg/L	2
1,3,5-Trimethylbenzene		<2.00	µg/L	2
tert-Butylbenzene		<2.00	µg/L	2
1,2,4-Trimethylbenzene		<2.00	µg/L	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	2
sec-Butylbenzene		<2.00	µg/L	2
1,3-Dichlorobenzene		<2.00	µg/L	2
p-Isopropyltoluene		<2.00	µg/L	2
4-Chlorotoluene		<2.00	µg/L	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	2
n-Butylbenzene		<2.00	µg/L	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<2.00	µg/L	2
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		49.87	µg/L	50	99	84 - 116
Toluene-d8		53.59	µg/L	50	107	92 - 108
4-Bromofluorobenzene		43.89	µg/L	50	87	80 - 110

Quality Control Report Lab Control Spikes and Duplicate Spikes

Sample: LCS

QC Batch: QC03490

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		98	µg/L	1	100	<2.00	98		73 - 154	20
Benzene		97	µg/L	1	100	<2.00	97		84 - 126	20
Trichloroethene (TCE)		95	µg/L	1	100	<2.00	95		82 - 123	20
Toluene		95	µg/L	1	100	<2.00	95		81 - 122	20
Chlorobenzene		97	µg/L	1	100	<2.00	97		86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		48.33	µg/L	1	50	96	84 - 116
Toluene-d8		51.16	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		48.39	µg/L	1	50	96	80 - 110

Sample: LCSD

QC Batch: QC03490

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		99	µg/L	1	100	<2.00	99	1.01	73 - 154	20
Benzene		98	µg/L	1	100	<2.00	98	1.02	84 - 126	20
Trichloroethene (TCE)		96	µg/L	1	100	<2.00	96	1.04	82 - 123	20
Toluene		95	µg/L	1	100	<2.00	95	0.00	81 - 122	20
Chlorobenzene		97	µg/L	1	100	<2.00	97	0.00	86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		48.62	µg/L	1	50	97	84 - 116
Toluene-d8		51.39	µg/L	1	50	102	92 - 108
4-Bromofluorobenzene		46.14	µg/L	1	50	92	80 - 110

Sample: LCS

QC Batch: QC03522

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		104	µg/L	1	100	<2.00	104		73 - 154	20
Benzene		103	µg/L	1	100	<2.00	103		84 - 126	20
Trichloroethene (TCE)		100	µg/L	1	100	<2.00	100		82 - 123	20
Toluene		100	µg/L	1	100	<2.00	100		81 - 122	20
Chlorobenzene		103	µg/L	1	100	<2.00	103		86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		50.54	µg/L	1	50	101	84 - 116
Toluene-d8		51.91	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		43.98	µg/L	1	50	87	80 - 110

Sample: LCSD

QC Batch: QC03522

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		101	µg/L	1	100	<2.00	101	2.92	73 - 154	20
Benzene		102	µg/L	1	100	<2.00	102	0.97	84 - 126	20
Trichloroethene (TCE)		98	µg/L	1	100	<2.00	98	2.02	82 - 123	20
Toluene		98	µg/L	1	100	<2.00	98	2.02	81 - 122	20
Chlorobenzene		101	µg/L	1	100	<2.00	101	1.96	86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		49.78	µg/L	1	50	99	84 - 116
Toluene-d8		51.81	µg/L	1	50	103	92 - 108
4-Bromofluorobenzene		44.51	µg/L	1	50	89	80 - 110

Quality Control Report Continuing Calibration Verification Standards

Sample: CCV (1)

QC Batch: QC03490

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	107	107	80 - 120	6/29/00
1,1-Dichloroethene		µg/L	100	102	102	73 - 154	6/29/00
Chloroform		µg/L	100	102	102	80 - 120	6/29/00
1,2-Dichloropropane		µg/L	100	100	100	80 - 120	6/29/00
Toluene		µg/L	100	98	98	81 - 122	6/29/00
Chlorobenzene		µg/L	100	99	99	86 - 121	6/29/00
Ethylbenzene		µg/L	100	101	101	80 - 120	6/29/00
Dibromofluoromethane		µg/L	50	51.88	103	80 - 120	6/29/00
Toluene-d8		µg/L	50	49.96	99	80 - 120	6/29/00
4-Bromofluorobenzene		µg/L	50	51.33	102	80 - 120	6/29/00

Sample: CCV (1)

QC Batch: QC03522

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	111	111	80 - 120	6/30/00
1,1-Dichloroethene		µg/L	100	105	105	73 - 154	6/30/00
Chloroform		µg/L	100	107	107	80 - 120	6/30/00
1,2-Dichloropropane		µg/L	100	104	104	80 - 120	6/30/00
Toluene		µg/L	100	102	102	81 - 122	6/30/00
Chlorobenzene		µg/L	100	102	102	86 - 121	6/30/00
Ethylbenzene		µg/L	100	104	104	80 - 120	6/30/00
Dibromofluoromethane		µg/L	50	51.32	102	80 - 120	6/30/00
Toluene-d8		µg/L	50	50.03	100	80 - 120	6/30/00
4-Bromofluorobenzene		µg/L	50	51.28	102	80 - 120	6/30/00

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # _____

Phone #:

NAVAF50

Fax #:

(Street, City, Zip) 501 E. Main

Contact Person: Darrell Moore or Charlie Symantse

Invoice to:
(If different from above)

Project #:

Project Name:

Project Location:

Sampler Signature: _____

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING	
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	ICE	NONE	DATE	TIME
148863	KWB-12A	2	40ml	X						X		6/27/00	9:40
64	KWB-9	2	40ml	X						X		6/27	9:50
65	KWB-11A	2	40ml	X						X		6/27	10:55
66	KWB-7	2	40ml	X						X		6/27	10:40
67	KWB-3A	2	40ml	X						X		6/27	10:15
68	KWB-1A	2	40ml	X						X		6/27	11:05
69	KWB-1C	2	40ml	X						X		6/27	11:20
70	MW 18	2	40ml	X						X		6/27	1440
71	NP-2	2	40ml	X						X		6/27	1355
72	NP-1	2	40ml	X						X		6/27	1340
73	MW-45	2	40ml	X						X		6/27	1425

Relinquished by: Quintin Date: 6/27/00 Time: 16:15

Belonged to: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by:	Date:	Time:
--------------	-------	-------

Received by: _____ Date: _____ Time: _____

Received at Laboratory by: _____ Date: _____ Time: _____

REMARKS:

LAB USE ONLY

Intact Y N
Headspace Y N
Temp 15°
Log-in Review ML

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

Carrier # FedEx 7/20-067

[illegible]

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296
888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

Bill To: **Navajo Refining**
501 E. Main
Artesia, NM 88210

Invoice # 42886

Invoice Date: **Jul 6, 2000**

Attn: **Darrell Moore**

Order ID: **A00062106**

Project #: **Artesia Monitor Well Replacement**

Project Name: **N/A**

Project Location: **KWB-2R**

Test	Quantity	Matrix	Description	Price	SubTotal
Hg, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Ag, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Al, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Anions/Cations	1	Water	148481 - 148481	\$80.00	\$80.00
As, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
B, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Ba, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Be, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Cd, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Co, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Conductivity	1	Water	148481 - 148481	\$8.00	\$8.00
Cr, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
8260	1	Water	148481 - 148481	\$180.00	\$180.00
Fe, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Zn, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Metals Prep	1	Water	148481 - 148481	\$15.00	\$15.00
Mn, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Mo, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Ni, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
PAH	1	Water	148481 - 148481	\$190.00	\$190.00
Pb, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
pH	1	Water	148481 - 148481	\$8.00	\$8.00
Se, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
TDS	1	Water	148481 - 148481	\$11.00	\$11.00
U, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
V, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Cu, Dissolved	1	Water	148481 - 148481	\$15.00	\$15.00
Payment Terms: Net 30 Days				Total	\$792.00

Director, Dr. Blair Leftwich



TRACE ANALYSIS, INC.

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

ANALYTICAL RESULTS FOR

NAVAJO REFINING CO.

Sampling Date: 6/19
Sample Condition: Intact
Sample Received by: VH
Project Name: N/A

July 5, 2000
Receiving Date: 6/21/00
Sample Type: Water
Project No: Artesia-Monitor Well Replacement
Project Location: KWB-2R

TA#	FIELD CODE	FLUORIDE (mg/L)	CHLORIDE (mg/L)	NITRATE (mg/L)	SULFATE (mg/L)
-----	------------	--------------------	--------------------	-------------------	-------------------

T148481	RWB-2R	1.9	490	2.7	560
---------	--------	-----	-----	-----	-----

ICV		2.50	11.81	4.69	12.15
CCV		2.50	11.90	4.71	12.43

REPORTING LIMIT		0.2	0.5	0.2	0.5
-----------------	--	-----	-----	-----	-----

RPD		3	0	1	1
% Extraction Accuracy		93	93	91	97
% Instrument Accuracy		100	94	94	99

PREP DATE		06/21/00	06/21/00	06/21/00	06/21/00
ANALYSIS DATE		06/21/00	06/21/00	06/21/00	06/21/00

METHODS: EPA 300.0
CHEMIST: FLUORIDE, CHLORIDE, NITRATE, SULFATE: JS/RS
FLUORIDE/ SPIKE CONC.: 12.5 CHLORIDE/SULFATE SPIKE CONC.: 62.5 mg/L NITRATE SPIKE CONC.: 25 mg/L
FLUORIDE CCV CONC.: 2.5 CHLORIDE CCV CONC.: 12.5 mg/L NITRATE CCV CONC.: 5.0 mg/L

Handwritten signature

Director, Dr. Blair Leftwich DATE

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1296
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888-588-3443 915-585-3443 FAX 915-585-4944

E-Mail: lab@traceanalysis.com
ANALYTICAL RESULTS FOR

July 5, 2000

Receiving Date: 06/21/00

Sample Type: Water

Project No: Artesia-Monitor Well Replacement

Project Location: KWB-2R

NAVAJO REFINING

Attention: David Boyer

P.O. Box 159

Artesia, NM 88211

Sampling Date: 06/19/00

Sample Condition: Intact & Cool

Sample Received by: VH

Project Name: N/A

DISSOLVED METALS (mg/L)

TA#	Field Code	Al	As	Ba	Be	B	Cd	Cr	Co	Cu	Fe	Pb	Mn	Mo	Ni	Se	Ag	U	V	Zn	Ca	Mg	K	Na	Hg
T148481	KWB-2R	<0.01	<0.01	0.26	<0.01	0.40	<0.002	<0.005	<0.02	<0.02	0.74	<0.01	0.43	<0.05	<0.02	<0.01	<0.005	<0.10	<0.02	<0.01	265	167	4.7	300	<0.0002
ICV		4.74	2.44	5.11	0.51	2.52	50.00	1.03	2.51	0.98	5.07	2.55	0.51	2.56	2.49	2.44	0.5	2.54	2.52	0.51	10.1	10.0	9.7	9.6	0.00092
CCV		4.81	2.35	5.43	0.52	2.48	0.51	1.06	2.64	1.00	5.26	2.63	0.53	2.66	2.56	2.35	0.51	2.69	2.63	0.54	265	167	4.7	300	0.00092
Reporting Limit		0.01	0.01	0.05	0.01	0.05	0.002	0.01	0.02	0.02	0.05	0.01	0.01	0.05	0.02	0.01	0.005	0.10	0.02	0.01	1.0	1.0	1.0	1.0	0.0002
RPD		0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	5	1	1	2	1	8
% Extraction Accuracy	87	88	102	90	93	80	100	96	100	99	94	94	105	104	94	99	95	111	103	105	102	94	105	98	120
% Instrument Accuracy	95	98	102	102	101	101	100	103	101	98	101	102	102	102	99	98	100	102	101	102	101	100	100	97	96

PREP DATE 6/22/00
ANALYSIS DATE 6/23/00

CHEMIST: Al, As, Ba, Be, B, Cd, Cr, Co, Cu, Fe, Pb, Mn, Mo, Ni, Se, Ag, U, V, Zn, Ca, Mg, K, Na: RR Hg: JM

METHODS: EPA SW 846-3005A, 6010B, 7470A.

DISSOLVED METALS SPIKE: 2.0 mg/L Al, Ba, Fe 1.0 mg/L As, B, Co, Pb, Mo, Ni, U, V 0.20 mg/L Be, Cd, Mn, Ag, Zn 0.40 mg/L Cr, Cu, 0.80 mg/L Se 1000 mg/L Ca, Mg, K, Na

DISSOLVED METALS CCV: 5.0 mg/L Al, Ba, Fe 2.5 mg/L As, B, Co, Pb, Mo, Ni, Se, U, V 0.50 mg/L Be, Cd, Mn, Ag, Zn 1.0 mg/L Cr, Cu, 10 mg/L Ca, Mg, K, Na

Signature

7-5-00

Director, Dr. Blair Leftwich

Date



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

Analytical and Quality Control Report

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

Report Date: July 5, 2000

Order ID Number: A00062106

Project Number: Artesia Monitor Well Replacement
Project Name: N/A
Project Location: KWB-2R

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
148481	RWB-2R	Water	6/19/00	15:15	6/21/00

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

This report consists of a total of 16 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 148481 - RWB-2R

Analysis: 8260	Analytical Method: S 8260B	QC Batch: QC03398	Date Analyzed: 6/22/00
Analyst: JG	Preparation Method: E 5030B	Prep Batch: PB02923	Date Prepared: 6/22/00

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<200	µg/L	1	2
Dichlorodifluoromethane		<200	µg/L	1	2
Chloromethane (methyl chloride)		<200	µg/L	1	2
Vinyl Chloride		<200	µg/L	1	2
Bromomethane (methyl bromide)		<500	µg/L	1	5
Chloroethane		<200	µg/L	1	2
Trichlorofluoromethane		<200	µg/L	1	2
Acetone		<1000	µg/L	1	10
Iodomethane (methyl iodide)		<200	µg/L	1	2
Carbon Disulfide		<200	µg/L	1	2
Acrylonitrile		<200	µg/L	1	2
2-Butanone (MEK)		<200	µg/L	1	2
4-methyl-2-pentanone (MIBK)		<1000	µg/L	1	10
2-hexanone		<200	µg/L	1	2
trans 1,4-Dichloro-2-butene		<1000	µg/L	1	10
1,1-Dichloroethene		<200	µg/L	1	2
Methylene chloride		<500	µg/L	1	5
MTBE		<200	µg/L	1	2
trans-1,2-Dichloroethene		<200	µg/L	1	2
1,1-Dichloroethane		<200	µg/L	1	2
cis-1,2-dichloroethene		<200	µg/L	1	2
2,2-Dichloropropane		<200	µg/L	1	2
1,2-Dichloroethane (EDC)		<200	µg/L	1	2
Chloroform		<200	µg/L	1	2
1,1,1-Trichloroethane		<200	µg/L	1	2
1,1-Dichloropropene		<200	µg/L	1	2
Benzene		2448	µg/L	1	2
Carbon Tetrachloride		<200	µg/L	1	2
1,2-Dichloropropane		<200	µg/L	1	2
Trichloroethene (TCE)		<200	µg/L	1	2
Dibromomethane (methylene bromide)		<200	µg/L	1	2
Bromodichloromethane		<200	µg/L	1	2
2-Chloroethyl vinyl ether		<1000	µg/L	1	10
cis-1,3-Dichloropropene		<200	µg/L	1	2
trans-1,3-Dichloropropene		<200	µg/L	1	2
Toluene		<200	µg/L	1	2
1,1,2-Trichloroethane		<200	µg/L	1	2
1,3-Dichloropropane		<200	µg/L	1	2
Dibromochloromethane		<200	µg/L	1	2
1,2-Dibromoethane (EDB)		<200	µg/L	1	2
Tetrachloroethene (PCE)		<200	µg/L	1	2
Chlorobenzene		<200	µg/L	1	2
1,1,1,2-Tetrachloroethane		<200	µg/L	1	2
Ethylbenzene		2627	µg/L	1	2
m,p-Xylene		3035	µg/L	1	2

Continued ...

... Continued Sample: 148481 Analysis: 8260

Param	Flag	Result	Units	Dilution	RDL
Bromoform		<200	µg/L	1	2
Styrene		<200	µg/L	1	2
o-Xylene		<200	µg/L	1	2
1,1,2,2-Tetrachloroethane		<200	µg/L	1	2
2-Chlorotoluene		<200	µg/L	1	2
1,2,3-Trichloropropane		<200	µg/L	1	2
Isopropylbenzene		<200	µg/L	1	2
Bromobenzene		<200	µg/L	1	2
n-Propylbenzene		203	µg/L	1	2
1,3,5-Trimethylbenzene		227	µg/L	1	2
tert-Butylbenzene		<200	µg/L	1	2
1,2,4-Trimethylbenzene		935	µg/L	1	2
1,4-Dichlorobenzene (para)		<200	µg/L	1	2
sec-Butylbenzene		<200	µg/L	1	2
1,3-Dichlorobenzene		<200	µg/L	1	2
p-Isopropyltoluene		<200	µg/L	1	2
4-Chlorotoluene		<200	µg/L	1	2
1,2-Dichlorobenzene (ortho)		<200	µg/L	1	2
n-Butylbenzene		<200	µg/L	1	2
1,2-Dibromo-3-chloropropane		<500	µg/L	1	5
1,2,3-Trichlorobenzene		<500	µg/L	1	5
1,2,4-Trichlorobenzene		<500	µg/L	1	5
Naphthalene	1	391	µg/L	1	2
Hexachlorobutadiene		<500	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		46.08	µg/L	1	50	92	84 - 116
Toluene-d8		47.58	µg/L	1	50	95	92 - 108
4-Bromofluorobenzene		47.90	µg/L	1	50	95	80 - 110

Sample: 148481 - RWB-2R

Analysis: Alkalinity Analytical Method: E 310.1 QC Batch: QC03440 Date Analyzed: 6/27/00
 Analyst: LD Preparation Method: N/A Prep Batch: PB02964 Date Prepared: 6/27/00

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		792	mg/L as CaCo3	1	1
Total Alkalinity		792	mg/L as CaCo3	1	1

Sample: 148481 - RWB-2R

Analysis: Conductivity Analytical Method: SM 2510B QC Batch: QC03441 Date Analyzed: 6/27/00
 Analyst: LD Preparation Method: N/A Prep Batch: PB02965 Date Prepared: 6/27/00

¹RSD value exceeds 15% on initial calibration

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		3300	uMHOS/cm	1	

Sample: 148481 - RWB-2R

Analysis: Dissolved Metals Analytical Method: E 200.7 QC Batch: QC03359 Date Analyzed: 6/22/00
Analyst: RR Preparation Method: E 3005A Prep Batch: PB02889 Date Prepared: 6/22/00

Param	Flag	Result	Units	Dilution	RDL
Dissolved Potassium		4.7	mg/L	1	0.50

Sample: 148481 - RWB-2R

Analysis: PAH Analytical Method: S 8270C QC Batch: QC03400 Date Analyzed: 6/23/00
Analyst: MA Preparation Method: E 3510C Prep Batch: PB02897 Date Prepared: 6/21/00

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.282	mg/L	5	0.005
Acenaphthylene		<0.025	mg/L	5	0.005
Acenaphthene		<0.025	mg/L	5	0.005
Fluorene		<0.025	mg/L	5	0.005
Phenanthrene		<0.025	mg/L	5	0.005
Anthracene		<0.025	mg/L	5	0.005
Fluoranthene		<0.025	mg/L	5	0.005
Pyrene		<0.025	mg/L	5	0.005
Benzo(a)anthracene		<0.025	mg/L	5	0.005
Chrysene		<0.025	mg/L	5	0.005
Benzo(b)fluoranthene		<0.025	mg/L	5	0.005
Benzo(k)fluoranthene		<0.025	mg/L	5	0.005
Benzo(a)pyrene		<0.025	mg/L	5	0.005
Indeno(1,2,3-cd)pyrene		<0.025	mg/L	5	0.005
Dibenzo(a,h)anthracene		<0.025	mg/L	5	0.005
Benzo(g,h,i)perylene		<0.025	mg/L	5	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		51.06	mg/L	5	80	63	36 - 107
2-Fluorobiphenyl		57.17	mg/L	5	80	71	54 - 97
Terphenyl-d14		47.63	mg/L	5	80	59	0 - 113

Sample: 148481 - RWB-2R

Analysis: TDS Analytical Method: E 160.1 QC Batch: QC03401 Date Analyzed: 6/26/00
Analyst: RS Preparation Method: N/A Prep Batch: PB02933 Date Prepared: 6/23/00

Param	Flag	Result	Units	Dilution	RDL
Total Dissolved Solids		2300	mg/L	1	10

Report Date: July 5, 2000
Artesia Monitor Well Replacement

Order Number: A00062106
N/A

Page Number: 5 of 16
KWB-2R

Sample: 148481 - RWB-2R

Analysis: pH Analytical Method: E 150.1 QC Batch: QC03403 Date Analyzed: 6/21/00
Analyst: RS Preparation Method: N/A Prep Batch: PB02930 Date Prepared: 6/21/00

Param	Flag	Result	Units	Dilution	RDL
pH	2	6.7	s.u.	1	1

²Out of holding time.

Quality Control Report Method Blank

Sample: Method Blank QCBatch: QC03359

Param	Flag	Results	Units	Reporting Limit
Dissolved Potassium		<1.0	mg/L	0.50

Sample: Method Blank QCBatch: QC03398

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<2.00	µg/L	2
Dichlorodifluoromethane		<2.00	µg/L	2
Chloromethane (methyl chloride)		<2.00	µg/L	2
Vinyl Chloride		<2.00	µg/L	2
Bromomethane (methyl bromide)		<5.00	µg/L	5
Chloroethane		<2.00	µg/L	2
Trichlorofluoromethane		<2.00	µg/L	2
Acetone		<10.00	µg/L	10
Iodomethane (methyl iodide)		<2.00	µg/L	2
Carbon Disulfide		<2.00	µg/L	2
Acrylonitrile		<2.00	µg/L	2
2-Butanone (MEK)		<2.00	µg/L	2
4-methyl-2-pentanone (MIBK)		<10.00	µg/L	10
2-hexanone		<2.00	µg/L	2
trans 1,4-Dichloro-2-butene		<10.00	µg/L	10
1,1-Dichloroethene		<2.00	µg/L	2
Methylene chloride		<5.00	µg/L	5
MTBE		<2.00	µg/L	2
trans-1,2-Dichloroethene		<2.00	µg/L	2
1,1-Dichloroethane		<2.00	µg/L	2
cis-1,2-dichloroethene		<2.00	µg/L	2
2,2-Dichloropropane		<2.00	µg/L	2
1,2-Dichloroethane (EDC)		<2.00	µg/L	2
Chloroform		<2.00	µg/L	2
1,1,1-Trichloroethane		<2.00	µg/L	2
1,1-Dichloropropene		<2.00	µg/L	2
Benzene		<2.00	µg/L	2
Carbon Tetrachloride		<2.00	µg/L	2
1,2-Dichloropropane		<2.00	µg/L	2
Trichloroethene (TCE)		<2.00	µg/L	2
Dibromomethane (methylene bromide)		<2.00	µg/L	2
Bromodichloromethane		<2.00	µg/L	2
2-Chloroethyl vinyl ether		<10.00	µg/L	10
cis-1,3-Dichloropropene		<2.00	µg/L	2
trans-1,3-Dichloropropene		<2.00	µg/L	2
Toluene		<2.00	µg/L	2

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
1,1,2-Trichloroethane		<2.00	µg/L	2
1,3-Dichloropropane		<2.00	µg/L	2
Dibromochloromethane		<2.00	µg/L	2
1,2-Dibromoethane (EDB)		<2.00	µg/L	2
Tetrachloroethene (PCE)		<2.00	µg/L	2
Chlorobenzene		<2.00	µg/L	2
1,1,1,2-Tetrachloroethane		<2.00	µg/L	2
Ethylbenzene		<2.00	µg/L	2
m,p-Xylene		<2.00	µg/L	2
Bromoform		<2.00	µg/L	2
Styrene		<2.00	µg/L	2
o-Xylene		<2.00	µg/L	2
1,1,2,2-Tetrachloroethane		<2.00	µg/L	2
2-Chlorotoluene		<2.00	µg/L	2
1,2,3-Trichloropropane		<2.00	µg/L	2
Isopropylbenzene		<2.00	µg/L	2
Bromobenzene		<2.00	µg/L	2
n-Propylbenzene		<2.00	µg/L	2
1,3,5-Trimethylbenzene		<2.00	µg/L	2
tert-Butylbenzene		<2.00	µg/L	2
1,2,4-Trimethylbenzene		<2.00	µg/L	2
1,4-Dichlorobenzene (para)		<2.00	µg/L	2
sec-Butylbenzene		<2.00	µg/L	2
1,3-Dichlorobenzene		<2.00	µg/L	2
p-Isopropyltoluene		<2.00	µg/L	2
4-Chlorotoluene		<2.00	µg/L	2
1,2-Dichlorobenzene (ortho)		<2.00	µg/L	2
n-Butylbenzene		<2.00	µg/L	2
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<2.00	µg/L	2
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Dibromofluoromethane		46.42	µg/L	50	92	84 - 116
Toluene-d8		47.62	µg/L	50	95	92 - 108
4-Bromofluorobenzene		47.64	µg/L	50	95	80 - 110

Sample: Method Blank

QCBatch: QC03400

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.005	mg/L	0.005
Acenaphthylene		<0.005	mg/L	0.005
Acenaphthene		<0.005	mg/L	0.005

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
Fluorene		<0.005	mg/L	0.005
Phenanthrene		<0.005	mg/L	0.005
Anthracene		<0.005	mg/L	0.005
Fluoranthene		<0.005	mg/L	0.005
Pyrene		<0.005	mg/L	0.005
Benzo(a)anthracene		<0.005	mg/L	0.005
Chrysene		<0.005	mg/L	0.005
Benzo(b)fluoranthene		<0.005	mg/L	0.005
Benzo(k)fluoranthene		<0.005	mg/L	0.005
Benzo(a)pyrene		<0.005	mg/L	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/L	0.005
Dibenzo(a,h)anthracene		<0.005	mg/L	0.005
Benzo(g,h,i)perylene		<0.005	mg/L	0.005

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
Nitrobenzene-d5		79.23	mg/L	80	99	36 - 107
2-Fluorobiphenyl		77.38	mg/L	80	96	54 - 97
Terphenyl-d14		48.47	mg/L	80	60	0 - 113

Sample: Method Blank QCBatch: QC03401

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

Sample: Method Blank QCBatch: QC03440

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		<2.0	mg/L as CaCo3	1
Total Alkalinity		<2.0	mg/L as CaCo3	1

Sample: Method Blank QCBatch: QC03441

Param	Flag	Results	Units	Reporting Limit
Specific Conductance		5.1	uMHOS/cm	

Quality Control Report Lab Control Spikes and Duplicate Spikes

Sample: LCS

QC Batch: QC03359

Param	Flag	Result	Units	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Dissolved Potassium		100	mg/L	1	100	<1.0	100		75 - 125	20

Sample: LCSD

QC Batch: QC03359

Param	Flag	Result	Units	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Dissolved Potassium		105	mg/L	1	100	<1.0	105	4.87	75 - 125	20

Sample: LCS

QC Batch: QC03398

Param	Flag	Result	Units	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		98	µg/L	1	100	<2.00	98		73 - 154	20
Benzene		99	µg/L	1	100	<2.00	99		84 - 126	20
Trichloroethene (TCE)		102	µg/L	1	100	<2.00	102		82 - 123	20
Toluene		98	µg/L	1	100	<2.00	98		81 - 122	20
Chlorobenzene		99	µg/L	1	100	<2.00	99		86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		46.23	µg/L	1	50	92	84 - 116
Toluene-d8		47.39	µg/L	1	50	94	92 - 108
4-Bromofluorobenzene		48.33	µg/L	1	50	96	80 - 110

Sample: LCSD

QC Batch: QC03398

Param	Flag	Result	Units	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit
1,1-Dichloroethene		101	µg/L	1	100	<2.00	101	3.01	73 - 154	20
Benzene		102	µg/L	1	100	<2.00	102	2.98	84 - 126	20
Trichloroethene (TCE)		105	µg/L	1	100	<2.00	105	2.89	82 - 123	20
Toluene		102	µg/L	1	100	<2.00	102	4.00	81 - 122	20
Chlorobenzene		102	µg/L	1	100	<2.00	102	2.98	86 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Dibromofluoromethane		46.40	µg/L	1	50	92	84 - 116
Toluene-d8		47.36	µg/L	1	50	94	92 - 108
4-Bromofluorobenzene		48.02	µg/L	1	50	96	80 - 110

Sample: LCS

QC Batch: QC03400

Param	Flag	Result	Units	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Naphthalene		48.435	mg/L	1	80	<0.005	60		36 - 100	20
Acenaphthylene		56.958	mg/L	1	80	<0.005	71		56 - 105	20
Acenaphthene		54.760	mg/L	1	80	<0.005	68		60 - 99	20
Fluorene		55.579	mg/L	1	80	<0.005	69		57 - 109	20
Phenanthrene		55.690	mg/L	1	80	<0.005	69		54 - 112	20
Anthracene		53.672	mg/L	1	80	<0.005	67		52 - 110	20
Fluoranthene		50.641	mg/L	1	80	<0.005	63		53 - 117	20
Pyrene		53.964	mg/L	1	80	<0.005	67		42 - 114	20
Benzo(a)anthracene		54.369	mg/L	1	80	<0.005	67		55 - 107	20
Chrysene		73.180	mg/L	1	80	<0.005	91		0 - 149	20
Benzo(b)fluoranthene		51.820	mg/L	1	80	<0.005	64		49 - 113	20
Benzo(k)fluoranthene		55.230	mg/L	1	80	<0.005	69		39 - 135	20
Benzo(a)pyrene		57.666	mg/L	1	80	<0.005	72		50 - 118	20
Indeno(1,2,3-cd)pyrene		56.115	mg/L	1	80	<0.005	70		29 - 120	20
Dibenzo(a,h)anthracene		64.177	mg/L	1	80	<0.005	80		0 - 165	20
Benzo(g,h,i)perylene		55.629	mg/L	1	80	<0.005	69		39 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Nitrobenzene-d5		56.03	mg/L	1	80	70	36 - 107
2-Fluorobiphenyl		56.72	mg/L	1	80	70	54 - 97
Terphenyl-d14		32.61	mg/L	1	80	40	0 - 113

Sample: LCSD

QC Batch: QC03400

Param	Flag	Result	Units	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Naphthalene		46.218	mg/L	1	80	<0.005	57	4.68	36 - 100	20
Acenaphthylene		55.699	mg/L	1	80	<0.005	69	2.23	56 - 105	20
Acenaphthene		54.638	mg/L	1	80	<0.005	68	0.22	60 - 99	20
Fluorene		57.246	mg/L	1	80	<0.005	71	2.95	57 - 109	20
Phenanthrene		60.245	mg/L	1	80	<0.005	75	7.85	54 - 112	20
Anthracene		60.149	mg/L	1	80	<0.005	75	11.38	52 - 110	20
Fluoranthene		58.794	mg/L	1	80	<0.005	73	14.90	53 - 117	20
Pyrene		57.438	mg/L	1	80	<0.005	71	6.23	42 - 114	20
Benzo(a)anthracene		61.026	mg/L	1	80	<0.005	76	11.53	55 - 107	20

Continued ...

... Continued

Param	Flag	Result	Units	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Chrysene		83.741	mg/L	1	80	<0.005	104	13.46	0 - 149	20
Benzo(b)fluoranthene		56.627	mg/L	1	80	<0.005	70	8.86	49 - 113	20
Benzo(k)fluoranthene		61.546	mg/L	1	80	<0.005	76	10.81	39 - 135	20
Benzo(a)pyrene		62.206	mg/L	1	80	<0.005	77	7.57	50 - 118	20
Indeno(1,2,3-cd)pyrene		60.073	mg/L	1	80	<0.005	75	6.81	29 - 120	20
Dibenzo(a,h)anthracene		70.355	mg/L	1	80	<0.005	87	9.18	0 - 165	20
Benzo(g,h,i)perylene		59.083	mg/L	1	80	<0.005	73	6.02	39 - 121	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
Nitrobenzene-d5		53.54	mg/L	1	80	66	36 - 107
2-Fluorobiphenyl		55.63	mg/L	1	80	69	54 - 97
Terphenyl-d14		35.99	mg/L	1	80	44	0 - 113

Quality Control Report Matrix Spikes and Duplicate Spikes

Sample: MS

QC Batch: QC03359

Param	Flag	Result	Units	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Dissolved Potassium		1055	mg/L	1	1000	4.7	105		75 - 125	20

Sample: MSD

QC Batch: QC03359

Param	Flag	Result	Units	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Dissolved Potassium		1030	mg/L	1	1000	4.7	102	2.40	75 - 125	20

Quality Control Report Duplicate Samples

Sample: Duplicate

QC Batch: QC03401

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1178	1200	mg/L	1	1.85	20

Sample: Duplicate

QC Batch: QC03403

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH		9.1	9.1	s.u.	1	0.00	20

Sample: Duplicate

QC Batch: QC03440

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0.00	20
Carbonate Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0.00	20
Bicarbonate Alkalinity		762	792	mg/L as CaCo3	1	3.86	20
Total Alkalinity		762	792	mg/L as CaCo3	1	3.86	20

Sample: Duplicate

QC Batch: QC03441

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance		3.53	3.5	uMHOS/cm	1	0.85	20

Quality Control Report Continuing Calibration Verification Standards

Sample: CCV (1) QC Batch: QC03359

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Potassium		mg/L	10	9.5	95	75 - 125	6/22/00

Sample: ICV (1) QC Batch: QC03359

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Potassium		mg/L	10	9.7	97	75 - 125	6/22/00

Sample: CCV (1) QC Batch: QC03398

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	95	95	80 - 120	6/22/00
1,1-Dichloroethene		µg/L	100	99	99	73 - 154	6/22/00
Chloroform		µg/L	100	93	93	80 - 120	6/22/00
1,2-Dichloropropane		µg/L	100	99	99	80 - 120	6/22/00
Toluene		µg/L	100	101	101	81 - 122	6/22/00
Chlorobenzene		µg/L	100	98	98	86 - 121	6/22/00
Ethylbenzene		µg/L	100	99	99	80 - 120	6/22/00
Dibromofluoromethane		µg/L	50	46.97	93	80 - 120	6/22/00
Toluene-d8		µg/L	50	46.82	93	80 - 120	6/22/00
4-Bromofluorobenzene		µg/L	50	51.00	102	80 - 120	6/22/00

Sample: CCV (1) QC Batch: QC03400

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	59.62	99	36 - 100	6/23/00
Acenaphthylene		mg/L	60	60.11	100	56 - 105	6/23/00
Acenaphthene		mg/L	60	59.90	99	60 - 99	6/23/00
Fluorene		mg/L	60	58.96	98	57 - 109	6/23/00
Phenanthrene		mg/L	60	58.52	97	54 - 112	6/23/00
Anthracene		mg/L	60	58.83	98	52 - 110	6/23/00
Fluoranthene		mg/L	60	55.18	91	53 - 117	6/23/00

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Pyrene		mg/L	60	57.59	95	42 - 114	6/23/00
Benzo(a)anthracene		mg/L	60	57.74	96	55 - 107	6/23/00
Chrysene		mg/L	60	57.72	96	0 - 149	6/23/00
Benzo(b)fluoranthene		mg/L	60	56.55	94	49 - 113	6/23/00
Benzo(k)fluoranthene		mg/L	60	62.99	104	39 - 135	6/23/00
Benzo(a)pyrene		mg/L	60	60.77	101	50 - 118	6/23/00
Indeno(1,2,3-cd)pyrene		mg/L	60	58.38	97	29 - 120	6/23/00
Dibenzo(a,h)anthracene		mg/L	60	58.37	97	0 - 165	6/23/00
Benzo(g,h,i)perylene		mg/L	60	60.46	100	39 - 121	6/23/00
Nitrobenzene-d5		mg/L	60	57.16	95	36 - 107	6/23/00
2-Fluorobiphenyl		mg/L	60	58.77	97	54 - 97	6/23/00
Terphenyl-d14		mg/L	60	55.99	93	0 - 113	6/23/00

Sample: CCV (1)

QC Batch: QC03401

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	979	97	80 - 120	6/26/00

Sample: ICV (1)

QC Batch: QC03401

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Dissolved Solids		mg/L	1000	956	95	80 - 120	6/26/00

Sample: CCV (1)

QC Batch: QC03403

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	80 - 120	6/21/00

Sample: ICV (1)

QC Batch: QC03403

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	80 - 120	6/21/00

Sample: CCV (1) QC Batch: QC03440

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	80 - 120	6/27/00
Carbonate Alkalinity		mg/L as CaCo3	0	228	0	80 - 120	6/27/00
Bicarbonate Alkalinity		mg/L as CaCo3	0	14	0	80 - 120	6/27/00
Total Alkalinity		mg/L as CaCo3	250	242	96	80 - 120	6/27/00

Sample: ICV (1) QC Batch: QC03440

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	80 - 120	6/27/00
Carbonate Alkalinity		mg/L as CaCo3	0	234	0	80 - 120	6/27/00
Bicarbonate Alkalinity		mg/L as CaCo3	0	9	0	80 - 120	6/27/00
Total Alkalinity		mg/L as CaCo3	250	243	97	80 - 120	6/27/00

Sample: CCV (1) QC Batch: QC03441

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		uMHOS/cm	1413	1401	99	80 - 120	6/27/00

Sample: ICV (1) QC Batch: QC03441

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		uMHOS/cm	1413	1409	99	80 - 120	6/27/00



TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296
888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: 5/31/00

Project Number: N/A
Project Name: Mo Off -Site
Project Location: Artesia, NM

Order ID Number: A00052406

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

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
146644	RA4196	Water	5/23/00	9:00	5/24/00
146645	RA4798	Water	5/23/00	9:10	5/24/00
146646	RA313	Water	5/23/00	8:20	5/24/00
146647	RA314	Water	5/23/00	8:30	5/24/00
146648	RA1331	Water	5/23/00	8:50	5/24/00
146649	RA1227	Water	5/23/00	8:45	5/24/00
146650	RA307	Water	5/23/00	8:55	5/24/00

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

This report consists of a total of 15 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Analytical Results Report

Sample Number: 146644

Description: RA4196

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dichlorodifluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloromethane (methyl chloride)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Vinyl Chloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromomethane (methyl bromide)	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Chloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichlorofluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acetone	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
Iodomethane (methyl iodide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Disulfide	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acrylonitrile	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Butanone (MEK)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
2-hexanone	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
1,1-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Methylene chloride	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
MTBE	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,2-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
cis-1,2-dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloroform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Benzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Tetrachloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichloroethene (TCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromodichloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
cis-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Toluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,2-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Tetrachloroethene (PCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Ethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
m,p-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromoform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Styrene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
o-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2

Report Date: 5/31/00

Order ID Number: A00052406

Page Number: 3 of 15

N/A

Mo Off -Site

Artesia,NM

1,1,2,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2,3-Trichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Isopropylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
n-Propylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
tert-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
sec-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3-Dichlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
p-Isopropyltoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
n-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Naphthalene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Hexachlorobutadiene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
Dibromofluoromethane	50.56	1	50	101	84 - 116	JG	PB02476	QC02888	
Toluene-d8	50.56	1	50	101	92 - 108	JG	PB02476	QC02888	
4-Bromofluorobenzene	46.00	1	50	92	80 - 110	JG	PB02476	QC02888	

Sample Number: 146645

Description: RA4798

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dichlorodifluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloromethane (methyl chloride)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Vinyl Chloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromomethane (methyl bromide)	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Chloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichlorofluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acetone	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
Iodomethane (methyl iodide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Disulfide	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acrylonitrile	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Butanone (MEK)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
2-hexanone	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
1,1-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Methylene chloride	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
MTBE	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,2-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
cis-1,2-dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloroethane (EDC)	2.83	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2

N/A	Mo Off -Site				Artesia,NM				
Chloroform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Benzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Tetrachloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichloroethene (TCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromodichloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
cis-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Toluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,2-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Tetrachloroethene (PCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Ethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
m,p-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromoform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Styrene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
o-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,2,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2,3-Trichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Isopropylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
n-Propylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
tert-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
sec-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3-Dichlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
p-Isopropyltoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
n-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Naphthalene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Hexachlorobutadiene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5

Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
Dibromofluoromethane	52.38	1	50	105	84 - 116	JG	PB02476	QC02888
Toluene-d8	50.71	1	50	101	92 - 108	JG	PB02476	QC02888
4-Bromofluorobenzene	45.28	1	50	91	80 - 110	JG	PB02476	QC02888

Report Date: 5/31/00

Order ID Number: A00052406

Page Number: 5 of 15

N/A

Mo Off -Site

Artesia, NM

Sample Number: 146646

Description: RA313

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dichlorodifluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloromethane (methyl chloride)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Vinyl Chloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromomethane (methyl bromide)	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Chloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichlorofluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acetone	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
Iodomethane (methyl iodide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Disulfide	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acrylonitrile	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Butanone (MEK)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
2-hexanone	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
1,1-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Methylene chloride	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
MTBE	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,2-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
cis-1,2-dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloroform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Benzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Tetrachloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichloroethene (TCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromodichloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
cis-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Toluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,2-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Tetrachloroethene (PCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Ethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
m,p-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromoform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Styrene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
o-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,2,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2,3-Trichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2

Report Date: 5/31/00

Order ID Number: A00052406

Page Number: 6 of 15

N/A

Mo Off-Site

Artesia, NM

Isopropylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
n-Propylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
tert-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
sec-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3-Dichlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
p-Isopropyltoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
n-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Naphthalene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Hexachlorobutadiene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5

Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
Dibromofluoromethane	51.84	1	50	104	84 - 116	JG	PB02476	QC02888
Toluene-d8	50.91	1	50	102	92 - 108	JG	PB02476	QC02888
4-Bromofluorobenzene	45.50	1	50	91	80 - 110	JG	PB02476	QC02888

Sample Number: 146647

Description: RA314

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dichlorodifluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloromethane (methyl chloride)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Vinyl Chloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromomethane (methyl bromide)	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Chloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichlorofluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acetone	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
Iodomethane (methyl iodide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Disulfide	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acrylonitrile	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Butanone (MEK)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
2-hexanone	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
1,1-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Methylene chloride	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
MTBE	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,2-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
cis-1,2-dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloroform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2

Report Date: 5/31/00

Order ID Number: A00052406

Page Number: 7 of 15

N/A

Mo Off -Site

Artesia,NM

Benzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Tetrachloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichloroethene (TCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromodichloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
cis-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Toluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,2-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Tetrachloroethene (PCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Ethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
m,p-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromoform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Styrene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
o-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,2,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2,3-Trichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Isopropylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
n-Propylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
tert-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
sec-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3-Dichlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
p-Isopropyltoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
n-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Naphthalene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Hexachlorobutadiene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5

Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
Dibromofluoromethane	51.69	1	50	103	84 - 116	JG	PB02476	QC02888
Toluene-d8	51.11	1	50	102	92 - 108	JG	PB02476	QC02888
4-Bromofluorobenzene	44.74	1	50	89	80 - 110	JG	PB02476	QC02888

Sample Number: 146648

Description: RA1331

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2

N/A	Mo Off-Site			Artesia,NM					
Dichlorodifluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloromethane (methyl chloride)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Vinyl Chloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromomethane (methyl bromide)	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Chloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichlorofluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acetone	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
Iodomethane (methyl iodide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Disulfide	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acrylonitrile	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Butanone (MEK)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
2-hexanone	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
1,1-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Methylene chloride	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
MTBE	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,2-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
cis-1,2-dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloroform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Benzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Tetrachloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichloroethene (TCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromodichloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
cis-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Toluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,2-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Tetrachloroethene (PCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Ethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
m,p-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromoform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Styrene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
o-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,2,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2,3-Trichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Isopropylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
n-Propylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
tert-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2

Report Date: 5/31/00

Order ID Number: A00052406

Page Number: 9 of 15

N/A Mo Off -Site Artesia,NM

1,4-Dichlorobenzene (para)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
sec-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3-Dichlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
p-Isopropyltoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
n-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Naphthalene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Hexachlorobutadiene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5

Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
Dibromofluoromethane	52.50	1	50	105	84 - 116	JG	PB02476	QC02888
Toluene-d8	51.08	1	50	102	92 - 108	JG	PB02476	QC02888
4-Bromofluorobenzene	45.36	1	50	91	80 - 110	JG	PB02476	QC02888

Sample Number: 146649

Description: RA1227

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dichlorodifluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloromethane (methyl chloride)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Vinyl Chloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromomethane (methyl bromide)	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Chloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichlorofluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acetone	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
Iodomethane (methyl iodide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Disulfide	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acrylonitrile	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Butanone (MEK)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
2-hexanone	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
1,1-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Methylene chloride	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
MTBE	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,2-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
cis-1,2-dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloroform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Benzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Tetrachloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichloroethene (TCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromodichloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2

Report Date: 5/31/00

Order ID Number: A00052406

Page Number: 10 of 15

N/A	Mo Off -Site						Artesia,NM			
2-Chloroethyl vinyl ether	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10	
cis-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
trans-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
Toluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
1,1,2-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
1,3-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
Dibromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
1,2-Dibromoethane (EDB)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
Tetrachloroethene (PCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
Chlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
Ethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
m,p-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
Bromoform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
Styrene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
o-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
1,1,2,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
2-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
1,2,3-Trichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
Isopropylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
Bromobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
n-Propylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
1,3,5-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
tert-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
1,2,4-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
1,4-Dichlorobenzene (para)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
sec-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
1,3-Dichlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
p-Isopropyltoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
4-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
n-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5	
1,2,3-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5	
1,2,4-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5	
Naphthalene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2	
Hexachlorobutadiene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5	

Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
Dibromofluoromethane	52.21	1	50	104	84 - 116	JG	PB02476	QC02888
Toluene-d8	51.25	1	50	102	92 - 108	JG	PB02476	QC02888
4-Bromofluorobenzene	45.24	1	50	90	80 - 110	JG	PB02476	QC02888

Sample Number: 146650

Description: RA307

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dichlorodifluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloromethane (methyl chloride)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Vinyl Chloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromomethane (methyl bromide)	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Chloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichlorofluoromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2

Report Date: 5/31/00	Order ID Number: A00052406					Page Number: 11 of 15			
N/A	Mo Off-Site					Artesia,NM			
Acetone	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
Iodomethane (methyl iodide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Disulfide	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Acrylonitrile	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Butanone (MEK)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
2-hexanone	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
1,1-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Methylene chloride	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
MTBE	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,2-Dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
cis-1,2-dichloroethene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chloroform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Benzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Carbon Tetrachloride	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Trichloroethene (TCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromodichloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	10
cis-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
trans-1,3-Dichloropropene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Toluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,2-Trichloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3-Dichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Dibromochloromethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Tetrachloroethene (PCE)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Chlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Ethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
m,p-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromoform	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Styrene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
o-Xylene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,1,2,2-Tetrachloroethane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
2-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2,3-Trichloropropane	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Isopropylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Bromobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
n-Propylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
tert-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
sec-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,3-Dichlorobenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
p-Isopropyltoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
4-Chlorotoluene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2

Report Date: 5/31/00

Order ID Number: A00052406

Page Number: 12 of 15

N/A

Mo Off -Site

Artesia,NM

n-Butylbenzene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Naphthalene	<2.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	2
Hexachlorobutadiene	<5.00	1	E 624	5/24/00	5/24/00	JG	PB02476	QC02888	5
Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
Dibromofluoromethane	52.28	1	50	105	84 - 116	JG	PB02476	QC02888	
Toluene-d8	51.31	1	50	103	92 - 108	JG	PB02476	QC02888	
4-Bromofluorobenzene	45.50	1	50	91	80 - 110	JG	PB02476	QC02888	

Quality Control Report Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Bromochloromethane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Dichlorodifluoromethane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Chloromethane (methyl chloride) (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Vinyl Chloride (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Bromomethane (methyl bromide) (µg/L)		<5.00	5	5/24/00	PB02476	QC02888
Chloroethane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Trichlorofluoromethane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Acetone (µg/L)		<10.00	10	5/24/00	PB02476	QC02888
Iodomethane (methyl iodide) (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Carbon Disulfide (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Acrylonitrile (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
2-Butanone (MEK) (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
4-methyl-2-pentanone (MIBK) (µg/L)		<10.00	10	5/24/00	PB02476	QC02888
2-hexanone (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
trans 1,4-Dichloro-2-butene (µg/L)		<10.00	10	5/24/00	PB02476	QC02888
1,1-Dichloroethene (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Methylene chloride (µg/L)		<5.00	5	5/24/00	PB02476	QC02888
MTBE (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
trans-1,2-Dichloroethene (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
1,1-Dichloroethane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
cis-1,2-dichloroethene (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
2,2-Dichloropropane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
1,2-Dichloroethane (EDC) (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Chloroform (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
1,1,1-Trichloroethane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
1,1-Dichloropropene (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Benzene (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Carbon Tetrachloride (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
1,2-Dichloropropane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Trichloroethene (TCE) (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Dibromomethane (methylene bromide) (µg)		<2.00	2	5/24/00	PB02476	QC02888
Bromodichloromethane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
2-Chloroethyl vinyl ether (µg/L)		<10.00	10	5/24/00	PB02476	QC02888
cis-1,3-Dichloropropene (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
trans-1,3-Dichloropropene (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Toluene (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
1,1,2-Trichloroethane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
1,3-Dichloropropane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Dibromochloromethane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
1,2-Dibromoethane (EDB) (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Tetrachloroethene (PCE) (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Chlorobenzene (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
1,1,1,2-Tetrachloroethane (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
Ethylbenzene (µg/L)		<2.00	2	5/24/00	PB02476	QC02888
m,p-Xylene (µg/L)		<2.00	2	5/24/00	PB02476	QC02888

N/A	Mo Off-Site		Artesia, NM		
Bromoform (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
Styrene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
o-Xylene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
1,1,2,2-Tetrachloroethane (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
2-Chlorotoluene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
1,2,3-Trichloropropane (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
Isopropylbenzene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
Bromobenzene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
n-Propylbenzene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
1,3,5-Trimethylbenzene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
tert-Butylbenzene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
1,2,4-Trimethylbenzene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
1,4-Dichlorobenzene (para) (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
sec-Butylbenzene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
1,3-Dichlorobenzene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
p-Isopropyltoluene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
4-Chlorotoluene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
1,2-Dichlorobenzene (ortho) (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
n-Butylbenzene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
1,2-Dibromo-3-chloropropane (µg/L)	<5.00	5	5/24/00	PB02476	QC02888
1,2,3-Trichlorobenzene (µg/L)	<5.00	5	5/24/00	PB02476	QC02888
1,2,4-Trichlorobenzene (µg/L)	<5.00	5	5/24/00	PB02476	QC02888
Naphthalene (µg/L)	<2.00	2	5/24/00	PB02476	QC02888
Hexachlorobutadiene (µg/L)	<5.00	5	5/24/00	PB02476	QC02888
Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
Dibromofluoromethane (µg/L)	51.19	50	102	84 - 116	QC02888
Toluene-d8 (µg/L)	49.89	50	100	92 - 108	QC02888
4-Bromofluorobenzene (µg/L)	46.41	50	93	80 - 110	QC02888

Quality Control Report Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS 1,1-Dichloroethene (ug/L)	<2.00	1	100	106	106		73 - 154	-	QC02888
LCS Benzene (ug/L)	<2.00	1	100	101	101		84 - 126	-	QC02888
LCS Trichloroethene (TCE) (ug/L)	<2.00	1	100	102	102		82 - 123	-	QC02888
LCS Toluene (ug/L)	<2.00	1	100	100	100		81 - 122	-	QC02888
LCS Chlorobenzene (ug/L)	<2.00	1	100	101	101		86 - 121	-	QC02888
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCS Dibromofluoromethane (µg/L)		1	50	50.42	101		84 - 116		QC02888
LCS Toluene-d8 (µg/L)		1	50	49.25	99		92 - 108		QC02888
LCS 4-Bromofluorobenzene (µg/L)		1	50	46.99	94		80 - 110		QC02888
LCSD 1,1-Dichloroethene (ug/L)	<2.00	1	100	105	105	1	-	0 - 20	QC02888
LCSD Benzene (ug/L)	<2.00	1	100	101	101	0	-	0 - 20	QC02888
LCSD Trichloroethene (TCE) (ug/L)	<2.00	1	100	102	102	0	-	0 - 20	QC02888
LCSD Toluene (ug/L)	<2.00	1	100	100	100	0	-	0 - 20	QC02888
LCSD Chlorobenzene (ug/L)	<2.00	1	100	100	100	1	-	0 - 20	QC02888
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCSD Dibromofluoromethane (µg/L)		1	50	50.52	101		84 - 116		QC02888
LCSD Toluene-d8 (µg/L)		1	50	49.16	98		92 - 108		QC02888
LCSD 4-Bromofluorobenzene (µg/L)		1	50	47.65	95		80 - 110		QC02888

Quality Control Report Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV 1	Vinyl Chloride (µg/L)		100	106	106	80 - 120	5/24/00	QC02888
CCV 1	1,1-Dichloroethene (µg/L)		100	114	114	73 - 154	5/24/00	QC02888
CCV 1	Chloroform (µg/L)		100	106	106	80 - 120	5/24/00	QC02888
CCV 1	1,2-Dichloropropane (µg/L)		100	105	105	80 - 120	5/24/00	QC02888
CCV 1	Toluene (µg/L)		100	104	104	81 - 122	5/24/00	QC02888
CCV 1	Chlorobenzene (µg/L)		100	102	102	86 - 121	5/24/00	QC02888
CCV 1	Ethylbenzene (µg/L)		100	103	103	80 - 120	5/24/00	QC02888
CCV 1	Dibromofluoromethane (µg/L)		50	51.06	102	80 - 120	5/24/00	QC02888
CCV 1	Toluene-d8 (µg/L)		50	48.44	97	80 - 120	5/24/00	QC02888
CCV 1	4-Bromofluorobenzene (µg/L)		50	51.99	104	80 - 120	5/24/00	QC02888

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

TraceAnalysis, Inc.

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

Company Name:

NAVASO

Phone #:

Address:

(Street, City, Zip)

Fax #:

Contact Person:

Darrell Moore or Charlie Phymale

Invoice to:

(If different from above)

Project #:

Project Name:

Monthly offsite

Project Location:

Artesia

Sampler Signature:

Charlie Phymale

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD							SAMPLING	
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	NaHSO ₄	H ₂ SO ₄	NaOH	ICE	NONE	DATE	TIME
146644	RA 4196	2	40ml	X							X			X	5/23/00	9:00
45	RA 4798	2	40ml	X							X			X	5/23/00	9:10
46	RA 313	2	40ml	X							X			X	5/23/00	8:20
47	RA 314	2	40ml	X							X			X	5/23	8:30
48	RA 1331	2	40ml	X							X			X	5/23/00	8:50
49	RA 1227	2	40ml	X							X			X	5/23	8:45
50	RA 307	2	40ml	X							X			X	5/23	8:55

Relinquished by:

Charlie Phymale

Date:

5/23/00

Time:

16:15

Relinquished by:

Date:

Time:

Relinquished by:

Date:

Time:

Received at Laboratory by:

Date:

Time:

5/24/00

10:00

LAB USE ONLY

Intact

Y/N

Headspace

Y/N

Temp

°C

Log-in Review

Y/N

REMARKS:

2/1/00

See list



TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: 6/28/00

Project Number: N/A
Project Name: Mo Off -Site
Project Location: Artesia, NM

Order ID Number: A00062109

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

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
148486	RA-4196	Water	6/20/00	10:20	6/21/00
148487	RA-4798	Water	6/20/00	10:15	6/21/00
148488	RA-313	Water	6/20/00	9:30	6/21/00
148489	RA-314	Water	6/20/00	9:40	6/21/00
148490	RA-1331	Water	6/20/00	10:10	6/21/00
148491	RA-1227	Water	6/20/00	10:00	6/21/00
148492	RA-307	Water	6/20/00	10:30	6/21/00

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

This report consists of a total of 6 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.


Dr. Blair Leftwich, Director

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Report Date: 6/28/00

Order ID Number: A00062109

Page Number: 2 of 6

N/A

Mo Off-Site

Artesia, NM

Analytical Results Report

Sample Number: 148486
Description: RA-4196

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Benzene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Toluene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Ethylbenzene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
M,P,O-Xylene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Total BTEX	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
TFT	0.1	1	0.1	100	72 - 128	RC	PB02909	QC03376	
4-BFB	0.101	1	0.1	101	72 - 128	RC	PB02909	QC03376	

Sample Number: 148487
Description: RA-4798

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Benzene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Toluene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Ethylbenzene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
M,P,O-Xylene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Total BTEX	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
TFT	0.102	1	0.1	102	72 - 128	RC	PB02909	QC03376	
4-BFB	0.102	1	0.1	102	72 - 128	RC	PB02909	QC03376	

Sample Number: 148488
Description: RA-313

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Benzene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Toluene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Ethylbenzene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
M,P,O-Xylene	0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Total BTEX	0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
TFT	0.101	1	0.1	101	72 - 128	RC	PB02909	QC03376	
4-BFB	0.098	1	0.1	98	72 - 128	RC	PB02909	QC03376	

Report Date: 6/28/00

Order ID Number: A00062109

Page Number: 3 of 6

N/A

Mo Off -Site

Artesia,NM

Sample Number: 148489

Description: RA-314

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Benzene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Toluene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Ethylbenzene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
M,P,O-Xylene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Total BTEX	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
TFT	0.102	1	0.1	102	72 - 128	RC	PB02909	QC03376	
4-BFB	0.101	1	0.1	101	72 - 128	RC	PB02909	QC03376	

Sample Number: 148490

Description: RA-1331

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Benzene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Toluene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Ethylbenzene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
M,P,O-Xylene	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Total BTEX	<0.001	1	S 8021B	6/22/00	6/22/00	RC	PB02909	QC03376	0.001
Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
TFT	0.108	1	0.1	108	72 - 128	RC	PB02909	QC03376	
4-BFB	0.106	1	0.1	106	72 - 128	RC	PB02909	QC03376	

Sample Number: 148491

Description: RA-1227

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.001	1	S 8021B	6/26/00	6/27/00	RC	PB02969	QC03446	0.001
Benzene	<0.001	1	S 8021B	6/26/00	6/27/00	RC	PB02969	QC03446	0.001
Toluene	<0.001	1	S 8021B	6/26/00	6/27/00	RC	PB02969	QC03446	0.001
Ethylbenzene	<0.001	1	S 8021B	6/26/00	6/27/00	RC	PB02969	QC03446	0.001
M,P,O-Xylene	0.002	1	S 8021B	6/26/00	6/27/00	RC	PB02969	QC03446	0.001
Total BTEX	0.002	1	S 8021B	6/26/00	6/27/00	RC	PB02969	QC03446	0.001
Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
TFT	0.08	1	0.1	80	72 - 128	RC	PB02969	QC03446	
4-BFB	0.083	1	0.1	83	72 - 128	RC	PB02969	QC03446	

Sample Number: 148492

Description: RA-307

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.005	5	S 8021B	6/26/00	6/27/00	RC	PB02969	QC03446	0.001

Report Date: 6/28/00

Order ID Number: A00062109

Page Number: 4 of 6

N/A

Mo Off-Site

Artesia, NM

Benzene	<0.005	5	S 8021B	6/26/00	6/27/00	RC	PB02969	QC03446	0.001
Toluene	<0.005	5	S 8021B	6/26/00	6/27/00	RC	PB02969	QC03446	0.001
Ethylbenzene	<0.005	5	S 8021B	6/26/00	6/27/00	RC	PB02969	QC03446	0.001
M,P,O-Xylene	<0.005	5	S 8021B	6/26/00	6/27/00	RC	PB02969	QC03446	0.001
Total BTEX	<0.005	5	S 8021B	6/26/00	6/27/00	RC	PB02969	QC03446	0.001

Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
TFT	0.453	5	0.1	91	72 - 128	RC	PB02969	QC03446
4-BFB	0.46	5	0.1	92	72 - 128	RC	PB02969	QC03446

Quality Control Report Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
MTBE (mg/L)		<0.001	0.001	6/22/00	PB02909	QC03376
Benzene (mg/L)		<0.001	0.001	6/22/00	PB02909	QC03376
Toluene (mg/L)		<0.001	0.001	6/22/00	PB02909	QC03376
Ethylbenzene (mg/L)		<0.001	0.001	6/22/00	PB02909	QC03376
M,P,O-Xylene (mg/L)		<0.001	0.001	6/22/00	PB02909	QC03376
Total BTEX (mg/L)		<0.001	0.001	6/22/00	PB02909	QC03376
Surrogate		Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
TFT (mg/L)		0.105	0.1	105	72 - 128	QC03376
4-BFB (mg/L)		0.102	0.1	102	72 - 128	QC03376
MTBE (mg/L)		<0.001	0.001	6/27/00	PB02969	QC03446
Benzene (mg/L)		<0.001	0.001	6/27/00	PB02969	QC03446
Toluene (mg/L)		<0.001	0.001	6/27/00	PB02969	QC03446
Ethylbenzene (mg/L)		<0.001	0.001	6/27/00	PB02969	QC03446
M,P,O-Xylene (mg/L)		<0.001	0.001	6/27/00	PB02969	QC03446
Total BTEX (mg/L)		<0.001	0.001	6/27/00	PB02969	QC03446
Surrogate		Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
TFT (mg/L)		0.08	0.1	80	72 - 128	QC03446
4-BFB (mg/L)		0.081	0.1	81	72 - 128	QC03446

Quality Control Report

Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS MTBE (mg/L)	<0.001	1	0.1	0.105	105		80 - 120	-	QC03376
LCS Benzene (mg/L)	<0.001	1	0.1	0.098	98		80 - 120	-	QC03376
LCS Toluene (mg/L)	<0.001	1	0.1	0.099	99		80 - 120	-	QC03376
LCS Ethylbenzene (mg/L)	<0.001	1	0.1	0.097	97		80 - 120	-	QC03376
LCS M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.299	100		80 - 120	-	QC03376
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCS TFT (mg/L)		1	0.1	0.102	102		72 - 128		QC03376
LCS 4-BFB (mg/L)		1	0.1	0.097	97		72 - 128		QC03376
LCSD MTBE (mg/L)	<0.001	1	0.1	0.107	107	2	-	0 - 20	QC03376
LCSD Benzene (mg/L)	<0.001	1	0.1	0.098	98	0	-	0 - 20	QC03376
LCSD Toluene (mg/L)	<0.001	1	0.1	0.098	98	1	-	0 - 20	QC03376
LCSD Ethylbenzene (mg/L)	<0.001	1	0.1	0.096	96	1	-	0 - 20	QC03376
LCSD M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.298	99	0	-	0 - 20	QC03376
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCSD TFT (mg/L)		1	0.1	0.099	99		72 - 128		QC03376
LCSD 4-BFB (mg/L)		1	0.1	0.097	97		72 - 128		QC03376

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS MTBE (mg/L)	<0.001	1	0.1	0.098	98		80 - 120	-	QC03446
LCS Benzene (mg/L)	<0.001	1	0.1	0.085	85		80 - 120	-	QC03446
LCS Toluene (mg/L)	<0.001	1	0.1	0.095	95		80 - 120	-	QC03446
LCS Ethylbenzene (mg/L)	<0.001	1	0.1	0.094	94		80 - 120	-	QC03446
LCS M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.286	95		80 - 120	-	QC03446
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCS TFT (mg/L)		1	0.1	0.08	80		72 - 128		QC03446
LCS 4-BFB (mg/L)		1	0.1	0.084	84		72 - 128		QC03446
LCSD MTBE (mg/L)	<0.001	1	0.1	0.112	112	13	-	0 - 20	QC03446
LCSD Benzene (mg/L)	<0.001	1	0.1	0.099	99	15	-	0 - 20	QC03446
LCSD Toluene (mg/L)	<0.001	1	0.1	0.11	110	15	-	0 - 20	QC03446
LCSD Ethylbenzene (mg/L)	<0.001	1	0.1	0.109	109	15	-	0 - 20	QC03446
LCSD M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.33	110	14	-	0 - 20	QC03446
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCSD TFT (mg/L)		1	0.1	0.078	78		72 - 128		QC03446
LCSD 4-BFB (mg/L)		1	0.1	0.083	83		72 - 128		QC03446

Quality Control Report

Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	MTBE (mg/L)		0.1	0.084	84	80 - 120	6/22/00	QC03376
ICV	Benzene (mg/L)		0.1	0.086	86	80 - 120	6/22/00	QC03376
ICV	Toluene (mg/L)		0.1	0.084	84	80 - 120	6/22/00	QC03376
ICV	Ethylbenzene (mg/L)		0.1	0.088	88	80 - 120	6/22/00	QC03376
ICV	M,P,O-Xylene (mg/L)		0.3	0.258	86	80 - 120	6/22/00	QC03376
CCV 1	MTBE (mg/L)		0.1	0.103	103	80 - 120	6/22/00	QC03376
CCV 1	Benzene (mg/L)		0.1	0.094	94	80 - 120	6/22/00	QC03376
CCV 1	Toluene (mg/L)		0.1	0.094	94	80 - 120	6/22/00	QC03376
CCV 1	Ethylbenzene (mg/L)		0.1	0.091	91	80 - 120	6/22/00	QC03376
CCV 1	M,P,O-Xylene (mg/L)		0.3	0.281	94	80 - 120	6/22/00	QC03376
CCV 2	MTBE (mg/L)		0.1	0.08	80	80 - 120	6/22/00	QC03376
CCV 2	Benzene (mg/L)		0.1	0.088	88	80 - 120	6/22/00	QC03376
CCV 2	Toluene (mg/L)		0.1	0.084	84	80 - 120	6/22/00	QC03376
CCV 2	Ethylbenzene (mg/L)		0.1	0.082	82	80 - 120	6/22/00	QC03376
CCV 2	M,P,O-Xylene (mg/L)		0.3	0.246	82	80 - 120	6/22/00	QC03376

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	MTBE (mg/L)		0.1	0.1	100	80 - 120	6/27/00	QC03446
ICV	Benzene (mg/L)		0.1	0.096	96	80 - 120	6/27/00	QC03446
ICV	Toluene (mg/L)		0.1	0.108	108	80 - 120	6/27/00	QC03446
ICV	Ethylbenzene (mg/L)		0.1	0.11	110	80 - 120	6/27/00	QC03446
ICV	M,P,O-Xylene (mg/L)		0.3	0.335	112	80 - 120	6/27/00	QC03446
CCV 1	MTBE (mg/L)		0.1	0.109	109	80 - 120	6/27/00	QC03446
CCV 1	Benzene (mg/L)		0.1	0.097	97	80 - 120	6/27/00	QC03446
CCV 1	Toluene (mg/L)		0.1	0.107	107	80 - 120	6/27/00	QC03446
CCV 1	Ethylbenzene (mg/L)		0.1	0.105	105	80 - 120	6/27/00	QC03446
CCV 1	M,P,O-Xylene (mg/L)		0.3	0.316	105	80 - 120	6/27/00	QC03446
CCV 2	MTBE (mg/L)		0.1	0.117	117	80 - 120	6/27/00	QC03446
CCV 2	Benzene (mg/L)		0.1	0.084	84	80 - 120	6/27/00	QC03446
CCV 2	Toluene (mg/L)		0.1	0.092	92	80 - 120	6/27/00	QC03446
CCV 2	Ethylbenzene (mg/L)		0.1	0.09	90	80 - 120	6/27/00	QC03446
CCV 2	M,P,O-Xylene (mg/L)		0.3	0.277	92	80 - 120	6/27/00	QC03446



TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: 5/2/00

Project Number: N/A
Project Name: Mo Off -Site
Project Location: Artesia, NM

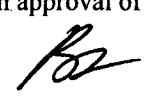
Order ID Number: A00042508

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

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
145099	RA 4798	Water	4/24/00	10:10	4/25/00

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

This report consists of a total of 6 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.


Dr. Blair Leftwich, Director

Analytical Results Report

Sample Number: 145099

Description: RA 4798

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Dichlorodifluoromethane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Chloromethane (methyl chloride)	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Vinyl Chloride	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Bromomethane (methyl bromide)	<5.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	5
Chloroethane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Trichlorofluoromethane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Acetone	<10.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	10
Iodomethane (methyl iodide)	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Carbon Disulfide	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Acrylonitrile	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
2-Butanone (MEK)	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	10
2-hexanone	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	10
1,1-Dichloroethene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Methylene chloride	<5.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	5
MTBE	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
trans-1,2-Dichloroethene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,1-Dichloroethane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
cis-1,2-dichloroethene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
2,2-Dichloropropane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,2-Dichloroethane (EDC)	3.06	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Chloroform	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,1,1-Trichloroethane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,1-Dichloropropene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Benzene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Carbon Tetrachloride	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,2-Dichloropropane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Trichloroethene (TCE)	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Bromodichloromethane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	10
cis-1,3-Dichloropropene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
trans-1,3-Dichloropropene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Toluene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,1,2-Trichloroethane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,3-Dichloropropane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Dibromochloromethane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Tetrachloroethene (PCE)	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Chlorobenzene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Ethylbenzene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
m,p-Xylene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Bromoform	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Styrene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
o-Xylene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2

Report Date: 5/2/00

Order ID Number: A00042508

Page Number: 3 of 6

N/A

Mo Off -Site

Artesia,NM

1,1,2,2-Tetrachloroethane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
2-Chlorotoluene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,2,3-Trichloropropane	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Isopropylbenzene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Bromobenzene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
n-Propylbenzene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
tert-Butylbenzene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
sec-Butylbenzene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,3-Dichlorobenzene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
p-Isopropyltoluene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
4-Chlorotoluene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
n-Butylbenzene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	5
Naphthalene	<2.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	2
Hexachlorobutadiene	<5.00	1	E 624	4/28/00	4/28/00	JG	PB02007	QC02387	5
Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
Dibromofluoromethane	54.24	1	50	108	84 - 116	JG	PB02007	QC02387	
Toluene-d8	53.39	1	50	107	92 - 108	JG	PB02007	QC02387	
4-Bromofluorobenzene	46.05	1	50	92	80 - 110	JG	PB02007	QC02387	

Tentatively Identified Compound ()

Result Dilution
1Retention Time
0 minComment
no ties to report

NOTE: Tentatively identified compounds are estimated values only.

Quality Control Report

Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Bromochloromethane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Dichlorodifluoromethane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Chloromethane (methyl chloride) (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Vinyl Chloride (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Bromomethane (methyl bromide) (µg/L)		<5.00	5	4/28/00	PB02007	QC02387
Chloroethane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Trichlorofluoromethane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Acetone (µg/L)		<10.00	10	4/28/00	PB02007	QC02387
Iodomethane (methyl iodide) (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Carbon Disulfide (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Acrylonitrile (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
2-Butanone (MEK) (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
4-methyl-2-pentanone (MIBK) (µg/L)		<10.00	10	4/28/00	PB02007	QC02387
2-hexanone (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
trans 1,4-Dichloro-2-butene (µg/L)		<10.00	10	4/28/00	PB02007	QC02387
1,1-Dichloroethene (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Methylene chloride (µg/L)		<5.00	5	4/28/00	PB02007	QC02387
MTBE (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
trans-1,2-Dichloroethene (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
1,1-Dichloroethane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
cis-1,2-dichloroethene (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
2,2-Dichloropropane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
1,2-Dichloroethane (EDC) (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Chloroform (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
1,1,1-Trichloroethane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
1,1-Dichloropropene (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Benzene (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Carbon Tetrachloride (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
1,2-Dichloropropane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Trichloroethene (TCE) (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Dibromomethane (methylene bromide) (µg)		<2.00	2	4/28/00	PB02007	QC02387
Bromodichloromethane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
2-Chloroethyl vinyl ether (µg/L)		<10.00	10	4/28/00	PB02007	QC02387
cis-1,3-Dichloropropene (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
trans-1,3-Dichloropropene (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Toluene (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
1,1,2-Trichloroethane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
1,3-Dichloropropane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Dibromochloromethane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
1,2-Dibromoethane (EDB) (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Tetrachloroethene (PCE) (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Chlorobenzene (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
1,1,1,2-Tetrachloroethane (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
Ethylbenzene (µg/L)		<2.00	2	4/28/00	PB02007	QC02387
m,p-Xylene (µg/L)		<2.00	2	4/28/00	PB02007	QC02387

N/A

Mo Off-Site

Artesia, NM

Bromoform (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
Styrene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
o-Xylene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
1,1,2,2-Tetrachloroethane (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
2-Chlorotoluene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
1,2,3-Trichloropropane (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
Isopropylbenzene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
Bromobenzene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
n-Propylbenzene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
1,3,5-Trimethylbenzene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
tert-Butylbenzene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
1,2,4-Trimethylbenzene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
1,4-Dichlorobenzene (para) (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
sec-Butylbenzene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
1,3-Dichlorobenzene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
p-Isopropyltoluene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
4-Chlorotoluene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
1,2-Dichlorobenzene (ortho) (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
n-Butylbenzene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
1,2-Dibromo-3-chloropropane (µg/L)	<5.00	5	4/28/00	PB02007	QC02387
1,2,3-Trichlorobenzene (µg/L)	<5.00	5	4/28/00	PB02007	QC02387
1,2,4-Trichlorobenzene (µg/L)	<5.00	5	4/28/00	PB02007	QC02387
Naphthalene (µg/L)	<2.00	2	4/28/00	PB02007	QC02387
Hexachlorobutadiene (µg/L)	<5.00	5	4/28/00	PB02007	QC02387
Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
Dibromofluoromethane (µg/L)	54.15	50	108	84 - 116	QC02387
Toluene-d8 (µg/L)	53.34	50	107	92 - 108	QC02387
4-Bromofluorobenzene (µg/L)	46.11	50	92	80 - 110	QC02387

Quality Control Report Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS 1,1-Dichloroethene (ug/L)	<2.00	1	100	97	97		73 - 154	-	QC02387
LCS Benzene (ug/L)	<2.00	1	100	97	97		84 - 126	-	QC02387
LCS Trichloroethene (TCE) (ug/L)	<2.00	1	100	90	90		82 - 123	-	QC02387
LCS Toluene (ug/L)	<2.00	1	100	91	91		81 - 122	-	QC02387
LCS Chlorobenzene (ug/L)	<2.00	1	100	92	92		86 - 121	-	QC02387
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCS Dibromofluoromethane (µg/L)		1	50	53.33	107		84 - 116		QC02387
LCS Toluene-d8 (µg/L)		1	50	52.16	104		92 - 108		QC02387
LCS 4-Bromofluorobenzene (µg/L)		1	50	46.61	93		80 - 110		QC02387
LCSD 1,1-Dichloroethene (ug/L)	<2.00	1	100	102	102	5	-	0 - 20	QC02387
LCSD Benzene (ug/L)	<2.00	1	100	102	102	5	-	0 - 20	QC02387
LCSD Trichloroethene (TCE) (ug/L)	<2.00	1	100	93	93	3	-	0 - 20	QC02387
LCSD Toluene (ug/L)	<2.00	1	100	96	96	5	-	0 - 20	QC02387
LCSD Chlorobenzene (ug/L)	<2.00	1	100	97	97	5	-	0 - 20	QC02387
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCSD Dibromofluoromethane (µg/L)		1	50	54.31	109		84 - 116		QC02387
LCSD Toluene-d8 (µg/L)		1	50	51.95	104		92 - 108		QC02387
LCSD 4-Bromofluorobenzene (µg/L)		1	50	47.52	95		80 - 110		QC02387

Quality Control Report Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV 1	Vinyl Chloride (µg/L)		100	118	118	80 - 120	4/28/00	QC02387
CCV 1	1,1-Dichloroethene (µg/L)		100	108	108	73 - 154	4/28/00	QC02387
CCV 1	Chloroform (µg/L)		100	115	115	80 - 120	4/28/00	QC02387
CCV 1	1,2-Dichloropropane (µg/L)		100	108	108	80 - 120	4/28/00	QC02387
CCV 1	Toluene (µg/L)		100	101	101	81 - 122	4/28/00	QC02387
CCV 1	Chlorobenzene (µg/L)		100	97	97	86 - 121	4/28/00	QC02387
CCV 1	Ethylbenzene (µg/L)		100	100	100	80 - 120	4/28/00	QC02387
CCV 1	Dibromofluoromethane (µg/L)		50	54.71	109	80 - 120	4/28/00	QC02387
CCV 1	Toluene-d8 (µg/L)		50	50.38	101	80 - 120	4/28/00	QC02387
CCV 1	4-Bromofluorobenzene (µg/L)		50	52.89	106	80 - 120	4/28/00	QC02387

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: 5/1/00

Project Number: Qtrly Offsite
Project Name: N/A
Project Location: 501 E Main, Artesia, NM

Order ID Number: A00042509

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

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
145100	KWB-7	Water	4/24/00	10:20	4/25/00

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

This report consists of a total of 6 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.


Dr. Blair Leftwich, Director

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Report Date: 5/1/00

Order ID Number: A00042509

Page Number: 2 of 6

Qtrly Offsite

N/A

501 E Main, Artesia, NM

Analytical Results Report

Sample Number: 145100

Description: KWB-7

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Dichlorodifluoromethane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Chloromethane (methyl chloride)	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Vinyl Chloride	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Bromomethane (methyl bromide)	<5.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	5
Chloroethane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Trichlorofluoromethane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Acetone	<10.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	10
Iodomethane (methyl iodide)	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Carbon Disulfide	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Acrylonitrile	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
2-Butanone (MEK)	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	10
2-hexanone	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	10
1,1-Dichloroethene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Methylene chloride	<5.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	5
MTBE	36.47	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
trans-1,2-Dichloroethene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,1-Dichloroethane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
cis-1,2-dichloroethene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
2,2-Dichloropropane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Chloroform	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,1,1-Trichloroethane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,1-Dichloropropene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Benzene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Carbon Tetrachloride	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,2-Dichloropropane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Trichloroethene (TCE)	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Bromodichloromethane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	10
cis-1,3-Dichloropropene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
trans-1,3-Dichloropropene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Toluene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,1,2-Trichloroethane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,3-Dichloropropane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Dibromochloromethane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Tetrachloroethene (PCE)	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Chlorobenzene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Ethylbenzene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
m,p-Xylene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Bromoform	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Styrene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
o-Xylene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2

Report Date: 5/1/00

Order ID Number: A00042509

Page Number: 3 of 6

Qtrly Offsite

N/A

501 E Main, Artesia, NM

1,1,2,2-Tetrachloroethane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
2-Chlorotoluene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,2,3-Trichloropropane	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Isopropylbenzene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Bromobenzene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
n-Propylbenzene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
tert-Butylbenzene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
sec-Butylbenzene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,3-Dichlorobenzene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
p-Isopropyltoluene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
4-Chlorotoluene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
n-Butylbenzene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	5
Naphthalene	<2.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	2
Hexachlorobutadiene	<5.00	1	E 624	4/27/00	4/27/00	JG	PB01985	QC02370	5
Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
Dibromofluoromethane	53.86	1	50	108	84 - 116	JG	PB01985	QC02370	
Toluene-d8	53.30	1	50	107	92 - 108	JG	PB01985	QC02370	
4-Bromofluorobenzene	46.38	1	50	93	80 - 110	JG	PB01985	QC02370	

Quality Control Report

Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Bromochloromethane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Dichlorodifluoromethane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Chloromethane (methyl chloride) (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Vinyl Chloride (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Bromomethane (methyl bromide) (µg/L)		<5.00	5	4/27/00	PB01985	QC02370
Chloroethane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Trichlorofluoromethane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Acetone (µg/L)		<10.00	10	4/27/00	PB01985	QC02370
Iodomethane (methyl iodide) (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Carbon Disulfide (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Acrylonitrile (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
2-Butanone (MEK) (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
4-methyl-2-pentanone (MIBK) (µg/L)		<10.00	10	4/27/00	PB01985	QC02370
2-hexanone (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
trans 1,4-Dichloro-2-butene (µg/L)		<10.00	10	4/27/00	PB01985	QC02370
1,1-Dichloroethene (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Methylene chloride (µg/L)		<5.00	5	4/27/00	PB01985	QC02370
MTBE (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
trans-1,2-Dichloroethene (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
1,1-Dichloroethane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
cis-1,2-dichloroethene (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
2,2-Dichloropropane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
1,2-Dichloroethane (EDC) (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Chloroform (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
1,1,1-Trichloroethane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
1,1-Dichloropropene (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Benzene (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Carbon Tetrachloride (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
1,2-Dichloropropane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Trichloroethene (TCE) (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Dibromomethane (methylene bromide) (µg)		<2.00	2	4/27/00	PB01985	QC02370
Bromodichloromethane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
2-Chloroethyl vinyl ether (µg/L)		<10.00	10	4/27/00	PB01985	QC02370
cis-1,3-Dichloropropene (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
trans-1,3-Dichloropropene (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Toluene (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
1,1,2-Trichloroethane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
1,3-Dichloropropane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Dibromochloromethane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
1,2-Dibromoethane (EDB) (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Tetrachloroethene (PCE) (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Chlorobenzene (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
1,1,1,2-Tetrachloroethane (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
Ethylbenzene (µg/L)		<2.00	2	4/27/00	PB01985	QC02370
m,p-Xylene (µg/L)		<2.00	2	4/27/00	PB01985	QC02370

Report Date: 5/1/00

Order ID Number: A00042509

Page Number: 5 of 6

Qtrly Offsite

N/A

501 E Main, Artesia, NM

Bromoform (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
Styrene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
o-Xylene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
1,1,2,2-Tetrachloroethane (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
2-Chlorotoluene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
1,2,3-Trichloropropane (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
Isopropylbenzene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
Bromobenzene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
n-Propylbenzene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
1,3,5-Trimethylbenzene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
tert-Butylbenzene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
1,2,4-Trimethylbenzene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
1,4-Dichlorobenzene (para) (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
sec-Butylbenzene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
1,3-Dichlorobenzene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
p-Isopropyltoluene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
4-Chlorotoluene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
1,2-Dichlorobenzene (ortho) (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
n-Butylbenzene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
1,2-Dibromo-3-chloropropane (µg/L)	<5.00	5	4/27/00	PB01985	QC02370
1,2,3-Trichlorobenzene (µg/L)	<5.00	5	4/27/00	PB01985	QC02370
1,2,4-Trichlorobenzene (µg/L)	<5.00	5	4/27/00	PB01985	QC02370
Naphthalene (µg/L)	<2.00	2	4/27/00	PB01985	QC02370
Hexachlorobutadiene (µg/L)	<5.00	5	4/27/00	PB01985	QC02370
Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
Dibromofluoromethane (µg/L)	53.52	50	107	84 - 116	QC02370
Toluene-d8 (µg/L)	53.43	50	107	92 - 108	QC02370
4-Bromofluorobenzene (µg/L)	45.24	50	90	80 - 110	QC02370

Quality Control Report Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS 1,1-Dichloroethene (ug/L)	<2.00	1	100	101	101		73 - 154	-	QC02370
LCS Benzene (ug/L)	<2.00	1	100	101	101		84 - 126	-	QC02370
LCS Trichloroethene (TCE) (ug/L)	<2.00	1	100	93	93		82 - 123	-	QC02370
LCS Toluene (ug/L)	<2.00	1	100	94	94		81 - 122	-	QC02370
LCS Chlorobenzene (ug/L)	<2.00	1	100	96	96		86 - 121	-	QC02370
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCS Dibromofluoromethane (µg/L)		1	50	52.99	106		84 - 116		QC02370
LCS Toluene-d8 (µg/L)		1	50	51.31	103		92 - 108		QC02370
LCS 4-Bromofluorobenzene (µg/L)		1	50	47.03	94		80 - 110		QC02370
LCSD 1,1-Dichloroethene (ug/L)	<2.00	1	100	100	100	1	-	0 - 20	QC02370
LCSD Benzene (ug/L)	<2.00	1	100	100	100	1	-	0 - 20	QC02370
LCSD Trichloroethene (TCE) (ug/L)	<2.00	1	100	93	93	0	-	0 - 20	QC02370
LCSD Toluene (ug/L)	<2.00	1	100	94	94	0	-	0 - 20	QC02370
LCSD Chlorobenzene (ug/L)	<2.00	1	100	95	95	1	-	0 - 20	QC02370
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCSD Dibromofluoromethane (µg/L)		1	50	53.04	106		84 - 116		QC02370
LCSD Toluene-d8 (µg/L)		1	50	51.67	103		92 - 108		QC02370
LCSD 4-Bromofluorobenzene (µg/L)		1	50	47.37	95		80 - 110		QC02370

Quality Control Report Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV 1	Vinyl Chloride (µg/L)		100	114	114	80 - 120	4/27/00	QC02370
CCV 1	1,1-Dichloroethene (µg/L)		100	113	113	73 - 154	4/27/00	QC02370
CCV 1	Chloroform (µg/L)		100	114	114	80 - 120	4/27/00	QC02370
CCV 1	1,2-Dichloropropane (µg/L)		100	108	108	80 - 120	4/27/00	QC02370
CCV 1	Toluene (µg/L)		100	101	101	81 - 122	4/27/00	QC02370
CCV 1	Chlorobenzene (µg/L)		100	99	99	86 - 121	4/27/00	QC02370
CCV 1	Ethylbenzene (µg/L)		100	102	102	80 - 120	4/27/00	QC02370
CCV 1	Dibromofluoromethane (µg/L)		50	53.67	107	80 - 120	4/27/00	QC02370
CCV 1	Toluene-d8 (µg/L)		50	50.18	100	80 - 120	4/27/00	QC02370
CCV 1	4-Bromofluorobenzene (µg/L)		50	53.09	106	80 - 120	4/27/00	QC02370

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296
888•588•3443

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: 4/24/00

Project Number: N/A
Project Name: Mo Off -Site
Project Location: Artesia, NM

Order ID Number: A00041912

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

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
144822	RA 4196	Water	4/18/00	9:30	4/19/00
144823	RA 313	Water	4/18/00	8:50	4/19/00
144824	RA 314	Water	4/18/00	9:05	4/19/00
144825	RA 1331	Water	4/18/00	9:20	4/19/00
144826	RA 1227	Water	4/18/00	9:10	4/19/00
144827	RA 307	Water	4/18/00	9:25	4/19/00

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

This report consists of a total of 13 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.


Dr. Blair Leftwich, Director

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Analytical Results Report

Sample Number: 144822

Description: RA 4196

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dichlorodifluoromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chloromethane (methyl chloride)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Vinyl Chloride	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromomethane (methyl bromide)	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Chloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Trichlorofluoromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Acetone	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
Iodomethane (methyl iodide)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Carbon Disulfide	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Acrylonitrile	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Butanone (MEK)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
2-hexanone	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
1,1-Dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Methylene chloride	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
MTBE	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans-1,2-Dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1-Dichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
cis-1,2-dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2,2-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chloroform	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,1-Trichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Benzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Carbon Tetrachloride	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Trichloroethene (TCE)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromodichloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
cis-1,3-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans-1,3-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Toluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,2-Trichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dibromochloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Tetrachloroethene (PCE)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chlorobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Ethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
m,p-Xylene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromoform	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Styrene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
o-Xylene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2

Report Date: 4/24/00

Order ID Number: A00041912

Page Number: 3 of 13

N/A

Mo Off -Site

Artesia,NM

1,1,2,2-Tetrachloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Chlorotoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2,3-Trichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Isopropylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
n-Propylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
tert-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
sec-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3-Dichlorobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
p-Isopropyltoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
4-Chlorotoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
n-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Naphthalene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Hexachlorobutadiene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
Dibromofluoromethane	49.22	1	50	98	72 - 128	JG	PB01846	QC02220	
Toluene-d8	51.61	1	50	103	91 - 107	JG	PB01846	QC02220	
4-Bromofluorobenzene	45.22	1	50	90	74 - 106	JG	PB01846	QC02220	

Sample Number: 144823

Description: RA 313

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dichlorodifluoromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chloromethane (methyl chloride)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Vinyl Chloride	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromomethane (methyl bromide)	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Chloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Trichlorofluoromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Acetone	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
Iodomethane (methyl iodide)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Carbon Disulfide	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Acrylonitrile	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Butanone (MEK)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
2-hexanone	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
1,1-Dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Methylene chloride	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
MTBE	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans-1,2-Dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1-Dichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
cis-1,2-dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2,2-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2

N/A

Mo Off-Site

Artesia,NM

Chloroform	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,1-Trichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Benzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Carbon Tetrachloride	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Trichloroethene (TCE)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromodichloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
cis-1,3-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans-1,3-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Toluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,2-Trichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dibromochloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Tetrachloroethene (PCE)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chlorobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Ethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
m,p-Xylene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromoform	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Styrene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
o-Xylene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,2,2-Tetrachloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Chlorotoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2,3-Trichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Isopropylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
n-Propylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
tert-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
sec-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3-Dichlorobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
p-Isopropyltoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
4-Chlorotoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
n-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Naphthalene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Hexachlorobutadiene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
Dibromofluoromethane	49.12	1	50	98	72 - 128	JG	PB01846	QC02220	
Toluene-d8	51.14	1	50	102	91 - 107	JG	PB01846	QC02220	
4-Bromofluorobenzene	46.89	1	50	94	74 - 106	JG	PB01846	QC02220	

Report Date: 4/24/00

Order ID Number: A00041912

Page Number: 5 of 13

N/A

Mo Off -Site

Artesia,NM

Sample Number: 144824

Description: RA 314

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dichlorodifluoromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chloromethane (methyl chloride)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Vinyl Chloride	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromomethane (methyl bromide)	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Chloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Trichlorofluoromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Acetone	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
Iodomethane (methyl iodide)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Carbon Disulfide	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Acrylonitrile	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Butanone (MEK)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
2-hexanone	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
1,1-Dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Methylene chloride	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
MTBE	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans-1,2-Dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1-Dichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
cis-1,2-dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2,2-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chloroform	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,1-Trichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Benzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Carbon Tetrachloride	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Trichloroethene (TCE)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromodichloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
cis-1,3-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans-1,3-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Toluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,2-Trichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dibromochloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Tetrachloroethene (PCE)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chlorobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Ethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
m,p-Xylene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromoform	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Styrene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
o-Xylene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,2,2-Tetrachloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Chlorotoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2,3-Trichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2

Report Date: 4/24/00

Order ID Number: A00041912

Page Number: 6 of 13

N/A

Mo Off -Site

Artesia,NM

Isopropylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
n-Propylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
tert-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
sec-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3-Dichlorobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
p-Isopropyltoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
4-Chlorotoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
n-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Naphthalene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Hexachlorobutadiene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
Dibromofluoromethane	49.61	1	50	99	72 - 128	JG	PB01846	QC02220	
Toluene-d8	51.68	1	50	103	91 - 107	JG	PB01846	QC02220	
4-Bromofluorobenzene	45.25	1	50	91	74 - 106	JG	PB01846	QC02220	

Sample Number: 144825

Description: RA 1331

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dichlorodifluoromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chloromethane (methyl chloride)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Vinyl Chloride	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromomethane (methyl bromide)	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Chloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Trichlorofluoromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Acetone	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
Iodomethane (methyl iodide)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Carbon Disulfide	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Acrylonitrile	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Butanone (MEK)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
2-hexanone	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
1,1-Dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Methylene chloride	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
MTBE	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans-1,2-Dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1-Dichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
cis-1,2-dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2,2-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chloroform	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,1-Trichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2

Report Date: 4/24/00

Order ID Number: A00041912

Page Number: 7 of 13

N/A

Mo Off -Site

Artesia,NM

Benzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Carbon Tetrachloride	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Trichloroethene (TCE)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromodichloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
cis-1,3-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans-1,3-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Toluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,2-Trichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dibromochloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Tetrachloroethene (PCE)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chlorobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Ethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
m,p-Xylene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromoform	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Styrene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
o-Xylene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,2,2-Tetrachloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Chlorotoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2,3-Trichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Isopropylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
n-Propylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
tert-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
sec-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3-Dichlorobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
p-Isopropyltoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
4-Chlorotoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
n-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Naphthalene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Hexachlorobutadiene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5

Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
Dibromofluoromethane	50.18	1	50	100	72 - 128	JG	PB01846	QC02220
Toluene-d8	51.20	1	50	102	91 - 107	JG	PB01846	QC02220
4-Bromofluorobenzene	45.42	1	50	91	74 - 106	JG	PB01846	QC02220

Sample Number: 144826

Description: RA 1227

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2

N/A	Mo Off-Site						Artesia,NM			
Dichlorodifluoromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Chloromethane (methyl chloride)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Vinyl Chloride	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Bromomethane (methyl bromide)	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5	
Chloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Trichlorofluoromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Acetone	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10	
Iodomethane (methyl iodide)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Carbon Disulfide	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Acrylonitrile	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
2-Butanone (MEK)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10	
2-hexanone	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10	
1,1-Dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Methylene chloride	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5	
MTBE	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
trans-1,2-Dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,1-Dichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
cis-1,2-dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
2,2-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,2-Dichloroethane (EDC)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Chloroform	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,1,1-Trichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,1-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Benzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Carbon Tetrachloride	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,2-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Trichloroethene (TCE)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Dibromomethane (methylene bromide)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Bromodichloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
2-Chloroethyl vinyl ether	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10	
cis-1,3-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
trans-1,3-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Toluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,1,2-Trichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,3-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Dibromochloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,2-Dibromoethane (EDB)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Tetrachloroethene (PCE)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Chlorobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Ethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
m,p-Xylene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Bromoform	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Styrene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
o-Xylene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,1,2,2-Tetrachloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
2-Chlorotoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,2,3-Trichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Isopropylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Bromobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
n-Propylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,3,5-Trimethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
tert-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,2,4-Trimethylbenzene	2.44	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	

Report Date: 4/24/00

Order ID Number: A00041912

Page Number: 9 of 13

N/A

Mo Off -Site

Artesia, NM

1,4-Dichlorobenzene (para)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
sec-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,3-Dichlorobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
p-Isopropyltoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
4-Chlorotoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
n-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Naphthalene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Hexachlorobutadiene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
Dibromofluoromethane	49.98	1	50	100	72 - 128	JG	PB01846	QC02220	
Toluene-d8	51.32	1	50	103	91 - 107	JG	PB01846	QC02220	
4-Bromofluorobenzene	45.85	1	50	92	74 - 106	JG	PB01846	QC02220	

Sample Number: 144827

Description: RA 307

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dichlorodifluoromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chloromethane (methyl chloride)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Vinyl Chloride	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromomethane (methyl bromide)	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
Chloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Trichlorofluoromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Acetone	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
Iodomethane (methyl iodide)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Carbon Disulfide	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Acrylonitrile	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2-Butanone (MEK)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
2-hexanone	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10
1,1-Dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Methylene chloride	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5
MTBE	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
trans-1,2-Dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1-Dichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
cis-1,2-dichloroethene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
2,2-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Chloroform	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1,1-Trichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,1-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Benzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Carbon Tetrachloride	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
1,2-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Trichloroethene (TCE)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2
Bromodichloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2

Report Date: 4/24/00

Order ID Number: A00041912

Page Number: 10 of 13

N/A	Mo Off -Site				Artesia,NM					
2-Chloroethyl vinyl ether	<10.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	10	
cis-1,3-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
trans-1,3-Dichloropropene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Toluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,1,2-Trichloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,3-Dichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Dibromochloromethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,2-Dibromoethane (EDB)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Tetrachloroethene (PCE)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Chlorobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Ethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
m,p-Xylene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Bromoform	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Styrene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
o-Xylene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,1,2,2-Tetrachloroethane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
2-Chlorotoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,2,3-Trichloropropane	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Isopropylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Bromobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
n-Propylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,3,5-Trimethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
tert-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,2,4-Trimethylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,4-Dichlorobenzene (para)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
sec-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,3-Dichlorobenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
p-Isopropyltoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
4-Chlorotoluene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
n-Butylbenzene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5	
1,2,3-Trichlorobenzene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5	
1,2,4-Trichlorobenzene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5	
Naphthalene	<2.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	2	
Hexachlorobutadiene	<5.00	1	E 624	4/20/00	4/20/00	JG	PB01846	QC02220	5	

Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
Dibromofluoromethane	50.60	1	50	101	72 - 128	JG	PB01846	QC02220
Toluene-d8	51.07	1	50	102	91 - 107	JG	PB01846	QC02220
4-Bromofluorobenzene	45.41	1	50	91	74 - 106	JG	PB01846	QC02220

Quality Control Report

Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Bromochloromethane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Dichlorodifluoromethane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Chloromethane (methyl chloride) (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Vinyl Chloride (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Bromomethane (methyl bromide) (µg/L)		<5.00	5	4/20/00	PB01846	QC02220
Chloroethane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Trichlorofluoromethane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Acetone (µg/L)		<10.00	10	4/20/00	PB01846	QC02220
Iodomethane (methyl iodide) (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Carbon Disulfide (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Acrylonitrile (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
2-Butanone (MEK) (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
4-methyl-2-pentanone (MIBK) (µg/L)		<10.00	10	4/20/00	PB01846	QC02220
2-hexanone (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
trans 1,4-Dichloro-2-butene (µg/L)		<10.00	10	4/20/00	PB01846	QC02220
1,1-Dichloroethene (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Methylene chloride (µg/L)		<5.00	5	4/20/00	PB01846	QC02220
MTBE (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
trans-1,2-Dichloroethene (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
1,1-Dichloroethane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
cis-1,2-dichloroethene (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
2,2-Dichloropropane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
1,2-Dichloroethane (EDC) (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Chloroform (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
1,1,1-Trichloroethane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
1,1-Dichloropropene (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Benzene (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Carbon Tetrachloride (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
1,2-Dichloropropane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Trichloroethene (TCE) (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Dibromomethane (methylene bromide) (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Bromodichloromethane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
2-Chloroethyl vinyl ether (µg/L)		<10.00	10	4/20/00	PB01846	QC02220
cis-1,3-Dichloropropene (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
trans-1,3-Dichloropropene (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Toluene (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
1,1,2-Trichloroethane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
1,3-Dichloropropane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Dibromochloromethane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
1,2-Dibromoethane (EDB) (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Tetrachloroethene (PCE) (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Chlorobenzene (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
1,1,1,2-Tetrachloroethane (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
Ethylbenzene (µg/L)		<2.00	2	4/20/00	PB01846	QC02220
m,p-Xylene (µg/L)		<2.00	2	4/20/00	PB01846	QC02220

Report Date: 4/24/00

Order ID Number: A00041912

Page Number: 12 of 13

N/A

Mo Off-Site

Artesia, NM

Bromoform (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
Styrene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
o-Xylene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
1,1,2,2-Tetrachloroethane (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
2-Chlorotoluene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
1,2,3-Trichloropropane (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
Isopropylbenzene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
Bromobenzene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
n-Propylbenzene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
1,3,5-Trimethylbenzene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
tert-Butylbenzene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
1,2,4-Trimethylbenzene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
1,4-Dichlorobenzene (para) (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
sec-Butylbenzene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
1,3-Dichlorobenzene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
p-Isopropyltoluene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
4-Chlorotoluene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
1,2-Dichlorobenzene (ortho) (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
n-Butylbenzene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
1,2-Dibromo-3-chloropropane (µg/L)	<5.00	5	4/20/00	PB01846	QC02220
1,2,3-Trichlorobenzene (µg/L)	<5.00	5	4/20/00	PB01846	QC02220
1,2,4-Trichlorobenzene (µg/L)	<5.00	5	4/20/00	PB01846	QC02220
Naphthalene (µg/L)	<2.00	2	4/20/00	PB01846	QC02220
Hexachlorobutadiene (µg/L)	<5.00	5	4/20/00	PB01846	QC02220
Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
Dibromofluoromethane (µg/L)	48.79	50	98	72 - 128	QC02220
Toluene-d8 (µg/L)	51.72	50	103	91 - 107	QC02220
4-Bromofluorobenzene (µg/L)	44.83	50	90	74 - 106	QC02220

Quality Control Report Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS 1,1-Dichloroethene (ug/L)	<2.00	1	100	90	90		80 - 120	-	QC02220
LCS Benzene (ug/L)	<2.00	1	100	91	91		77 - 130	-	QC02220
LCS Trichloroethene (TCE) (ug/L)	<2.00	1	100	95	95		83 - 108	-	QC02220
LCS Toluene (ug/L)	<2.00	1	100	89	89		85 - 114	-	QC02220
LCS Chlorobenzene (ug/L)	<2.00	1	100	94	94		87 - 114	-	QC02220
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCS Dibromofluoromethane (µg/L)		1	50	48.36	97		72 - 128		QC02220
LCS Toluene-d8 (µg/L)		1	50	49.34	99		91 - 107		QC02220
LCS 4-Bromofluorobenzene (µg/L)		1	50	45.19	90		74 - 106		QC02220
LCSD 1,1-Dichloroethene (ug/L)	<2.00	1	100	93	93	3	-	0 - 20	QC02220
LCSD Benzene (ug/L)	<2.00	1	100	94	94	3	-	0 - 20	QC02220
LCSD Trichloroethene (TCE) (ug/L)	<2.00	1	100	97	97	2	-	0 - 20	QC02220
LCSD Toluene (ug/L)	<2.00	1	100	91	91	2	-	0 - 20	QC02220
LCSD Chlorobenzene (ug/L)	<2.00	1	100	95	95	1	-	0 - 20	QC02220
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCSD Dibromofluoromethane (µg/L)		1	50	48.52	97		72 - 128		QC02220
LCSD Toluene-d8 (µg/L)		1	50	49.60	99		91 - 107		QC02220
LCSD 4-Bromofluorobenzene (µg/L)		1	50	45.38	91		74 - 106		QC02220

Quality Control Report Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV 1	Vinyl Chloride (µg/L)		100	97	97	80 - 120	4/20/00	QC02220
CCV 1	1,1-Dichloroethene (µg/L)		100	103	103	80 - 120	4/20/00	QC02220
CCV 1	Chloroform (µg/L)		100	98	98	80 - 120	4/20/00	QC02220
CCV 1	1,2-Dichloropropane (µg/L)		100	100	100	80 - 120	4/20/00	QC02220
CCV 1	Toluene (µg/L)		100	98	98	80 - 120	4/20/00	QC02220
CCV 1	Chlorobenzene (µg/L)		100	99	99	80 - 120	4/20/00	QC02220
CCV 1	Ethylbenzene (µg/L)		100	97	97	80 - 120	4/20/00	QC02220
CCV 1	Dibromofluoromethane (µg/L)		50	48.90	98	80 - 120	4/20/00	QC02220
CCV 1	Toluene-d8 (µg/L)		50	47.61	95	80 - 120	4/20/00	QC02220
CCV 1	4-Bromofluorobenzene (µg/L)		50	52.33	105	80 - 120	4/20/00	QC02220

Page ____ of ____

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

TraceAnalysis, Inc.

Phone #: 505 748 3311

(Street, City, Zip)
501 E. Main

Contact Person: Darrell Moore or Charlie Phymale

Project Name:

Artesia

Signature: Charles Floyd

[illegible]

Date: 4/18/00 Time: 16:15

Received by:

Date: _____ Time: _____

Date: _____ Time: _____

Received by:

Date: _____ Time: _____

Date: Time:

Received at Laboratory by:

Date: Time:

LAB USE ONLY

Intact Y / N
 Headspace Y (N)
 Temp -2 °
 Log-in Review gls

REMARKS:

20/2/14

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

Carrier # VPS 17-762 45-03-405/-1729

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

April 3, 2000
Receiving Date: 03/16/00
Sample Type: Water
Project No: Quarterly Offsite
Project Loc: 501 E. Main, Artesia, NM

ANALYTICAL RESULTS FOR
NAVAJO REFINING CO.
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Prep Date: 03/28/00
Analysis Date: 03/28/00
Sampling Date: 03/15/00
Sample Condition: I & C
Sample Received by: VH
Project Name: N/A

FIELD CODE: MW-28

TA #: T142726

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
Bromochloromethane	20	ND				
Dichlorodifluoromethane	20	ND				
Vinyl Chloride	20	ND	109			109
Bromomethane	50	ND				
Chloroethane	20	ND				
Trichlorofluoromethane	20	ND				
Acetone	100	ND				
Carbon Disulfide	20	ND				
Acrylonitrile	20	ND				
2-Butanone (MEK)	20	ND				
4-Methyl-2-Pentanone	100	ND				
2-hexanone	20	ND				
trans 1,4-Dichloro-2-butene	100	ND				
1,1-Dichloroethene	20	ND	110	4	128	110
Methylene chloride	50	ND				
MTBE	20	1,192				
trans-1,2-Dichloroethene	20	ND				
1,1-Dichloroethane	20	ND				
cis-1,2-dichloroethene	20	ND				
2,2-Dichloropropane	50	ND				
1,2-Dichloroethane (EDC)	20	ND				
Chloroform	20	ND	103			103
1,1,1-Trichloroethane	20	ND				
1,1-Dichloropropene	20	ND				
Benzene	20	ND		1	111	
Carbon Tetrachloride	20	ND				
1,2-Dichloropropane	20	ND	105			105
Trichloroethene (TCE)	20	ND		0	110	
Dibromomethane	20	ND				
Bromodichloromethane	20	ND				
2-Chloroethyl vinyl ether	100	ND				
cis-1,3-Dichloropropene	20	ND				
trans-1,3-Dichloropropene	20	ND				
Toluene	20	ND	103	1	107	103

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

FIELD CODE: MW-28

TA #: T142726

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
1,1,2-Trichloroethane	20	ND				
1,3-Dichloropropane	20	ND				
Dibromochloromethane	20	ND				
1,2-Dibromoethane (EDB)	20	ND				
Tetrachloroethene (PCE)	20	ND				
Chlorobenzene	20	ND	107	2	108	107
1,1,1,2-Tetrachloroethane	20	ND				
Ethylbenzene	20	ND	105			105
m,p-Xylene	20	ND				
Bromoform	20	ND				
Styrene	20	ND				
o-Xylene	20	ND				
1,1,2,2-Tetrachloroethane	20	ND				
2-Chlorotoluene	20	ND				
1,2,3-Trichloropropane	20	ND				
Isopropylbenzene	20	ND				
Bromobenzene	20	ND				
n-Propylbenzene	20	ND				
1,3,5-Trimethylbenzene	20	ND				
tert-Butylbenzene	20	ND				
1,2,4-Trimethylbenzene	20	ND				
1,4-Dichlorobenzene	20	ND				
sec-Butylbenzene	20	ND				
1,3-Dichlorobenzene	20	ND				
p-Isopropyltoluene	20	ND				
4-Chlorotoluene	20	ND				
1,2-Dichlorobenzene	20	ND				
n-Butylbenzene	20	ND				
chloropropane	50	ND				
1,2,3-Trichlorobenzene	50	ND				
1,2,4-Trichlorobenzene	50	ND				
Naphthalene	20	ND				
Hexachlorobutadiene	50	ND				

% Recovery

Dibromofluoromethane 97
Toluene-d8 102
4-Bromofluorobenzene 99

ND = Not Detected

Methods: EPA 624

CHEMIST: JG


Director, Dr. Blair Leftwich

4-3-00
Date

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

April 3, 2000
Receiving Date: 03/16/00
Sample Type: Water
Project No: Quarterly Offsite
Project Loc: 501 E. Main, Artesia, NM

ANALYTICAL RESULTS FOR
NAVAJO REFINING CO.
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Prep Date: 03/26/00
Analysis Date: 03/26/00
Sampling Date: 03/15/00
Sample Condition: I & C
Sample Received by: VH
Project Name: N/A

FIELD CODE: MW-29

TA #: T142727

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
Bromochloromethane	2	ND				
Dichlorodifluoromethane	2	ND				
Vinyl Chloride	2	ND	105			105
Bromomethane	5	ND				
Chloroethane	2	ND				
Trichlorofluoromethane	2	ND				
Acetone	10	ND				
Carbon Disulfide	2	ND				
Acrylonitrile	2	ND				
2-Butanone (MEK)	2	ND				
4-Methyl-2-Pentanone	10	ND				
2-hexanone	2	ND				
trans 1,4-Dichloro-2-butene	10	ND				
1,1-Dichloroethene	2	ND	108	1	128	108
Methylene chloride	5	ND				
MTBE	2	ND				
trans-1,2-Dichloroethene	2	ND				
1,1-Dichloroethane	2	ND				
cis-1,2-dichloroethene	2	ND				
2,2-Dichloropropane	5	ND				
1,2-Dichloroethane (EDC)	2	ND				
Chloroform	2	ND	109			109
1,1,1-Trichloroethane	2	ND				
1,1-Dichloropropene	2	ND				
Benzene	2	ND		3	111	
Carbon Tetrachloride	2	ND				
1,2-Dichloropropane	2	ND	101			101
Trichloroethene (TCE)	2	ND		3	110	
Dibromomethane	2	ND				
Bromodichloromethane	2	ND				
2-Chloroethyl vinyl ether	10	ND				
cis-1,3-Dichloropropene	2	ND				
trans-1,3-Dichloropropene	2	ND				
Toluene	2	ND	104	2	109	104

FIELD CODE: MW-29

TA #: T142727

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
1,1,2-Trichloroethane	2	ND				
1,3-Dichloropropane	2	ND				
Dibromochloromethane	2	ND				
1,2-Dibromoethane (EDB)	2	ND				
Tetrachloroethene (PCE)	2	ND				
Chlorobenzene	2	ND	103	3	108	103
1,1,1,2-Tetrachloroethane	2	ND				
Ethylbenzene	2	ND	105			105
m,p-Xylene	2	ND				
Bromoform	2	ND				
Styrene	2	ND				
o-Xylene	2	ND				
1,1,2,2-Tetrachloroethane	2	ND				
2-Chlorotoluene	2	ND				
1,2,3-Trichloropropane	2	ND				
Isopropylbenzene	2	24.43				
Bromobenzene	2	ND				
n-Propylbenzene	2	ND				
1,3,5-Trimethylbenzene	2	ND				
tert-Butylbenzene	2	ND				
1,2,4-Trimethylbenzene	2	ND				
14-Dichlorobenzene	2	ND				
sec-Butylbenzene	2	17.11				
1,3-Dichlorobenzene	2	ND				
p-Isopropyltoluene	2	ND				
4-Chlorotoluene	2	ND				
1,2-Dichlorobenzene	2	ND				
n-Butylbenzene	2	ND				
chloropropane	5	ND				
1,2,3-Trichlorobenzene	5	ND				
1,2,4-Trichlorobenzene	5	ND				
Naphthalene	2	ND				
Hexachlorobutadiene	5	ND				

% Recovery

Dibromofluoromethane	104
Toluene-d8	100
4-Bromofluorobenzene	102

ND = Not Detected

Methods: EPA 624

CHEMIST: JG



Director, Dr. Blair Leftwich

4-3-00

Date

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

April 3, 2000
Receiving Date: 03/16/00
Sample Type: Water
Project No: Quarterly Offsite
Project Loc: 501 E. Main, Artesia, NM

ANALYTICAL RESULTS FOR
NAVAJO REFINING CO.
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Prep Date: 03/25/00
Analysis Date: 03/25/00
Sampling Date: 03/15/00
Sample Condition: I & C
Sample Received by: VH
Project Name: N/A

FIELD CODE: MW-18

TA #: T142728

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
Bromochloromethane	2	ND				
Dichlorodifluoromethane	2	ND				
Vinyl Chloride	2	ND	114			114
Bromomethane	5	ND				
Chloroethane	2	ND				
Trichlorofluoromethane	2	ND				
Acetone	10	ND				
Carbon Disulfide	2	ND				
Acrylonitrile	2	ND				
2-Butanone (MEK)	2	ND				
4-Methyl-2-Pentanone	10	ND				
2-hexanone	2	ND				
trans 1,4-Dichloro-2-butene	10	ND				
1,1-Dichloroethene	2	ND	113	1	123	113
Methylene chloride	5	ND				
MTBE	2	ND				
trans-1,2-Dichloroethene	2	ND				
1,1-Dichloroethane	2	ND				
cis-1,2-dichloroethene	2	ND				
2,2-Dichloropropane	5	ND				
1,2-Dichloroethane (EDC)	2	ND				
Chloroform	2	ND	115			115
1,1,1-Trichloroethane	2	ND				
1,1-Dichloropropene	2	ND				
Benzene	2	ND		0	107	
Carbon Tetrachloride	2	ND				
1,2-Dichloropropane	2	ND	107			107
Trichloroethene (TCE)	2	ND		1	108	
Dibromomethane	2	ND				
Bromodichloromethane	2	ND				
2-Chloroethyl vinyl ether	10	ND				
cis-1,3-Dichloropropene	2	ND				
trans-1,3-Dichloropropene	2	ND				
Toluene	2	ND	105	1	105	105

FIELD CODE: MW-18

TA #: T142728

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
1,1,2-Trichloroethane	2	ND				
1,3-Dichloropropane	2	ND				
Dibromochloromethane	2	ND				
1,2-Dibromoethane (EDB)	2	ND				
Tetrachloroethene (PCE)	2	ND				
Chlorobenzene	2	ND	16	2	103	106
1,1,1,2-Tetrachloroethane	2	ND				
Ethylbenzene	2	ND	107			107
m,p-Xylene	2	ND				
Bromoform	2	ND				
Styrene	2	ND				
o-Xylene	2	ND				
1,1,2,2-Tetrachloroethane	2	ND				
2-Chlorotoluene	2	ND				
1,2,3-Trichloropropane	2	ND				
Isopropylbenzene	2	ND				
Bromobenzene	2	ND				
n-Propylbenzene	2	ND				
1,3,5-Trimethylbenzene	2	ND				
tert-Butylbenzene	2	ND				
1,2,4-Trimethylbenzene	2	ND				
1,4-Dichlorobenzene	2	ND				
sec-Butylbenzene	2	ND				
1,3-Dichlorobenzene	2	ND				
p-Isopropyltoluene	2	ND				
4-Chlorotoluene	2	ND				
1,2-Dichlorobenzene	2	ND				
n-Butylbenzene	2	ND				
chloropropane	5	ND				
1,2,3-Trichlorobenzene	5	ND				
1,2,4-Trichlorobenzene	5	ND				
Naphthalene	2	ND				
Hexachlorobutadiene	5	ND				

% Recovery

Dibromofluoromethane	105
Toluene-d8	102
4-Bromofluorobenzene	99

ND = Not Detected

Methods: EPA 624

CHEMIST: JG



Director, Dr. Blair Leftwich

4-3-00

Date

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296
888•588•3443

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

E-Mail: lab@traceanalysis.com

April 3, 2000
Receiving Date: 03/16/00
Sample Type: Water
Project No: Quarterly Offsite
Project Loc: 501 E. Main, Artesia, NM

ANALYTICAL RESULTS FOR
NAVAJO REFINING CO.
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Prep Date: 03/25/00
Analysis Date: 03/25/00
Sampling Date: 03/15/00
Sample Condition: I & C
Sample Received by: VH
Project Name: N/A

FIELD CODE: MW-45

TA #: T142729

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
Bromochloromethane	2	ND				
Dichlorodifluoromethane	2	ND				
Vinyl Chloride	2	ND	114			114
Bromomethane	5	ND				
Chloroethane	2	ND				
Trichlorofluoromethane	2	ND				
Acetone	10	ND				
Carbon Disulfide	2	ND				
Acrylonitrile	2	ND				
2-Butanone (MEK)	2	ND				
4-Methyl-2-Pentanone	10	ND				
2-hexanone	2	ND				
trans 1,4-Dichloro-2-butene	10	ND				
1,1-Dichloroethene	2	ND	113	1	123	113
Methylene chloride	5	ND				
MTBE	2	6.85				
trans-1,2-Dichloroethene	2	ND				
1,1-Dichloroethane	2	ND				
cis-1,2-dichloroethene	2	ND				
2,2-Dichloropropane	5	ND				
1,2-Dichloroethane (EDC)	2	ND				
Chloroform	2	ND	115			115
1,1,1-Trichloroethane	2	ND				
1,1-Dichloropropene	2	ND				
Benzene	2	ND		0	107	
Carbon Tetrachloride	2	ND				
1,2-Dichloropropane	2	ND	107			107
Trichloroethene (TCE)	2	ND		1	108	
Dibromomethane	2	ND				
Bromodichloromethane	2	ND				
2-Chloroethyl vinyl ether	10	ND				
cis-1,3-Dichloropropene	2	ND				
trans-1,3-Dichloropropene	2	ND				
Toluene	2	ND	105	1	105	105

FIELD CODE: MW-45

TA #: T142729

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
1,1,2-Trichloroethane	2	ND				
1,3-Dichloropropane	2	ND				
Dibromochloromethane	2	ND				
1,2-Dibromoethane (EDB)	2	ND				
Tetrachloroethene (PCE)	2	ND				
Chlorobenzene	2	ND	106	2	103	106
1,1,1,2-Tetrachloroethane	2	ND				
Ethylbenzene	2	ND	107			107
m,p-Xylene	2	ND				
Bromoform	2	ND				
Styrene	2	ND				
o-Xylene	2	2.80				
1,1,2,2-Tetrachloroethane	2	ND				
2-Chlorotoluene	2	ND				
1,2,3-Trichloropropane	2	ND				
Isopropylbenzene	2	ND				
Bromobenzene	2	ND				
n-Propylbenzene	2	ND				
1,3,5-Trimethylbenzene	2	ND				
tert-Butylbenzene	2	ND				
1,2,4-Trimethylbenzene	2	ND				
1,4-Dichlorobenzene	2	ND				
sec-Butylbenzene	2	ND				
1,3-Dichlorobenzene	2	ND				
p-Isopropyltoluene	2	ND				
4-Chlorotoluene	2	ND				
1,2-Dichlorobenzene	2	ND				
n-Butylbenzene	2	ND				
chloropropane	5	ND				
1,2,3-Trichlorobenzene	5	ND				
1,2,4-Trichlorobenzene	5	ND				
Naphthalene	2	ND				
Hexachlorobutadiene	5	ND				

% Recovery

Dibromofluoromethane	107
Toluene-d8	99
4-Bromofluorobenzene	101

ND = Not Detected

Methods: EPA 624

CHEMIST: JG



Director, Dr. Blair Leftwich

4-3-00

Date

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel: (915) 585-3443
Fax: (915) 585-4944
1 (888) 588-3443

TraceAnalysis, Inc.

Company Name: VAVA-50

Phone #: 505-748-3311

Address: _____ (Street, City, Zip)

Fax #:

501 E. Main

505 748 9077

Contact Person: Darrell Moore or Charlie Phymale

Invoice to:

(If different from above)

Project #:

Project Name:

Project Location:

Project Name: Army off-sample measure

[illegible]

Relinquished by:  Date: 3/5/00 Time: 5:01 PM

Received by:	Date:	Time:
--------------	-------	-------

Relinquished by: _____ Date: _____ Time: _____

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received at Laboratory by: _____ Date: _____ Time: _____

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #

400031611

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
	PCBs	8082/608
	Pesticides	8081A/608
	BOD, TSS, pH	
	Turn Around Time if different from standard	
	Hold	

LAB USE ONLY

REMARKS:

NW-18 1 broken vna

Intact

10

Headings

Temp 72

Wm

Carrier # 507-1156-862 dz per

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296 806•794•1296
El Paso, Texas 79922 888•588•3443 915•585•3443
E-Mail: lab@traceanalysis.com

FAX 806•794•1298
FAX 915•585•4944

April 4, 2000
Receiving Date: 03/15/00
Sample Type: Water
Project No: Quarterly Offsite
Project Loc: 501 E. Main, Artesia, NM

ANALYTICAL RESULTS FOR
NAVAJO REFINING CO.
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Prep Date: 03/23/00
Analysis Date: 03/23/00
Sampling Date: 03/14/00
Sample Condition: I & C
Sample Received by: VH
Project Name: Quarterly Offsite
Well Sample/Meas.

FIELD CODE: KWB-9

TA #: T142613

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
Bromochloromethane	2	ND				
Dichlorodifluoromethane	2	ND				
Vinyl Chloride	2	ND	114			114
Bromomethane	5	ND				
Chloroethane	2	ND				
Trichlorofluoromethane	2	ND				
Acetone	10	ND				
Carbon Disulfide	2	ND				
Acrylonitrile	2	ND				
2-Butanone (MEK)	2	ND				
4-Methyl-2-Pentanone	10	ND				
2-hexanone	2	ND				
trans 1,4-Dichloro-2-butene	10	ND				
1,1-Dichloroethene	2	ND	105	2	125	105
Methylene chloride	5	ND				
MTBE	2	ND				
trans-1,2-Dichloroethene	2	ND				
1,1-Dichloroethane	2	ND				
cis-1,2-dichloroethene	2	ND				
2,2-Dichloropropane	5	ND				
1,2-Dichloroethane (EDC)	2	ND				
Chloroform	2	ND	98			98
1,1,1-Trichloroethane	2	ND				
1,1-Dichloropropene	2	ND				
Benzene	2	ND		9	107	
Carbon Tetrachloride	2	ND				
1,2-Dichloropropane	2	ND	100			100
Trichloroethene (TCE)	2	ND		2	114	
Dibromomethane	2	ND				
Bromodichloromethane	2	ND				
2-Chloroethyl vinyl ether	10	ND				
cis-1,3-Dichloropropene	2	ND				
trans-1,3-Dichloropropene	2	ND				
Toluene	2	ND	96	7	101	96

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

FIELD CODE: KWB-9

TA #: T142613

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
1,1,2-Trichloroethane	2	ND				
1,3-Dichloropropane	2	ND				
Dibromochloromethane	2	ND				
1,2-Dibromoethane (EDB)	2	ND				
Tetrachloroethene (PCE)	2	ND				
Chlorobenzene	2	ND	102	2	102	102
1,1,1,2-Tetrachloroethane	2	ND				
Ethylbenzene	2	ND	100			100
m,p-Xylene	2	ND				
Bromoform	2	ND				
Styrene	2	ND				
o-Xylene	2	ND				
1,1,2,2-Tetrachloroethane	2	ND				
2-Chlorotoluene	2	ND				
1,2,3-Trichloropropane	2	ND				
Isopropylbenzene	2	ND				
Bromobenzene	2	ND				
n-Propylbenzene	2	ND				
1,3,5-Trimethylbenzene	2	ND				
tert-Butylbenzene	2	ND				
1,2,4-Trimethylbenzene	2	ND				
1,4-Dichlorobenzene	2	ND				
sec-Butylbenzene	2	ND				
1,3-Dichlorobenzene	2	ND				
p-Isopropyltoluene	2	ND				
4-Chlorotoluene	2	ND				
1,2-Dichlorobenzene	2	ND				
n-Butylbenzene	2	ND				
chloropropane	5	ND				
1,2,3-Trichlorobenzene	5	ND				
1,2,4-Trichlorobenzene	5	ND				
Naphthalene	2	ND				
Hexachlorobutadiene	5	ND				

% Recovery

Dibromofluoromethane	103
Toluene-d8	101
4-Bromofluorobenzene	99

ND = Not Detected

Methods: EPA 624

CHEMIST: JG



Director, Dr. Blair Leftwich

4-4-00

Date

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296
888•588•3443

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

E-Mail: lab@traceanalysis.com

April 4, 2000

Receiving Date: 03/15/00

Sample Type: Water

Project No: Quarterly Offsite

Project Loc: 501 E. Main, Artesia, NM

ANALYTICAL RESULTS FOR

NAVAJO REFINING CO.

Attention: Darrell Moore

501 E. Main

Artesia, NM 88210

Prep Date: 03/23/00

Analysis Date: 03/23/00

Sampling Date: 03/14/00

Sample Condition: I & C

Sample Received by: VH

Project Name: Quarterly Offsite

Well Sample/Meas.

FIELD CODE: KWB-11A

TA #: T142614

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
Bromochloromethane	2	ND				
Dichlorodifluoromethane	2	ND				
Vinyl Chloride	2	ND	114			114
Bromomethane	5	ND				
Chloroethane	2	ND				
Trichlorofluoromethane	2	ND				
Acetone	10	ND				
Carbon Disulfide	2	ND				
Acrylonitrile	2	ND				
2-Butanone (MEK)	2	ND				
4-Methyl-2-Pentanone	10	ND				
2-hexanone	2	ND				
trans 1,4-Dichloro-2-butene	10	ND				
1,1-Dichloroethene	2	ND	105	2	125	105
Methylene chloride	5	ND				
MTBE	2	2.19				
trans-1,2-Dichloroethene	2	ND				
1,1-Dichloroethane	2	ND				
cis-1,2-dichloroethene	2	ND				
2,2-Dichloropropane	5	ND				
1,2-Dichloroethane (EDC)	2	ND				
Chloroform	2	ND	98			98
1,1,1-Trichloroethane	2	ND				
1,1-Dichloropropene	2	ND				
Benzene	2	ND		9	107	
Carbon Tetrachloride	2	ND				
1,2-Dichloropropane	2	ND	100			100
Trichloroethene (TCE)	2	ND		2	114	
Dibromomethane	2	ND				
Bromodichloromethane	2	ND				
2-Chloroethyl vinyl ether	10	ND				
cis-1,3-Dichloropropene	2	ND				
trans-1,3-Dichloropropene	2	ND				
Toluene	2	ND	96	7	101	96

FIELD CODE: KWB-11A

TA #: T142614

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
1,1,2-Trichloroethane	2	ND				
1,3-Dichloropropane	2	ND				
Dibromochloromethane	2	ND				
1,2-Dibromoethane (EDB)	2	ND				
Tetrachloroethene (PCE)	2	ND				
Chlorobenzene	2	ND	102	2	102	102
1,1,1,2-Tetrachloroethane	2	ND				
Ethylbenzene	2	ND	100			100
m,p-Xylene	2	ND				
Bromoform	2	ND				
Styrene	2	ND				
o-Xylene	2	ND				
1,1,2,2-Tetrachloroethane	2	ND				
2-Chlorotoluene	2	ND				
1,2,3-Trichloropropane	2	ND				
Isopropylbenzene	2	ND				
Bromobenzene	2	ND				
n-Propylbenzene	2	ND				
1,3,5-Trimethylbenzene	2	ND				
tert-Butylbenzene	2	ND				
1,2,4-Trimethylbenzene	2	ND				
1,4-Dichlorobenzene	2	ND				
sec-Butylbenzene	2	ND				
1,3-Dichlorobenzene	2	ND				
p-Isopropyltoluene	2	ND				
4-Chlorotoluene	2	ND				
1,2-Dichlorobenzene	2	ND				
n-Butylbenzene	2	ND				
chloropropane	5	ND				
1,2,3-Trichlorobenzene	5	ND				
1,2,4-Trichlorobenzene	5	ND				
Naphthalene	2	ND				
Hexachlorobutadiene	5	ND				

% Recovery

Dibromofluoromethane	104
Toluene-d8	102
4-Bromofluorobenzene	93

ND = Not Detected

Methods: EPA 624

CHEMIST: JG



Director, Dr. Blair Leftwich

4-4-00

Date

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

E-Mail: lab@traceanalysis.com

April 4, 2000

Receiving Date: 03/15/00

Sample Type: Water

Project No: Quarterly Offsite

Project Loc: 501 E. Main, Artesia, NM

ANALYTICAL RESULTS FOR

NAVAJO REFINING CO.

Attention: Darrell Moore

501 E. Main

Artesia, NM 88210

Prep Date: 03/23/00

Analysis Date: 03/23/00

Sampling Date: 03/14/00

Sample Condition: I & C

Sample Received by: VH

Project Name: Quarterly Offsite
Well Sample/Meas.

FIELD CODE: KWB-3A

TA #: T142615

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
Bromochloromethane	2	ND				
Dichlorodifluoromethane	2	ND				
Vinyl Chloride	2	ND	114			114
Bromomethane	5	ND				
Chloroethane	2	ND				
Trichlorofluoromethane	2	ND				
Acetone	10	ND				
Carbon Disulfide	2	ND				
Acrylonitrile	2	ND				
2-Butanone (MEK)	2	ND				
4-Methyl-2-Pentanone	10	ND				
2-hexanone	2	ND				
trans 1,4-Dichloro-2-butene	10	ND				
1,1-Dichloroethene	2	ND	105	2	125	105
Methylene chloride	5	ND				
MTBE	2	ND				
trans-1,2-Dichloroethene	2	ND				
1,1-Dichloroethane	2	ND				
cis-1,2-dichloroethene	2	ND				
2,2-Dichloropropane	5	ND				
1,2-Dichloroethane (EDC)	2	ND				
Chloroform	2	ND	98			98
1,1,1-Trichloroethane	2	ND				
1,1-Dichloropropene	2	ND				
Benzene	2	ND		9	107	
Carbon Tetrachloride	2	ND				
1,2-Dichloropropane	2	ND	100			100
Trichloroethene (TCE)	2	ND		2	114	
Dibromomethane	2	ND				
Bromodichloromethane	2	ND				
2-Chloroethyl vinyl ether	10	ND				
cis-1,3-Dichloropropene	2	ND				
trans-1,3-Dichloropropene	2	ND				
Toluene	2	ND	96	7	101	96

FIELD CODE: KWB-3A

TA #: T142615

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
1,1,2-Trichloroethane	2	ND				
1,3-Dichloropropane	2	ND				
Dibromochloromethane	2	ND				
1,2-Dibromoethane (EDB)	2	ND				
Tetrachloroethene (PCE)	2	ND				
Chlorobenzene	2	ND	102	2	102	102
1,1,1,2-Tetrachloroethane	2	ND				
Ethylbenzene	2	ND	100			100
m,p-Xylene	2	ND				
Bromoform	2	ND				
Styrene	2	ND				
o-Xylene	2	ND				
1,1,2,2-Tetrachloroethane	2	ND				
2-Chlorotoluene	2	ND				
1,2,3-Trichloropropane	2	ND				
Isopropylbenzene	2	ND				
Bromobenzene	2	ND				
n-Propylbenzene	2	ND				
1,3,5-Trimethylbenzene	2	ND				
tert-Butylbenzene	2	ND				
1,2,4-Trimethylbenzene	2	ND				
1,4-Dichlorobenzene	2	ND				
sec-Butylbenzene	2	ND				
1,3-Dichlorobenzene	2	ND				
p-Isopropyltoluene	2	ND				
4-Chlorotoluene	2	ND				
1,2-Dichlorobenzene	2	ND				
n-Butylbenzene	2	ND				
chloropropane	5	ND				
1,2,3-Trichlorobenzene	5	ND				
1,2,4-Trichlorobenzene	5	ND				
Naphthalene	2	ND				
Hexachlorobutadiene	5	ND				

% Recovery

Dibromofluoromethane	104
Toluene-d8	101
4-Bromofluorobenzene	101

ND = Not Detected

Methods: EPA 624

CHEMIST: JG



Director, Dr. Blair Leftwich

3-15-00

Date

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

April 4, 2000
Receiving Date: 03/15/00
Sample Type: Water
Project No: Quarterly Offsite
Project Loc: 501 E. Main, Artesia, NM

ANALYTICAL RESULTS FOR
NAVAJO REFINING CO.
Attention: Darrell Moore
501 E. Main
Artesia, NM 88210

Prep Date: 03/23/00
Analysis Date: 03/23/00
Sampling Date: 03/14/00
Sample Condition: I & C
Sample Received by: VH
Project Name: Quarterly Offsite
Well Sample/Meas.

FIELD CODE: KWB-1A

TA #: T142616

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
Bromochloromethane	2	ND				
Dichlorodifluoromethane	2	ND				
Vinyl Chloride	2	ND	114			114
Bromomethane	5	ND				
Chloroethane	2	ND				
Trichlorofluoromethane	2	ND				
Acetone	10	ND				
Carbon Disulfide	2	ND				
Acrylonitrile	2	ND				
2-Butanone (MEK)	2	ND				
4-Methyl-2-Pentanone	10	ND				
2-hexanone	2	ND				
trans 1,4-Dichloro-2-butene	10	ND				
1,1-Dichloroethene	2	ND	105	2	125	105
Methylene chloride	5	ND				
MTBE	2	30.80				
trans-1,2-Dichloroethene	2	ND				
1,1-Dichloroethane	2	ND				
cis-1,2-dichloroethene	2	ND				
2,2-Dichloropropane	5	ND				
1,2-Dichloroethane (EDC)	2	ND				
Chloroform	2	ND	98			98
1,1,1-Trichloroethane	2	ND				
1,1-Dichloropropene	2	ND				
Benzene	2	ND		9	107	
Carbon Tetrachloride	2	ND				
1,2-Dichloropropane	2	ND	100			100
Trichloroethene (TCE)	2	ND		2	114	
Dibromomethane	2	ND				
Bromodichloromethane	2	ND				
2-Chloroethyl vinyl ether	10	ND				
cis-1,3-Dichloropropene	2	ND				
trans-1,3-Dichloropropene	2	ND				
Toluene	2	ND	96	7	101	96

FIELD CODE: KWB-1A

TA #: T142616

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
1,1,2-Trichloroethane	2	ND				
1,3-Dichloropropane	2	ND				
Dibromochloromethane	2	ND				
1,2-Dibromoethane (EDB)	2	ND				
Tetrachloroethene (PCE)	2	ND				
Chlorobenzene	2	ND	102	2	102	102
1,1,1,2-Tetrachloroethane	2	ND				
Ethylbenzene	2	ND	100			100
m,p-Xylene	2	ND				
Bromoform	2	ND				
Styrene	2	ND				
o-Xylene	2	ND				
1,1,2,2-Tetrachloroethane	2	ND				
2-Chlorotoluene	2	ND				
1,2,3-Trichloropropane	2	ND				
Isopropylbenzene	2	ND				
Bromobenzene	2	ND				
n-Propylbenzene	2	ND				
1,3,5-Trimethylbenzene	2	ND				
tert-Butylbenzene	2	ND				
1,2,4-Trimethylbenzene	2	ND				
1,4-Dichlorobenzene	2	ND				
sec-Butylbenzene	2	2.08				
1,3-Dichlorobenzene	2	ND				
p-Isopropyltoluene	2	ND				
4-Chlorotoluene	2	ND				
1,2-Dichlorobenzene	2	ND				
n-Butylbenzene	2	ND				
chloropropane	5	ND				
1,2,3-Trichlorobenzene	5	ND				
1,2,4-Trichlorobenzene	5	ND				
Naphthalene	2	ND				
Hexachlorobutadiene	5	ND				

% Recovery

Dibromofluoromethane	106
Toluene-d8	102
4-Bromofluorobenzene	104

ND = Not Detected

Methods: EPA 624

CHEMIST: JG



Director, Dr. Blair Leftwich

4-4-00

Date

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424 800•378•1296
El Paso, Texas 79922 888•588•3443
E-Mail: lab@traceanalysis.com

806•794•1296 FAX 806•794•1298
915•585•3443 FAX 915•585•4944

April 4, 2000

Receiving Date: 03/15/00

Sample Type: Water

Project No: Quarterly Offsite

Project Loc: 501 E. Main, Artesia, NM

ANALYTICAL RESULTS FOR

NAVAJO REFINING CO.

Attention: Darrell Moore

501 E. Main

Artesia, NM 88210

Prep Date: 03/23/00

Analysis Date: 03/23/00

Sampling Date: 03/14/00

Sample Condition: I & C

Sample Received by: VH

Project Name: Quarterly Offsite
Well Sample/Meas.

FIELD CODE: KWB-1C

TA #: T142617

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
Bromochloromethane	2	ND				
Dichlorodifluoromethane	2	ND				
Vinyl Chloride	2	ND	114			114
Bromomethane	5	ND				
Chloroethane	2	ND				
Trichlorofluoromethane	2	ND				
Acetone	10	ND				
Carbon Disulfide	2	ND				
Acrylonitrile	2	ND				
2-Butanone (MEK)	2	ND				
4-Methyl-2-Pentanone	10	ND				
2-hexanone	2	ND				
trans 1,4-Dichloro-2-butene	10	ND				
1,1-Dichloroethene	2	ND	105	2	125	105
Methylene chloride	5	ND				
MTBE	2	34.55				
trans-1,2-Dichloroethene	2	ND				
1,1-Dichloroethane	2	ND				
cis-1,2-dichloroethene	2	ND				
2,2-Dichloropropane	5	ND				
1,2-Dichloroethane (EDC)	2	ND				
Chloroform	2	ND	98			98
1,1,1-Trichloroethane	2	ND				
1,1-Dichloropropene	2	ND				
Benzene	2	ND		9	107	
Carbon Tetrachloride	2	ND				
1,2-Dichloropropane	2	ND	100			100
Trichloroethene (TCE)	2	ND		2	114	
Dibromomethane	2	ND				
Bromodichloromethane	2	ND				
2-Chloroethyl vinyl ether	10	ND				
cis-1,3-Dichloropropene	2	ND				
trans-1,3-Dichloropropene	2	ND				
Toluene	2	ND	96	7	101	96

FIELD CODE: KWB-1C

TA #: T142617

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
624 Compounds						
1,1,2-Trichloroethane	2	ND				
1,3-Dichloropropane	2	ND				
Dibromochloromethane	2	ND				
1,2-Dibromoethane (EDB)	2	ND				
Tetrachloroethene (PCE)	2	ND				
Chlorobenzene	2	ND	102	2	102	102
1,1,1,2-Tetrachloroethane	2	ND				
Ethylbenzene	2	ND	100			100
m,p-Xylene	2	ND				
Bromoform	2	ND				
Styrene	2	ND				
o-Xylene	2	ND				
1,1,2,2-Tetrachloroethane	2	ND				
2-Chlorotoluene	2	ND				
1,2,3-Trichloropropane	2	ND				
Isopropylbenzene	2	ND				
Bromobenzene	2	ND				
n-Propylbenzene	2	ND				
1,3,5-Trimethylbenzene	2	ND				
tert-Butylbenzene	2	ND				
1,2,4-Trimethylbenzene	2	ND				
1,4-Dichlorobenzene	2	ND				
sec-Butylbenzene	2	ND				
1,3-Dichlorobenzene	2	ND				
p-Isopropyltoluene	2	ND				
4-Chlorotoluene	2	ND				
1,2-Dichlorobenzene	2	ND				
n-Butylbenzene	2	ND				
chloropropane	5	ND				
1,2,3-Trichlorobenzene	5	ND				
1,2,4-Trichlorobenzene	5	ND				
Naphthalene	2	ND				
Hexachlorobutadiene	5	ND				

% Recovery

Dibromofluoromethane	105
Toluene-d8	102
4-Bromofluorobenzene	99

ND = Not Detected
Methods: EPA 624
CHEMIST: JG



Director, Dr. Blair Leftwich

4-4-00

Date

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

**Fax (915) 585-4944
1 (888) 588-3443**

Phone #: 505 748 3511

Fax #: 505 748 9077

Darrell Moore or Charlie Pymale

Invoice to:
(If different from above)

Project Name: Qtrly offsite well sample/meas
 Sampler Signature: [Signature]

Sampler Signature: *Charles R. Rye*

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	

Date: _____ Time: _____

Date: _____ Time: _____

Date: Time:

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

Carrier # 7ed56278-7641-291

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296
888•588•3443

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: 4/18/00

Project Number: Qtrly Offsite
Project Name: N/A
Project Location: 501 E Main, Artesia, NM

Order ID Number: A00031612

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

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
142730	NP-1	Water	3/15/00	14:39	3/16/00
142731	NP-2	Water	3/15/00	14:50	3/16/00

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

This report consists of a total of 10 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.


Dr. Blair Leftwich, Director

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Analytical Results Report

Sample Number: 142730

Description: NP-1

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Dichlorodifluoromethane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Chloromethane (methyl chloride)	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Vinyl Chloride	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Bromomethane (methyl bromide)	<5.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	5
Chloroethane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Trichlorofluoromethane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Acetone	<10.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	10
Iodomethane (methyl iodide)	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Carbon Disulfide	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Acrylonitrile	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
2-Butanone (MEK)	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	10
2-hexanone	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	10
1,1-Dichloroethene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Methylene chloride	<5.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	5
MTBE	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
trans-1,2-Dichloroethene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,1-Dichloroethane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
cis-1,2-dichloroethene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
2,2-Dichloropropane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Chloroform	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,1,1-Trichloroethane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,1-Dichloropropene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Benzene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Carbon Tetrachloride	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,2-Dichloropropane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Trichloroethene (TCE)	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Bromodichloromethane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	10
cis-1,3-Dichloropropene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
trans-1,3-Dichloropropene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Toluene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,1,2-Trichloroethane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,3-Dichloropropane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Dibromochloromethane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Tetrachloroethene (PCE)	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Chlorobenzene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Ethylbenzene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
m,p-Xylene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Bromoform	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Styrene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
o-Xylene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2

Report Date: 4/18/00

Order ID Number: A00031612

Page Number: 3 of 10

Qtrly Offsite

N/A

501 E Main, Artesia, NM

1,1,2,2-Tetrachloroethane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
2-Chlorotoluene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,2,3-Trichloropropane	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Isopropylbenzene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Bromobenzene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
n-Propylbenzene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
tert-Butylbenzene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
sec-Butylbenzene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,3-Dichlorobenzene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
p-Isopropyltoluene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
4-Chlorotoluene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
n-Butylbenzene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	5
Naphthalene	<2.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	2
Hexachlorobutadiene	<5.00	1	E 624	3/25/00	3/25/00	JG	PB01702	QC02081	5

Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
Dibromofluoromethane	52.16	1	50	104	72 - 128	JG	PB01702	QC02081
Toluene-d8	51.07	1	50	102	91 - 107	JG	PB01702	QC02081
4-Bromofluorobenzene	50.84	1	50	102	74 - 106	JG	PB01702	QC02081

Sample Number: 142731

Description: NP-2

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
624 (µg/L)									
Bromochloromethane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Dichlorodifluoromethane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Chloromethane (methyl chloride)	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Vinyl Chloride	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Bromomethane (methyl bromide)	<5.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	5
Chloroethane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Trichlorofluoromethane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Acetone	<10.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	10
Iodomethane (methyl iodide)	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Carbon Disulfide	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Acrylonitrile	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
2-Butanone (MEK)	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
4-methyl-2-pentanone (MIBK)	<10.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	10
2-hexanone	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
trans 1,4-Dichloro-2-butene	<10.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	10
1,1-Dichloroethene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Methylene chloride	<5.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	5
MTBE	3.29	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
trans-1,2-Dichloroethene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,1-Dichloroethane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
cis-1,2-dichloroethene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
2,2-Dichloropropane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,2-Dichloroethane (EDC)	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2

Report Date: 4/18/00

Order ID Number: A00031612

Page Number: 4 of 10

Qtrly Offsite

N/A

501 E Main, Artesia, NM

Chloroform	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,1,1-Trichloroethane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,1-Dichloropropene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Benzene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Carbon Tetrachloride	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,2-Dichloropropane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Trichloroethene (TCE)	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Dibromomethane (methylene bromide)	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Bromodichloromethane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
2-Chloroethyl vinyl ether	<10.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	10
cis-1,3-Dichloropropene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
trans-1,3-Dichloropropene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Toluene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,1,2-Trichloroethane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,3-Dichloropropane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Dibromochloromethane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,2-Dibromoethane (EDB)	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Tetrachloroethene (PCE)	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Chlorobenzene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,1,1,2-Tetrachloroethane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Ethylbenzene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
m,p-Xylene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Bromoform	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Styrene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
o-Xylene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,1,2,2-Tetrachloroethane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
2-Chlorotoluene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,2,3-Trichloropropane	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Isopropylbenzene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Bromobenzene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
n-Propylbenzene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,3,5-Trimethylbenzene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
tert-Butylbenzene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,2,4-Trimethylbenzene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,4-Dichlorobenzene (para)	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
sec-Butylbenzene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,3-Dichlorobenzene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
p-Isopropyltoluene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
4-Chlorotoluene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,2-Dichlorobenzene (ortho)	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
n-Butylbenzene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
1,2-Dibromo-3-chloropropane	<5.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	5
1,2,3-Trichlorobenzene	<5.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	5
1,2,4-Trichlorobenzene	<5.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	5
Naphthalene	<2.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	2
Hexachlorobutadiene	<5.00	1	E 624	3/26/00	3/26/00	JG	PB01703	QC02082	5
Surrogate (ug/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
Dibromofluoromethane	51.28	1	50	103	72 - 128	JG	PB01703	QC02082	
Toluene-d8	50.31	1	50	101	91 - 107	JG	PB01703	QC02082	
4-Bromofluorobenzene	50.43	1	50	101	74 - 106	JG	PB01703	QC02082	

Quality Control Report

Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Bromochloromethane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Dichlorodifluoromethane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Chloromethane (methyl chloride) (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Vinyl Chloride (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Bromomethane (methyl bromide) (µg/L)		<5.00	5	3/25/00	PB01702	QC02081
Chloroethane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Trichlorofluoromethane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Acetone (µg/L)		<10.00	10	3/25/00	PB01702	QC02081
Iodomethane (methyl iodide) (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Carbon Disulfide (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Acrylonitrile (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
2-Butanone (MEK) (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
4-methyl-2-pentanone (MIBK) (µg/L)		<10.00	10	3/25/00	PB01702	QC02081
2-hexanone (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
trans 1,4-Dichloro-2-butene (µg/L)		<10.00	10	3/25/00	PB01702	QC02081
1,1-Dichloroethene (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Methylene chloride (µg/L)		<5.00	5	3/25/00	PB01702	QC02081
MTBE (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
trans-1,2-Dichloroethene (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
1,1-Dichloroethane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
cis-1,2-dichloroethene (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
2,2-Dichloropropane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
1,2-Dichloroethane (EDC) (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Chloroform (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
1,1,1-Trichloroethane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
1,1-Dichloropropene (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Benzene (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Carbon Tetrachloride (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
1,2-Dichloropropane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Trichloroethene (TCE) (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Dibromomethane (methylene bromide) (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Bromodichloromethane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
2-Chloroethyl vinyl ether (µg/L)		<10.00	10	3/25/00	PB01702	QC02081
cis-1,3-Dichloropropene (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
trans-1,3-Dichloropropene (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Toluene (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
1,1,2-Trichloroethane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
1,3-Dichloropropane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Dibromochloromethane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
1,2-Dibromoethane (EDB) (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Tetrachloroethene (PCE) (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Chlorobenzene (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
1,1,1,2-Tetrachloroethane (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
Ethylbenzene (µg/L)		<2.00	2	3/25/00	PB01702	QC02081
m,p-Xylene (µg/L)		<2.00	2	3/25/00	PB01702	QC02081

Qtrly Offsite

N/A

501 E Main, Artesia, NM

Bromoform (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
Styrene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
o-Xylene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
1,1,2,2-Tetrachloroethane (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
2-Chlorotoluene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
1,2,3-Trichloropropane (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
Isopropylbenzene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
Bromobenzene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
n-Propylbenzene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
1,3,5-Trimethylbenzene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
tert-Butylbenzene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
1,2,4-Trimethylbenzene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
1,4-Dichlorobenzene (para) (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
sec-Butylbenzene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
1,3-Dichlorobenzene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
p-Isopropyltoluene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
4-Chlorotoluene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
1,2-Dichlorobenzene (ortho) (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
n-Butylbenzene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
1,2-Dibromo-3-chloropropane (µg/L)	<5.00	5	3/25/00	PB01702	QC02081
1,2,3-Trichlorobenzene (µg/L)	<5.00	5	3/25/00	PB01702	QC02081
1,2,4-Trichlorobenzene (µg/L)	<5.00	5	3/25/00	PB01702	QC02081
Naphthalene (µg/L)	<2.00	2	3/25/00	PB01702	QC02081
Hexachlorobutadiene (µg/L)	<5.00	5	3/25/00	PB01702	QC02081
Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
Dibromofluoromethane (µg/L)	52.55	50	104	72 - 128	QC02081
Toluene-d8 (µg/L)	50.58	50	101	91 - 107	QC02081
4-Bromofluorobenzene (µg/L)	50.86	50	102	74 - 106	QC02081
Bromochloromethane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Dichlorodifluoromethane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Chloromethane (methyl chloride) (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Vinyl Chloride (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Bromomethane (methyl bromide) (µg/L)	<5.00	5	3/26/00	PB01703	QC02082
Chloroethane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Trichlorofluoromethane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Acetone (µg/L)	<10.00	10	3/26/00	PB01703	QC02082
Iodomethane (methyl iodide) (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Carbon Disulfide (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Acrylonitrile (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
2-Butanone (MEK) (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
4-methyl-2-pentanone (MIBK) (µg/L)	<10.00	10	3/26/00	PB01703	QC02082
2-hexanone (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
trans 1,4-Dichloro-2-butene (µg/L)	<10.00	10	3/26/00	PB01703	QC02082
1,1-Dichloroethene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Methylene chloride (µg/L)	<5.00	5	3/26/00	PB01703	QC02082
MTBE (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
trans-1,2-Dichloroethene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,1-Dichloroethane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
cis-1,2-dichloroethene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
2,2-Dichloropropane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082

Report Date: 4/18/00

Order ID Number: A00031612

Page Number: 7 of 10

Qtrly Offsite

N/A

501 E Main, Artesia, NM

1,2-Dichloroethane (EDC) (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Chloroform (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,1,1-Trichloroethane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,1-Dichloropropene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Benzene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Carbon Tetrachloride (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,2-Dichloropropane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Trichloroethene (TCE) (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Dibromomethane (methylene bromide) (µg)	<2.00	2	3/26/00	PB01703	QC02082
Bromodichloromethane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
2-Chloroethyl vinyl ether (µg/L)	<10.00	10	3/26/00	PB01703	QC02082
cis-1,3-Dichloropropene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
trans-1,3-Dichloropropene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Toluene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,1,2-Trichloroethane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,3-Dichloropropane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Dibromochloromethane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,2-Dibromoethane (EDB) (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Tetrachloroethene (PCE) (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Chlorobenzene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,1,1,2-Tetrachloroethane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Ethylbenzene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
m,p-Xylene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Bromoform (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Styrene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
o-Xylene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,1,1,2,2-Tetrachloroethane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
2-Chlorotoluene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,2,3-Trichloropropane (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Isopropylbenzene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Bromobenzene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
n-Propylbenzene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,3,5-Trimethylbenzene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
tert-Butylbenzene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,2,4-Trimethylbenzene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,4-Dichlorobenzene (para) (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
sec-Butylbenzene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,3-Dichlorobenzene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
p-Isopropyltoluene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
4-Chlorotoluene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,2-Dichlorobenzene (ortho) (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
n-Butylbenzene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
1,2-Dibromo-3-chloropropane (µg/L)	<5.00	5	3/26/00	PB01703	QC02082
1,2,3-Trichlorobenzene (µg/L)	<5.00	5	3/26/00	PB01703	QC02082
1,2,4-Trichlorobenzene (µg/L)	<5.00	5	3/26/00	PB01703	QC02082
Naphthalene (µg/L)	<2.00	2	3/26/00	PB01703	QC02082
Hexachlorobutadiene (µg/L)	<5.00	5	3/26/00	PB01703	QC02082

Report Date: 4/18/00

Order ID Number: A00031612

Page Number: 8 of 10

Qtrly Offsite

N/A

501 E Main, Artesia, NM

Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
Dibromofluoromethane (µg/L)	51.77	50	104	72 - 128	QC02082
Toluene-d8 (µg/L)	50.36	50	101	91 - 107	QC02082
4-Bromofluorobenzene (µg/L)	49.88	50	100	74 - 106	QC02082

Quality Control Report Matrix Spike and Matrix Duplicate Spike

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	1,1-Dichloroethene (ug/L)	<2.00	1	100	127	127		80 - 120	-	QC02082
MS	1,1-Dichloroethene (ug/L)	<2.00	1	100	127	127		79 - 129	-	QC02082
MS	Benzene (ug/L)	<2.00	1	100	109	109		77 - 130	-	QC02082
MS	Trichloroethene (TCE) (ug/L)	<2.00	1	100	108	108		83 - 108	-	QC02082
MS	Toluene (ug/L)	<2.00	1	100	108	108		85 - 114	-	QC02082
MS	Chlorobenzene (ug/L)	<2.00	1	100	106	106		87 - 114	-	QC02082
Standard	Surrogate	Result	Dil.	Spike Amount	Analyst	% Rec.		% Rec. Limit	Prep Batch #	QC Batch #
MS	Dibromofluoromethane (µg/L)	52.05	1	50	JG	104		72 - 128	PB01703	QC02082
MS	Toluene-d8 (µg/L)	50.22	1	50	JG	100		91 - 107	PB01703	QC02082
MS	4-Bromofluorobenzene (µg/L)	50.13	1	50	JG	100		74 - 106	PB01703	QC02082
MSD	1,1-Dichloroethene (ug/L)	<2.00	1	100	128	128	1	-	0 - 20	QC02082
MSD	1,1-Dichloroethene (ug/L)	<2.00	1	100	128	128	1	-	0 - 20	QC02082
MSD	Benzene (ug/L)	<2.00	1	100	113	113	4	-	0 - 20	QC02082
MSD	Trichloroethene (TCE) (ug/L)	<2.00	1	100	111	111	3	-	0 - 20	QC02082
MSD	Toluene (ug/L)	<2.00	1	100	110	110	2	-	0 - 20	QC02082
MSD	Chlorobenzene (ug/L)	<2.00	1	100	109	109	3	-	0 - 20	QC02082
Standard	Surrogate	Result	Dil.	Spike Amount	Analyst	% Rec.		% Rec. Limit	Prep Batch #	QC Batch #
MSD	Dibromofluoromethane (µg/L)	51.80	1	50	JG	104		72 - 128	PB01703	QC02082
MSD	Toluene-d8 (µg/L)	50.26	1	50	JG	101		91 - 107	PB01703	QC02082
MSD	4-Bromofluorobenzene (µg/L)	50.46	1	50	JG	101		74 - 106	PB01703	QC02082

Quality Control Report

Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS 1,1-Dichloroethene (ug/L)	<2.00	1	100	132	132		80 - 120	-	QC02081
LCS Benzene (ug/L)	<2.00	1	100	118	118		77 - 130	-	QC02081
LCS Trichloroethene (TCE) (ug/L)	<2.00	1	100	113	113		83 - 108	-	QC02081
LCS Toluene (ug/L)	<2.00	1	100	111	111		85 - 114	-	QC02081
LCS Chlorobenzene (ug/L)	<2.00	1	100	115	115		87 - 114	-	QC02081
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCS Dibromofluoromethane (µg/L)		1	50	49.75	100		72 - 128		QC02081
LCS Toluene-d8 (µg/L)		1	50	51.08	102		91 - 107		QC02081
LCS 4-Bromofluorobenzene (µg/L)		1	50	50.40	101		74 - 106		QC02081
LCSD 1,1-Dichloroethene (ug/L)	<2.00	1	100	125	125	5	-	0 - 20	QC02081
LCSD 1,1-Dichloroethene (ug/L)	<2.00	1	100	125	125	5	-	0 - 20	QC02081
LCSD Benzene (ug/L)	<2.00	1	100	112	112	5	-	0 - 20	QC02081
LCSD Trichloroethene (TCE) (ug/L)	<2.00	1	100	107	107	5	-	0 - 20	QC02081
LCSD Toluene (ug/L)	<2.00	1	100	107	107	4	-	0 - 20	QC02081
LCSD Chlorobenzene (ug/L)	<2.00	1	100	108	108	6	-	0 - 20	QC02081
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCSD Dibromofluoromethane (µg/L)		1	50	51.09	102		72 - 128		QC02081
LCSD Toluene-d8 (µg/L)		1	50	50.42	101		91 - 107		QC02081
LCSD 4-Bromofluorobenzene (µg/L)		1	50	51.07	102		74 - 106		QC02081

Quality Control Report

Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV 1	Vinyl Chloride (µg/L)		100	114	114	80 - 120	3/25/00	QC02081
CCV 1	1,1-Dichloroethene (µg/L)		100	113	113	80 - 120	3/25/00	QC02081
CCV 1	Chloroform (µg/L)		100	115	115	80 - 120	3/25/00	QC02081
CCV 1	1,2-Dichloropropane (µg/L)		100	107	107	80 - 120	3/25/00	QC02081
CCV 1	Toluene (µg/L)		100	105	105	80 - 120	3/25/00	QC02081
CCV 1	Chlorobenzene (µg/L)		100	106	106	80 - 120	3/25/00	QC02081
CCV 1	Ethylbenzene (µg/L)		100	107	107	80 - 120	3/25/00	QC02081
CCV 1	Dibromofluoromethane (µg/L)		50	53.40	107	80 - 120	3/25/00	QC02081
CCV 1	Toluene-d8 (µg/L)		50	50.28	101	80 - 120	3/25/00	QC02081
CCV 1	4-Bromofluorobenzene (µg/L)		50	52.99	106	80 - 120	3/25/00	QC02081

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV 1	Vinyl Chloride (µg/L)		100	105	105	80 - 120	3/26/00	QC02082
CCV 1	1,1-Dichloroethene (µg/L)		100	108	108	80 - 120	3/26/00	QC02082
CCV 1	Chloroform (µg/L)		100	109	109	80 - 120	3/26/00	QC02082
CCV 1	1,2-Dichloropropane (µg/L)		100	101	101	80 - 120	3/26/00	QC02082
CCV 1	Toluene (µg/L)		100	104	104	80 - 120	3/26/00	QC02082
CCV 1	Chlorobenzene (µg/L)		100	103	103	80 - 120	3/26/00	QC02082
CCV 1	Ethylbenzene (µg/L)		100	105	105	80 - 120	3/26/00	QC02082
CCV 1	Dibromofluoromethane (µg/L)		50	52.30	105	80 - 120	3/26/00	QC02082
CCV 1	Toluene-d8 (µg/L)		50	49.82	100	80 - 120	3/26/00	QC02082
CCV 1	4-Bromofluorobenzene (µg/L)		50	52.86	106	80 - 120	3/26/00	QC02082

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296
888•588•3443

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: 3/21/00

Project Number: N/A
Project Name: Mo Off -Site
Project Location: Artesia, NM

Order ID Number: A00031515

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

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
142611	RA 314	Water	3/14/00	13:30	3/15/00

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

This report consists of a total of 3 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.


Dr. Blair Leftwich, Director

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Report Date: 3/21/00

Order ID Number: A00031515

Page Number: 2 of 3

N/A

Mo Off-Site

Artesia,NM

Analytical Results Report

Sample Number: 142611

Description: RA 314

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.001	1	S 8021B	3/19/00	3/19/00	RC	PB01329	QC01600	0.001
Benzene	<0.001	1	S 8021B	3/19/00	3/19/00	RC	PB01329	QC01600	0.001
Toluene	<0.001	1	S 8021B	3/19/00	3/19/00	RC	PB01329	QC01600	0.001
Ethylbenzene	<0.001	1	S 8021B	3/19/00	3/19/00	RC	PB01329	QC01600	0.001
M,P,O-Xylene	<0.001	1	S 8021B	3/19/00	3/19/00	RC	PB01329	QC01600	0.001
Total BTEX	<0.001	1	S 8021B	3/19/00	3/19/00	RC	PB01329	QC01600	0.001
Surrogate (mg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
TFT	0.072	1	0.1	72	72 - 128	RC	PB01329	QC01600	
4-BFB	0.072	1	0.1	72	72 - 128	RC	PB01329	QC01600	

Quality Control Report

Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
MTBE (mg/L)		<0.001	0.001	3/19/00	PB01329	QC01600
Benzene (mg/L)		<0.001	0.001	3/19/00	PB01329	QC01600
Toluene (mg/L)		<0.001	0.001	3/19/00	PB01329	QC01600
Ethylbenzene (mg/L)		<0.001	0.001	3/19/00	PB01329	QC01600
M,P,O-Xylene (mg/L)		<0.001	0.001	3/19/00	PB01329	QC01600
Total BTEX (mg/L)		<0.001	0.001	3/19/00	PB01329	QC01600
Surrogate		Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
TFT (mg/L)		0.102	0.1	102	72 - 128	QC01600
4-BFB (mg/L)		0.098	0.1	98	72 - 128	QC01600

Quality Control Report Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS MTBE (mg/L)	<0.001	1	0.1	0.11	110		80 - 120	-	QC01600
LCS Benzene (mg/L)	<0.001	1	0.1	0.101	101		80 - 120	-	QC01600
LCS Toluene (mg/L)	<0.001	1	0.1	0.103	103		80 - 120	-	QC01600
LCS Ethylbenzene (mg/L)	<0.001	1	0.1	0.102	102		80 - 120	-	QC01600
LCS M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.302	101		80 - 120	-	QC01600
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCS TFT (mg/L)		1	0.1	0.112	112		72 - 128		QC01600
LCS 4-BFB (mg/L)		1	0.1	0.112	112		72 - 128		QC01600
LCSD MTBE (mg/L)	<0.001	1	0.1	0.109	109	1	-	0 - 20	QC01600
LCSD Benzene (mg/L)	<0.001	1	0.1	0.097	97	4	-	0 - 20	QC01600
LCSD Toluene (mg/L)	<0.001	1	0.1	0.099	99	4	-	0 - 20	QC01600
LCSD Ethylbenzene (mg/L)	<0.001	1	0.1	0.099	99	3	-	0 - 20	QC01600
LCSD M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.292	97	3	-	0 - 20	QC01600
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCSD TFT (mg/L)		1	0.1	0.101	101		72 - 128		QC01600
LCSD 4-BFB (mg/L)		1	0.1	0.101	101		72 - 128		QC01600

Quality Control Report Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	MTBE (mg/L)		0.1	0.105	105	80 - 120	3/19/00	QC01600
ICV	Benzene (mg/L)		0.1	0.096	96	80 - 120	3/19/00	QC01600
ICV	Toluene (mg/L)		0.1	0.097	97	80 - 120	3/19/00	QC01600
ICV	Ethylbenzene (mg/L)		0.1	0.097	97	80 - 120	3/19/00	QC01600
ICV	M,P,O-Xylene (mg/L)		0.3	0.286	95	80 - 120	3/19/00	QC01600
CCV 1	MTBE (mg/L)		0.1	0.104	104	80 - 120	3/19/00	QC01600
CCV 1	Benzene (mg/L)		0.1	0.084	84	80 - 120	3/19/00	QC01600
CCV 1	Toluene (mg/L)		0.1	0.086	86	80 - 120	3/19/00	QC01600
CCV 1	Ethylbenzene (mg/L)		0.1	0.086	86	80 - 120	3/19/00	QC01600
CCV 1	M,P,O-Xylene (mg/L)		0.3	0.255	85	80 - 120	3/19/00	QC01600
CCV 2	MTBE (mg/L)		0.1	0.1	100	80 - 120	3/19/00	QC01600
CCV 2	Benzene (mg/L)		0.1	0.08	80	80 - 120	3/19/00	QC01600
CCV 2	Toluene (mg/L)		0.1	0.082	82	80 - 120	3/19/00	QC01600
CCV 2	Ethylbenzene (mg/L)		0.1	0.082	82	80 - 120	3/19/00	QC01600
CCV 2	M,P,O-Xylene (mg/L)		0.3	0.24	80	80 - 120	3/19/00	QC01600

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296
888•588•3443

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: 3/14/00

Project Number: Qtrly Offsite
Project Name: N/A
Project Location: 501 E Main, Artesia, NM

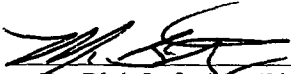
Order ID Number: A00030707

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

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
141884	RA 3353	Water	3/6/00	14:00	3/7/00
141885	RA 3156	Water	3/6/00	13:45	3/7/00

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

This report consists of a total of 8 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.


Dr. Blair Leftwich, Director

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Report Date: 3/14/00

Order ID Number: A00030707

Page Number: 2 of 8

Qtrly Offsite

N/A

501 E Main, Artesia, NM

Analytical Results Report

Sample Number: 141884

Description: RA 3353

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
8260 (µg/L)									
Bromochloromethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Dichlorodifluoromethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Chloromethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Vinyl Chloride	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Bromomethane	<5.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	5
Chloroethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Trichlorofluoromethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Vinyl acetate	<10.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	10
Acetone	<10.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	10
Iodomethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Carbon Disulfide	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Acrylonitrile	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
2-Butanone (MEK)	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
4-methyl-2-pentanone	<10.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	10
2-hexanone	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
trans 1,4-Dichloro-2-butene	<10.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	10
1,1-Dichloroethene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Methylene chloride	<5.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	5
MTBE	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
trans-1,2-Dichloroethene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,1-Dichloroethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
cis-1,2-dichloroethene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
2,2-Dichloropropane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2-Dichloroethane (EDC)	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Chloroform	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,1,1-Trichloroethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,1-Dichloropropene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Benzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Carbon Tetrachloride	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2-Dichloropropane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Trichloroethene (TCE)	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Dibromomethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Bromodichloromethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
2-Chloroethyl vinyl ether	<10.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	10
cis-1,3-Dichloropropene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
trans-1,3-Dichloropropene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Toluene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,1,2-Trichloroethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,3-Dichloropropane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Dibromochloromethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2-Dibromoethane (EDB)	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Tetrachloroethene (PCE)	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Chlorobenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,1,1,2-Tetrachloroethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Ethylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
m,p-Xylene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Bromoform	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Styrene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2

Report Date: 3/14/00

Order ID Number: A00030707

Page Number: 3 of 8

Qtrly Offsite

N/A

501 E Main, Artesia, NM

o-Xylene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,1,2,2-Tetrachloroethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
2-Chlorotoluene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2,3-Trichloropropane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Isopropylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Bromobenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
n-Propylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,3,5-Trimethylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
tert-Butylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2,4-Trimethylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,4-Dichlorobenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
sec-Butylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,3-Dichlorobenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
p-Isopropyltoluene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
4-Chlorotoluene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2-Dichlorobenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
n-Butylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2-Dibromo-3-chloropropane	<5.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	5
1,2,3-Trichlorobenzene	<5.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	5
1,2,4-Trichlorobenzene	<5.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	5
Naphthalene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Hexachlorobutadiene	<5.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	5

Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
Dibromofluoromethane	50.49	1	50	101	80 - 120	JG	PB01166	QC01408
Toluene-d8	51.20	1	50	102	80 - 120	JG	PB01166	QC01408
4-Bromofluorobenzene	44.12	1	50	88	80 - 120	JG	PB01166	QC01408

Tentatively Identified Compound (µg/L)	Result	Dilution	Retention Time	Comment
unidentified hydrocarbon	1.85	1	18.2 min	

NOTE: Tentatively identified compounds are estimated values only.

Sample Number: 141885

Description: RA 3156

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
8260 (µg/L)									
Bromochloromethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Dichlorodifluoromethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Chloromethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Vinyl Chloride	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Bromomethane	<5.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	5
Chloroethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Trichlorofluoromethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Vinyl acetate	<10.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	10
Acetone	<10.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	10
Iodomethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Carbon Disulfide	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Acrylonitrile	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
2-Butanone (MEK)	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
4-methyl-2-pentanone	<10.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	10
2-hexanone	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
trans 1,4-Dichloro-2-butene	<10.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	10
1,1-Dichloroethene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Methylene chloride	<5.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	5

Qtrly Offsite

N/A

501 E Main, Artesia, NM

MTBE	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
trans-1,2-Dichloroethene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,1-Dichloroethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
cis-1,2-dichloroethene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
2,2-Dichloropropane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2-Dichloroethane (EDC)	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Chloroform	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,1,1-Trichloroethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,1-Dichloropropene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Benzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Carbon Tetrachloride	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2-Dichloropropane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Trichloroethene (TCE)	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Dibromomethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Bromodichloromethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
2-Chloroethyl vinyl ether	<10.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	10
cis-1,3-Dichloropropene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
trans-1,3-Dichloropropene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Toluene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,1,2-Trichloroethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,3-Dichloropropane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Dibromochloromethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2-Dibromoethane (EDB)	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Tetrachloroethene (PCE)	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Chlorobenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,1,1,2-Tetrachloroethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Ethylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
m,p-Xylene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Bromoform	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Styrene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
o-Xylene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,1,2,2-Tetrachloroethane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
2-Chlorotoluene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2,3-Trichloropropane	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Isopropylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Bromobenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
n-Propylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,3,5-Trimethylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
tert-Butylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2,4-Trimethylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,4-Dichlorobenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
sec-Butylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,3-Dichlorobenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
p-Isopropyltoluene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
4-Chlorotoluene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2-Dichlorobenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
n-Butylbenzene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
1,2-Dibromo-3-chloropropane	<5.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	5
1,2,3-Trichlorobenzene	<5.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	5
1,2,4-Trichlorobenzene	<5.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	5
Naphthalene	<2.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	2
Hexachlorobutadiene	<5.00	1	S 8260B	3/8/00	3/8/00	JG	PB01166	QC01408	5

Report Date: 3/14/00

Order ID Number: A00030707

Page Number: 5 of 8

Qtrly Offsite

N/A

501 E Main, Artesia, NM

Surrogate (µg/L)	Result	Dilution	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #
Dibromofluoromethane	48.76	1	50	98	80 - 120	JG	PB01166	QC01408
Toluene-d8	50.77	1	50	102	80 - 120	JG	PB01166	QC01408
4-Bromofluorobenzene	44.55	1	50	89	80 - 120	JG	PB01166	QC01408

Tentatively Identified Compound (µg/L)	Result	Dilution	Retention Time	Comment
unidentified hydrocarbon	.80	1	21.69 min	
unidentified hydrocarbon	1.04	1	22.6 min	
unidentified hydrocarbon	.65	1	23.55 min	

NOTE: Tentatively identified compounds are estimated values only.

Quality Control Report

Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Bromochloromethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Dichlorodifluoromethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Chloromethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Vinyl Chloride (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Bromomethane (µg/L)		<5.00	5	3/8/00	PB01166	QC01408
Chloroethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Trichlorofluoromethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Vinyl acetate (µg/L)		<10.00	10	3/8/00	PB01166	QC01408
Acetone (µg/L)		<10.00	10	3/8/00	PB01166	QC01408
Iodomethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Carbon Disulfide (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Acrylonitrile (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
2-Butanone (MEK) (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
4-methyl-2-pentanone (µg/L)		<10.00	10	3/8/00	PB01166	QC01408
2-hexanone (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
trans 1,4-Dichloro-2-butene (µg/L)		<10.00	10	3/8/00	PB01166	QC01408
1,1-Dichloroethene (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Methylene chloride (µg/L)		<5.00	5	3/8/00	PB01166	QC01408
MTBE (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
trans-1,2-Dichloroethene (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
1,1-Dichloroethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
cis-1,2-dichloroethene (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
2,2-Dichloropropane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
1,2-Dichloroethane (EDC) (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Chloroform (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
1,1,1-Trichloroethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
1,1-Dichloropropene (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Benzene (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Carbon Tetrachloride (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
1,2-Dichloropropane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Trichloroethene (TCE) (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Dibromomethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Bromodichloromethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
2-Chloroethyl vinyl ether (µg/L)		<10.00	10	3/8/00	PB01166	QC01408
cis-1,3-Dichloropropene (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
trans-1,3-Dichloropropene (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Toluene (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
1,1,2-Trichloroethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
1,3-Dichloropropane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Dibromochloromethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
1,2-Dibromoethane (EDB) (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Tetrachloroethene (PCE) (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Chlorobenzene (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
1,1,1,2-Tetrachloroethane (µg/L)		<2.00	2	3/8/00	PB01166	QC01408
Ethylbenzene (µg/L)		<2.00	2	3/8/00	PB01166	QC01408

Report Date: 3/14/00

Order ID Number: A00030707

Page Number: 7 of 8

Qtrly Offsite

N/A

501 E Main, Artesia, NM

m,p-Xylene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
Bromoform (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
Styrene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
o-Xylene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
1,1,2,2-Tetrachloroethane (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
2-Chlorotoluene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
1,2,3-Trichloropropane (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
Isopropylbenzene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
Bromobenzene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
n-Propylbenzene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
1,3,5-Trimethylbenzene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
tert-Butylbenzene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
1,2,4-Trimethylbenzene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
1,4-Dichlorobenzene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
sec-Butylbenzene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
1,3-Dichlorobenzene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
p-Isopropyltoluene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
4-Chlorotoluene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
1,2-Dichlorobenzene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
n-Butylbenzene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
1,2-Dibromo-3-chloropropane (µg/L)	<5.00	5	3/8/00	PB01166	QC01408
1,2,3-Trichlorobenzene (µg/L)	<5.00	5	3/8/00	PB01166	QC01408
1,2,4-Trichlorobenzene (µg/L)	<5.00	5	3/8/00	PB01166	QC01408
Naphthalene (µg/L)	<2.00	2	3/8/00	PB01166	QC01408
Hexachlorobutadiene (µg/L)	<5.00	5	3/8/00	PB01166	QC01408
Surrogate	Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
Dibromofluoromethane (µg/L)	48.80	50	98	80 - 120	QC01408
Toluene-d8 (µg/L)	51.34	50	103	80 - 120	QC01408
4-Bromofluorobenzene (µg/L)	43.28	50	87	80 - 120	QC01408

Quality Control Report Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS 1,1-Dichloroethene (ug/L)	<2.00	1	100	90	90		80 - 120	-	QC01408
LCS Benzene (ug/L)	<2.00	1	100	91	91		80 - 120	-	QC01408
LCS Trichloroethene (TCE) (ug/L)	<2.00	1	100	90	90		80 - 120	-	QC01408
LCS Toluene (ug/L)	<2.00	1	100	91	91		80 - 120	-	QC01408
LCS Chlorobenzene (ug/L)	<2.00	1	100	93	93		80 - 120	-	QC01408
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCS Dibromofluoromethane (ug/L)		1	50	49.80	100		80 - 120		QC01408
LCS Toluene-d8 (ug/L)		1	50	49.71	99		80 - 120		QC01408
LCS 4-Bromofluorobenzene (ug/L)		1	50	44.02	88		80 - 120		QC01408
LCSD 1,1-Dichloroethene (ug/L)	<2.00	1	100	89	89	1	-	0 - 20	QC01408
LCSD Benzene (ug/L)	<2.00	1	100	90	90	1	-	0 - 20	QC01408
LCSD Trichloroethene (TCE) (ug/L)	<2.00	1	100	89	89	1	-	0 - 20	QC01408
LCSD Toluene (ug/L)	<2.00	1	100	91	91	0	-	0 - 20	QC01408
LCSD Chlorobenzene (ug/L)	<2.00	1	100	93	93	0	-	0 - 20	QC01408
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCSD Dibromofluoromethane (ug/L)		1	50	49.40	99		80 - 120		QC01408
LCSD Toluene-d8 (ug/L)		1	50	49.58	99		80 - 120		QC01408
LCSD 4-Bromofluorobenzene (ug/L)		1	50	43.89	88		80 - 120		QC01408

Quality Control Report Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV 1	Vinyl Chloride (ug/L)		100	98	98	80 - 120	3/8/00	QC01408
CCV 1	1,1-Dichloroethene (ug/L)		100	95	95	80 - 120	3/8/00	QC01408
CCV 1	Chloroform (ug/L)		100	97	97	80 - 120	3/8/00	QC01408
CCV 1	1,2-Dichloropropane (ug/L)		100	97	97	80 - 120	3/8/00	QC01408
CCV 1	Toluene (ug/L)		100	98	98	80 - 120	3/8/00	QC01408
CCV 1	Chlorobenzene (ug/L)		100	99	99	80 - 120	3/8/00	QC01408
CCV 1	Ethylbenzene (ug/L)		100	100	100	80 - 120	3/8/00	QC01408
CCV 1	Dibromofluoromethane (ug/L)		50	49.91	100	80 - 120	3/8/00	QC01408
CCV 1	Toluene-d8 (ug/L)		50	49.50	99	80 - 120	3/8/00	QC01408
CCV 1	4-Bromofluorobenzene (ug/L)		50	48.49	97	80 - 120	3/8/00	QC01408



TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9
4725 Ripley Avenue, Suite A

Lubbock, Texas 79424
El Paso, Texas 79922

800•378•1296
888•588•3443

806•794•1296
915•585•3443

FAX 806•794•1298
FAX 915•585•4944

E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Darrell Moore
Navajo Refining
501 E. Main
Artesia, NM 88210

Report Date: 3/10/00

Project Number: N/A
Project Name: Mo Off -Site
Project Location: Artesia, NM

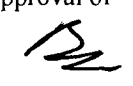
Order ID Number: A00030708

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

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
141886	RA 4196	Water	3/6/00	9:20	3/7/00
141887	RA 4798	Water	3/6/00	9:15	3/7/00
141888	RA 313	Water	3/6/00	9:30	3/7/00
141889	RA 1227	Water	3/6/00	9:00	3/7/00
141890	RA 1331	Water	3/6/00	11:20	3/7/00
141891	RA 307	Water	3/6/00	11:15	3/7/00

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

This report consists of a total of 5 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



Dr. Blair Leftwich, Director

RECEIVED

MAR 05 2001

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION

Report Date: 3/10/00

Order ID Number: A00030708

Page Number: 2 of 5

N/A

Mo Off-Site

Artesia,NM

Analytical Results Report

Sample Number: 141886

Description: RA 4196

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Benzene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Toluene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Ethylbenzene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
M,P,O-Xylene	0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Total BTEX	0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Surrogate (mg/L)									
TFT	0.095	1	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
4-BFB	0.092	1	0.1	95	72 - 128	RC	PB01167	QC01409	

Sample Number: 141887

Description: RA 4798

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Benzene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Toluene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Ethylbenzene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
M,P,O-Xylene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Total BTEX	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Surrogate (mg/L)									
TFT	0.113	1	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
4-BFB	0.118	1	0.1	113	72 - 128	RC	PB01167	QC01409	

Sample Number: 141888

Description: RA 313

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Benzene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Toluene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Ethylbenzene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
M,P,O-Xylene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Total BTEX	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Surrogate (mg/L)									
TFT	0.077	1	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
4-BFB	0.072	1	0.1	77	72 - 128	RC	PB01167	QC01409	

Report Date: 3/10/00

Order ID Number: A00030708

Page Number: 3 of 5

N/A

Mo Off-Site

Artesia,NM

Sample Number: 141889

Description: RA 1227

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.005	5	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Benzene	<0.005	5	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Toluene	<0.005	5	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Ethylbenzene	<0.005	5	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
M,P,O-Xylene	<0.005	5	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Total BTEX	<0.005	5	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Surrogate (mg/L)									
TFT	0.52	1	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
4-BFB	0.518	1	0.1	104	72 - 128	RC	PB01167	QC01409	

Sample Number: 141890

Description: RA 1331

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Benzene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Toluene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Ethylbenzene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
M,P,O-Xylene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Total BTEX	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Surrogate (mg/L)									
TFT	0.103	1	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
4-BFB	0.106	1	0.1	106	72 - 128	RC	PB01167	QC01409	

Sample Number: 141891

Description: RA 307

Param	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
BTEX (mg/L)									
MTBE	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Benzene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Toluene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Ethylbenzene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
M,P,O-Xylene	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Total BTEX	<0.001	1	S 8021B	3/8/00	3/8/00	RC	PB01167	QC01409	0.001
Surrogate (mg/L)									
TFT	0.117	1	Spike Amount	% Rec.	% Rec. Limit	Analyst	Prep Batch #	QC Batch #	
4-BFB	0.122	1	0.1	117	72 - 128	RC	PB01167	QC01409	

Quality Control Report Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
MTBE (mg/L)		<0.001	0.001	3/8/00	PB01167	QC01409
Benzene (mg/L)		<0.001	0.001	3/8/00	PB01167	QC01409
Toluene (mg/L)		<0.001	0.001	3/8/00	PB01167	QC01409
Ethylbenzene (mg/L)		<0.001	0.001	3/8/00	PB01167	QC01409
M,P,O-Xylene (mg/L)		<0.001	0.001	3/8/00	PB01167	QC01409
Total BTEX (mg/L)		<0.001	0.001	3/8/00	PB01167	QC01409
Surrogate		Result	Spike Amount	% Rec.	% Rec. Limit	QC Batch #
TFT (mg/L)		0.088	0.1	88	72 - 128	QC01409
4-BFB (mg/L)		0.08	0.1	80	72 - 128	QC01409

Quality Control Report Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD	QC Batch #
LCS MTBE (mg/L)	<0.001	1	0.1	0.1	100		80 - 120	0 - 20	QC01409
LCS Benzene (mg/L)	<0.001	1	0.1	0.09	90		80 - 120	0 - 20	QC01409
LCS Toluene (mg/L)	<0.001	1	0.1	0.093	93		80 - 120	0 - 20	QC01409
LCS Ethylbenzene (mg/L)	<0.001	1	0.1	0.086	86		80 - 120	0 - 20	QC01409
LCS M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.252	84		80 - 120	0 - 20	QC01409
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCS TFT (mg/L)		1	0.1	0.081	81		72 - 128		QC01409
LCS 4-BFB (mg/L)		1	0.1	0.089	89		72 - 128		QC01409
LCSD MTBE (mg/L)	<0.001	1	0.1	0.09	90	11	80 - 120	0 - 20	QC01409
LCSD Benzene (mg/L)	<0.001	1	0.1	0.089	89	1	80 - 120	0 - 20	QC01409
LCSD Toluene (mg/L)	<0.001	1	0.1	0.093	93	0	80 - 120	0 - 20	QC01409
LCSD Ethylbenzene (mg/L)	<0.001	1	0.1	0.084	84	2	80 - 120	0 - 20	QC01409
LCSD M,P,O-Xylene (mg/L)	<0.001	1	0.3	0.242	81	4	80 - 120	0 - 20	QC01409
Standard Surrogate		Dil.	Spike Amount	Result	% Rec.		% Rec. Limit		QC Batch #
LCSD TFT (mg/L)		1	0.1	0.102	102		72 - 128		QC01409
LCSD 4-BFB (mg/L)		1	0.1	0.107	107		72 - 128		QC01409

Quality Control Report

Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	MTBE (mg/L)		0.1	0.105	105	80 - 120	3/8/00	QC01409
ICV	Benzene (mg/L)		0.1	0.096	96	80 - 120	3/8/00	QC01409
ICV	Toluene (mg/L)		0.1	0.102	102	80 - 120	3/8/00	QC01409
ICV	Ethylbenzene (mg/L)		0.1	0.091	91	80 - 120	3/8/00	QC01409
ICV	M,P,O-Xylene (mg/L)		0.3	0.268	89	80 - 120	3/8/00	QC01409
CCV 1	MTBE (mg/L)		0.1	0.11	110	80 - 120	3/8/00	QC01409
CCV 1	Benzene (mg/L)		0.1	0.101	101	80 - 120	3/8/00	QC01409
CCV 1	Toluene (mg/L)		0.1	0.107	107	80 - 120	3/8/00	QC01409
CCV 1	Ethylbenzene (mg/L)		0.1	0.097	97	80 - 120	3/8/00	QC01409
CCV 1	M,P,O-Xylene (mg/L)		0.3	0.283	94	80 - 120	3/8/00	QC01409
CCV 2	MTBE (mg/L)		0.1	0.118	118	80 - 120	3/8/00	QC01409
CCV 2	Benzene (mg/L)		0.1	0.106	106	80 - 120	3/8/00	QC01409
CCV 2	Toluene (mg/L)		0.1	0.112	112	80 - 120	3/8/00	QC01409
CCV 2	Ethylbenzene (mg/L)		0.1	0.101	101	80 - 120	3/8/00	QC01409
CCV 2	M,P,O-Xylene (mg/L)		0.3	0.294	98	80 - 120	3/8/00	QC01409

[illegible]