



DEPARTMENT OF ECOLOGY

7171 Cleanwater Lane, Building 8, LH-14 • Olympia, Washington 98504

May 29, 1990

TO: Mike Gallagher  
FROM: Laura Chern  
SUBJECT: Restover Truck Stop Ground Water Monitoring Round Four.

Introduction: The fourth round of ground water monitoring at the Restover Truck Stop was completed by the Toxics Investigations and Ground Water Monitoring Section on January 29-31, 1990. Two domestic supply and five monitoring wells were sampled for benzene, toluene, ethyl benzene, and total xylenes (BTEX) and dissolved iron. Figure 1 shows the locations of wells sampled. The extent of BTEX contamination continues to be stable.

Methods: Prior to sample collection, static water level measurements were obtained from 17 wells located onsite (Table 1). Groundwater samples were collected from two domestic supply and five monitoring wells. Three or more well volumes were removed from the wells prior to sampling using either a centrifugal pump or decontaminated teflon bailer. Wells were purged until pH, temperature, and conductivity measurements were stable. Monitoring well samples were collected using decontaminated, bottom-emptying teflon bailers. Supply wells were sampled at the tap nearest the pump. Sampling equipment was decontaminated using a Liquinox wash, three tap rinses, and a deionized water rinse. Teflon bailers were rinsed with 10 percent nitric acid/deionized water solution, methylene chloride, acetone, and a final deionized rinse. The peristaltic pump, tubing, and filter bed used for filtration of samples to be analyzed for dissolved iron, were rinsed between samples using 500 ml of a 10 percent nitric acid/deionized water solution, followed by 500 ml of deionized water. Filters were changed between each sample.

Quality Assurance Samples: Five quality control samples were collected including a duplicate, matrix spike, and transfer, transport, and filter blanks. Duplicate samples were obtained from monitoring well MW-8A. BTEX have been detected previously in MW-8A. Transfer blanks for BTEX and dissolved iron were obtained by pouring organic free water through the bailer and collecting rinsate in the sample containers. A separate filter blank for dissolved iron was obtained by pumping deionized water through the peristaltic pump and filter bed.

# Restover Truck Stop Sampling Round Four

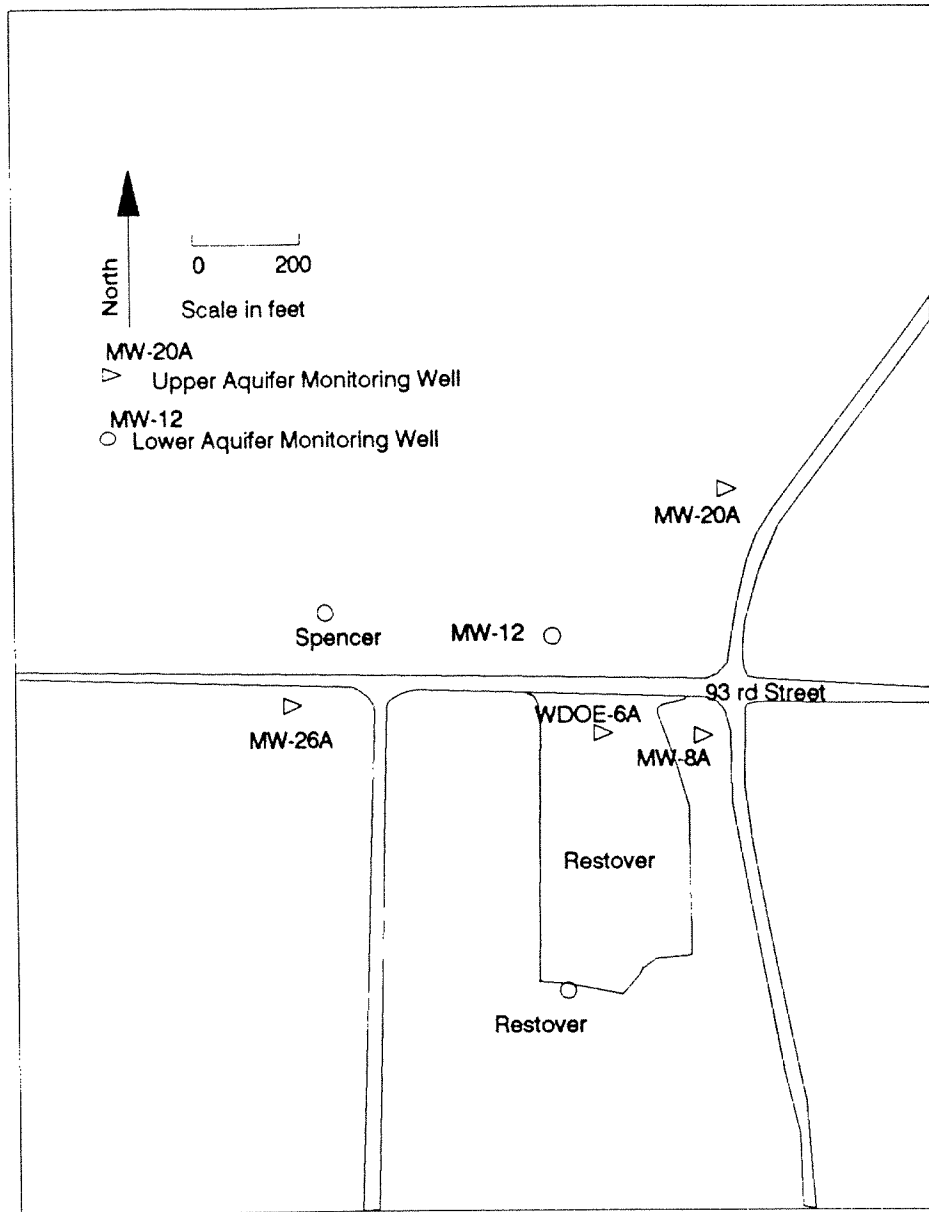


Figure 1: Sampling Locations  
January, 1990

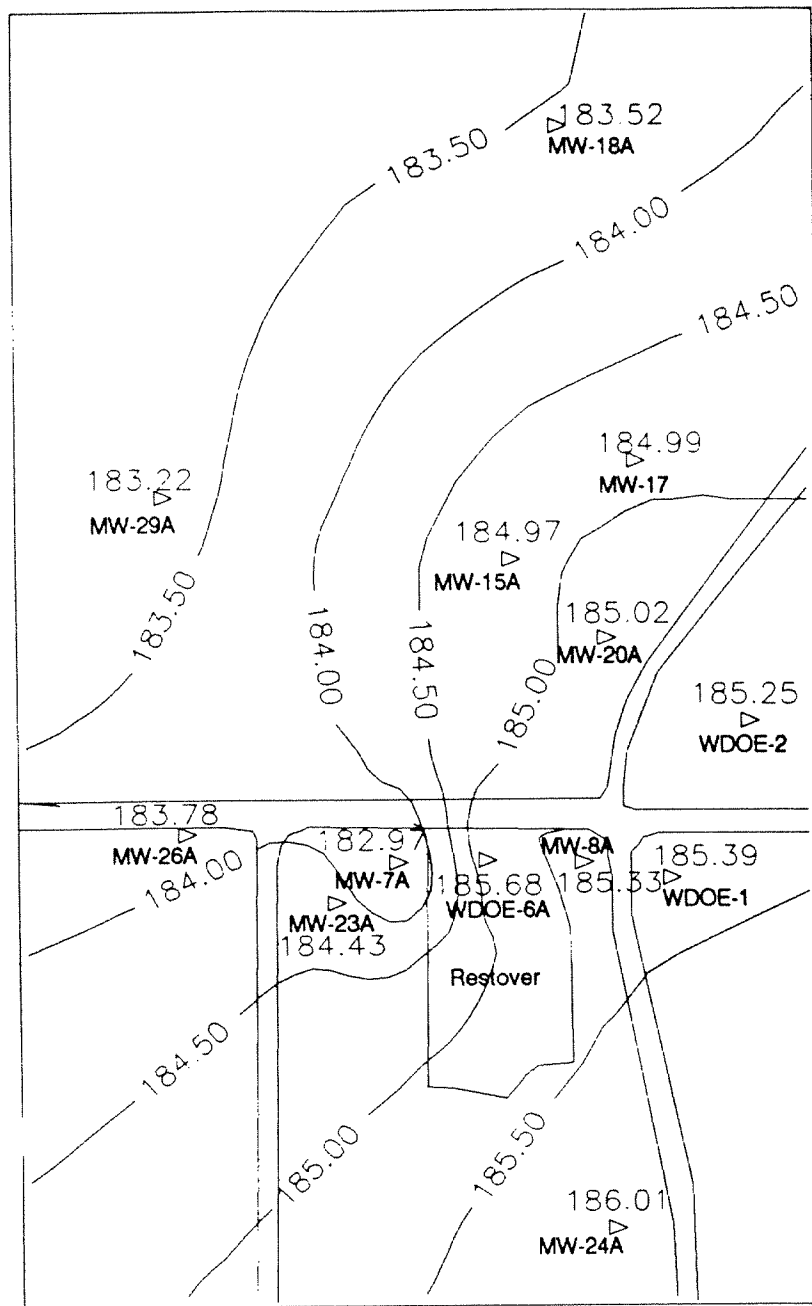
Field Observations: Figure 2 shows the potentiometric surface in the upper aquifer. Table 1 shows the water level elevations in wells located onsite. Table 2 lists field observation data including pH, temperature, and specific conductance, in the order wells were sampled. Hydrocarbon odor and sheens were observed in purge water from WDOE-6A, MW-8A, and MW-12.

Table 1: Water Table Elevations (MSL)

<u>Well ID</u>	<u>Elevation (MSL)</u>
Upper Aquifer	
WDOE-1	185.39
WDOE-2	185.25
WDOE-6A	185.68
MW-7A	182.97
MW-8A	185.33
MW-15A	184.97
MW-17	184.985
MW-18A	183.52
MW-20A	185.02
MW-23A	184.43
MW-24A	186.01
MW-26A	183.78
MW-27A	DRY
MW-29A	183.22
Lower Aquifer	
MW-12	184.15
MW-16	184.16
MW-21	184.38

Table 2: Field Sampling Results (in order sampled)

Well ID	pH	Specific Conductance	Temperature Degrees C	Purge Volume (gals)	Aquifer (Upper/Lower)
Restover	6.54	107	9.4	290	L
Spencer	6.55	85	9.4	125	L
MW-12	6.56	139	10.7	72	L
MW-26A	6.32	81	10.3	80	U
MW-20A	5.97	77	10.2	68	U
MW-8A	6.19	100	10.4	60	U
WDOE-6A	6.46	236	12.1	96	U



▽ 183.52  
MW-18A

Monitoring Well  
and Water Table  
Elevation (MSL)



0 200  
Scale in feet

Figure 2: Potentiometric Surface  
Upper Aquifer, January, 1990

Sample Analytical Results: Analytical results for BTEX and dissolved iron are presented in Table 3. Appendix A lists the detection limits and matrix spike recoveries. Table 4 shows the sum of BTEX for sampling events between May 1987 and January 1990.

Table 3: Sample Analytical Results in Order Sampled (ug/L)

Well ID	Benzene	Toluene	Ethylbenzene	Total Xylene	Dissolved Iron
Restover	ND	ND	ND	ND	30.8
Spencer	ND	ND	ND	ND	19 J
MW-12	ND	ND	ND	ND	20 J
MW-20A	ND	ND	2.0	18	3.0 J
MW-26A	ND	ND	ND	ND	3.0 J
MW-8A	ND	2.1	ND	12	1310
Duplicate	ND	1.8	2.6	22	1350
WDOE-6A	1300	2600	670	5300	4560
Transfer	ND	ND	ND	ND	ND
Transport	ND	ND	ND	ND	ND
Filter	NA	NA	NA	NA	ND

J: Concentration is estimated  
 ND: Compound Not Detected at the given Detection Limit  
 NA: Compound Not Analyzed

Table 4: Restover Truck Stop BTEX Concentrations (ug/L)

Well ID	May 1987	September 1987	October 1988	January 1989	July 1989	January 1990
Upper Aquifer						
WDOE-6A	6950	1180	5300	28000	7490	9870
MW-8A	230	388	479	334	58	14.1
MW-20A	126	NT	NT	NT	NT	20
MW-26A	ND	ND	ND	ND	ND	ND
Lower Aquifer						
Restover	NT	NT	ND	ND	ND	ND
MW-12	53	5	7.7	ND	4	ND

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Discussion: No contamination was detected in the lower aquifer during the fourth round of sampling. Hydrocarbon odor and a sheen was observed in MW-12 but no BTEX was detected. Dissolved iron in MW-12 may indicate that weathered gasoline is still present. The extent of hydrocarbon contamination in the upper aquifer remains stable. Monitoring wells MW-8A, WDOE-6A, and MW-20A showed detectable concentrations of BTEX.

Quality Assurance Analytical Results: The Transfer, Transport, and Method Blank analytical results showed no laboratory or field contamination of samples by BTEX. The relative percent difference between duplicate samples collected from MW-8A are 0.7% for toluene, 20.9% for total xylene, and 1.5% for dissolved iron.

Conclusions:

1. WDOE-6A continues to show high concentrations of BTEX. This may be attributed to a possible continuing source located near the gas pumps.
2. High concentrations of dissolved iron have consistently been detected where BTEX contamination has been detected in the upper and lower aquifers.

Recommendations:

1. A semi-volatile organic compound analysis should be run on MW-12 samples to determine the concentrations of contaminants present in the lower aquifer.
2. Monitoring wells WDOE-6A, MW-8A, MW-12, MW-15A, MW-16, the Spencer well, and the Restover supply well should continue to be sampled for BTEX and dissolved iron. In addition, MW-20A screened in the upper aquifer should be sampled as BTEX was detected during sampling round four.
3. Monitoring well MW-27A should be abandoned. It has been dry since October of 1988 when TI/GWM section began site monitoring.

LC:krc

cc: Bill Yake

State of Washington Department of Ecology  
Manchester Environmental Laboratory  
P.O Box 307 Manchester, WA. 98353

Data Review

March 13, 1990

Project : Restover  
Samples : 058130-39  
Laboratory: Analytical Resources Inc. 4563  
By: Stuart Magoon *SM*

BETX (waters)

Holding Times:

Sample	Date Collect	Date Man Lab Rec'd	Date Cntr Lab Rec'd	Date Extd	Date Anlz	#Days From Collect
058130	1/30	1/31	2/1	NA	2/2	3 of 14
058131	1/30	1/31	2/1	NA	2/2	3 of 14
058132	1/30	1/31	2/1	NA	2/2	3 of 14
058133	1/30	1/31	2/1	NA	2/2	3 of 14
058134	1/30	1/31	2/1	NA	2/3	4 of 14
058135	1/30	1/31	2/1	NA	2/3	4 of 14
058136	1/30	1/31	2/1	NA	2/3	4 of 14
058137	1/31	2/1	2/1	NA	2/3	3 of 14
058138	1/31	2/1	2/1	NA	2/3	3 of 14
058139	1/31	2/1	2/1	NA	2/3	3 of 14

These samples have met all the holding time requirements.

Surrogates:

Surrogate recoveries for these samples, and the method blanks are reasonable and acceptable and within ARI's recovery limits. No EPA recovery limits have been established.

Sample Data

This data is acceptable for use.

DATE: 2/13/90

SITE: WDOE BETX ARI # 4563

RE: CASE NARRATIVE NOTES

THE SAMPLES WERE ANALYZED UTILIZING EPA METHOD 602. QUANTITATION WAS PERFORMED AS FOLLOWS:

1) SAMPLES A,B,C,D,E,G,H, AND I WERE QUANTITATED FROM A 5 POINT CURVE THAT UTILIZED THE FOLLOWING CONCENTRATIONS IN NG/ML (1,25,50,100,150).

2) DUE TO INCREASED RESPONSE ON THE ANALYSIS SEQUENCE BEGUN AT 12:42 ON 2/3/90. SAMPLES F AND J WERE QUANTITATED FROM A SINGLE POINT CALIBRATION STANDARD (STD36 @ 25 NG/ML).

BOTH CALIBRATIONS WERE CHECKED EVERY FIVE SAMPLE INJECTIONS WITH A CONTINUING CALIBRATION STANDARD AT 25 NG/ML. THE PERCENT DIFFERENCE IN CONCENTRATION (ACTUAL VS OBSERVED) WAS NOT ALLOWED TO DEVIATE BY MORE THAN +/-15%.

SURROGATE SPIKING LEVELS:

ARI SAMPLE ID	SPIKING LEVEL (NG/ML)	
	TRIFLUOROTOLUENE	BROMOBENZENE
4563-A	50	25
4563-B	50	25
4563-C	50	25
4563-D	50	25
4563-E	50	25
4563-F	50	25
4563-G	50	25
4563-H	50	25
4563-I	50	25
4563-J	4000	2000

SURROGATE CONTROL LIMITS (WATER):

TRIFLUOROTOLUENE: 74 - 123

BROMOBENZENE: 70 - 116

SAMPLE PREPARATION INFORMATION: 40 MLS OF SAMPLES A-I WERE TRANSFERRED TO A CLEAN BAKED 40ML VOA VIAL TO WHICH 400 ULS OF SURROGATE SOLUTION WAS THEN ADDED. THE SURROGATE SOLUTION CONTAINED TRIFLUOROTOLUENE AT 5 UG/ML AND BROMOBENZENE AT 2.5 UG/ML. 500 ULS OF SAMPLE J WAS ADDED TO 39.5 MLS OF ORGANIC-FREE WATER AND THEN SPIKED WITH 400 ULS OF THE ABOVE MENTIONED SURROGATE SOLUTION. THE BLANK, SAMPLES AND QUANTITATION STANDARDS WERE THEN SAMPLED ON A VOA VIAL-TYPE AUTOSAMPLER LINKED TO A PURGE AND TRAP DEVICE.





**ANALYTICAL  
RESOURCES  
INCORPORATED**

Analytical  
Chemists &  
Consultants

333 Ninth Ave North  
Seattle, WA 98109-5187  
(206) 621-6490  
(206) 621-7523 (FAX)

**ORGANICS ANALYSIS DATA SHEET**  
**BETX by Method 602/8020**  
Matrix: Waters

**Project No: Restover**  
**QC Report No: 4563**  
**VTSR: 02/01/90**

Data Release Authorized: Alan N. Baker  
Report prepared: 03/02/90 - MAC:B

		<i>Restover</i>		<i>Spencer</i>	<i>MW-12</i>	
Sample No.	Meth Blank	058130	058131	058132	058133	
ARI ID	MB202	4563A	4563B	4563C	4563D	
Date Analyzed	02/02/90	02/02/90	02/02/90	02/02/90	02/02/90	
Amt Analyzed	5.0 ml	5.0 ml	5.0 ml	5.0 ml	5.0 ml	
Units	µg/L	µg/L	µg/L	µg/L	µg/L	
CAS Number						
71-43-2	Benzene	1.0U	1.0U	1.0U	1.0U	1.0U
108-88-3	Toluene	1.0U	1.0U	1.0U	1.0U	1.0U
100-41-4	Ethylbenzene	1.0U	1.0U	1.0U	1.0U	<b>2.0</b>
1330-20-7	Total Xylenes	2.0U	2.0U	2.0U	2.0U	<b>1.8</b>
	Trifluorotoluene	101%	96.0%	98.8%	98.2%	85.8%
	Bromobenzene	98.4%	99.6%	102%	103%	93.6%

		<i>MW-26A</i>	<i>MW-7A</i>	<i>Transfer</i>	<i>Transport</i>
Sample No.	Meth Blank	058134	058136	058137	058138
ARI ID		4563E	4563G	4563H	4563I
Date Analyzed		02/03/90	02/03/90	02/03/90	02/03/90
Amt Analyzed		5.0 ml	5.0 ml	5.0 ml	5.0 ml
Units		µg/L	µg/L	µg/L	µg/L
CAS Number					
71-43-2	Benzene	1.0U	2.1U	1.0U	1.0U
108-88-3	Toluene	1.0U	<b>1.2</b>	1.0U	1.0U
100-41-4	Ethylbenzene	1.0U	<b>2.2</b>	1.0U	1.0U
1330-20-7	Total Xylenes	2.0U	<b>2.2</b>	2.0U	2.0U
	Trifluorotoluene	94.0%	80.6%	97.6%	98.0%
	Bromobenzene	99.2%	96.8%	102%	102%

		<i>MW-8A</i>		<i>WDOE-6A</i>
Sample No.	Meth Blank	058135	058139	
ARI ID	MB0203	4563F	4563JDL	
Date Analyzed	02/03/90	02/03/90	02/03/90	
Amt Analyzed	5.0 ml	5.0 ml	0.0625 ml	
Units	µg/L	µg/L	µg/L	
CAS Number				
71-43-2	Benzene	1.0U	2.7U	<b>1300</b>
108-88-3	Toluene	1.0U	<b>2.1</b>	<b>2600</b>
100-41-4	Ethylbenzene	1.0U	<b>2.8U</b>	<b>670</b>
1330-20-7	Total Xylenes	2.0U	<b>12.1</b>	<b>5300</b>
	Trifluorotoluene	100%	75.6%	93.2%
	Bromobenzene	100%	92.4%	102%

- Value If the result is a value greater than or equal to the detection limit, report value.
- U Indicates compound was analyzed for but not detected at the given detection limit.
- NR Analysis not required.
- B This flag is used when the analyte is found in the blank as well as a sample. Indicates possible/probable blank contamination.
- K This flag is used when quantitated value falls above the limit of the calibration curve and dilution should be run.

==> Transaction #: 03121148                      Laboratory: (WE) Ecology, Manchester Lab  
 Work Group:                      (38) Metals - ICP Scan  
 Instrument: (ICP            ) ICP, Jarrell-Ash AtomComp 1100 (DOE)  
 Method: (EP1-200.7        ) Inductively Coupled Plasma Atomic Emissions Analysis  
 Chemist:                      (JFR) Rigot, Jerome                      DOE                      Hours Worked: \_\_\_\_\_  
 Project: DOE-024N    RESTOVER TRUCK STOP    Prg Ele#: D3K01  
 Prj Off: Chern, Laura                      DOE                      Analysis Due: 900131    Revised Due:

## \*\*\* Sample Records in Transaction \*\*\*

Seq#	Sample #	QA	Date/Time	Description	Alternate Keys
01	90058130		900130	RESTOVER	
02	90058131		900130	SPENCER	
03	90058132		900130	MW-12	
04	90058133		900130	MW-20A	
05	90058134		900130	MW-26A	
06	90058135		900130	MW-8A	
07	90058136		900130	MW-7A	
08	90058130	LMX1	900130	RESTOVER	
09	90058130	LMX2	900130	RESTOVER	

Record Type: TRNIN3                      Date Verified: 3-19-90    By: June  
 Transaction Status: Edited Transaction...First Printing...Unverified.  
 Processed: 12-MAR-90 11:52:31    Status: E    Batch:    (In CUR DB)

Transaction #: 03121148    Seq #: 01    (38) Metals - ICP Scan  
Proj Code : DOE-024N    RESTOVER TRUCK STOP    PE # : D3K01

Sa    e No.: 90 058130    *Restover*    Alternate Keys:

Samp Matrix: (11) Water-Filtered    Units: (00)    %Slds:  
QA Code: (    ) Unspecified    Peaks Total:  
Date Extracted:    Date Analyzed: 900207    # Days to Ext/Anal: 0/ 8

Line	Par #	Parameter Description	Units	Value
1	01046	Iron    Fe-Diss    ug/l		30.8

Transaction #: 03121148    Seq #: 02    (38) Metals - ICP Scan  
Proj Code : DOE-024N    RESTOVER TRUCK STOP    PE # : D3K01

*Spencer*

Sample No.: 90 058131    Alternate Keys:

Samp Matrix: (11) Water-Filtered    Units: (00)    %Slds:  
QA Code: (    ) Unspecified    Peaks Total:  
Date Extracted:    Date Analyzed: 900207    # Days to Ext/Anal: 0/ 8

Line	Par #	Parameter Description	Units	Value
1	01046	Iron Fe-Diss ug/l		19J

Transaction #: 03121148    Seq #: 03    (38) Metals - ICP Scan  
Proj Code : DOE-024N    RESTOVER TRUCK STOP    PE # : D3K01

MW-12

Sampl No.: 90 058132    Alternate Keys:

Samp Matrix: (11) Water-Filtered    Units: (00)    %Slds:  
QA Code: (    ) Unspecified    Peaks Total:  
Date Extracted:    Date Analyzed: 900207    # Days to Ext/Anal: 0/ 8

Line	Par #	Parameter Description	Units	Value
1	01046	Iron Fe-Diss ug/l		20J

Transaction #: 03121148    Seq #: 04    (38) Metals - ICP Scan  
Proj Code : DOE-024N    RESTOVER TRUCK STOP    PE # : D3K01

**MW-20A**

Sample No.: 90 058133    Alternate Keys:

Samp Matrix: (11) Water-Filtered    Units: (00)    %Slds:  
QA Code: (    ) Unspecified    Peaks Total:  
Date Extracted:    Date Analyzed: 900207    # Days to Ext/Anal: 0/ 8

Line	Par #	Parameter Description	Units	Value
1	01046	Iron    Fe-Diss    ug/l		3.0J

Transaction #: 03121148    Seq #: 05    (38) Metals - ICP Scan  
Proj Code : DOE-024N    RESTOVER TRUCK STOP    PE # : D3K01

Sa e No.: 90 058134    <sup>MW-26A</sup>    Alternate Keys:

Samp Matrix: (11) Water-Filtered    Units: (00)    %Slds:  
QA Code: (    ) Unspecified    Peaks Total:  
Date Extracted:    Date Analyzed: 900207    # Days to Ext/Anal: 0/ 8

Line	Par #	Parameter Description	Units	Value
1	01046	Iron Fe-Diss ug/l		3.0J

Transaction #: 03121148    Seq #: 06    (38) Metals - ICP Scan  
Proj Code : DOE-024N    RESTOVER TRUCK STOP    PE # : D3K01

MW-8A

Sample No.: 90 058135    Alternate Keys:

Samp Matrix: (11) Water-Filtered    Units: (00)    %Slds:  
QA Code: (    ) Unspecified    Peaks Total:  
Date Extracted:    Date Analyzed: 900207    # Days to Ext/Anal: 0/ 8

Line	Par #	Parameter Description	Units	Value
1	01046	Iron Fe-Diss ug/l		1310



\*\*\* Lab Analysis Report \*\*\*

Transaction #: 03121148 Seq #: 07 (38) Metals - ICP Scan  
Proj Code : DOE-024N RESTOVER TRUCK STOP PE # : D3K01

Sa le No.: 90 058136 <sup>MW-7A</sup> Alternate Keys:

Samp Matrix: (11) Water-Filtered Units: (00) %Slds:  
QA Code: ( ) Unspecified Peaks Total:  
Date Extracted: Date Analyzed: 900207 # Days to Ext/Anal: 0/ 8

Line	Par #	Parameter Description	Units	Value
1	01046	Iron Fe-Diss ug/l		1350

Transaction #: 03121148 Seq #: 08 (38) Metals - ICP Scan  
Proj Code : DOE-024N ~~RESTOVER~~ TRUCK STOP PE # : D3K01

San No.: 90 058130 <sup>Restover</sup> Alternate Keys:

Samp Matrix: (11) Water-Filtered Units: (94) % Recov %Slds:  
QA Code: (LMX1) Lab Mtrx Spike #1 (% Rec Peaks Total:  
Date Extracted: Date Analyzed: 900207 # Days to Ext/Anal: 0/ 8

Line	Par #	Parameter Description	Units	Value
1	01046	Iron Fe-Diss ug/l	% Recov	103

Transaction #: 03121148    Seq #: 09    (38) Metals - ICP Scan  
Proj Code : DOE-024N    RESTOVER TRUCK STOP    PE # : D3K01

Sa. e No.: 90 <sup>Restover</sup> 058130    Alternate Keys:

Samp Matrix: (11) Water-Filtered    Units: (94) % Recov    %Slds:  
QA Code: (LMX2) Lab Mtrx Spike #2 (% Rec    Peaks Total:  
Date Extracted:    Date Analyzed: 900207    # Days to Ext/Anal: 0/ 8

Line	Par #	Parameter Description	Units	Value
1	01046	Iron    Fe-Diss    ug/l	% Recov	103

==> Transaction #: 03121139                      Laboratory: (WE) Ecology, Manchester Lab  
 Wc Group:                      (38) Metals - ICP Scan  
 Instrument: (ICP            ) ICP, Jarrell-Ash AtomComp 1100 (DOE)  
 Method: (EP1-200.7        ) Inductively Coupled Plasma Atomic Emissions Analysis  
 Chemist:                      (JFR) Rigot, Jerome                      DOE                      Hours Worked: \_\_\_\_\_  
 Project: DOE-024N    RESTOVER TRUCK STOP    Prg Ele#: D3K01  
 Prj Off: Chern, Laura                      DOE                      Analysis Due: 900131    Revised Due:

## \*\*\* Sample Records in Transaction \*\*\*

Seq#	Sample #	QA	Date/Time	Description	Alternate Keys
01	90058137		900131	TRANSFER	
02	90058138		900131	TRANSPORT	
03	90058139		900131	WDOE-6A	
04	90058140		900131	MW-8	
05	90058139	LMX1	900131	WDOE-6A	
06	90058139	LMX2	900131	WDOE-6A	

Record Type: TRNIN3                      Date Verified: 3-19-90                      By: JFR  
 Transaction Status: Edited Transaction...First Printing...Unverified.  
 Processed: 12-MAR-90 11:42:33                      Status: E    Batch:                      (In CUR DB)

\*\*\* Lab Analysis Report \*\*\*

Transaction #: 03121139 Seq #: 01 (38) Metals - ICP Scan  
Proj Code : DOE-024N RESTOVER TRUCK STOP PE # : D3K01

Sa. e No.: 90 <sup>Transfer</sup> 058137 Alternate Keys:

Samp Matrix: (11) Water-Filtered Units: (00) %Slds:  
QA Code: ( ) Unspecified Peaks Total:  
Date Extracted: Date Analyzed: 900207 # Days to Ext/Anal: 0/ 7

Line	Par #	Parameter Description	Units	Value
1	01046	Iron Fe-Diss ug/l		2.0U

Transaction #: 03121139    Seq #: 02    (38) Metals - ICP Scan  
Proj Code : DOE-024N    RESTOVER TRUCK STOP    PE # : D3K01

Sa. e No.: 90 058138    <sup>Transport</sup>    Alternate Keys:

Samp Matrix: (11) Water-Filtered    Units: (00)    %Slds:  
QA Code: (    ) Unspecified    Peaks Total:  
Date Extracted:    Date Analyzed: 900207    # Days to Ext/Anal: 0/ 7

Line	Par #	Parameter Description	Units	Value
1	01046	Iron Fe-Diss ug/l		2.00

Transaction #: 03121139    Seq #: 03    (38) Metals - ICP Scan  
Proj Code : DOE-024N RESTOVER TRUCK STOP    PE # : D3K01

Sample No.: 90 058139    <sup>WDOE-6A</sup>    Alternate Keys:

Samp Matrix: (11) Water-Filtered    Units: (00)    %Slds:  
QA Code: (    ) Unspecified    Peaks Total:  
Date Extracted:    Date Analyzed: 900213    # Days to Ext/Anal: 0/ 13

Line	Par #	Parameter Description	Units	Value
1	01046	Iron Fe-Diss ug/l		4560

\*\*\* Lab Analysis Report \*\*\*

Transaction #: 03121139    Seq #: 04    (38) Metals - ICP Scan  
Proj Code : DOE-024N    RESTOVER TRUCK STOP    PE # : D3K01

Sample No.: 90 058140 <sup>MW-8</sup>    Alternate Keys:

Samp Matrix: (11) Water-Filtered    Units: (00)    %Slds:  
QA Code: (    ) Unspecified    Peaks Total:  
Date Extracted:    Date Analyzed: 900207    # Days to Ext/Anal: 0/ 7

Line	Par #	Parameter Description	Units	Value
1	01046	Iron Fe-Diss	ug/l	2U



\*\*\* Lab Analysis Report \*\*\*

Transaction #: 03121139 Seq #: 05 (38) Metals - ICP Scan  
Proj Code : DOE-024N RESTOVER TRUCK STOP PE # : D3K01

Sar No.: 90 058139> Alternate Keys:

Samp Matrix: (11) Water-Filtered Units: (94) % Recov %Slds: \_\_\_\_\_  
QA Code: (LMX1) Lab Mtrx Spike #1 (% Rec Peaks Total: \_\_\_\_\_  
Date Extracted: Date Analyzed: 900213 # Days to Ext/Anal: 0/13

Line	Par #	Parameter Description	Units	Value
1	01046	Iron Fe-Diss ug/l	% Recov	104

Transaction #: 03121139    Seq #: 06    (38) Metals - ICP Scan  
Proj Code : DOE-024N    RESTOVER TRUCK STOP    PE # : D3K01

S    e No.: 90 058139    Alternate Keys:

Samp Matrix: (11) Water-Filtered    Units: (94) % Recov    %Slds:  
QA Code: (LMX2) Lab Mtrx Spike #2 (% Rec    Peaks Total:  
Date Extracted:    Date Analyzed: 900213    # Days to Ext/Anal: 0/ 13

Line	Par #	Parameter Description	Units	Value
1	01046	Iron    Fe-Diss    ug/l	% Recov	102