

P.O. Drawer 3337, 700 S. Tucker, Farmington, New Mexico 87499  
(505) 327-4981 • 24-Hour Dispatch (505) 325-6892 • (505) 327-0416

April 10, 1998

Roger Anderson  
Environmental Bureau Chief  
New Mexico OCD  
2040 South Pacheco  
Santa Fe, New Mexico 87505

RECEIVED  
APR - 9 1998  
OIL CON. DIV.  
DIST. 3

Denny Foust  
Deputy Oil & Gas Inspector  
New Mexico OCD  
1000 Rio Brazos Road  
Aztec, New Mexico 87410

Dear Sirs:

Please find attached our Quarterly Injection Well Report for Sunco Disposal.  
The following explanation is needed concerning Flow Rate and Annular Pressures.

On Flow Rates: The average was based on a 16 hour days / days in the month .  
Also there were many days when there was no pump activity.

On Annular Pressures: The non-continuous injection pump activity had severely effected  
the backside pressures . So on a letter dated March 20, 1997 NMOCD granted Sunco a permit  
amendment pertaining to the annulus. This change in the permit is reflected in this quarters report.

The Injection Water Analysis is also provided . If you require additional information,  
please contact me at (505) 334-6186

Best Regards:

Michael Talovich  
Disposal Manager  
Sunco Trucking

cc: H. Stone

**SUNCO DISPOSAL**  
**P.O. BOX 900**  
**FARMINGTON, N.M. 87499**

MONTHLY INJECTION WELL REPORT

PERIOD 1998	INJECTION PRESSURES			FLOW RATES			'FLOW VOLUMES / DAY			'ANNULAR PRESSURES			CLASS 1 NON-HAZ	
	MAX (PSI)	MIN (PSI)	AVG (PSI)	MAX (bbls)	MIN (bbls)	AVG (bbls)	MONTH(bbls)	'YTD (bbls)	LIFE OF WELL	MAX (PSI)	MIN (PSI)	AVG (PSI)	VOLUMES IN BARRELS	
JAN	1940	1740	1920	2,863	808	2,044	63,358	63,358	2,730	383	0	0	0	5,040
FEB	1940	1740	1920	2,736	1,177	1,809	50,641	113,999	2,781	024	0	0	0	0
MAR	1950	1740	1920	2,495	1,339	1,750	54,262	168,261	2,835	286	0	0	0	2,680
APR														
MAY														
JUN														
JUL														
AUG														
SEP														
OCT														
NOV														
DEC														

CERTIFICATION *Michael J. Haines* DATE 14-9-98

Michael Talovich  
Sunco Trucking  
708 S. Tucker  
Farmington, NM 87401

March 30, 1998

Mr. Talovich:

Enclosed, please find the reports for the sample received by our laboratory for analysis on March 10, 1998.

If you have any questions about the results of these analyses, please don't hesitate to call me at your convenience.

We appreciate your business!

Sincerely,

A handwritten signature in cursive script that reads "Sharon Williams".

Sharon Williams  
Organics Lab Supervisor

Enclosures  
cc: File

## SUNCO TRUCKING

### Case Narrative

On March 10, 1998, one sample was submitted to Inter-Mountain Laboratories - Farmington for analysis. The sample was identified by project "Injection Pump", and was analyzed for the parameters indicated on the accompanying Chain of Custody document #51877.

It is the policy of this laboratory to employ, whenever possible, preparatory and analytical methods which have been approved by regulatory agencies. The methods used in the analyses of the sample reported herein are found in Test Methods For Evaluation of Solid Waste, SW-846, USEPA, 1986, and Methods For Chemical Analysis of Water and Wastes, EPA-600/4-79-020, USEPA, 1983.

Quality control reports appear at the end of the analytical package and may be identified by title. If there are any questions regarding the information presented in this package, please feel free to call at your convenience.

Sincerely,

A handwritten signature in cursive script, reading "Sharon Williams". The signature is written in black ink and is positioned above the printed name and title.

Sharon Williams  
Organics Lab Supervisor

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CASE NARRATIVE

Client: SUNCO TRUCKING  
Project: Injection Plant Received on: 03/12/98  
Set ID: 0598H01037 # samples: 1

Suites: 8260 Standard

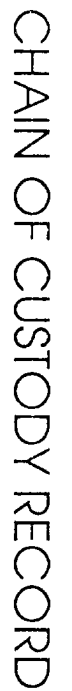
Samples were received for analysis at Inter-Mountain Laboratories (IML), Gillette, Wyoming. Enclosed are the results of these analyses.

No targeted analytes were found in the water sample, however high levels of aromatic compounds were observed. Such as Benzene, Toluene, and m,p-xylene.

Limits of detection for each instrument/analysis are determined by sample matrix effects, instrument performance under standard conditions, and dilution requirements to maintain chromatography output within calibration ranges. Quantitations have been calculated on an as received basis.

Quality Control reports have been included for your information and use. These reports appear at the end of the analytical package and may be identified by title. If there are any questions regarding the information presented in this package, please contact me at (800) 828-1413.

  
IML-Gillette



## CHAIN OF CUSTODY RECORD

[illegible]

**Client:** Sunco Trucking  
**Project:** Injection Plant  
**Sample ID:** Injection Pump  
**Lab ID:** 0398G01127  
**Matrix:** Water  
**Condition:** Cool/Intact

**Date Received:** 03/10/98  
**Date Reported:** 03/30/98  
**Date Sampled:** 03/10/98  
**Time Sampled:** 1500

Parameter	Analytical Result	Units	Units	PQL	Method	Analysis			
						Date	Time	Init.	
General Parameters									
PH	8.1	s.u.		0.1	EPA 150.1	03/10/98	1600	AP	
Electrical Conductivity	30,000	µmhos/cm		10	EPA 120.1	03/10/98	1600	AP	
Solids - Total Disso ved	17,800	mg/L		10	EPA 160.1	03/11/98	0930	BJ	
Solids - Total Disso ved (Calc)	16,697	mg/L		10	Calculation	03/30/98	0930	JG	
Solids-Total	20,100	mg/L		10	EPA 160.3	03/17/98	0830	BJ	
Alkalinity (CaCO3)	1,660	mg/L		1	EPA 310.1	03/18/98	0930	BJ	
Hardness (CaCO3)	605	mg/L		1	Calculation	03/30/98	0930	JG	
Major Anions									
Bicarbonate (HCO3)	2,030	mg/L	33.3	meq/L	1	EPA 310.1	03/18/98	0930	BJ
Carbonate (CO3)	<1	mg/L	<0.01	meq/L	1	EPA 310.1	03/18/98	0930	BJ
Hydroxide (OH)	<1	mg/L	<0.01	meq/L	1	EPA 310.1	03/18/98	0930	BJ
Chloride	9,210	mg/L	260	meq/L	1	EPA 300.0	03/11/98	1300	AP
Nitrogen - Nitrate/Nitrite	0.12	mg/L			0.05	EPA 353.2	03/24/98	1255	SH
Sulfate	121	mg/L	2.52	meq/L	5	EPA 300.0	03/11/98	1300	AP
Major Cations									
Calcium	160	mg/L	7.98	meq/L	0.2	EPA 200.7	03/12/98	0900	ST
Magnesium	50.0	mg/L	4.11	meq/L	0.2	EPA 200.7	03/12/98	0900	ST
Potassium	220	mg/L	5.63	meq/L	0.2	EPA 200.7	03/12/98	0900	ST
Sodium	5,940	mg/L	258	meq/L	0.2	Calculation	03/12/98	0900	ST
Cation / Anion Balance QC Information									
Anion Sum			296	meq/L	0.01	Calculation	03/30/98	0930	JG
Cation Sum			276	meq/L	0.01	Calculation	03/30/98	0930	JG
Cation/Anion Balance			3.40	%	0.01	Calculation	03/30/98	0930	JG

Reference: EPA - "Methods for Chemical Analysis of Water and Wastes", United States Environmental Protection Agency, EPA 600/4-79-020, Revised March 1983.

EPA - "Methods for the Determination of Inorganic Substances in Environmental Samples", United States Environmental Protection Agency, EPA 600/R-93/100 August, 1983.

Reviewed By:

John Green, Water Lab Supervisor

## VOLATILE AROMATIC HYDROCARBONS

## Sunco Trucking

Project ID:	Injection Plant	Report Date:	03/20/98
Sample ID:	Injection Pump	Date Sampled:	03/10/98
Lab ID:	0398G01127	Date Received:	03/10/98
Sample Matrix:	Water	Date Extracted:	NA
Condition:	Cool/Intact	Date Analyzed:	03/16/98



Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	107	0.2
Toluene	226	0.2
Chlorobenzene	ND	0.2
Ethylbenzene	41.2	0.2
m,p-Xylenes	472	0.2
o-Xylene	99.8	0.2
1,3-Dichlorobenzene	24.5	0.2
1,4-Dichlorobenzene	ND	0.2
1,2-Dichlorobenzene	20.4	0.2

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	91.9%	70 -130%

Reference: Method 5030, Purge and Trap; Method 602, Purgeable Aromatics; Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, USEPA, October 1984.

Comments:

  
\_\_\_\_\_  
Analyst  
\_\_\_\_\_  
Review



**TOXICITY CHARACTERISTIC LEACHING PROCEDURE  
TRACE METAL CONCENTRATION**

Client: **Sunco Trucking**  
Project: Injection Pump  
Sample ID: Injection Pump  
Laboratory ID: 0398G01127  
Sample Matrix: Water

Date Reported: 03/20/98  
Date Sampled: 03/10/98  
Date Received: 03/10/98  
Date Analyzed: 03/19/98

Parameter	Result	Detection Limit	Regulatory Level	Units
Arsenic.....	<0.005	0.005	5	mg/L
Barium.....	2.44	0.01	100	mg/L
Cadmium.....	<0.004	0.004	1	mg/L
Chromium.....	0.06	0.01	5	mg/L
Lead.....	<0.05	0.05	5	mg/L
Mercury.....	<0.001	0.001	0.2	mg/L
Selenium.....	<0.005	0.005	1	mg/L
Silver.....	<0.01	0.01	5	mg/L

ND- Analyte not detected at stated detection level.

**References:** Method 1311: Toxicity Characteristic Leaching Procedure,  
SW-846, Rev. 0, July 1992.

Method 3010A: Acid Digestion of Aqueous Samples and Extracts for Total  
Metals, SW-846, Rev. 1, July 1992.

**Comments:**Reported By: Reviewed: 

EPA METHOD 8260  
VOLATILE ORGANIC COMPOUNDS

Client: **SUNCO TRUCKING**  
 Sample ID: Injection Pump  
 Project ID: Injection Plant  
 Lab ID: B981037  
 Matrix: Water

Date Reported: 03/27/98  
 Date Sampled: 03/10/98  
 Date Received: 03/12/98  
 Date Extracted: 03/24/98  
 Date Analyzed: 03/24/98

Parameter	Result	PQL	Units
1,1,1,2-Tetrachloroethane	ND	5.0	ug/L
1,1,1-Trichloroethane	ND	5.0	ug/L
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	ug/L
1,1,2-Trichloroethane	ND	5.0	ug/L
1,1-Dichloroethane	ND	5.0	ug/L
1,1-Dichloroethene	ND	5.0	ug/L
1,1-Dichloropropene	ND	5.0	ug/L
1,2-Dibromoethane (EDB)	ND	5.0	ug/L
1,2-Dichloroethane	ND	5.0	ug/L
1,2-Dichloropropane	ND	5.0	ug/L
Bromodichloromethane	ND	5.0	ug/L
Bromoform	ND	5.0	ug/L
Bromomethane	ND	5.0	ug/L
Carbon Tetrachloride	ND	5.0	ug/L
Chloroethane	ND	5.0	ug/L
Chloroform	ND	5.0	ug/L
Chloromethane	ND	5.0	ug/L
cis-1,3-Dichloropropene	ND	5.0	ug/L
Dibromochloromethane	ND	5.0	ug/L
Dibromomethane	ND	5.0	ug/L
Dichlorodifluoromethane	ND	5.0	ug/L
Methylene chloride	ND	20	ug/L
Tetrachloroethene (PCE)	ND	5.0	ug/L
trans-1,2-Dichloroethene	ND	5.0	ug/L
Trichloroethene (TCE)	ND	5.0	ug/L
Vinyl Chloride	ND	5.0	ug/L

## Quality Control / Quality Assurance

### Known Analysis

### TOXICITY CHARACTERISTIC LEACHING PROCEDURE

Client: Sunco Trucking  
Project: Injection Pump  
Sample Matrix: Water

Date Reported: 03/20/98  
Date Analyzed: 03/19/98  
Date Received: 03/10/98

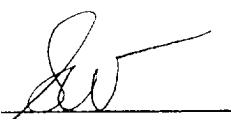
#### Known Analysis


Parameter	Found Result	Known Result	Percent Recovery	Units
Arsenic	0.009	0.010	90%	mg/L
Barium	0.98	1.00	98%	mg/L
Cadmium	1.060	1.000	106%	mg/L
Chromium	1.06	1.00	106%	mg/L
Lead	1.10	1.00	110%	mg/L
Mercury	0.004	0.004	100%	mg/L
Selenium	0.010	0.010	100%	mg/L
Silver	2.11	2.00	106%	mg/L

References: Method 1311: Toxicity Characteristic Leaching Procedure,  
SW-846, Rev. 0, July 1992.

Method 3010A: Acid Digestion of Aqueous Samples and Extracts for Total  
Metals, SW-846, Rev. 1, July 1992.

Comments:

Reported by: 

Reviewed by: 

## Quality Control / Quality Assurance

### Spike Analysis / Blank Analysis

#### TOXICITY CHARACTERISTIC LEACHING PROCEDURE

Client: Sunco Trucking  
Project: Injection Pump  
Sample Matrix: Water

Date Reported: 03/20/98  
Date Analyzed: 03/19/98  
Date Received: 03/10/98

#### Spike Analysis

Parameter	Spike Result (mg/L)	Sample Result (mg/L)	Spike Added (mg/L)	Percent Recovery
Arsenic	N/A	N/A	N/A	N/A
Barium	1.91	0.95	1.00	96%
Cadmium	0.890	0.070	1.000	82%*
Chromium	0.96	<0.01	1.00	96%
Lead	N/A	N/A	N/A	N/A
Mercury	0.005	<0.001	0.005	90%
Selenium	N/A	N/A	N/A	N/A
Silver	N/A	N/A	N/A	N/A

#### Method Blank Analysis

Parameter	Result	Detection Limit	Units
Arsenic	ND	0.005	mg/L
Barium	ND	0.01	mg/L
Cadmium	ND	0.004	mg/L
Chromium	ND	0.01	mg/L
Lead	ND	0.05	mg/L
Mercury	ND	0.001	mg/L
Selenium	ND	0.005	mg/L
Silver	ND	0.01	mg/L

References: Method 1311: Toxicity Characteristic Leaching Procedure, SW-846, Rev. 0, July 1992.

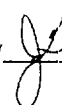
Method 3010A: Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, Rev. 1, July 1992.

Comments: \*Spike recovery failed to meet established QC limits due to matrix interference.  
N/A= Data not available.

Reported by



Reviewed by



# Quality Control / Quality Assurance

## Known Analysis Purgeable Aromatics

Client: Sunco Trucking  
Project: Injection Plant

Date Reported: 03/20/98  
Date Analyzed: 03/16/98

### Known Analysis

Parameter	Found Result (ppb)	Known Result (ppb)	Percent Recovery	Acceptance Limits
Benzene	19.3	20.0	97%	70-130%
Toluene	19.9	20.0	99%	70-130%
Chlorobenzene	20.8	20.0	104%	70-130%
Ethylbenzene	19.9	20.0	99%	70-130%
m+p-Xylene	40.5	40.0	101%	70-130%
o-Xylene	20.0	20.0	100%	70-130%
1,3-Dichlorobenzene	20.1	20.0	100%	70-130%
1,4-Dichlorobenzene	20.4	20.0	102%	70-130%
1,2-Dichlorobenzene	20.9	20.0	104%	70-130%

Quality Control: Surrogate

Percent Recovery

Acceptance Limits

Bromofluorobenzene

107.9%

70-130%

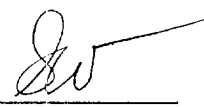
Reference: Method 5030, Purge and Trap; Method 602, Purgeable Aromatics; Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, USEPA, October 1984.

Comments:

Analyst



Reviewed by



VOLATILE AROMATIC HYDROCARBONS  
QUALITY CONTROL REPORTMatrix Spike Analysis

Lab ID: 0398G01127  
Sample Matrix: Water  
Condition: Cool/Intact

Report Date: 03/20/98  
Date Analyzed: 03/16/98

Target Analyte	Spiked Sample Result in ppb	Sample result in ppb	Spike Added (ppb)	% Recovery	Acceptance Limits (%)
Benzene	36.30	21.40	20.0	74.5%	70-130
Toluene	54.00	45.30	20.0	43.5%*	70-130
Chlorobenzene	19.99	ND	20.0	100.0%	70-130
Ethylbenzene	26.61	8.24	20.0	91.9%	70-130
m,p-Xylenes	108.58	94.60	40.0	69.9%*	70-130
o-Xylene	28.89	20.00	20.0	44.5%*	70-130
1,3-Dichlorobenzene	26.66	4.89	20.0	108.9%	70-130
1,4-Dichlorobenzene	18.18	ND	20.0	90.9%	70-130
1,2-Dichlorobenzene	18.10	4.08	20.0	70.1%	70-130

ND - Analyte not detected at the stated detection limit.

NA - Not applicable or not calculated.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	92.0%	70 -130%

Reference: Method 5030, Purge and Trap; Method 602, Purgeable Aromatics; Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, USEPA, October 1984.

Comments: \*Spike recovery failed to meet established QC limits due to matrix interferences.

Analyst

Review


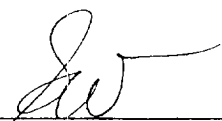
**VOLATILE AROMATIC HYDROCARBONS  
QUALITY CONTROL REPORT**Method Blank AnalysisSample Matrix:  
Lab IDWater  
Method BlankReport Date: 03/20/98  
Date Analyzed: 03/16/98

Target Analyte	Concentration (ppb)	Detection Limit (ppb)
Benzene	ND	0.2
Toluene	ND	0.2
Chlorobenzene	ND	0.2
Ethylbenzene	ND	0.2
m,p-Xylenes	ND	0.2
o-Xylene	ND	0.2
1,3-Dichlorobenzene	ND	0.2
1,4-Dichlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	96.2%	70-130%

**Reference:** Method 5030, Purge and Trap; Method 602, Purgeable Aromatics; Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, USEPA, October 1984.

**Comments:**  
\_\_\_\_\_  
Analyst  
\_\_\_\_\_  
Review

VOLATILE AROMATIC HYDROCARBONS  
QUALITY CONTROL REPORTDuplicate Analysis

Lab ID: 0398G01127  
Sample Matrix: Water  
Condition: Cool/Intact

Report Date: 03/20/98  
Date Analyzed: 03/16/98

Target Analyte	Duplicate Concentration (ppb)	Original Concentration (ppb)	% Difference
Benzene	101	107	5.8
Toluene	214	226	5.5
Chlorobenzene	ND	ND	NA
Ethylbenzene	38.4	41.2	7.0
m,p-Xylenes	455	472	3.7
o-Xylene	97.7	99.8	2.1
1,3-Dichlorobenzene	25.1	24.5	2.4
1,4-Dichlorobenzene	ND	ND	NA
1,2-Dichlorobenzene	20.1	20.4	1.5


ND - Analyte not detected at the stated detection limit.

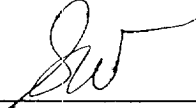
NA - Not applicable or not calculated.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Bromofluorobenzene	89.9%	70 -130%

Reference: Method 5030, Purge and Trap; Method 602, Purgeable Aromatics; Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater, USEPA, October 1984.

Comments:

  
\_\_\_\_\_  
Analyst

  
\_\_\_\_\_  
Review



EPA METHOD 8260  
VOLATILE ORGANIC COMPOUNDS

Client: **SUNCO TRUCKING**  
Sample ID: Injection Pump  
Project ID: Injection Plant  
Lab ID: B981037  
Matrix: Water

Date Reported: 03/27/98  
Date Sampled: 03/10/98  
Date Received: 03/12/98  
Date Extracted: 03/24/98  
Date Analyzed: 03/24/98

Parameter	Result	PQL	Units
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Continued

QUALITY CONTROL - Surrogate Recovery	%	QC Limits
1,2-Dichloroethane-d4	103	80 - 120
Bromofluorobenzene	108	86 - 115
Toluene-d8	104	88 - 110

ND - Not Detected at Practical Quantitation Level (PQL)

Reference: Method 8260A Gas Chromatography/Mass Spectrometry for Volatile Organics, Test Methods for Evaluating Solid Wastes, SW-846, Final Update II, United States Environmental Protection Agency, September 1994.

Analyst E. D.Reviewed SW