

WATER AND OIL FIELD HEAVY HAULING P.O. BOX 443, FARMINGTON, NM 87499 (505) 327-0416

Jan 9, 1997

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

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 severely effects  
the backside pressure. So the Averages are based on pressures indicated prior to  
injection.

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: E. Stone

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**SUNCO DISPOSAL**  
**P.O. BOX 443**  
**FARMINGTON, N.M. 87499**

MONTHLY INJECTION WELL REPORT

PERIOD 1996	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															
FEB															
MAR															
APR															
MAY															
JUN															
JUL															
AUG															
SEP															
OCT	2040	1800	1920	2788	0	1394	46,071	512,520	1,915,325	1200	0	600	0		
NOV	2040	1800	1920	3810	0	1905	46,762	562,081	1,962,170	720	0	360	0		
DEC	2040	1800	1920	2818	0	1825	56,562	618,670	2,019,090	540	0	270	6,480		

CERTIFICATION  DATE 1-9-97

**RECEIVED**  
 JUN 14 1997

SUNCO DISPOSAL  
 FARMINGTON, NM  
 87499



December 9, 1996

Mike Talovich  
Surico Trucking  
708 S. Tucker Ave.  
Farmington, NM 87401

Dear Mr. Talovich:

Enclosed are the analytical results for the water sample received at Anaitas, Inc. on November 9, 1996. The sample was analyzed for BTEX, Halogenated Volatile Organic Compounds, RCRA Metals, and General Water Quality, as requested.

Tests were conducted in accordance with Standard Methods For The Examination Of Water And Wastewater Analysis, 18th edition and the "EPA 600 Series For The Examination Of Water and Wastes," as amended. The analysis for halogenated organics was subcontracted to Evergreen Analytical Laboratory.

If you have any questions or comments concerning any information in this report, please contact me at your convenience.

Sincerely,

Dr. Denise A. Bohemier  
Lab Manager



## PURGEABLE AROMATICS

### Sunco Disposal

Project ID	Injection Well	Report Date:	11/19/96
Sample ID:	Injection Well #1	Date Sampled:	11/07/96
Lab ID:	5584	Date Received:	11/07/96
Sample Matrix:	Water	Date Analyzed:	11/12/96
Preservative:	Cool, HCl		
Condition:	Intact		

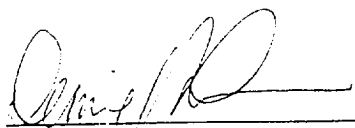
Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	43.2	5.00
Toluene	123	5.00
Ethylbenzene	8.70	5.00
m,p-Xylenes	182	10.0
o-Xylene	61.8	5.00
Total BTEX		419

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	103	88 - 110%
	Bromofluorobenzene	106	86 - 115%

Reference: Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments: Discharge side of pump.

  
Analyst

  
Review

## Purgeable Aromatics

### Matrix Spike Analysis

Lab ID: 5584Spk  
Sample Matrix: Water  
Preservative: Cool, HCl  
Condition: Intact

Report Date: 11/19/96  
Date Sampled: 11/07/96  
Date Received: 11/07/96  
Date Analyzed: 11/12/96

Target Analyte	Spike Added (ug/L)	Original Conc. (ug/L)	Spiked Sample Conc. (ug/L)	% Recovery	Acceptance Limits (%)
Benzene	100	43.2	136	93%	39 - 150
Toluene	100	123	214	91%	46 - 148
Ethylbenzene	100	8.70	108	100%	32 - 160
m,p-Xylenes	200	182	374	96%	NE
o-Xylene	100	61.8	157	95%	NE

ND - Analyte not detected at the stated detection limit.

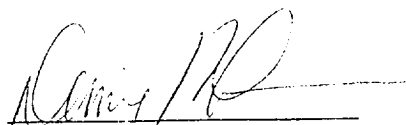
NA - Not applicable or not calculated.

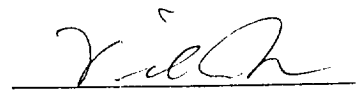
NE - Spike acceptance range not established by the EPA.

<b>Quality Control:</b>	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	100	88 - 110%
	Bromofluorobenzene	106	86 - 115%

**Reference:** Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

**Comments:**

  
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Analyst

  
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Review

## Purgeable Aromatics

### Duplicate Analysis

Lab ID: 5584Dup  
Sample Matrix: Water  
Preservative: Cool, HCl  
Condition: Intact

Report Date: 11/19/96  
Date Sampled: 11/07/96  
Date Received: 11/07/96  
Date Analyzed: 11/12/96

Target Analyte	Original Conc. (ug/L)	Duplicate Conc. (ug/L)	Acceptance Range (ug/L)
Benzene	43.2	45.1	35.0 - 53.3
Toluene	123	129	102 - 150
Ethylbenzene	ND	ND	NA
m,p-Xylenes	182	186	NE
o-Xylene	61.8	62.6	NE

ND - Analyte not detected at the stated detection limit.


NA - Not applicable or not calculated.

NE - Duplicate acceptance range not established by the EPA.

	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
Quality Control:	Trifluorotoluene	103	88 - 110%
	Bromofluorobenzene	99	86 - 115%

Reference: Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209, Oct. 1984.

Comments:

  
Analyst

  
Review

# Chlorinated Volatile Organic Compounds

EPA Method 8010

## Sunco Disposal

Project ID: Injection Well #1  
 Sample ID: NA  
 Lab ID: 5584  
 Sample Matrix: Water  
 Preservative: Cool, HCl

Report Date: 12/09/96  
 Date Sampled: 11/07/96  
 Date Received: 11/07/96  
 Date Analyzed: 11/15/96

Analyte	Concentration (µg/L)	Detection Limit (µg/L)
Bromodichloromethane	ND	0.40
Bromoform	ND	0.40
Bromomethane	ND	0.40
Carbon Tetrachloride	ND	0.40
Chlorobenzene	ND	0.40
Chloroethane	ND	0.40
2-Chloroethyl vinyl ether	ND	0.40
Chloroform	ND	0.40
Chloromethane	ND	0.40
Dibromochloromethane	ND	0.40
1,2-Dichlorobenzene	ND	0.40
1,3-Dichlorobenzene	ND	0.40
1,4-Dichlorobenzene	ND	0.40
Dichlorodifluoromethane	ND	0.40
1,1-Dichloroethane	ND	0.40
1,2-Dichloroethane	ND	0.20
1,1-Dichloroethene	ND	0.40
trans-1,2-Dichloroethene	ND	0.40
Dichloromethane	ND	0.40
1,2-Dichloropropane	ND	0.40
cis-1,3-Dichloropropene	ND	0.20
trans-1,3-Dichloropropene	ND	0.20
Tetrachloroethene	ND	0.20
1,1,2,2-Tetrachloroethane	ND	0.50
1,1,1-Trichloroethane	ND	0.20
1,1,2-Trichloroethane	ND	0.20
Trichloroethene	ND	0.20
Trichlorofluoromethane	ND	0.40
Vinyl Chloride	ND	0.40

Surrogate Recovery (1-Chloro-2-fluorobenzene): 107%

70% - 130% (QC Limits)

  
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## General Water Quality Sunco Disposal

Project ID: Injection Well  
 Sample ID: Injection Well #1  
 Laboratory ID: 5584  
 Sample Matrix: Water

Date Reported: 11/20/96  
 Date Sampled: 11/07/96  
 Time Sampled: 10:30  
 Date Received: 11/07/96

Parameter	Analytical Result	Units
<b>General</b>		
Lab pH.....	8.2	s.u.
Lab Conductivity @ 25° C.....	26,600	µmhos/cm
Total Dissolved Solids @ 180°C.....	17,500	mg/L
Total Dissolved Solids (Calc).....	15,800	mg/L
<b>Anions</b>		
Total Alkalinity as CaCO <sub>3</sub> .....	2,300	mg/L
Bicarbonate Alkalinity as CaCO <sub>3</sub> .....	2,300	mg/L
Carbonate Alkalinity as CaCO <sub>3</sub> .....	NA	mg/L
Hydroxide Alkalinity as CaCO <sub>3</sub> .....	NA	mg/L
Chloride.....	7,220	mg/L
Sulfate.....	502	mg/L
Nitrate + Nitrite - N.....	NA	
Nitrate - N.....	NA	
Nitrite - N.....	NA	
<b>Cations</b>		
Total Hardness as CaCO <sub>3</sub> .....	522	mg/L
Calcium.....	130	mg/L
Magnesium.....	48.4	mg/L
Potassium.....	380	mg/L
Sodium.....	6,100	mg/L

**Data Validation**
Acceptance Level

Cation/Anion Difference.....	4.64	+/- 5 %
TDS (180):TDS (calculated).....	1.1	1.0 - 1.2

**Reference** U.S.E.P.A. 600/4-79-020, Methods for Chemical Analysis of Water and Wastes, 1983.  
Standard Methods For The Examination Of Water And Wastewater, 18th ed., 1992.



Review





## TCLP Metals Analysis

### Sunco Disposal

Project ID:	Injection Well #1	Date Reported:	12/09/96
Sample ID:	NA	Date Sampled:	11/07/96
Laboratory ID:	5584	Date Received:	11/07/96
Sample Matrix:	Water	Date Digested:	11/14/96

Parameter	Analytical Result (mg/L)	Regulatory Limit (mg/L)
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#### Trace Metals

Arsenic.....	< 0.002	5.0
Barium.....	4.33	100
Cadmium.....	0.06	1.0
Chromium.....	0.62	5.0
Lead.....	0.50	5.0
Mercury.....	< 0.001	0.2
Selenium.....	< 0.05	1.0
Silver.....	0.10	5.0

General	Percent Solids.....	0	%
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**Reference:** Method 1311: Toxicity Characteristic Leaching Procedure; Method 7000: Methods for Determination of Metals; Test Methods for Evaluating Solid Wates, SW-846, United States Environmental Protection Agency, Final Update I, July, 1992.

  
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# General Water Quality Quality Control Report

## Sunco Disposal

Report Date: 11/20/96

Parameter	Analytical Result	Certified Value	Acceptance Range	Units
Laboratory pH	9.13	9.08	8.88 - 9.28	s.u.
Conductivity	1152	1280	1000 - 1470	µmhos/cm
Total Dissolved Solids	950	959	834 - 1080	mg/L
Total Alkalinity	216	209	186 - 232	mg/L
Chloride	95.0	95.0	88.4 - 102	mg/L
Sulfate	140	149	128 - 170	mg/L
Total Hardness	219	208	179 - 237	mg/L
Calcium	63.8	60.3	51.9 - 68.7	mg/L
Magnesium	NA	NA	NA	mg/L
Potassium	130	146	124 - 168	mg/L
Sodium	160	158	134 - 182	mg/L

**Reference:** U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes",  
1983. Standard Methods For The Examination Of Water And Wastewater, 18th ed.,  
1992.

**Comments:**



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# PURGEABLE AROMATICS

## Quality Control Report

### Method Blank Analysis

Sample hydrocarbon: Water  
Lab ID: MB35381

Report Date: 11/19/96  
Date Analyzed: 11/12/96

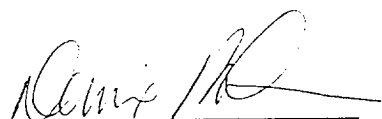
Target Analyte	Concentration (ug/L)	Detection Limit (ug/L)
Benzene	ND	0.50
Toluene	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	1.00
o-Xylene	ND	0.50

ND - Analyte not detected at the stated detection limit.

<b>Quality Control:</b>	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	98	88 - 110%
	Bromofluorobenzene	92	86 - 115%

**Reference:** Method 602.2, Purgeable Aromatics; Federal Register, Vol. 49, No. 209,  
Oct. 1984.

**Comments:**

  
Analyst

  
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# Quality Control Report

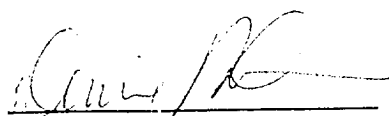
## Sunco Disposal

Date Reported: 12/09/96

Target Analyte	QC Sample ID	Concentration ( $\mu\text{g/L}$ )	Certified Concentration ( $\mu\text{g/L}$ )	Acceptance Limits
Arsenic	Spex 19	8.63	10.0	8.50 - 11.5
Barium	Spex 7	875	1000	850 - 1150
Cadmium	ERA 9966	137	145	119 - 171
Chromium	Spex 19	5.43	5.00	4.25 - 5.75
Lead	ERA 9966	388	395	374 - 466
Mercury	EMS	5.36	5.00	4.50 - 5.50
Selenium	Spex 19	9.86	10.0	8.50 - 11.5
Silver	ERA 9966	137	153	125 - 181

**Reference:**

Method 1311: Toxicity Characteristic Leaching Procedure; Method 7000: Methods for Determination of Metals; Test Methods for Evaluating Solid Wates, SW-846, United States Environmental Protection Agency, Final Update I, July, 1992.

  
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