

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

August 29, 2005

Mr. Denny Foust
State of New Mexico Oil Conservation Division Phone (505) 334-6178 Ext 15
1000 Rio Brazos Rd
Aztec, New Mexico 87410

Project No.: 99042-011

Dear Mr. Foust,

Enclosed are the analytical results for the sample collected from the location designated as "Horseshoe Gallup Water Source". One water sample was collected by Bassinger with the EPA on 8/23/05, and delivered to the Envirotech laboratory on 8/25/05 for Total Petroleum Hydrocarbons (TPH) per USEPA Method 8015, BTEX per USEPA Method 8021 and Cation / Anion analysis.

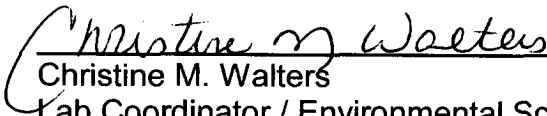
The sample was documented on Envirotech Chain of Custody No. 1455 and assigned Laboratory No. 34148 (WSW #2) for tracking purposes.

The sample was analyzed on 8/25/05 and 8/26/05 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.

API 30-045-10274


Christine M. Walters
Lab Coordinator / Environmental Scientist

enclosure

CMW/cmw

C:/files/labreports/OCD/.wpd



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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client: NMOCD
Sample ID: WSW #2
Laboratory Number: 34148
Chain of Custody: 14455
Sample Matrix: Water
Preservative: Cool
Condition: Cool & Intact

Project #: 04093-002
Date Reported: 08-25-05
Date Sampled: 08-23-05
Date Received: 08-25-05
Date Extracted: N/A
Date Analyzed: 08-25-05

Parameter	Analytical Result	Units		
pH	9.52	s.u.		
Conductivity @ 25° C	9,740	umhos/cm		
Total Dissolved Solids @ 180C	5,070	mg/L		
Total Dissolved Solids (Calc)	5,060	mg/L		
SAR	37.8	ratio		
Total Alkalinity as CaCO3	520	mg/L		
Total Hardness as CaCO3	344	mg/L		
Bicarbonate as HCO3	304	mg/L	4.98	meq/L
Carbonate as CO3	216	mg/L	7.20	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	1.3	mg/L	0.02	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	304	mg/L	8.58	meq/L
Fluoride	0.67	mg/L	0.04	meq/L
Phosphate	28.2	mg/L	0.89	meq/L
Sulfate	2,660	mg/L	55.38	meq/L
Iron	1.75	mg/L	0.06	meq/L
Calcium	138	mg/L	6.87	meq/L
Magnesium	<0.01	mg/L	0.00	meq/L
Potassium	1.55	mg/L	0.04	meq/L
Sodium	1,610	mg/L ppm	70.04	meq/L
Cations			77.00	meq/L
Anions			77.09	meq/L
Cation/Anion Difference			0.11%	



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 Waste Water", 18th ed., 1992.

Comments: Horseshoe Gallup Water Source Well.

Christine M. Waeten
Analyst

David L. Olsen
Review

14455

san juan reproduction 578-129

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EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	NMOCD	Project #:	04093-002
Sample ID:	WSW #2	Date Reported:	08-26-05
Laboratory Number:	34148	Date Sampled:	08-23-05
Chain of Custody No:	14455	Date Received:	08-25-05
Sample Matrix:	Water	Date Extracted:	08-25-05
Preservative:	Cool	Date Analyzed:	08-26-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

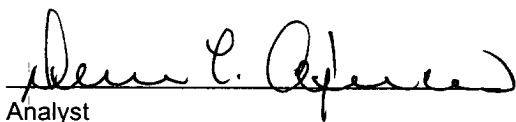
Parameter	Concentration (mg/L)	Det. Limit (mg/L)
Gasoline Range (C5 - C10)	39.5	0.2
Diesel Range (C10 - C28)	55.7	0.1
Total Petroleum Hydrocarbons	95.2 ppm	0.2

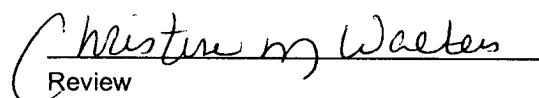
ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Horseshoe Gallup Water Source Well.**




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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	08-26-TPH QA/QC	Date Reported:	08-26-05
Laboratory Number:	34148	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-26-05
Condition:	N/A	Analysis Requested:	TPH

	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	9.9892E-001	9.9693E-001	0.20%	0 - 15%
Diesel Range C10 - C28	9.9794E-001	9.9595E-001	0.20%	0 - 15%

Blank Conc. (mg/L)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

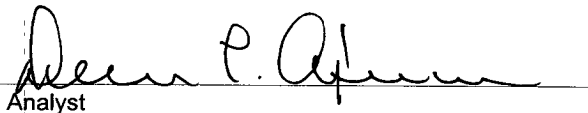
Duplicate Conc. (mg/L)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	39.5	39.5	0.0%	0 - 30%
Diesel Range C10 - C28	55.7	56.3	1.1%	0 - 30%

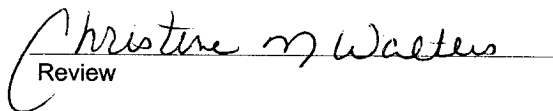
Spike Conc. (mg/L)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	39.5	250	289	99.9%	75 - 125%
Diesel Range C10 - C28	55.7	250	305	99.8%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for sample 34148.


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EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	NMOCD	Project #:	04093-002
Sample ID:	WSW #2	Date Reported:	08-26-05
Chain of Custody:	14455	Date Sampled:	08-23-05
Laboratory Number:	34148	Date Received:	08-25-05
Sample Matrix:	Water	Date Analyzed:	08-26-05
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	207	1	0.2
Toluene	1,710	1	0.2
Ethylbenzene	1,870	1	0.2
p,m-Xylene	5,140	1	0.2
o-Xylene	2,670	1	0.1

Total BTEX

11,600 ppb

ND - Parameter not detected at the stated detection limit.



Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	99 %
	1,4-difluorobenzene	99 %
	4-bromochlorobenzene	99 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: Horseshoe Gallup Water Source Well.

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EPA METHOD 8021 AROMATIC VOLATILE ORGANICS QUALITY ASSURANCE REPORT

Client:	N/A	Project #:	N/A
Sample ID:	08-26-BTEX QA/QC	Date Reported:	08-26-05
Laboratory Number:	34148	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	08-26-05
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
		Accept. Range 0 - 15%			
Benzene	3.9202E+006	3.9320E+006	0.30%	ND	0.2
Toluene	2.9863E+006	2.9953E+006	0.30%	ND	0.2
Ethylbenzene	1.7253E+006	1.7305E+006	0.30%	ND	0.2
p,m-Xylene	4.3109E+006	4.3239E+006	0.30%	ND	0.2
o-Xylene	1.7519E+006	1.7572E+006	0.30%	ND	0.1

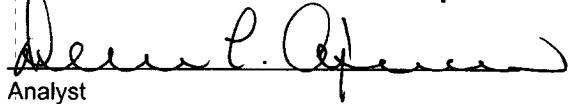
Duplicate Conc. (ug/L)	Sample	Duplicate	%Diff	Accept Limit
Benzene	207	206	0.5%	0 - 30%
Toluene	1,710	1,700	0.6%	0 - 30%
Ethylbenzene	1,870	1,860	0.5%	0 - 30%
p,m-Xylene	5,140	5,120	0.4%	0 - 30%
o-Xylene	2,670	2,660	0.4%	0 - 30%

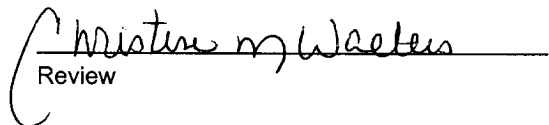
Spike Conc. (ug/L)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Limits
Benzene	207	50.0	256	99.7%	39 - 150
Toluene	1,710	50.0	1,750	99.4%	46 - 148
Ethylbenzene	1,870	50.0	1,910	99.5%	32 - 160
p,m-Xylene	5,140	100	5,230	99.8%	46 - 148
o-Xylene	2,670	50.0	2,710	99.6%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for sample 34148.


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