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2008 ANNUAL GROUNDWATER MONITORING REPORT

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CONOCOPHILLIPS COMPANY HAMPTON #4M AZTEC, NEW MEXICO

OCD # 3R069

Prepared for:

ConocoPhillips

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August 6, 2009

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ANNUAL GROUNDWATER MONITORING REPORT HAMPTON #4M, AZTEC, NEW MEXICO

I.0 INTRODUCTION

This report presents the results of quarterly groundwater monitoring events of 2008 conducted by Tetra Tech, Inc. (Tetra Tech), at the ConocoPhillips Hampton #4M site near Aztec, New Mexico.

The site is located approximately ¼ mile south of Hampton Arroyo and 2 miles southeast of Aztec, New Mexico. The site consists of a gas production well and associated equipment and installations. The location and general features of the Hampton #4M site are shown on Figures I and 2, respectively.

I.I Site Background

The Hampton #4M gas well was spudded on November 22, 1983, by Southland Royalty Company (Southland). Southland was acquired by Burlington Resources, Inc. (Burlington) in January of 1996 and Burlington was subsequently acquired by ConocoPhillips Company in March of 2006.

Environmental assessment and remediation activities at this site date back to April of 1996, when Public Service Company of New Mexico (PNM), the operator of some tanks, a dehydration unit and an unlined earthen pit on the north end of the Hampton #4M well pad, initiated pit closure work. Since that time there has been a great deal of soil and groundwater assessment, excavation of hydrocarbon-impacted soil, and groundwater monitoring. The existing monitor well network consists of 9 wells: MW-1, MW-5, MW-7, MW-9, MW-11, MW-12, MW-15, MW-16, and TMW-1. A nearby groundwater seep is also part of the current program to monitor the progression of natural remediation at the site.

2.0 MONITORING SUMMARY AND SAMPLING METHODOLOGY / RESULTS

2.1 Monitoring Summary

Quarterly groundwater sampling was conducted in March, July, and November 2008 and in January 2009. Groundwater samples were collected from monitoring wells MW-1, MW-5, MW-7, MW-9, MW-11, MW-12, MW-15, MW-16, TMW-1, and a seep on location. During each sampling event, water levels were measured by Tetra Tech in each monitoring well. Calculated groundwater elevations are presented on Table 1. Groundwater elevation contour maps were generated using quarterly water level data and are presented in Figures 3-6. A geologic cross section is presented as Figure 7.

2.2 Groundwater Sampling Methodology

Monitoring wells MW-1, MW-5, MW-7, MW-9, MW-11, MW-12, MW-15, MW-16, and TMW-1 were purged of three volumes of water and sampled. A 1.5-inch clear, poly-vinyl, disposable bailer was used to purge each well and to collect the groundwater sample. The purge water generated during the event was

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disposed of in the waste water tank located on site (Figure 2). The groundwater samples were placed in laboratory prepared bottles, packed on ice, and shipped with chain-of-custody documentation to Southern Petroleum Laboratories in Houston, Texas. All samples collected were analyzed for the presence of benzene, toluene, ethylbenezene, and xylenes (BTEX) by Environmental Protection Agency (EPA) Method 8260B.

2.3 Groundwater Sampling Analytical Results

Samples collected during the 2008 monitoring period indicate the following results:

- Groundwater concentrations for BTEX were below laboratory method detection limits (MDL) / practical quantitation limits (PQL) in monitor wells MW-1, MW-9, MW-11, MW-15, and the onsite seep.
- Groundwater concentrations exceeded the New Mexico Water Quality Control Commission (NMWQCC) standard for:
 - \circ benzene (10 micrograms per liter [µg/L]), toluene (750 µg/L), and total xylenes (620 µg/L) in monitoring wells MW-5 and MW-16 for the entire monitoring period;
 - benzene in monitoring well MW-12 for the entire monitoring period;
 - benzene in monitoring well MW-7 during the second and third quarters of the monitoring period;
 - o benzene in monitoring well TMW-I during the second and fourth quarters of the monitoring period.
- The highest BTEX concentrations were detected in monitoring well MW-16 at 5500, 9600, 510, and 6900 µg/L, respectively in the March 2008 sampling.

Table 2 summarizes the laboratory analytical results for each quarterly groundwater sampling event. The corresponding laboratory analysis reports including quality control summaries are included in Appendix A.

3.0 CONCLUSIONS

Tetra Tech will continue to conduct quarterly groundwater monitoring of the existing well network at the Hampton #4M site during March, June, September and December 2009. Please contact Kelly Blanchard at 505-237-8440 or kelly.blanchard@tetratech.com if you have any questions or require additional information.















Table 1	. ConocoPhill	ps Hampton	#4M - Groundwater	Elevation \$	Summary
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	TOC Elevation	· · · · · · ·	Depth to Water	GW Elevation
Monitor Well	(ft AMSL)	Sample Date	(ft)	(ft AMSL)
	(,	11/8/2007	42.81	6106.61
		1/17/2008	42.96	6106.46
		3/19/2008	42.93	6106.49
MVV-1	6149.42	7/22/2008	42.74	6106.68
		10/23/2008	32.80	6116.62
		1/21/2008	42.90	6106.52
		11/8/2007	16.52	6074.31
		1/17/2008	15.65	6075.18
104 -		3/19/2008	13.64	6077.19
MW-5	6090.83	7/22/2008	15.72	6075.11
		10/23/2008	16.53	6074.30
		1/21/2008	16.04	6074.79
		11/8/2007	19.06	NA
		1/17/2008	19.37	NA
T 1 0 4 / 4	No survey -	3/19/2008	18.55	NA
IMW-1	DTW only	7/22/2008	18.10	NA
		10/23/2008	19,19	NA
		1/21/2008	19.25	NA
		11/8/2007	20.22	6046.69
		1/17/2008	20.50	6046.41
		3/19/2008	20.02	6046.89
MW-7	6066.91	7/22/2008	19.29	6047.62
		10/23/2008	19.95	6046.96
	F	1/21/2008	20.44	6046.47
		11/8/2007	22.91	6099.61
	-	1/17/2008	22.76	6099.76
		3/19/2008	22.38	6100.14
MW-9	6122.52	7/22/2008	23.10	6099.42
		10/23/2008	23.02	6099.50
		1/21/2008	22.85	6099.67
		11/8/2007	56.00	5959.75
		1/17/2008	55.86	5959.89
	0045 75	3/19/2008	55.88	5959.87
MVV-11	6015.75	7/22/2008	55.71	5960.04
		10/23/2008	55.91	5959.84
		1/21/2008	55.75	5960.00
		11/8/2007	20.46	6088.56
		1/17/2008	20.24	6088.78
NNA(40	0400.00	3/19/2008	19.85	6089.17
WW-12	6109.02	7/22/2008	20.54	6088.48
		10/23/2008	20.61	6088.41
		1/21/2008	20.37	6088.65
		11/8/2007	18.03	NA
		1/17/2008	18.20	NA
MNA/ 15	No survey -	3/19/2008	17.60	NA
10104-10	DTW only	7/22/2008	17.79	NA
		10/23/2008	18.01	NA
		1/21/2008	18.20	NA
		11/8/2007	25.03	NA
		1/17/2008	24.88	NA
MW-16	No survey -	3/19/2008	24.37	NA
	DTW only	7/22/2008	25.00	NA
		10/23/2008	25.57	NA
		1/21/2008	24.97	NA

Explanation

AMSL = Above mean sea level DTW = Depth to water NA = Not available

Well ID	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes
	•		()	ug/L)	
	3/26/2007	<0.3 U	0.3 J	0.2 J	0.4 J
	6/26/2007	<0.3 U	<0.2 U	<0.2 U	<0.6 U
	11/8/2007	<0.5 U	<0.7 U	<0.8 U	<0.8 U
M\\\/_1	1/15/2008	<0.5 U	<0.7 U	<0.8 U	<0.8 U
	3/19/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	7/22/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	10/23/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	1/21/2009	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	3/26/2007	660	6470	530	5450
	6/26/2007	740	8070	640	7320
	11/8/2007	410	4800	390	5000
MW/ 5	1/17/2008	440	6400	510	6100
10100-3	3/19/2008	370	2900	240	2570
	7/22/2008	340	6100	550	6400
	10/23/2008	270	6200	440	6300
	1/21/2009	250	3800	510	5200
	3/26/2007	11.5	1.0	0.6 J	0.8 J
	6/26/2007	56	0.4 J	17.7	1.3
	11/8/2007	44	<0.7 U	2.0	<0.8 U
N/N/ 7	1/17/2008	17	<0.7 U	3.0	<0.8 U
10100-7	3/19/2008	5	<5.0 U	<5.0 U	<5.0 U
	7/22/2008	32	<5.0 U	12.0	7
	10/23/2008	17	<5.0 U	<5.0 U	<5.0 U
	1/21/2009	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	3/26/2007	<0.3 U	<0.2 U	<0.2 U	<0.6 U
	6/26/2007	<0.3 U	<0.2 U	<0.2 U	<0.6 U
	11/8/2007	<0.5 U	<0.7 U	<0.8 U	<0.8 U
M\\\/_Q	1/17/2008	<0.5 U	<0.7 U	<0.8 U	<0.8 U
10100-3	3/19/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	7/22/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	10/23/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	1/21/2009	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	3/26/2007	<0.3 U	<0.2 U	<0.2 U	<0.6 U
	6/26/2007	<0.3 U	<0.2 U	<0.2 U	<0.6 U
	11/8/2007	<0.5 U	<0.7 U	<0.8 U	<0.8 U
M\\/_11	1/17/2008	<0.5 U	<0.7 U	<0.8 U	<0.8 U
14144-11	3/19/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	7/22/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	10/23/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	1/21/2009	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	3/26/2007	4130	1680	340	1180
	6/26/2007	1520	432	118	340
	11/8/2007	780	310	43	170
٨٨١٨/_٩٦	1/17/2008	2000	1400	180	790
WIVV-12	3/19/2008	1600	560	160	530
	7/22/2008	730	22	14	21
	10/23/2008	500	30	22	40
	1/21/2009	1100	430	110	410

 Table 2. ConocoPhillips Hampton #4M - Groundwater Laboratory

 Analytical Results Summary

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	3/26/2007	<0.3 U	<0.2 U	<0.2 U	<0.6 U
	6/26/2007	<0.3 U	0.5 J	<0.2 U	<0.6 U
	11/8/2007	<0.5 U	<0.7 U	<0.8 U	<0.8 U
M\A/_15	1/17/2008	<0.5 U	<0.7 U	<0.8 U	<0.8 U
10100-15	3/19/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	7/22/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	10/23/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	1/21/2009	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	3/26/2007	2970	2820	260	5220
	6/26/2007	5230	9110	770	7760
	11/8/2007	5500	12000	570	6200
MIN 16	1/17/2008	4600	9100	550	5600
10100-10	3/19/2008	5500	9600	510	6900
	7/22/2008	3600	6100	430	4500
	10/23/2008	4700	9100	480	6600
	1/21/2009	4200	7500	480 J	6900
	3/26/2007	NA	NA	NA	NA
	6/26/2007	269	2.6	4.9	15.7
	11/8/2007	300	12	6	38.
	1/17/2008	0.8	<0.7 U	<0.8 U	1
1 1010 0 - 1	3/19/2008	<5.0 U	<5.0 U	<5.0 U [,]	<5.0 U
	7/22/2008	130	29	11	22
	10/23/2008	NA	NA	NA	NA
	1/21/2009	13	<5.0 U	<5.0 U	<5.0 U
	3/26/2007	<0.3 U	0.3 J	<0.2 U	<0.6 UJ
	6/26/2007	<0.3 U	<0.2 U	<0.2 U	<0.6 U
	11/8/2007	<0.5 U	<0.7 U	<0.8 U	<0.8 U
Seen	1/17/2008	NA	NA	NA	NA
Occh	3/19/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	7/22/2008	NA	NA	. NA	NA
	10/23/2008	<5.0 U	<5.0 U	<5.0 U	<5.0 U
	1/21/2009	<5.0 U	<5.0 U	<5.0 U	<5.0 U
NMWQC	C Standards	10 (µg/L)	750 (µg/L)	750 (μg/L)	620 (µg/L)

Explanation

J = Analyte concetration detected at a value between MDL and PQL

MDL = Method Detection Limit

NA = Not Analyzed

NMWQCC = New Mexico Water Quality Control Commission

PQL = Practical Quantitation Limit

U = Analyte was analyzed for but not detected at the indicated MDL μ g/L = micrograms per liter (parts per billion)

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco, Inc.

Certificate of Analysis Number: <u>08031211</u>							
Report To:	Report To: COP Hampton 4M/4929						
Tetra Tech EM, Inc.	<u>Site:</u>	Aztec,NM					
Kelly Blanchard	Site Address:						
6121 Indian School Road, N.E.							
Suite 200 Albuquerque	PO Number:	4509525243					
NM	State:	New Mexico					
87110-	State Cert. No .:						
ph: (505) 881-3188 fax:	Date Reported:	3/31/2008					

This Report Contains A Total Of 21 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

4/4/2008



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Case Narrative for:

Certificate of Analysis Number:

Conoco, Inc.

<u>08031211</u>						
Report To:	Project Name:	COP Hampton 4M/4929				
Tetra Tech EM, Inc.	<u>Site:</u>	Aztec,NM				
Kelly Blanchard	Site Address:					
6121 Indian School Road, N.E.						
Suite 200 Albuquerque	PO Number:	4509525243				
NM	<u>State:</u>	New Mexico				
87110-	State Cert. No .:					
ph: (505) 881-3188 fax:	Date Reported:	3/31/2008				

Per the Conoco Phillips TSM Revision 0, a copy of the internal chain of custody is to be included in final data package. However, due to LIMS limitations, this cannot be provided at this time.

The pH of sample ID "MW-16" (SPL ID: 08031211-04) was checked at the time of the Volatile Organics analysis and the pH was greater than 2. Although the sample was collected in a VOA vial preserved with HCI, the sample was not properly preserved to a pH less than 2, which may be due to the matrix of the sample. The analysis of the sample (WAS/WAS NOT) completed within seven days of the collection date.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch; the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Bethay	Agamet	
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08031211 Page 1 4/4/2008

Bethany A. Agarwal Senior Project Manager



8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco, Inc.

	Certificate of Analysis Number:							
	<u>08031211</u>							
Report To:	Tetra Tech EM, Inc.			Project Name:	COP Hampton 4M/4929			
	Kelly Blanchard			Site:	Aztec,NM			
	6121 Indian School Roa	id, N.E.		Site Address:				
	Suite 200			Olle Addless.				
	Albuquerque							
	NM			PO Number:	4509525243			
	87110-			State:	New Mexico			
	ph: (505) 881-3188	fax: (505) 881-3283		State Cert. No.:				
<u>Fax To:</u>				Date Reported:	3/31/2008			

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-1	08031211-01	Water	3/19/2008 1:35:00 PM	3/21/2008 10:00:00 AM	297487	
MW-15	08031211-02	Water	3/19/2008 2:25:00 PM	3/21/2008 10:00:00 AM	297487	
MW-9	08031211-03	Water	3/19/2008 3:00:00 PM	3/21/2008 10:00:00 AM	297487	
MW-16	08031211-04	Water	3/19/2008 3:10:00 PM	3/21/2008 10:00:00 AM	297487	
MW-12	08031211-05	Water	3/19/2008 3:50:00 PM	3/21/2008 10:00:00 AM	297487	
Duplicate	08031211-06	Water	3/19/2008 3:40:00 PM	3/21/2008 10:00:00 AM	297487	
Seep	08031211-07	Water	3/19/2008 4:20:00 PM	3/21/2008 10:00:00 AM	297487	
MW-5	08031211-08	Water	3/19/2008 4:30:00 PM	3/21/2008 10:00:00 AM	297487	
TMW-1	08031211-09	Water	3/19/2008 4:55:00 PM	3/21/2008 10:00:00 AM	297487	
MW-7	08031211-10	Water	3/19/2008 5:20:00 PM	3/21/2008 10:00:00 AM	297487	
Trip Blank	08031211-11	Water	3/19/2008 5:35:00 PM	3/21/2008 10:00:00 AM	278996	
MW-11	08031211-12	Water	3/19/2008 5:55:00 PM	3/21/2008 10:00:00 AM	278996	

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Bethany A. Agarwal Senior Project Manager

4/4/2008

Date

Richard R. Reed Laboratory Director

Ted Yen Quality Assurance Officer

> 08031211 Page 2 4/4/2008 11:02:42 AM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:	MW-1
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Collected: 03/19/2008 13:35

SPL Sample ID: 08031211-01

			Sit	e: Azte	c,NM					
Analyses/Method	Result	QUAL	R	ep.Limit	Di	il. Factor	Date Anal	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	SV	V8260B	U	nits: ug/L	
Benzene	ND			5		1	03/25/08	23:01	LU_L	4346041
Ethylbenzene	ND			5		1	03/25/08	23:01	LU_L	4346041
Toluene	ND			5		1	03/25/08	23:01	LU_L	4346041
m,p-Xylene	ND			5		1	03/25/08	23:01	LU_L	4346041
o-Xylene	ND			5		1	03/25/08	23:01	LU_L	4346041
Xylenes,Total	ND			5		1	03/25/08	23:01	LU_L	4346041
Surr: 1,2-Dichloroethane-d4	94.0		%	62-130		1	03/25/08	23:01	LU_L	4346041
Surr: 4-Bromofluorobenzene	98.0		%	70-130		1	03/25/08	23:01	LU_L	4346041
Surr: Toluene-d8	90.0		%	74-122		1	03/25/08	23:01	LU_L	4346041

Qualifiers:

- ND/U Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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08031211 Page 3 4/4/2008 11:02:52 AM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-15

Collected: 03/19/2008 14:25

SPL Sample ID: 08031211-02

		Si	te: Azte	c,NM			
Analyses/Method	Result	QUAL F	lep.Limit	Dil. Fact	or Date Ana	lyzed Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B			MCL	SW8260B	Units: ug/L	
Benzene	ND		5	1	03/26/08	3 0:24 LU_L	4346044
Ethylbenzene	ND		5	1	03/26/08	3 0:24 LU_L	4346044
Toluene	ND		5	1	03/26/08	3 0:24 LU_L	4346044
m,p-Xylene	ND		5	1	03/26/08	3 0:24 LU_L	4346044
o-Xylene	ND		5	1	03/26/08	3 0:24 LU_L	4346044
Xylenes,Total	ND		5	1	03/26/08	3 0:24 LU_L	4346044
Surr: 1,2-Dichloroethane-d4	90.0	%	62-130	1	03/26/08	3 0:24 LU_L	4346044
Surr: 4-Bromofluorobenzene	96.0	%	70-130	1	03/26/08	3 0:24 LU_L	4346044
Surr: Toluene-d8	90.0	%	74-122	1	03/26/08	3 0:24 LU_L	4346044

Qualifiers:

ND/U - Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

08031211 Page 4 4/4/2008 11:02:52 AM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-9			Coll	ected: 03	3/19/2008 15:00	SPL Sam	ple II	D: 0803	1211-03
			Site	e: Azte	c,NM				
Analyses/Method	Result	QUAL	Re	p.Limit	Dil. Factor	Date Analy	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL SV	V8260B	Un	its: ug/L	
Benzene	ND			5	1	03/26/08	0:52	LU_L	4346045
Ethylbenzene	ND			5	1	03/26/08	0:52	LU_L	4346045
Toluene	ND			5	1	03/26/08	0:52	LU_L	4346045
m,p-Xylene	ND			5	1	03/26/08	0:52	LU_L	4346045
o-Xylene	ND			5	1	03/26/08	0:52	LU_L	4346045
Xylenes,Total	ND			5	1	03/26/08	0:52	LU_L	4346045
Surr: 1,2-Dichloroethane-d4	90.0		%	62-130	1	03/26/08	0:52	LU_L	4346045
Surr: 4-Bromofluorobenzene	94.0		%	70-130	1	03/26/08	0:52	LU_L	4346045
Surr: Toluene-d8	88.0		%	74-122	1	03/26/08	0:52	LU_L	4346045

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-16

Collected: 03/19/2008 15:10

SPL Sample ID: 08031211-04

			Sit	e: Azte	ec,NM				
Analyses/Method	Result	QUAL	R	ep.Limit	Dil. Fact	tor Date Ana	lyzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	SW8260B	Ur	nits: ug/L	
Benzene	5500			500	100	03/26/08	19:39	LU_L	4346955
Ethylbenzene	510			500	100	03/26/08	19:39	LU_L	4346955
Toluene	9600			500	100	03/26/08	19:39	LU_L	4346955
m,p-Xylene	5100			500	100	03/26/08	19:39	LU_L	4346955
o-Xylene	1800			500	100	03/26/08	19:39	LU_L	4346955
Xylenes,Total	6900			500	100	03/26/08	19:39	LU_L	4346955
Surr: 1,2-Dichloroethane-d4	92.0		%	62-130	100	03/26/08	19:39	LU_L	4346955
Surr: 4-Bromofluorobenzene	98.0		%	70-130	100	03/26/08	19:39	LU_L	4346955
Surr: Toluene-d8	88.0		%	74-122	100	03/26/08	19:39	LU_L	4346955

Qualifiers:

- ND/U Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client	Sam	ple IC	D:MV	N-12
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Collected: 03/19/2008 15:50

SPL Sample ID: 08031211-05

			Sit	e: Azte	ec,NM			
Analyses/Method	Result	QUAL	Re	ep.Limit	Dil. Facto	or Date Analy	zed Analys	t Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B				MCL S	W8260B	Units: ug/	L
Benzene	1600			100	20	03/26/08 1	7:17 LU_L	4346950
Ethylbenzene	160			5	1	03/26/08	1:20 LU_L	4346046
Toluene	560			100	20	03/26/08 1	7:17 LU_L	4346950
m,p-Xylene	390			100	20	03/26/08 1	7:17 LU_L	4346950
o-Xylene	140			5	1	03/26/08	1:20 LU_L	4346046
Xylenes,Total	530			5	1	03/26/08	1:20 LU_L	4346046
Surr: 1,2-Dichloroethane-d4	89.0		%	62-130	.20	03/26/08 1	7:17 LU_L	4346950
Surr: 1,2-Dichloroethane-d4	90.0		%	62-130	1	03/26/08	1:20 LU_L	4346046
Surr: 4-Bromofluorobenzene	100		%	70-130	20	03/26/08 1	7:17 LU_L	4346950
Surr: 4-Bromofluorobenzene	96.0		%	70-130	1	03/26/08	1:20 LU_L	4346046
Surr: Toluene-d8	90.0		%	74-122	20	03/26/08 1	7:17 LU_L	4346950
Surr: Toluene-d8	86.0		%	74-122	1	03/26/08	1:20 LU_L	4346046

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- $\ensuremath{\mathsf{B/V}}\xspace$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Client Sample ID: Duplicate

Collected: 03/19/2008 15:40 SPL Sample ID: (

e ID: 08031211-06

			Site	: Azte	c,NM				
Analyses/Method	Result	QUAL	Rep).Limit	Dil. Factor	Date Ana	lyzed	Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B		•		MCL S	W8260B	Un	its: ug/L	
Benzene	1700			100	20	03/26/08	17:45	LU_L	4346951
Ethylbenzene	160	-		5	1	03/25/08	22:34	LU_L	4346040
Toluene	590			100	20	03/26/08	17:45	LU_L	4346951
m,p-Xylene	440			100	20	03/26/08	17:45	LU_L	4346951
o-Xylene	140	1		5	1	03/25/08	22:34	LU_L	4346040
Xylenes,Total	580			5	1	03/25/08	22:34	LU_L	4346040
Surr: 1,2-Dichloroethane-d4	88.0		%	62-130	20	03/26/08	17:45	LU_L	4346951
Surr: 1,2-Dichloroethane-d4	92.0	•	%	62-130	1	03/25/08	22:34	LU_L	4346040
Surr: 4-Bromofluorobenzene	98.0		%	70-130	20	03/26/08	17:45	LU_L	4346951
Surr: 4-Bromofluorobenzene	102		%	70-130	1	03/25/08	22:34	LU_L	4346040
Surr: Toluene-d8	89.0	• • •	%	74-122	20	03/26/08	17:45	LU_Ŀ	4346951
Surr: Toluene-d8	90.0		%	74-122	1	03/25/08	22:34	LU_L	4346040

Qualifiers:

- ND/U Not Detected at the Reporting Limit $\ensuremath{\mathsf{B/V}}$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Client Sample ID:Seep Collected: 03/19/2008 16:20 SPL Sample ID: 08031211-07 Site: Aztec,NM Dil. Factor Date Analyzed Analyst Analyses/Method QUAL **Rep.Limit** Seq. # Result **VOLATILE ORGANICS BY METHOD 8260B** MCL SW8260B Units: ug/L 03/26/08 1:47 LU_L 4346047 Benzene ND 5 1 Ethylbenzene ND 5 1 03/26/08 1:47 LU_L 4346047 Toluene 5 1 03/26/08 1:47 LU_L 4346047 ND 4346047 1 03/26/08 1:47 LU_L m,p-Xylene ND 5 o-Xylene 1 03/26/08 1:47 LU_L 4346047 ND 5 03/26/08 1:47 LU_L 4346047 Xylenes,Total ND 5 1 Surr: 1,2-Dichloroethane-d4 94.0 62-130 1 03/26/08 1:47 LU_L 4346047 % 1 03/26/08 1:47 LU_L 4346047 Surr: 4-Bromofluorobenzene 96.0 % 70-130 Surr: Toluene-d8 88.0 % 74-122 1 03/26/08 1:47 LU_L 4346047

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- $\ensuremath{\mathsf{B/V}}\xspace$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-5			Col	lected: 03	8/19/2008 16:30	SPL Sam	ple ID: 0803	1211-08
			Sit	e: Azte	c,NM			
Analyses/Method	Result	QUAL	R	ep.Limit	Dil. Factor	Date Analy	zed Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B				MCL SV	V8260B	Units: ug/L	
Benzene	370			100	20	03/26/08 1	6:21 LU_L	4346949
Ethylbenzene	240			100	20	03/26/08 1	6:21 LU_L	4346949
Toluene	2900			100	20	03/26/08 1	6:21 LU_L	4346949
m,p-Xylene	2000			100	20	03/26/08 1	6:21 LU_L	4346949
o-Xylene	570			100	20	03/26/08 1	6:21 LU_L	4346949
Xylenes,Total	2570			100	20	03/26/08 1	6:21 LU_L	4346949
Surr: 1,2-Dichloroethane-d4	90.0		%	62-130	20	03/26/08 1	6:21 LU_L	4346949
Surr: 4-Bromofluorobenzene	99.0		%	70-130	20	03/26/08 1	6:21 LU_L	4346949
Surr: Toluene-d8	90.0		%	74-122	20	03/26/08 1	6:21 LU_L	4346949

Qualifiers:

ND/U - Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count >MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:TMW-1

Collected: 03/19/2008 16:55

SPL Sample ID: 08031211-09

			Site	e: Azte	c,NM					
Analyses/Method	Result	QUAL	Re	p.Limit	(Dil. Factor	Date Ana	lyzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	THOD 8260B				MCL	SV	V8260B	Ur	nits: ug/L	
Benzene	ND			5	•	1	03/26/08	19:10	LU_L	4346954
Ethylbenzene	ND			5		1	03/26/08	19:10	LU_L	4346954
Toluene	ND			5		1	03/26/08	19:10	LU_L	4346954
m,p-Xylene	ND			5		1	03/26/08	19:10	LU_L	4346954
o-Xylene	ND			5		1	03/26/08	19:10	LU_L	4346954
Xylenes,Total	ND			5		1	03/26/08	19:10	LU_L	4346954
Surr: 1,2-Dichloroethane-d4	90.0		%	62-130		1	03/26/08	19:10	LU_L	4346954
Surr: 4-Bromofluorobenzene	96.0		%	70-130		1	03/26/08	19:10	LU_L	4346954
Surr: Toluene-d8	88.0		%	74-122		1	03/26/08	19:10	LU_L	4346954

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits

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J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-7

Collected: 03/19/2008 17:20

SPL Sample ID: 08031211-10

		:	Site: Azt	ec,NM			
Analyses/Method	Result	QUAL	Rep.Limit	Dil. Fa	ctor Date Ana	lyzed Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B			MCL	SW8260B	Units: ug/L	
Benzene	5		5		1 03/26/08	14:59 LU_L	4346946
Ethylbenzene	ND		5		1 03/26/08	14:59 LU_L	4346946
Toluene	ND		5		03/26/08	14:59 LU_L	4346946
m,p-Xylene	ND		5		1 03/26/08	14:59 LU_L	4346946
o-Xylene	ND		5		1 03/26/08	14:59 LU_L	4346946
Xylenes,Total	• ND		5		1 03/26/08	14:59 LU_L	4346946
Surr: 1,2-Dichloroethane-d4	90.0	(% 62-130		1 03/26/08	14:59 LU_L	4346946
Surr: 4-Bromofluorobenzene	98.0	(% 70-130		1 03/26/08	14:59 LU_L	4346946
Surr: Toluene-d8	86.0		% 74-122		1 03/26/08	14:59 LU_L	4346946

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID: Trip Blank			Coll	ected: 03	3/19/2008 17:35	SPL Sample ID: 08031			1211-11
			Sit	e: Azte	c,NM				
Analyses/Method	Result	QUAL	Re	p.Limit	Dil. Facto	r Date Ana	lyzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL S	W8260B	Ur	its: ug/L	
Benzene	ND			5	1	03/26/08	13:36	LU_L	4346944
Ethylbenzene	ND			5	1	03/26/08	13:36	LU_L	4346944
Toluene	ND			5	1	03/26/08	13:36	LU_L	4346944
m,p-Xylene	ND			5	1	03/26/08	13:36	LU_L	4346944
o-Xylene	ND			5	1	03/26/08	13:36	LU_L	4346944
Xylenes,Total	ND			5	1	03/26/08	13:36	LU_L	4346944
Surr: 1,2-Dichloroethane-d4	92.0		%	62-130	1	03/26/08	13:36	LU_L	4346944
Surr: 4-Bromofluorobenzene	96.0		%	70-130	1	03/26/08	13:36	LU_L	4346944
Surr: Toluene-d8	88.0		%	74-122	1	03/26/08	13:36	LU L	4346944

Qualifiers:

- ND/U Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-11

Collected: 03/19/2008 17:55

SPL Sample ID: 08031211-12

			SI	e: Azte	ec,NM					
Analyses/Method	Result	QUAL	R	ep.Limit	Dil. Fa	ctor	Date Ana	lyzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	SW	/8260B	Ur	nits: ug/L	
Benzene	ND			5	1		03/26/08	15:26	LU_L	4346947
Ethylbenzene	ND			5	1		03/26/08	15:26	LU_L	4346947
Toluene	ND			5	1		03/26/08	15:26	LU_L	4346947
m,p-Xylene	ND			5	1		03/26/08	15:26	LU_L	4346947
o-Xylene	ND			5	1		03/26/08	15:26	LU_L	4346947
Xylenes,Total	ND			5	1		03/26/08	15:26	LU_L	4346947
Surr: 1,2-Dichloroethane-d4	88.0		%	62-130	1		03/26/08	15:26	LU_L	4346947
Surr: 4-Bromofluorobenzene	96.0		%	70-130	1		03/26/08	15:26	LU_L	4346947
Surr: Toluene-d8	88.0		%	74-122	1		03/26/08	15:26	LU_L	4346947

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

J - Estimated value between MDE and FQE

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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Quality Control Documentation

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o-Xylene

Xylenes, Total

Surr: Toluene-d8

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco, Inc. COP Hampton 4M/4929

Analysis: Method:	Volatile Organics by SW8260B	Method 826	0B			WorkOrder: Lab Batch ID:	08031211 R232038		
	Meti	nod Blank		Samples in Analy	Samples in Analytical Batch:				
RunID: K_08032	5D-4346039	Units:	ug/L		Lab Sample ID	Client Sar	<u>mple ID</u>		
Analysis Date:	03/25/2008 20:15	Analyst:	LU_L		08031211-01A	MW-1			
Preparation Date:	03/25/2008 20:15	Prep By: Method			08031211-02A	MW-15			
					08031211-03A	MW-9			
					08031211-05A	MW-12			
	Analyte		Result	Rep Limit	08031211-06A	Duplicate			
Benz	Benzene			5.0	000012110031	2 aprioato			
Ethylbenzene			ND	5.0	08031211-07A	Seep			
Tolue	ene		ND	5.0					
m,p-2	Xylene		ND	5.0					

5.0

5.0

62-130

70-130

74-122

Laboratory Control Sample (LCS)

RunID:	K_080325
Analysis Date:	03/25/20
Preparation Date:	03/25/20

D-4346038 08 19:20 08 19:20

ND

ND

92.0

96.0

88.0

Units: ug/L Analyst: LU L Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	22.0	110	76	126
Ethylbenzene	20.0	21.0	105	67	122
Toluene	20.0	22.0	110	70	131
m,p-Xylene	40.0	43.0	108	72	150
o-Xylene	20.0	22.0	110	78	. 141
Xylenes,Total	60	65	110	72	150
Surr: 1,2-Dichloroethane-d4	50.0	46	92.0	62	130
Surr: 4-Bromofluorobenzene	50.0	. 51	102	70	130
Surr: Toluene-d8	50.0	46	92.0	74	122

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	08031211-01
RunID:	K_080325D-4346042
Analysis Date:	03/25/2008 23:29

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank J - Estimated value between MDL and PQL

MI - Matrix Interference D - Recovery Unreportable due to Dilution

ug/L

LU_L

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

Units:

Analyst:

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco, Inc. COP Hampton 4M/4929

Analysis: Method:	by Method 826	y Method 8260B							031211 !32038			
	Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene		ND	20	22.0	110	20	22.0	110	0	22	76	127
Ethylbenzene		ND	20	20.0	100	20	21.0	105	4.88	20	35	175
Toluene		ND	20	20.0	100	20	21.0	105	4.88	24	70	131
m,p-Xylene		ND	40	41.0	102	40	42.0	105	2.41	20	35	175
o-Xylene		ND	20	20.0	100	20	21.0	105	4.88	20	35	175
Xylenes,Total		ND	60	61	100	60	63	100	3.2	20	35	175
Surr: 1,2-Dich	loroethane-d4	ND	50	43	86.0	50	45.0	90.0	4.55	30	62	130
Surr: 4-Bromo	fluorobenzene	ND	50	50	100	50	51.0	102	1.98	30	70	130
Surr: Toluene-	d8	ND	50	45	90.0	50	45.0	90.0	0	30	74	122

Qualifiers:

ND/U - Not Detected at the Reporting Limit

- B/V Analyte detected in the associated Method Blank
- J Estimated value between MDL and PQL
- E Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Xylenes, Total

Surr: Toluene-d8

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco, Inc. COP Hampton 4M/4929

Analysis: Method:	Volatile Organics by SW8260B	Method 820	60B			WorkOrder: Lab Batch ID:	08031211 R232123			
Method Blank					Samples in A	Samples in Analytical Batch:				
RunID: K_080326	6C-4346943	Units:	ug/L		Lab Sample II	D Client Sa	mple ID			
Analysis Date:	03/26/2008 12:40	Analyst:	LU_L		08031211-04A	MW-16				
Preparation Date:	03/26/2008 12:40	Prep By:	N	/lethod	08031211-05A	MW-12				
					08031211-06A	Duplicate				
	Anabás		Desult	Dan Linsia	08031211-08A	MW-5				
	Analyte		Result	Rep Limit	08031211-09A	TMW-1				
Ethylt	ene Denzene			5.0	08031211-10A	MW-7				
Tolue	ne		ND	5.0	08031211-11A	Trip Blank				
m,p-X	(yiene		ND	5.0	08031211-124	MW-11				
o-Xyle	ene		ND	5.0	30031211-126					

Laboratory Control Sample (LCS)

RunID:	K_080326C-4346942	Units:	ug/L
Analysis Date:	03/26/2008 11:33	Analyst:	LU_L
Preparation Date:	03/26/2008 11:33	Prep By:	Method

5.0

62-130

70-130

74-122

ND

92.0

98.0

90.0

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit	
Benzene	20.0	21.0	105	76	126	
Ethylbenzene	20.0	20.0	100	67	122	
Toluene	20.0	20.0	100	70	131	
m,p-Xylene	40.0	41.0	102	72	150	
o-Xylene	20.0	21.0	105	78	141	
Xylenes,Total	60	62	100	72	150	
Surr: 1,2-Dichloroethane-d4	50.0	45	90.0	62	130	
Surr: 4-Bromofluorobenzene	50.0	49	98.0	70	130	
Surr: Toluene-d8	50.0	45	90.0	74	122	

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	08031211-06		
RunID:	K_080326C-4346952	Units:	ug/L
Analysis Date:	03/26/2008 18:13	Analyst:	LU_L

Qualifiers:

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

MI - Matrix Interference D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

ND/U - Not Detected at the Reporting Limit

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

08031211 Page 18 4/4/2008 11:02:55 AM



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco, Inc. COP Hampton 4M/4929

Analysis:Volatile OrganicsMethod:SW8260B	y Method 8260B						WorkOrder: 04 Lab Batch ID: R		1031211 232123		
Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	1700	400	2300	N/C	400	2300	N/C	N/C	22	76	127
Ethylbenzene	160	400	610	112	400	590	108	3.33	20	35	175
Toluene	590	400	1000	102	400	1000	102	0	24	70	131
m,p-Xylene	440	800	1300	108	800	1300	108	0	20	35	175
o-Xylene	140	400	590	112	400	610	118	3.33	20	35	175
Xylenes,Total	580	1200	1890	109	1200	1910	111	1.05	20	35	175
Surr: 1,2-Dichloroethane-d4	ND	1000	880	88.0	1000	910	91.0	3.35	30	62	130
Surr: 4-Bromofluorobenzene	ND	1000	980	98.0	1000	990	99.0	1.02	30	70	130
Surr: Toluene-d8	ND	1000	910	91.0	1000	890	89.0	2.22	30	74	122

Qualifiers: ND/U - Not Detected at the Reporting Limit

- B/V Analyte detected in the associated Method Blank
- J Estimated value between MDL and PQL E - Estimated Value exceeds calibration curve

MI - Matrix Interference

nod Blank D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

08031211 Page 19 4/4/2008 11:02:55 AM Sample Receipt Checklist And Chain of Custody

> 08031211 Page 20 4/4/2008 11:02:56 AM


Sample Receipt Checklist

Workorder: 08031211 Date and Time Received: 3/21/2008 10:00:00 AM Temperature: 3.0°C		Received By: Carrier name: Chilled by:	RE Fedex-Standard Overnight Blue Ice Pack
1. Shipping container/cooler in good condition?	Yes 🗹	Νο	Not Present
2. Custody seals intact on shippping container/cooler?	Yes 🗹	No 🗌	Not Present
3. Custody seals intact on sample bottles?	Yes	No 🗌	Not Present
4. Chain of custody present?	Yes 🗹	Νο	
5. Chain of custody signed when relinquished and received?	Yes 🗹	Νο	
6. Chain of custody agrees with sample labels?	Yes 🗹	No 🗌	
7. Samples in proper container/bottle?	Yes 🗹	No 🗌	
8. Sample containers intact?	Yes 🗹	No 🗔	
9. Sufficient sample volume for indicated test?	Yes 🔽	Νο	
10. All samples received within holding time?	Yes 🗹	No 🗀	
11. Container/Temp Blank temperature in compliance?	Yes 🗹	Νο	
12. Water - VOA vials have zero headspace?	Yes 🗹	Νο Ο νοα	Vials Not Present
13. Water - Preservation checked upon receipt (except VOA*)?	Yes 🗌	No 🗌	Not Applicable
*VOA Preservation Checked After Sample Analysis			
SPL Representative:	Contact Date 8	& Time:	
Client Name Contacted:			
Non Conformance Issues:			
Client Instructions:			

Site Name: **Client Name: Client/Consultant Remarks:** Site Location: Project Name/No. Phone/Fax: nvoice To: **Client Contact:** Other 48hr 24hr Contract ddress: MW-5 5- XN **Requested TAT 4** 8880 Interchange Drive Houston, TX 77054 (713) 660-0901 Duplicate MU-<u>7</u> <u>7</u> <u>7</u> <u>7</u> <u>7</u> MM-12 MN-16 MNN MW-SAMPLE ID 6 de S Ψ 72hr Standard N R 3008 5. Relinquished by: 1. Relinquished by Sampler: Special Reporting Requirements Results: 3. Relinquished by: 5 319108 Standard QCALevel 3 QC 5 <u>(</u>\) <u>لا</u> <u>تى</u> \mathcal{N} 3/19/08 9-301 PI 1 20161 New 19/06 19108 19108 DATE I FI K 19105 2 mail: 200 0 Analysis Request & Chain of Custody Record 97. H 16:55 16:30 16:20 15:40 01:51 00:51 Texic 8.5 14:25 55:57 Ph: TIME K A 8 comp|grab Level 4 QC 20 SPL, Inc. X earrow \succ メ Х \prec \succ > 500 Ambassador Caffery Parkway Scott, LA 70583 (337) 237-4775 O=oil Laboratory remarks: W=water matrix S=soil ξ É 3 É ٤ 9 É È 5 ٤ SL=sludge X=other TX TRRP Fax bottle A=amber glass P=plastic 2 G=glass V=vial X=other Email Detection Limits (specify): 3/20/05 aften 1=1 liter 4=4oz 40=vial Size ક 40 40 S £ 40 £ 40 40 õ 8=80z 16=160z X=other 6 pres. 2=HNO3 1=HC1 Z 3=H2SO4 X=other ume 10: 3 time /200 time S Number of Containers $\boldsymbol{\omega}$ S Ś S S 8260B-2 イ χ * 7 2. Received by: 4. Received by 3 SPL Workorder No. Heylivad Langeatory: \propto L 459 Hughes Drive Traverse City MI 49686 (231) 947-5777 のたく 0 V **Requested Analysis** A E I Intact? Ice? 6 Temp: page 及 PM review (initial): S 29748 ₽ (14 ત 2 80 $\overline{z}\overline{z}$

Houston, TX 77054 (713) 660-0901 Scott, LA 70583 (Other 5. Relinquished by: d	48hr 🗋 3. Relinquished by:	24hr D Standard A 1. Relinquished by Sampler:	Contract 72hr Standard QC Level 3 QC Level 3 QC TX TRRP	Lieno Consuntanti Remarks				MW-11 319108 17 55 X W GU 1	Trip Blank 39/08 17:35 X W GV	Site Location: TTETX C NLAW PNR L Invoice To: Ph: Ph: SAMPLE ID DATE TIME comp grab W == slud SL=slud G=glass	Project Name: HCM HCI Site Name: HCI HCI <th>Client Contact: Kelly Dayc Nor Email:</th> <th>Phone/Fax: 505-237-28440</th> <th>Client Name: Tetra Tech matrix bottle</th> <th>a Analysis Request & Chain of Custod</th> <th>SPL, Inc.</th>	Client Contact: Kelly Dayc Nor Email:	Phone/Fax: 505-237-28440	Client Name: Tetra Tech matrix bottle	a Analysis Request & Chain of Custod	SPL, Inc.
Image: Carliery Parkway Image: Carlier	1/1/28 time 6. Hereiven by Laboratory:	te time 4. Received by:	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ Received by:	A RECAP							8=8oz 1 1=HC1 3=H2SO Number	6=16oz 2=H 4 X=0 of Cont X 8	X= NO3 ther 24	other	ize pres. V Requested Analysis	(Record n) $OSO3/3/1$ page of	SPL Workorder No. 27859

Z



Conoco Phillips

Certificat	te of Analysis Number:								
<u>080/1477</u>									
Report To:	Project Name: COP Hampton 4M								
Tetra Tech, Inc.	<u>Site:</u> Aztec, NM								
Kelly Blanchard	Site Address:								
6121 Indian School Road, N.E.									
Suite 200	PO Number: 4510016693								
Albuquerque	<u>- 0 Number.</u> 4510010035								
NM	State: New Mexico								
87110-	State Cert. No.:								
ph: (505) 237-8440 fax:	Date Reported: 12/10/2008								

This Report Contains A Total Of 22 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

12/11/2008

Test results meet all requirements of NELAC, unless specified in the narrative.



Case Narrative for: Conoco Phillips

Certificate of Analysis Number:

08071477

Report To:	Project Name: COP Hampton 4M
Tetra Tech, Inc.	Site: Aztec, NM
Kelly Blanchard	Site Address:
6121 Indian School Road, N.E.	
Suite 200	BO Numbers 4510046602
Albuquerque	<u>PO Number.</u> 4310018693
NM	State: New Mexico
87110-	State Cert. No.:
ph: (505) 237-8440 fax:	Date Reported: 12/10/2008

This report was revised on December 10, 2008 to edit the sample ID for SPL ID 08071477-08.

Per the Conoco Phillips TSM Revision 0, a copy of the internal chain of custody is to be included in final data package. However, due to LIMS limitations, this cannot be provided at this time.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Betho

08071477 Page 1 12/11/2008

Bethany A. Agarwal Senior Project Manager



Conoco Phillips

		Certifi	cate of Analysis Nun	nber:		
			<u>08071477</u>			
Report To:	Tetra Tech, Inc.			Project Name:	COP Hampton 4M	
	Kelly Blanchard			Site:	Aztec, NM	
	6121 Indian School Roa	ad, N.E.		Site Address:		
	Suite 200					
	Albuquerque					
	NM			PO Number:	4510016693	
	87110-			State:	New Mexico	
	ph: (505) 237-8440	fax: (505) 881-3283		State Cert. No.:		
<u>Fax To:</u>				Date Reported:	12/10/2008	

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-1	08071477-01	Water	7/22/2008 11:00:00 AM	7/24/2008 9:30:00 AM		
MW-15	08071477-02	Water	7/22/2008 11:30:00 AM	7/24/2008 9:30:00 AM		
Duplicate	08071477-03	Water	7/22/2008 11:35:00 AM	7/24/2008 9:30:00 AM		
MW-9	08071477-04	Water	7/22/2008 11:45:00 AM	7/24/2008 9:30:00 AM		
MW-16	08071477-05	Water	7/22/2008 11:55:00 AM	7/24/2008 9:30:00 AM		
MW-12	08071477-06	Water	7/22/2008 12:20:00 PM	7/24/2008 9:30:00 AM		
MW-5	08071477-07	Water	7/22/2008 1:30:00 PM	7/24/2008 9:30:00 AM		
TMW-1	08071477-08	Water	7/22/2008 1:45:00 PM	7/24/2008 9:30:00 AM		
MW-7	08071477-09	Water	7/22/2008 2:00:00 PM	7/24/2008 9:30:00 AM		
MW-11	08071477-10	Water	7/22/2008 2:30:00 PM	7/24/2008 9:30:00 AM		
Trip Blank	08071477-11	Water	7/22/2008 2:35:00 PM	7/24/2008 9:30:00 AM		

ļ Betho <

Bethany A. Agarwal Senior Project Manager

12/11/2008

Date

Richard R. Reed Laboratory Director

Ted Yen Quality Assurance Officer

> 08071477 Page 2 12/11/2008 1:39:49 PM



8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Client Sample ID:MW-1

Sitor Artee NM

Collected: 07/22/2008 11:00

SPL Sample ID: 08071477-01

			51	e: Azte				
Analyses/Method	Result	QUAL	R	ep.Limit	Dil. Facto	or Date Anal	yzed Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B				MCL S	SW8260B	Units: ug/L	
Benzene	ND			5	1	07/29/08	0:59 LU_L	4600905
Ethylbenzene	ND			5	1	07/29/08	0:59 LU_L	4600905
Toluene	ND			5	1	07/29/08	0:59 LU_L	4600905
m,p-Xylene	ND			5	1	07/29/08	0:59 LU_L	4600905
o-Xylene	ND			5	1	07/29/08	0:59 LU_L	4600905
Xylenes,Total	ND			5	1	07/29/08	0:59 LU_L	4600905
Surr: 1,2-Dichloroethane-d4	92.0		%	62-130	1	07/29/08	0:59 LU_L	4600905
Surr: 4-Bromofluorobenzene	96.0	·	%	70-130	1	07/29/08	0:59 LU_L	4600905
Surr: Toluene-d8	98.0		%	74-122	1	07/29/08	0:59 LU_L	4600905

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/\!V}}$ - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count >MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

> 08071477 Page 3 12/11/2008 1:39:59 PM



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-15

Site: Artec NM

Collected: 07/22/2008 11:30

SPL Sample ID: 08071477-02

			31	e. Azie	., ININI					
Analyses/Method	Result	QUAL	R	ep.Limit		Dil. Factor	Date Ana	lyzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	S	W8260B	Un	nits: ug/L	
Benzene	ND			5		1	07/29/0	8 2:25	LU_L	4600908
Ethylbenzene	ND			5		1	07/29/0	8 2:25	LU_L	4600908
Toluene	ND			5		1	07/29/0	8 2:25	LU_L	4600908
m,p-Xylene	ND			5		1	07/29/0	8 2:25	LU_L	4600908
o-Xylene	ND			5		1	07/29/0	8 2:25	LU_L	4600908
Xylenes,Total	ND			5		1	07/29/0	8 2:25	LU_L	4600908
Surr: 1,2-Dichloroethane-d4	96.0		%	62-130		1	07/29/0	8 2:25	LU_L	4600908
Surr: 4-Bromofluorobenzene	96.0		%	70-130		1	07/29/0	8 2:25	LU_L	4600908
Surr: Toluene-d8	100		%	74-122		1	07/29/0	8 2:25	LU_L	4600908

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/\!V}}\xspace$ - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

> 08071477 Page 4 12/11/2008 1:40:00 PM



8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID: Duplicate

Collected: 07/22/2008 11:35

SPL Sample ID: 08071477-03

			Sit	e: Azte	ec, NM					
Analyses/Method	Result	QUAL	R	ep.Limit	0	Dil. Factor	Date Anal	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	SV	V8260B	Un	its: ug/L	
Benzene	ND			5		1	07/29/08	2:54	LU_L	4600909
Ethylbenzene	ND			5		1	07/29/08	2:54	LU_L	4600909
Toluene	ND	••••		5		1	07/29/08	2:54	LU_L	4600909
m,p-Xylene	ND			5		1	07/29/08	2:54	LU_L	4600909
o-Xylene	ND			5		1	07/29/08	2:54	LU_L	4600909
Xylenes,Total	ND			5		1	07/29/08	2:54	LU_L	4600909
Surr: 1,2-Dichloroethane-d4	94.0		%	62-130		1	07/29/08	2:54	LU_L	4600909
Surr: 4-Bromofluorobenzene	96.0		%	70-130		1	07/29/08	2:54	LU_L	4600909
Surr: Toluene-d8	98.0		%	74-122		1	07/29/08	2:54	LU_L	4600909

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Collected: 07/22/2008 11:45

SPL Sample ID: 08071477-04

		Site:	Azte	ec, NM			
Analyses/Method	Result QUA	L Rep.1	.imit	Dil. Factor	Date Anal	yzed Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B			MCL S	W8260B	Units: ug/L	
Benzene	ND		5	1	07/29/08	3:23 LU_L	4600910
Ethylbenzene	ND		5	1	07/29/08	3:23 LU_L	4600910
Toluene	ND		5	1	07/29/08	3:23 LU_L	4600910
m,p-Xylene	ND		5	1	07/29/08	3:23 LU_L	4600910
o-Xylene	ND		5	1	07/29/08	3:23 LU_L	4600910
Xylenes,Total	ND		5	1	07/29/08	3:23 LU_L	4600910
Surr: 1,2-Dichloroethane-d4	92.0	% 62	-130	1	07/29/08	3:23 LU_L	4600910
Surr: 4-Bromofluorobenzene	92.0	% 70	-130	1	07/29/08	3:23 LU_L	4600910
Surr: Toluene-d8	96.0	% 74	-122	. 1	07/29/08	3:23 LU_L	4600910

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- $\ensuremath{\mathsf{B/V}}\xspace$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- ${\sf J}$ Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

> 08071477 Page 6 12/11/2008 1:40:00 PM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-16

Collected: 07/22/2008 11:55

SPL Sample ID: 08071477-05

		S	ite: Azte	ec, NM			
Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analy	zed Analyst	Seq. #
VOLATILE ORGANICS BY N	ETHOD 8260B			MCL S	W8260B	Units: ug/L	
Benzene	3600		250	50	07/30/08 2	0:46 LU_L	4604395
Ethylbenzene	430		250	50	07/30/08 2	0:46 LU_L	4604395
Toluene	6100		250	50	07/30/08 2	0:46 LU_L	4604395
m,p-Xylene	3300		250	50	07/30/08 2	0:46 LU_L	4604395
o-Xylene	1200	• • • • • • • • • • • • • • • • • • •	250	50	07/30/08 2	0:46 LU_L	4604395
Xylenes,Total	4500		250	50	07/30/08 2	0:46 LU_L	4604395
Surr: 1,2-Dichloroethane-d4	92.0	%	62-130	50	07/30/08 2	0:46 LU_L	4604395
Surr: 4-Bromofluorobenzene	96.0	. %	5 70-130	50	07/30/08 2	0:46 LU_L	4604395
Surr: Toluene-d8	96.0	%	5 74-122	50	07/30/08 2	0:46 LU_L	4604395

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- $\ensuremath{\mathsf{B/V}}\xspace$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- ${\sf J}$ Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Client Sample ID:MW-12

Collected: 07/22/2008 12:20

SPL Sample ID: 08071477-06

			Sit	e: Azte	ec, NM			
Analyses/Method	Result	QUAL	Re	ep.Limit	Dil. Fact	or Date Analy	zed Analys	: Seq. #
VOLATILE ORGANICS BY ME	ETHOD 8260B				MCL	SW8260B	Units: ug/L	•
Benzene	730			50	10	07/30/08 1	9:47 LU_L	4604393
Ethylbenzene	14			5	1	07/30/08	5:50 LU_L	4604356
Toluene	22			5	1	07/30/08	5:50 LU_L	4604356
m,p-Xylene	16			5	1	07/30/08	5:50 LU_L	4604356
o-Xylene	5			5	1	07/30/08	5:50 LU_L	4604356
Xylenes,Total	21			5	1	07/30/08	5:50 LU_L	4604356
Surr: 1,2-Dichloroethane-d4	94.0		%	62-130	10	07/30/08 1	9:47 LU_L	4604393
Surr: 1,2-Dichloroethane-d4	92.0		%	62-130	1	07/30/08	5:50 LU_L	4604356
Surr: 4-Bromofluorobenzene	96.0		%	70-130	10	07/30/08 1	9:47 LU_L	4604393
Surr: 4-Bromofluorobenzene	96.0		%	70-130	1	07/30/08	5:50 LU_L	4604356
Surr: Toluene-d8	96.0		%	74-122	10	07/30/08 1	9:47 LU_L	4604393
Surr: Toluene-d8	96.0		%	74-122	1	07/30/08	5:50 LU_L	4604356

Qualifiers:

ND/U - Not Detected at the Reporting Limit

- $\ensuremath{\mathsf{B/V}}\xspace$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count >MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

08071477 Page 8 12/11/2008 1:40:00 PM



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Collected: 07/22/2008 13:30

SPL Sample ID: 08071477-07

		Sit	e: Azte	c, NM			
Analyses/Method	Result (QUAL R	ep.Limit	Dil. Factor	Date Analy	zed Analyst	Seq. #
VOLATILE ORGANICS BY MET	THOD 8260B			MCL SV	V8260B	Units: ug/L	
Benzene	340		250	50	07/30/08 2	20:16 LU_L	4604394
Ethylbenzene	550		250	50	07/30/08 2	20:16 LU_L	4604394
Toluene	6100		250	50	07/30/08 2	20:16 LU_L	4604394
m,p-Xylene	5000		250	50	07/30/08 2	20:16 LU_L	4604394
o-Xylene	1400		250	50	07/30/08 2	20:16 LU_L	4604394
Xylenes,Total	6400		250	50	07/30/08 2	20:16 LU_L	4604394
Surr: 1,2-Dichloroethane-d4	88.0	%	62-130	50	07/30/08 2	20:16 LU_L	4604394
Surr: 4-Bromofluorobenzene	96.0	%	70-130	50	07/30/08 2	20:16 LU_L	4604394
Surr: Toluene-d8	96.0	%	74-122	50	07/30/08 2	20:16 LU_L	4604394

Qualifiers:

- ND/U Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve TNTC Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:TMW-1

Collected: 07/22/2008 13:45 SPL 9

SPL Sample ID: 08071477-08

			Sit	e: Azte	ec, NM					
Analyses/Method	Result	QUAL	R	ep.Limit	:	Dil. Factor	Date Anal	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	SI	N8260B	Ur	nits: ug/L	
Benzene	130			5		1	07/30/08	7:44	LU_L	4604359
Ethylbenzene	11			5		1	07/30/08	3 7:44	LU_L	4604359
Toluene	29			5		1	07/30/08	7:44	LU_L	4604359
m,p-Xylene	22			5		1	07/30/08	7:44	LU_L	4604359
o-Xylene	ND			5		1	07/30/08	7:44	LU_L	4604359
Xylenes,Total	22			5		1	07/30/08	7:44	LU_L	4604359
Surr: 1,2-Dichloroethane-d4	88.0		%	62-130		1	07/30/08	7:44	LU_L	4604359
Surr: 4-Bromofluorobenzene	98.0		%	70-130		1	07/30/08	7:44	LU_L	4604359
Surr: Toluene-d8	100		%	74-122		1	07/30/08	7:44	LU_L	4604359

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/V}}\xspace$ - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-7

Collected: 07/22/2008 14:00

SPL Sample ID: 08071477-09

			Sit	e: Azte	c, NM					
Analyses/Method	Result	QUAL	R	ep.Limit		Dil. Factor	Date Ana	lyzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	THOD 8260B				MCL	SV	V8260B	U	nits: ug/L	
Benzene	32			5		1	07/30/08	19:19	LU_L	4604392
Ethylbenzene	12			5		1	07/30/08	19:19	LU_L	4604392
Toluene	ND			5		1	07/30/08	19:19	LU_L	4604392
m,p-Xylene	7			5		1	07/30/08	19:19	LU_L	4604392
o-Xylene	ND			5		1	07/30/08	19:19	LU_L	4604392
Xylenes,Total	7			5		1	07/30/08	19:19	LU_L	4604392
Surr: 1,2-Dichloroethane-d4	92.0		%	62-130		1	07/30/08	19:19	LU_L	4604392
Surr: 4-Bromofluorobenzene	98.0		%	70-130		1	07/30/08	19:19	LU_L	4604392
Surr: Toluene-d8	94.0		%	74-122		1	07/30/08	19:19	LU_L	4604392

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- BN Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-11

Collected: 07/22/2008 14:30

SPL Sample ID: 08071477-10

			Sit	e: Azte	ec, NM					
Analyses/Method	Result	QUAL	R	ep.Limit		Dil. Factor	Date Anal	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	SV	V8260B	Ur	its: ug/L	
Benzene	ND			5		1	07/30/08	3 7:16	LU_L	4604358
Ethylbenzene	ND			5		1	07/30/08	7:16	LU_L	4604358
Toluene	ND	·		5		1	07/30/08	3 7:16	LU_L	4604358
m,p-Xylene	ND			5		1	07/30/08	3 7:16	LU_L	4604358
o-Xylene	ND			5		1	07/30/08	3 7:16	LU_L	4604358
Xylenes,Total	ND			5		1	07/30/08	37:16	LU_L	4604358
Surr: 1,2-Dichloroethane-d4	94.0		%	62-130		1	07/30/08	37:16	LU_L	4604358
Surr: 4-Bromofluorobenzene	92.0		%	70-130		1	07/30/08	3 7:16	LU_L	4604358
Surr: Toluene-d8	96.0		%	74-122		1	07/30/08	3 7:16	LU_L	4604358

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/V}}$ - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

 ${\sf J}$ - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID: Trip Blank

Collected: 07/22/2008 14:35

SPL Sample ID: 08071477-11

			Site: Aztec, NM									
Analyses/Method	Result	QUAL	Re	ep.Limit	l	Dil. Facto	r Date Analy	yzed	Analyst	Seq. #		
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	S	W8260B	Ur	nits: ug/L			
Benzene	ND			5		1	07/30/08	5:21	LU_L	4604355		
Ethylbenzene	ND			5		1	07/30/08	5:21	LU_L	4604355		
Toluene	ND			5		1	07/30/08	5:21	LU_L	4604355		
m,p-Xylene	ND			5		1	07/30/08	5:21	LU_L	4604355		
o-Xylene	ND			5		1	07/30/08	5:21	LU_L	4604355		
Xylenes,Total	ND			5		1	07/30/08	5:21	LU_L	4604355		
Surr: 1,2-Dichloroethane-d4	92.0		%	62-130		1	07/30/08	5:21	LU_L	4604355		
Surr: 4-Bromofluorobenzene	98.0		%	70-130		1	07/30/08	5:21	LU_L	4604355		
Surr: Toluene-d8	100		%	74-122		1	07/30/08	5:21	LU L	4604355		

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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Quality Control Documentation

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips COP Hampton 4M

Analysis: Method:	Volatile Organics by SW8260B	Method 8260	В		WorkOrder: Lab Batch ID:	08071477 R246784
	Meth	od Blank		Samples in Analytica	al Batch:	- • ·
RunID: K_08072	8C-4600904	Units:	ug/L	Lab Sample ID	Client Sar	nple ID
Analysis Date:	07/28/2008 17:45	Analyst:	LU_L	08071477-01A	MW-1	
Preparation Date:	07/28/2008 17:45	Prep By:	Method	08071477-02A	MW-15	
				08071477-03A	Duplicate	
	Analita		Booult Boo Limit	08071477-04A	MW-9	

Analyte	Result	Rep Limit
Benzene	ND	5.0
Ethylbenzene	ND	5.0
Toluene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
Xylenes, Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	94.0	62-130
Surr: 4-Bromofluorobenzene	94.0	70-130
Surr: Toluene-d8	98.0	74-122

Laboratory Control Sample (LCS)

RunID:	K_080728C-4600903	Units:	ug/L
Analysis Date:	07/28/2008 16:57	Analyst:	LU_L
Preparation Date:	07/28/2008 16:57	Prep By:	Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	19.0	95.0	76	126
Ethylbenzene	20.0	21.0	105	67	122
Toluene	20.0	19.0	95.0	70	131
m,p-Xylene	40.0	40.0	100	72	150
o-Xylene	20.0	21.0	105	78	141
Xylenes,Total	60	61	100	72	150
Surr: 1,2-Dichloroethane-d4	50.0	46	92.0	62	130
Surr: 4-Bromofluorobenzene	50.0	49	98.0	70	130
Surr: Toluene-d8	50.0	50	100	74	122

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:
RunID:
Analysis Date:

08071477-01 K_080728C-4600906 07/29/2008 1:28

Units: ug/L Analyst: LU_L

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank J - Estimated value between MDL and PQL

MI - Matrix Interference D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

COP Hampton 4M

Analysis: Method:	nalysis: Volatile Organics by Method 8260B lethod: SW8260B									71477 46784		
	Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene		ND	20	18.0	90.0	20	19.0	95.0	5.41	22	76	127
Ethylbenzene		ND	20	19.0	95.0	20	19.0	95.0	0	20	35	175
Toluene		ND	20	18.0	90.0	20	18.0	90.0	0	24	70	131
m,p-Xylene		ND	40	38.0	95.0	40	36.0	90.0	5.41	20	35	175
o-Xylene		ND	20	20.0	100	20	20.0	100	0	20	35	175
Xylenes,Total		ND	60	58	97	60	56	93	3.5	20	35	175
Surr: 1,2-Dich	loroethane-d4	ND	50	47	94.0	50	47.0	94.0	0	30	62	130
Surr: 4-Bromo	ofluorobenzene	ND	50	48	96.0	50	48.0	96.0	0	30	70	130
Surr: Toluene	-d8	ND	50	50	100	50	49.0	98.0	2.02	30	74	122

ND/U - Not Detected at the Reporting Limit Qualifiers:

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Conoco Phillips

COP Hampton 4M

Analysis: Method:	Volatile Organics by SW8260B	/ Method 8260	В		WorkOrder: Lab Batch ID:	08071477 R246995		
<u> </u>	Met	hod Blank		Samples in Analytical Batch:				
RunID: K_08072	91-4604354	Units:	ug/L	Lab Sample ID	Client Sar	nple ID		
Analysis Date:	07/30/2008 4:23	Analyst:	LU_L	08071477-06A	MW-12			
Preparation Date:	07/30/2008 4:23	Prep By:	Method	08071477-08A	TMW-1			
				08071477-10A	MW-11			
[Analyte		Result Rep Limit	08071477-11A	Trip Blank			

Analyte	Result	Rep Limit
Benzene	ND	5.0
Ethylbenzene	ND	5.0
Toluene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	92.0	62-130
Surr: 4-Bromofluorobenzene	94.0	70-130
Surr: Toluene-d8	98.0	74-122

Laboratory Control Sample (LCS)

RunID:	K_080729I-4604353
Analysis Date:	07/30/2008 3:54
Preparation Date:	07/30/2008 3:54

Units: ug/L Analyst: LU_L Prep By: Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	18.0	90.0	76	126
Ethylbenzene	20.0	18.0	90.0	67	122
Toluene	20.0	18.0	90.0	70	131
m,p-Xylene	40.0	35.0	87.5	72	150
o-Xylene	20.0	19.0	95.0	78	141
Xylenes,Total	60	54	90	72	150
Surr: 1,2-Dichloroethane-d4	50.0	46	92.0	62	130
Surr: 4-Bromofluorobenzene	50.0	49	98.0	70	130
Surr: Toluene-d8	50.0	49	98.0	74	122

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked
RunID:
Analysis Date:

08071558-02 K_080729I-4604361 07/30/2008 11:06

Units: ug/L Analyst: LU_L

Qualifiers:

ND/U - Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank

B/V - Analyte detected in the associated Method Blan J - Estimated value between MDL and PQL MI - Matrix Interference D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

COP Hampton 4M

Analysis: Method:	Volatile Organics SW8260B	by Method 826	0B					WorkOrder: Lab Batch I	: 080 D: R24	71477 16995		
· · · · · · · · · · · · · · · · · · ·	Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene		ND	20	20.0	100	20	20.0	100	0	22	76	127
Ethylbenzene		. ND	20	20.0	100	20	19.0	95.0	5.13	20	35	175
Toluene		ND	20	20.0	100	20	19.0	95.0	5.13	24	70	131
m,p-Xylene		ND	40	40.0	100	40	38.0	95.0	5.13	20	35	175
o-Xylene		ND	20	21.0	105	20	20.0	100	4.88	20	35	175
Xylenes,Total		ND	60	61	100	60	58	97	5.0	20	35	175
Surr: 1,2-Dichk	proethane-d4	ND	50	47	94.0	50	47.0	94.0	0	30	62	130
Surr: 4-Bromof	luorobenzene	ND	50	49	98.0	50	48.0	96.0	2.06	30	70	130
Surr: Toluene-c	18	ND	50	49	98.0	50	49.0	98.0	0	30	74	122

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

od Blank D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips COP Hampton 4M

Analysis: Method:	Volatile Organics by SW8260B	Method 826	0B			WorkOrder: Lab Batch ID:	08071477 R246996
	Met	nod Blank			Samples in Analytica	al Batch:	
RunID: K_080736	0C-4604391	Units:	ug/L		Lab Sample ID	Client San	nple ID
Analysis Date:	07/30/2008 17:21	Analyst:	LU_L		08071477-05A	MW-16	
Preparation Date:	07/30/2008 17:21	Prep By:	1	Method	08071477-06A	MW-12	
					08071477-07A	MW-5	
	Analyte		Result	Rep Limit	08071477-09A	MW-7	

Analyte	Result	Rep Limit
Benzene	ND	5.0
Ethylbenzene	ND	5.0
Toluene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	88.0	62-130
Surr: 4-Bromofluorobenzene	94.0	70-130
Surr: Toluene-d8	96.0	74-122

Laboratory Control Sample (LCS)

RunID:	K_080730C-4604390	Units:	ug/L
Analysis Date:	07/30/2008 16:12	Analyst:	LU_L
Preparation Date:	07/30/2008 16:12	Prep By:	Method

A 1.			-		
Analyte	Spike	Result	Percent	Lower	Upper
	Added		Recovery	Limit	Limit
Banzana	20.0	10.0	95.0	76	126
Delizerie	20.0	19.0	95.0	70	120
Ethylbenzene	20.0	20.0	100	67	122
Toluene	20.0	18.0	90.0	70	131
m,p-Xylene	40.0	38.0	95.0	72	150
o-Xylene	20.0	20.0	100	78	141
Xylenes,Total	60	58	97	72	150
Surr: 1,2-Dichloroethane-d4	50.0	49	98.0	62	130
Surr: 4-Bromofluorobenzene	50.0	48	96.0	70	130
Surr: Toluene-d8	50.0	49	98.0	74	122

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:
RunID:
Analvsis Date:

08071540-02 K_080730C-4604398 07/31/2008 0:39

Units: ug/L Analyst: LU_L

Qualifiers:

ND/U - Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

MI - Matrix Interference D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

COP Hampton 4M

Analysis: Method:	Volatile Organics b SW8260B	by Method 826	0B					WorkOrder Lab Batch I	: 080 ID: R24	71477 46996		
	Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene		ND	20	21.0	105	20	21.0	105	0	22	76	127
Ethylbenzene	· · · · · · · · · · · · · · · · · · ·	ND	20	20.0	100	20	21.0	105	4.88	20	35	175
Toluene		ND	20	20.0	100	20	20.0	100	0	24	70	131
m,p-Xylene		ND	40	41.0	102	40	40.0	100	2.47	20	35	175
o-Xylene		ND	20	21.0	105	20	21.0	105	0	20	35	175
Xylenes,Total		ND	60	62	100	60	· 61	100	1.6	20	35	175
Surr: 1,2-Dich	nloroethane-d4	ND	50	46	92.0	50	46.0	92.0	0	30	62	130
Surr: 4-Bromo	ofluorobenzene	ND	50	50	100	50	49.0	98.0	2.02	30	70	130
Surr: Toluene	⊢d8	ND	50	50	100	50	49.0	98.0	2.02	30	74	122

Qualifiers: ND/U

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

ed Method Blank D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Sample Receipt Checklist

Workorder:08071477Date and Time Received:7/24/2008 9:30:00 AMTemperature:3.5°C		Received By: Carrier name: Chilled by:	ERH Fedex-Priority Water Ice
1. Shipping container/cooler in good condition?	Yes 🗹	No 🗌	Not Present
2. Custody seals intact on shippping container/cooler?	Yes 🗹	Νο	Not Present
3. Custody seals intact on sample bottles?	Yes 🗌	No 🗌	Not Present
4. Chain of custody present?	Yes 🗹	No 🗔	
5. Chain of custody signed when relinquished and received?	Yes 🗹	No 🗌	
6. Chain of custody agrees with sample labels?	Yes 🗹	No 🗌	
7. Samples in proper container/bottle?	Yes 🗹	No 🗌	
8. Sample containers intact?	Yes 🗹	No 🗌	
9. Sufficient sample volume for indicated test?	Yes 🗹	Νο	
10. All samples received within holding time?	Yes 🗹	No 🗌	
11. Container/Temp Blank temperature in compliance?	Yes 🗹		
12. Water - VOA vials have zero headspace?	Yes 🗹		Vials Not Present
13. Water - Preservation checked upon receipt (except VOA*)?	Yes	No 🗌	Not Applicable
*VOA Preservation Checked After Sample Analysis			
SPL Representative: Client Name Contacted:	Contact Date	& Time:	
Non Conformance Issues:	·······		
Client Instructions:			

 $\vec{\phi}$ mber Gigse S. Box Assic Temperclare S. Rounded Analysis 5 - M.C 571 Workonder Number 2××× 2 Vials for mate Chain of Custody Record which I viavo & Z HNCX 00.1 Christing West No. • 3 Presemañve Type: Ś /22/14:00 12213:30 1000 的代码工业的问题 4 122 22 Junoco Pfallo 22 anchoscients incl 11 and a march s untitle 10 -11-MW mm d 1-MW mw < A PRIMA - MW UPSPECON: e quite e 2



Conoco Phillips

Certificate of	Certificate of Analysis Number:									
<u>08101633</u>										
Report To:	Project Name:	COP Hampton 4M								
Tetra Tech EM, Inc.	Site:	Aztec, NM								
Kelly Blanchard	Site Address:									
6121 Indian School Road, N.E.										
Suite 200	PO Number:	4510016693								
Albuquerque	<u>ronumber.</u>	-0.0010000								
NM	State:	New Mexico								
87110-	State Cert. No .:									
ph: (505) 881-3188 fax:	Date Reported:	11/10/2008								

This Report Contains A Total Of 22 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

11/10/2008



Case Narrative for: **Conoco Phillips**

Certificate of Analysis Number:

<u>081</u>	<u>08101633</u>								
Report To:	Project Name:	COP Hampton 4M							
Tetra Tech EM, Inc.	<u>Site:</u>	Aztec, NM							
Kelly Blanchard	Site Address:								
6121 Indian School Road, N.E.									
Suite 200	80 Number	4540046692							
Albuquerque	FO Multiper.	45 100 10095							
NM	<u>State:</u>	New Mexico							
87110-	State Cert. No .:								
ph: (505) 881-3188 fax:	Date Reported:	11/10/2008							

Per the Conoco Phillips TSM Revision 0, a copy of the internal chain of custody is to be included in final data package. However, due to LIMS limitations, this cannot be provided at this time.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

- Ca Cardinas

08101633 Page 1 11/10/2008

Erica Cardenas Project Manager



Conoco Phillips

Certificate of Analysis Number: 08101633 **COP Hampton 4M** Tetra Tech EM, Inc. Project Name: Report To: Kelly Blanchard Aztec, NM Site: 6121 Indian School Road, N.E. Site Address: Suite 200 Albuquerque NM PO Number: 4510016693 87110-State: **New Mexico** ph: (505) 881-3188 fax: (505) 881-3283 State Cert. No.: Fax To: Date Reported: 11/10/2008

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-15	08101633-01	Water	10/23/2008 11:30:00 AM	10/28/2008 9:30:00 AM		
MW-1	08101633-02	Water	10/23/2008 11:45:00 AM	10/28/2008 9:30:00 AM		
MW-9	08101633-03	Water	10/23/2008 12:20:00 PM	10/28/2008 9:30:00 AM		
MW-16	08101633-04	Water	10/23/2008 12:40:00 PM	10/28/2008 9:30:00 AM		
SEEP	08101633-05	Water	10/23/2008 1:00:00 PM	10/28/2008 9:30:00 AM		
MW-5	08101633-06	Water	10/23/2008 1:50:00 PM	10/28/2008 9:30:00 AM		
MW-12	08101633-07	Water	10/23/2008 1:45:00 PM	10/28/2008 9:30:00 AM		
DUPLICATE	08101633-08	Water	10/23/2008 1:50:00 PM	10/28/2008 9:30:00 AM		
MW-7	08101633-09	Water	10/23/2008 2:10:00 PM	10/28/2008 9:30:00 AM		
MW-11	08101633-10	Water	10/23/2008 2:45:00 PM	10/28/2008 9:30:00 AM		
Trip Blank	08101633-11	Water	10/27/2008 2:30:00 PM	10/28/2008 9:30:00 AM	313361	

- On Oardinas 85

Erica Cardenas Project Manager 11/10/2008

Date

Richard R. Reed Laboratory Director

Ted Yen Quality Assurance Officer

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client	Sample	ID:MW-15
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Collected: 10/23/2008 11:30

SPL Sample ID: 08101633-01

			Sit	e: Azte	c, NM					
Analyses/Method	Result	QUAL	R	ep.Limit		Dil. Factor	Date Anal	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B				MCL	. sv	V8260B	Un	its: ug/L	
Benzene	ND			5		1	11/05/08	13:09	LT	4753595
Ethylbenzene	ND			5		1	11/05/08	13:09	LT	4753595
Toluene	ND			5		1	11/05/08	13:09	LT	4753595
m,p-Xylene	ND			5		1	11/05/08	13:09	LT	4753595
o-Xylene	ND			5		1	11/05/08	13:09	LT	4753595
Xylenes,Total	ND			5		1	11/05/08	13:09	LT	4753595
Surr: 1,2-Dichloroethane-d4	102		%	62-130		1	11/05/08	13:09	LT	4753595
Surr: 4-Bromofluorobenzene	96.0		%	70-130		1	11/05/08	13:09	LT	4753595
Surr: Toluene-d8	106		%	74-122		1	11/05/08	13:09	LT	4753595

Qualifiers:

- ND/U Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-1

Collected: 10/23/2008 11:45 SPL Sample ID:

e ID: 08101633-02

		Sit	e: Azte	c, NM				
Analyses/Method	Result C	QUAL R	ep.Limit	Dil. Factor	Date Anal	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B			MCL SV	V8260B	Un	its: ug/L	
Benzene	ND		5	1	11/05/08	13:37	LT	4753596
Ethylbenzene	ND		5	1	11/05/08	13:37	LT	4753596
Toluene	ND		5	1	11/05/08	13:37	LT	4753596
m,p-Xylene	ND		5	1	11/05/08	13:37	LT	4753596
o-Xylene	ND		5	1	11/05/08	13:37	LT	4753596
Xylenes,Total	ND		5	1	11/05/08	13:37	LT	4753596
Surr: 1,2-Dichloroethane-d4	108	%	62-130	1	11/05/08	13:37	LT	4753596
Surr: 4-Bromofluorobenzene	94.0	%	70-130	1	11/05/08	13:37	LT	4753596
Surr: Toluene-d8	106	%	74-122	1	11/05/08	13:37	LT	4753596

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits J - Estimated Value between MDL and PQL

J - Estimated value between MDL and FQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count >MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-9			Coll	ected: 10)/23/2008 12:20	SPL Sar	nple l	D: 0810	1633-03
			Site	e: Azte	c, NM				
Analyses/Method	Result	QUAL	Re	p.Limit	Dil. Facto	r Date Ana	lyzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL S	W8260B	Un	its: ug/L	
Benzene	ND			5.	1	11/05/08	14:05	LT	4753597
Ethylbenzene	ND			5	1	11/05/08	14:05	LT	4753597
Toluene	ND			5	1	11/05/08	14:05	LT	4753597
m,p-Xylene	ND			5	1	11/05/08	14:05	LT	4753597
o-Xylene	ND	•		5	1	11/05/08	14:05	LT	4753597
Xylenes,Total	ND			5	1	11/05/08	14:05	LT	4753597
Surr: 1,2-Dichloroethane-d4	108		%	62-130	1	11/05/08	14:05	LT	4753597
Surr: 4-Bromofluorobenzene	92.0		%	70-130	1	11/05/08	14:05	LT	4753597
Surr: Toluene-d8	104		%	74-122	1	11/05/08	14:05	LT	4753597

Qualifiers:

- ND/U Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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Surr: Toluene-d8

HOUSTON LABORATORY

8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

11/06/08 7:11 LT

4754365

Client Sample ID:MW-16		Col	ected: 10	0/23/2008 12:40	SPL Sampl	e ID: 0810	1633-04
	,	Sit	e: Azte	c, NM			
Analyses/Method	Result QUA	AL Ro	ep.Limit	Dil. Factor	Date Analyze	ed Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B			MCL SV	V8260B	Units: ug/L	
Benzene	4700		250	50	11/06/08 7:	11 LT	4754365
Ethylbenzene	480		250	50	11/06/08 7:	11 LT	4754365
Toluene	9100		250	50	11/06/08 7:	11 LT	4754365
m,p-Xylene	4900		250	50	11/06/08 7:	11 LT	4754365
o-Xylene	1700		250	50	11/06/08 7:	11 LT	4754365
Xylenes,Total	6600		250	50	11/06/08 7:	11 LT	4754365
Surr: 1,2-Dichloroethane-d4	100	%	62-130	50	11/06/08 7:	11 LT	4754365
Surr: 4-Bromofluorobenzene	104	%	70-130	50	11/06/08 7:	11 LT	4754365

% 74-122

50

108

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/V}}\xspace$ - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:SEEP			Col	lected: 10)/23/2008 13:00	SPL Samp	ole ID: 081	01633-05
			Sit	e: Azte	c, NM			
Analyses/Method	Result	QUAL	R	ep.Limit	Dil. Factor	Date Analyz	ed Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL SV	V8260B	Units: ug/L	
Benzene	ND			5	1	11/05/08 18	:39 LT	4754089
Ethylbenzene	ND			5	1	11/05/08 18	:39 LT	4754089
Toluene	ND			5	1	11/05/08 18	:39 LT	4754089
m,p-Xylene	ND			5	1	11/05/08 18	:39 LT	4754089
o-Xylene	ND			5	1	11/05/08 18	:39 LT	4754089
Xylenes,Total	ND			5	1	11/05/08 18	:39 LT	4754089
Surr: 1,2-Dichloroethane-d4	110		%	62-130	1	11/05/08 18	:39 LT	4754089
Surr: 4-Bromofluorobenzene	90.0		%	70-130	1	11/05/08 18	:39 LT	4754089
Surr: Toluene-d8	104		%	74-122	1	11/05/08 18	:39 LT	4754089

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-5			Col	lected: 10)/23/2008 13:50	SPL Samp	le IC	D: 0810	1633-06
			Sif	e: Azte	c, NM				
Analyses/Method	Result	QUAL	R	ep.Limit	Dil. Facto	r Date Analyz	zed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	THOD 8260B				MCL S	W8260B	Uni	its: ug/L	
Benzene	270			250	50	11/06/08 7	:39	LT	4754366
Ethylbenzene	440			250	50	11/06/08 7	:39	LT	4754366
Toluene	6200			250	50	11/06/08 7	:39	LT	4754366
m,p-Xylene	5000			250	50	11/06/08 7	':39	LT	4754366
o-Xylene	1300			250	50	11/06/08 7	':39	LT	4754366
Xylenes,Total	6300			250	50	11/06/08 7	:39	LT	4754366
Surr: 1,2-Dichloroethane-d4	108		%	62-130	50	11/06/08 7	:39	LT	4754366
Surr: 4-Bromofluorobenzene	104		%	70-130	50	11/06/08 7	:39	LT	4754366
Surr: Toluene-d8	108		%	74-122	50	11/06/08 7	':39	LT	4754366

Qualifiers:

ND/U - Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-12

Collected: 10/23/2008 13:45

SPL Sample ID: 08101633-07

			Sit	e: Azte	ec, NM					
Analyses/Method	Result	QUAL	R	ep.Limit	Dil. Fa	ctor Da	ate Anal	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B			· · · · · · · · · · · · · · · · · · ·	MCL	SW82	260B	Un	nits: ug/L	
Benzene	500			25	5	1	1/06/08	10:28	LT	4754370
Ethylbenzene	22			5	1		11/06/08	3 3:29	LT	4754102
Toluene	30			5	1		11/06/08	3 3:29	LT	4754102
m,p-Xylene	32			5	1		11/06/08	3 3:29	LT	4754102
o-Xylene	8			5	1		11/06/08	3 3:29	LT	4754102
Xylenes, Total	40			5	1		11/06/08	3 3:29	LT	4754102
Surr: 1,2-Dichloroethane-d4	108		%	62-130	5	1	1/06/08	10:28	LT	4754370
Surr: 1,2-Dichloroethane-d4	100		%	62-130	1		11/06/08	3 3:29	LT	4754102
Surr: 4-Bromofluorobenzene	100		%	70-130	5	1	1/06/08	10:28	LT	4754370
Surr: 4-Bromofluorobenzene	102		%	70-130	1		11/06/08	3 3:29	LT	4754102
Surr: Toluene-d8	104		%	74-122	5	1	1/06/08	10:28	LT	4754370
Surr: Toluene-d8	104		%	74-122	1		11/06/08	3 3:29	LT	4754102

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- $\ensuremath{\mathsf{B/\!V}}\xspace$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID: DUPLICATE

Collected: 10/23/2008 13:50

SPL Sample ID: 08101633-08

			Sit	e: Azte	c, NM	•			
Analyses/Method	Result	QUAL	R	ep.Limit	Dil. Factor	Date Analy:	zed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL SI	N8260B	Un	its: ug/L	
Benzene	660		·	25	5	11/05/08 19	9:07	LT	4754090
Ethylbenzene	- 29			5	1	11/05/08 9	9:53	LT	4753591
Toluene	30			5	1	11/05/08 9	9:53	LT	4753591
m,p-Xylene	39			5	1	11/05/08 9	9:53	LT	4753591
o-Xylene	9			5	1	11/05/08 9	9:53	LT	4753591
Xylenes,Total	48			5	1	11/05/08 9	9:53	LT	4753591
Surr: 1,2-Dichloroethane-d4	108		%	62-130	5	11/05/08 19	9:07	LT	4754090
Surr: 1,2-Dichloroethane-d4	100		%	62-130	1	11/05/08 9	9:53	LT	4753591
Surr: 4-Bromofluorobenzene	100		%	70-130	5	11/05/08 19	9:07	LT	4754090
Surr: 4-Bromofluorobenzene	102		%	70-130	1	11/05/08 9	9:53	LT	4753591
Surr: Toluene-d8	104	,	%	74-122	5	11/05/08 19	9:07	LT	4754090
Surr: Toluene-d8	104		%	74-122	1	11/05/08 9	9:53	LT	4753591

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/V}}\xspace$ - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Client Sample ID:MW-7		Collected:	10/23/2008 14:10	SPL Sample I	D: 0810	1633-09
		Site: Azt	tec, NM			
Analyses/Method	Result QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B		MCL SI	W8260B Ur	nits: ug/L	
Benzene	17	5	1	11/06/08 2:34	LT	4754100
Ethylbenzene	ND	5	1	11/06/08 2:34	LT	4754100
Toluene	ND	5	1	11/06/08 2:34	LT	4754100
m,p-Xylene	ND	5	1	11/06/08 2:34	LT	4754100
o-Xylene	ND	5	1	11/06/08 2:34	LT	4754100
Xylenes,Total	ND	5	1	11/06/08 2:34	LT	4754100
Surr: 1,2-Dichloroethane-d4	98.0	% 62-130	1	11/06/08 2:34	LT	4754100
Surr: 4-Bromofluorobenzene	100	% 70-130	1	11/06/08 2:34	LT	4754100
Surr: Toluene-d8	104	% 74-122	1	11/06/08 2:34	LT	4754100

Qualifiers:

- ND/U Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-11

Collected: 10/23/2008 14:45 SPL Sai

SPL Sample ID: 08101633-10

			Sit	e: Azte	c, NM					
Analyses/Method	Result	QUAL	R	ep.Limit		Dil. Factor	Date Analy	zed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B	,			MCL	S	W8260B	Un	its: ug/L	
Benzene	ND			5	•	1	11/06/08	3:02	LT	4754101
Ethylbenzene	ND			5		1	11/06/08	3:02	LT	4754101
Toluene	ND			5		1	11/06/08	3:02	LT	4754101
m,p-Xylene	ND			5		1	11/06/08	3:02	LT	4754101
o-Xylene	ND	<u> </u>		5		1	11/06/08	3:02	LT	4754101
Xylenes,Total	ND			5		1	11/06/08	3:02	LT	4754101
Surr: 1,2-Dichloroethane-d4	108		%	62-130		1	11/06/08	3:02	LT	4754101
Surr: 4-Bromofluorobenzene	96.0		%	70-130		1	11/06/08	3:02	LT	4754101
Surr: Toluene-d8	104	,	%	74-122		1	11/06/08	3:02	LT	4754101

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID: Trip Blank

Collected: 10/27/2008 14:30

SPL Sample ID: 08101633-11

			Sit	e: Azte	ec, NM					
Analyses/Method	Result	QUAL	R	ep.Limit		Dil. Factor	Date Analy	/zed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	. sv	V8260B	Un	its: ug/L	
Benzene	ND			5		1	11/05/08	9:26	LT	4753590
Ethylbenzene	ND			5		1	11/05/08	9:26	LT	4753590
Toluene	· ND			5		1	11/05/08	9:26	LT	4753590
m,p-Xylene	ND			5		1	11/05/08	9:26	LT	4753590
o-Xylene	ND			5		1	11/05/08	9:26	LT	4753590
Xylenes,Total	ND			5		1	11/05/08	9:26	LT	4753590
Surr: 1,2-Dichloroethane-d4	104		%	62-130		1	11/05/08	9:26	LT	4753590
Surr: 4-Bromofluorobenzene	92.0		%	70-130		1	11/05/08	9:26	LT	4753590
Surr: Toluene-d8	106		%	74-122		1	11/05/08	9:26	LT	4753590

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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Quality Control Documentation

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips COP Hampton 4M

Analysis: /lethod:		Volatile Or SW8260B	ganics by I	lethod 826	0B					Worl Lab	kOrder: Batch ID:	08101633 R256071	
			Metho	od Blank		•		Sam	oles in Analy	tical Batcl	h:		
RunID: N_ Analysis Date Preparation [081104) e:)ate:	E-4753589 11/05/2008 11/05/2008	6:36 6:36	Units: Analyst: Prep By:	ug/L LT N	Nethod		<u>Lab \$</u> 0810 ⁻ 0810 ⁻	<u>Sample ID</u> 1633-01A 1633-02A		<u>Client Sa</u> MW-15 MW-1	mple ID	
				··· · · · ··				0810	1633-03A		MW-9		
			nalita		Booult	Bon Limi		0810 ⁻	1633-08A		DUPLICA	TE	
	Benzer		naiyte		ND	Rep Lini		0810 ⁻	1633-11A		Trip Blank	:	
	Ethylbe	enzene			ND	5.	0						
	Toluen	e			ND	5.	0						
	o-Xvlei	ne				5.	0						
	Xylene	s,Total			ND	5.	0						
	Surr	: 1,2-Dichloro	ethane-d4		112.0	62-13	0						
	Surr	: Toluene-d8	robenzene		92.0	70-13	2						

B + + +			• • •		La	boratory	Control	Sample (L	CS)				
			RunID:		N_081104	E-4753588	8 Ui	nits: u	g/L				
			Analysis	Date:	11/05/20	08 5:11	Ar	nalyst: L	T				
			Preparat	ion Date:	11/05/20	08 5:11	Pr	ep By:	Method				
				Analyt	e		Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit		
			Benzene				20.0	21.0	105	76	126		
			Ethylbenze	ne			20.0	19.0	95.0	67	122		
			Toluene				20.0	20.0	100	70	131		
			m,p-Xylene				40.0	37.0	92.5	72	150		
			o-Xylene				20.0	19.0	95.0	78	141		
			Xylenes,To	tal			60	56	93	72	150		
,			Surr: 1,2	-Dichloroeth	ane-d4		50.0	52	104	62	130		
			Surr: 4-E	Bromofluorot	penzene		50.0	52	104	70	130		
			Surr: Tol	uene-d8			50.0	53	106	/4	122		
				Matrix	Spike (N	S) / Matr	riv Snika	Dunlicato	(MSD)				
			. .					saphoate					
			Sample	e Spiked:	U81016	033-08	:02	Inite					
			KuniD:	in Deter	11/0E/C	000 40.0	.ອ <u>ະ</u> (ົ	uniis: Analieti	ug/L IT				
			Analys	is Udle.	11/05/2	.000 10:22	~ /	nnalyst.	L1				
Qualifiers:		ND/U - No	t Detected a	t the Report	ing Limit		МІ	- Matrix In	terference				
		B/V - Analy	/te detected	in the assoc	iated Met	hod Blank	с D-	Recovery	Unreportable	due to Dilu	ution		
		J - Estimat	ed value bet	ween MDL a	and PQL		*-	Recovery	Outside Advis	able QC Li	imits		
		E - Estimat	ted Value ex	ceeds calibr	ation curv	/e							
		N/C - Not C	Calculated -	Sample con	centration	is greate	r than 4 tir	nes the an	nount of spike	added. Co	ontrol limits d	io not apply.	
		TNTC - To	o numerous	to count								0810	1633 Page 1



Conoco Phillips

COP Hampton 4M

Analysis: Volatile Organics by Method 8260B Method: SW8260B						WorkOrder Lab Batch I	: 081 D: R2	08101633 R256071				
	Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene		650	20	610	N/C	20	610	N/C	N/C	22	76	127
Ethylbenzene		29.0	20	44.0	75.0	20	44.0	75.0	0	20	35	175
Toluene		30.0	20	47.0	85.0	20	48.0	90.0	2.11	24	70	131
m,p-Xytene		39.0	40	70.0	77.5	40	71.0	80.0	1.42	20	35	175
o-Xylene		9.00	20	27.0	90.0	20	28.0	95.0	3.64	20	35	175
Xylenes,Total		48	60	97	82	60	99	85	2.0	20	35	175
Surr: 1,2-Dich	nloroethane-d4	ND	50	49	98.0	50	54.0	108	9.71	30	62	130
Surr: 4-Bromo	ofluorobenzene	ND	50	51	102	50	53.0	106	3.85	30	70	130
Surr: Toluene	⊢d8	ND	50	52	104	50	53.0	106	1.90	30	74	122

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips COP Hampton 4M

Analysis: Method:	Volatile Organics by SW8260B	Method 826	0B			WorkOrder: Lab Batch ID:	08101633 R256099	
	Method Blank			Samples in Analytical Batch:				
RunID: N_08110	5 B- 4754087	Units:	ug/L		Lab Sample ID	Client San	nple ID	
Analysis Date:	11/05/2008 17:43	Analyst:	LT		08101633-05A	SEEP		
Preparation Date:	11/05/2008 17:43	Prep By:	N	/lethod	08101633-07A	MW-12		
					08101633-08A	DUPLICAT	E	
			Desult	Dom Limit	08101633-09A	MW-7		
	Analyte		Result	Rep Limit	08101633-10A	MW-11		

Analyte	Result	Rep Limit
Benzene	ND	5.0
Ethylbenzene	ND	5.0
Toluene	ND	5.0
n,p-Xylene	ND	5.0
p-Xylene	ND	5.0
Kylenes, Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	104.0	62-130
Surr: 4-Bromofluorobenzene	92.0	70-130
Surr: Toluene-d8	104.0	74-122

Laboratory Control Sample (LCS)

RunID:	N_081105B-4754086	Units:	ug/L	
Analysis Date:	11/05/2008 17:15	Analyst:	LT	
Preparation Date:	11/05/2008 17:15	Prep By:		Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	21.0	105	76	126
Ethylbenzene	20.0	19.0	95.0	67	122
Toluene	20.0	22.0	110	70	131
m,p-Xylene	40.0	40.0	100	72	150
o-Xylene	20.0	20.0	100	78	141
Xylenes,Total	60	60	100	72	150
Surr: 1,2-Dichloroethane-d4	50.0	52	104	62	130
Surr: 4-Bromofluorobenzene	50.0	52	104	70	130
Surr: Toluene-d8	50.0	53	106	74	122

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	
RuniD:	
Analysis Date:	

08101839-02 N_081105B-4754097 11/05/2008 22:50

Units: ug/L Analyst: LT

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 ${\sf BN}$ - Analyte detected in the associated Method Blank J - Estimated value between MDL and PQL

MI - Matrix Interference D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

COP Hampton 4M

Analysis: Method:	Volatile Organics b SW8260B	y Method 826	0B				١	WorkOrder: Lab Batch I	081 D: R2	01633 56099		
An	alyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene		ND	20	20.0	100	20	19.0	95.0	5.13	22	76	127
Ethylbenzene		ND	20	19.0	95.0	20	18.0	90.0	5.41	20	35	175
Toluene		ND	20	20.0	100	20	20.0	100	0	24	70	131
m,p-Xylene		ND	40	38.0	95.0	40	37.0	92.5	2.67	20	35	175
o-Xylene		ND	20	20.0	100	20	18.0	90.0	10.5	20	35	175
Xylenes,Total		ND	60	58	97	60	55	92	5.3	20	35	175
Surr: 1,2-Dichloro	ethane-d4	ND	50	48	96.0	50	49.0	98.0	2.06	30	62	130
Surr: 4-Bromofluc	probenzene	ND	50	52	104	50	52.0	104	0	30	70	130
Surr: Toluene-d8		ND	50	54	108	50	54.0	108	0	30	74	122

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

nod Blank D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips COP Hampton 4M

Analysis: Method:	Volatile Organics by SW8260B	y Method 8260B			WorkOrder: Lab Batch ID:	08101633 R256114
	Met	hod Blank		Samples in Analytic	al Batch:	
RunID: N_08110)6C-4754364	Units: ug/	L	Lab Sample ID	Client Sar	nple ID
Analysis Date:	11/06/2008 6:15	Analyst: LT		08101633-04A	MW-16	
Preparation Date:	11/06/2008 6:15	Prep By:	Method .	08101633-06A	MW-5	
				08101633-07A	MW-12	

Analyte	Result	Rep Limit
Benzene	ND	5.0
Ethylbenzene	ND	5.0
Toluene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	104.0	62-130
Surr: 4-Bromofluorobenzene	98.0	70-130
Surr: Toluene-d8	106.0	74-122

Laboratory Control Sample (LCS)

RunID:	N_081106C-4754363	Units:	ug/L
Analysis Date:	11/06/2008 5:47	Analyst:	LT
Preparation Date:	11/06/2008 5:47	Prep By:	Method

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	21.0	105	76	126
Ethylbenzene	20.0	19.0	95.0	67	122
Toluene	20.0	21.0	105	70	131
m,p-Xylene	40.0	39.0	97.5	72	150
o-Xylene	20.0	20.0	100	78	141
Xylenes,Total	60	59	98	72	150
Surr: 1,2-Dichloroethane-d4	50.0	49	98.0	62	130
Surr: 4-Bromofluorobenzene	50.0	53	106	70	130
Surr: Toluene-d8	, 50.0	54	108	74	122

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	08101917-01	
RunID:	N_081106C-4754368	Units:
Analysis Date:	11/06/2008 8:36	Analyst:

Qualifiers:

B/V - Analyte detected in the associated Method Blank

ND/U - Not Detected at the Reporting Limit

J - Estimated value between MDL and PQL

D - Recovery Unreportable due to Dilution

MI - Matrix Interference

ug/L LT

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips COP Hampton 4M

Analysis: Volati Method: SW82	le Organics by Method 826 60B	60B					WorkOrder Lab Batch	:: 081 ID: R25	01633 56114		
Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	21.0	105	20	21.0	105	0	22	76	127
Ethylbenzene	ND	20	20.0	100	20	19.0	95.0	5.13	20	35	175
Toluene	ND	20	22.0	110	20	22.0	110	0	24	70	131
m,p-Xylene	ND	40	41.0	102	40	39.0	97.5	5.00	20	35	175
o-Xylene	ND	20	21.0	105	20	21.0	105	0	20	35	175
Xylenes,Total	ND	60	62	100	60	60	100	3.3	20	35	175
Surr: 1,2-Dichloroethane-	d4 ND	50	48	96.0	50	50.0	100	4.08	30	62	130
Surr: 4-Bromofluorobenze	ene ND	50	53	106	50	52.0	104	1.90	30	70	130
Surr: Toluene-d8	ND	. 50	54	108	50	56.0	112	3.64	30	74	122

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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> 08101633 Page 21 11/10/2008 3:25:43 PM



Sample Receipt Checklist

Workorder: 08101633 Date and Time Received: 10/28/2008 9:30:00 AM		Received By: Carrier name:	RE Fedex-Priority						
Temperature: 4.0°C		Chilled by:	Water Ice						
1. Shipping container/cooler in good condition?	Yes 🗹	No 🗌	Not Present						
2. Custody seals intact on shippping container/cooler?	Yes 🗹	No 🗌	Not Present						
3. Custody seals intact on sample bottles?	Yes 🗌	No 🗌	Not Present						
4. Chain of custody present?	Yes 🗹	No 🗌							
5. Chain of custody signed when relinquished and received?	Yes 🗹	No 🗔							
6. Chain of custody agrees with sample labels?	Yes 🗹	No 🗌							
7. Samples in proper container/bottle?	Yes 🗹	No 🗌							
8. Sample containers intact?	Yes 🗹	No 🗌							
9. Sufficient sample volume for indicated test?	Yes 🗹	No							
10. All samples received within holding time?	Yes 🗹	No 🗌							
11. Container/Temp Blank temperature in compliance?	Yes 🗹	No 🗆							
12. Water - VOA vials have zero headspace?	Yes 🔽	No 🗌 🛛 VOA	Vials Not Present						
13. Water - Preservation checked upon receipt (except VOA*)?	Yes 🗌	No 🗌	Not Applicable						
*VOA Preservation Checked After Sample Analysis									
SPL Representative: Client Name Contacted:	Contact Date	& Time:							
Non Conformance Issues:									
Client Instructions:									



SPL, Inc. SPL, Inc. I Priction Analysis Request & Chain of Custody Record I Priction Request & Chain of Custody Record Soc. Soc. So	No 313361	655 page_of	uested Analysis								,	Intact?	h: PM review (initial):	-		1	abbagedy:	459 Hughes Drive
SPL, Inc. SPL, Inc. Control of the file Analysis Request & Chain of Custody Record Control of the file Analysis Request & Chain of Custody Record Control of the file Analysis Request & Chain of Custody Record Control of the file Analysis Request & Chain of Custody Record Control of the file Analysis Request & Chain of Custody Record Control of the file Analysis Request & Chain of Custody Record Control of the file Analysis Request & Chain of Custody Record PLE ID DATE TIME PLAN Long PLE ID DATE PLAN Laboratory remarks: Laboratory remarks: If Renarks: Laboratory remarks: Laboratory remarks: If Renarks: Laboratory remarks: Laboratory remarks: Intervention Laboratory remarks: Laboratory remarks: Intervention Laboratory remarks: Laboratory remarks:	SPL Workorder	0810	Req	·····									Detection Limits (specify)		OD 2. Received by:	4. Received by:	30 6. Hegyed D.La	
SPL, Inc. SPL, Inc. Inc. Inc. SPL, Inc. Inc. Inc. Inc. Inc. Inc. <		stody Record	e size pres.	4=402 40=vial 2=HNO3 2=HNO3 X=other X=other	=	N N = 2 = 1 = 1 = 1						narks:	Email D PDF D Special		1 ate 21 00 time	date 1 c time	$\frac{date}{0} \frac{1}{28} \frac{1}{0} \frac{1}{28} \frac{1}{0} \frac{1}{0}$	dor Caffery Parkway
Analysis Required to the second of the secon	SPL, Inc.	lest & Chain of Cus	S matrix bottl		- 	mp grah > SI P. G	>					Laboratory ren	nts Results: Fax	Level 4 QC TX TRRP	UNU			500 Ambassa
Itel Internation 1 1 Thritten 1 205-237-84 205-237-		Analysis Requ	more Hillia	Hool Rd NE HO HU HUM	/Actec	ATE TIME 00	INC LI 17						ial Reporting Requiremen	dard QC Level 3 QC	HILLED Sall AND	elinquished by:	elinquished by:	ive
			" Tethni Tech //	121 Indian Br 505-237-Bit with Blanchurdt	" [Tarmington	AMPLE ID D	M NMA					ultant Remarks:	uested TAT Spec	72hr [Standard		5. R	3880 Interchange Dri



Conoco Phillips

Certificate of Analysis Number: <u>09010853</u>								
Report To:	Project Name:	COP Hampton 4M						
Tetra Tech, Inc.	Site:	Aztec,NM						
Kelly Blanchard	<u>Site Address:</u>							
6121 Indian School Road, N.E.								
Suite 200 Albuquerque	PO Number:	4510016693						
NM	State:	New Mexico						
87110-	State Cert. No.:							
ph: (505) 237-8440 fax:	Date Reported:	2/3/2009						

This Report Contains A Total Of 21 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments



Case Narrative for: Conoco Phillips

Conoco Phillips	
Certificate of Analysis Numbe	r:

<u>09010853</u>							
Report To:	Project Name:	COP Hampton 4M					
Tetra Tech, Inc.	<u>Site:</u>	Aztec,NM					
Kelly Blanchard	Site Address:						
6121 Indian School Road, N.E.							
Suite 200 Albuquerque	PO Number:	4510016693					
NM	<u>State:</u>	New Mexico					
87110-	State Cert. No.:						
ph: (505) 237-8440 fax:	Date Reported:	2/3/2009					

Per the Conoco Phillips TSM Revision 0, a copy of the internal chain of custody is to be included in final data package. However, due to LIMS limitations, this cannot be provided at this time.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

a Cardinas

09010853 Page 1 2/4/2009

Erica Cardenas Project Manager



Conoco Phillips Certificate of Analysis Number:

	OP10853 ort To: Tetra Tech, Inc. Project Name: COP Hampton 4M Kelly Blanchard Site: Aztec,NM 6121 Indian School Road, N.E. Site Address: Site Address: Suite 200 Albuquerque Site Address: Site Address: NM PO Number: 4510016693 87110- State: New Mexico ph: (505) 237-8440 fax: (505) 881-3283 State Cert. No.:			
Report To:	Tetra Tech, Inc.	Project Name:	COP Hampton 4M	
	Kelly Blanchard	Site:	Aztec,NM	
	6121 Indian School Road, N.E.	Site Address:	·	
	Suite 200	one Address.		
	Albuquerque			
	NM	PO Number:	4510016693	
	87110-	State:	New Mexico	
	ph: (505) 237-8440 fax: (505) 881-3283	State Cert. No.:		
<u>Fax To:</u>		Date Reported:	2/3/2009	

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-15	09010853-01	Water	1/21/2009 11:30:00 AM	1/22/2009 10:00:00 AM		
MW-1	09010853-02	Water	1/21/2009 11:50:00 AM	1/22/2009 10:00:00 AM		
MW-9	09010853-03	Water	1/21/2009 10:20:00 AM	1/22/2009 10:00:00 AM		
MW-16	09010853-04	Water	1/21/2009 11:10:00 AM	1/22/2009 10:00:00 AM		
SEEP	09010853-05	Water	1/21/2009 10:00:00 AM	1/22/2009 10:00:00 AM		
MW-5	09010853-06	Water	1/21/2009 9:45:00 AM	1/22/2009 10:00:00 AM		
MW-12	09010853-07	Water	1/21/2009 10:40:00 AM	1/22/2009 10:00:00 AM		
DUPLICATE	09010853-08	Water	1/21/2009 10:45:00 AM	1/22/2009 10:00:00 AM		
MW-7	09010853-09	Water	1/21/2009 9:10:00 AM	1/22/2009 10:00:00 AM		
MW-11	09010853-10	Water	1/21/2009 8:50:00 AM	1/22/2009 10:00:00 AM		
TRIP BLANK	09010853-11	Water	1/21/2009	1/22/2009 10:00:00 AM	316975	
TMW-1	09010853-12	Water	1/21/2009 9:25:00 AM	1/22/2009 10:00:00 AM	316975	

· Cardinas 8

Erica Cardenas Project Manager

Richard R. Reed Laboratory Director

Ted Yen Quality Assurance Officer 2/4/2009

Date

09010853 Page 2 2/4/2009 2:31:37 PM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-15

Collected: 01/21/2009 11:30 SPL Sample ID:

nple ID: 09010853-01

			Site	: Azte	ec,NM					
Analyses/Method	Result	QUAL	Rep	.Limit		Dil. Factor	Date Anal	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	. sv	V8260B	Ur	nits: ug/L	
Benzene	ND			5		1	01/26/09	21:31	E_G	4879300
Ethylbenzene	ND			5		1	01/26/09	21:31	E_G	4879300
Toluene	ND			5		1	01/26/09	21:31	E_G	4879300
m,p-Xylene	ND			5		1	01/26/09	21:31	E_G	4879300
o-Xylene	ND			5		1	01/26/09	21:31	E_G	4879300
Xylenes,Total	ND			5		1	01/26/09	21:31	E_G	4879300
Surr: 1,2-Dichloroethane-d4	104		%	52-130		1	01/26/09	21:31	E_G	4879300
Surr: 4-Bromofluorobenzene	106		%	70-130		1	01/26/09	21:31	E_G	4879300
Surr: Toluene-d8	106		%	74-122		1	01/26/09	21:31	E_G	4879300

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/V}}\xspace$ - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Client Sample ID:MW-1

Collected: 01/21/2009 11:50

SPL Sample ID: 09010853-02

		S	ite: Azte	c,NM			
Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B		·	MCL SV	V8260B U	nits: ug/L	
Benzene	ND		5	1	01/26/09 22:52	2 E_G	4879303
Ethylbenzene	ND		5	1	01/26/09 22:52	2 E_G	4879303
Toluene	ND		5	1	01/26/09 22:52	2 E_G	4879303
m,p-Xylene	ND		5	1	01/26/09 22:52	2 E_G	4879303
o-Xylene	ND		5	1	01/26/09 22:52	2 E_G	4879303
Xylenes,Total	ND		5	1	01/26/09 22:52	2 E_G	4879303
Surr: 1,2-Dichloroethane-d4	106	9	62-130	1	01/26/09 22:52	2 E_G	4879303
Surr: 4-Bromofluorobenzene	108	9	6 70-130	1	01/26/09 22:52	2 E_G	4879303
Surr: Toluene-d8	108	9	6 74-122	1	01/26/09 22:52	2 E_G	4879303

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- $\ensuremath{\mathsf{B/V}}\xspace$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-9

Collected: 01/21/2009 10:20

SPL Sample ID: 09010853-03

			Site:	Azte	c,NM					
Analyses/Method	Result	QUAL	Rep.	Limit		Dil. Factor	Date Analy	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCI	L SI	V8260B	Ur	nits: ug/L	
Benzene	ND			5		1	01/26/09	23:19	E_G	4879304
Ethylbenzene	ND			5		1	01/26/09 2	23:19	E_G	4879304
Toluene	ND			5		1	01/26/09	23:19	E_G	4879304
m,p-Xylene	ND			5		1	01/26/09 2	23:19	E_G	4879304
o-Xylene	ND			5		1	01/26/09 2	23:19	E_G	4879304
Xylenes,Total	ND			5		1	01/26/09 2	23:19	E_G	4879304
Surr: 1,2-Dichloroethane-d4	100		% 62	2-130		· 1	01/26/09	23:19	E_G	4879304
Surr: 4-Bromofluorobenzene	108		% 70	0-130		1	01/26/09	23:19	E_G	4879304
Surr: Toluene-d8	108		% 74	1-122		1	01/26/09	23:19	E_G	4879304

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-16

Collected: 01/21/2009 11:10 SI

SPL Sample ID: 09010853-04

			Sit	e: Azte	ec,NM				
Analyses/Method	Result	QUAL	R	ep.Limit	Dil. Fac	tor Date Ana	alyzed	Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B				MCL	SW8260B	Uı	nits: ug/L	
Benzene	4200			500	100	01/29/09	9 15:38	E_G	4884303
Ethylbenzene	480 J			500	100	01/29/09	15:38	E_G	4884303
Toluene	7500			500	100	01/29/09	9 15:38	E_G	4884303
m,p-Xylene	5000			500	100	01/29/09	9 15:38	E_G	4884303
o-Xylene	1900			500	100	01/29/09	9 15:38	E_G	4884303
Xylenes,Total	6900			500	100	01/29/09	9 15:38	E_G	4884303
Surr: 1,2-Dichloroethane-d4	96.0		%	62-130	100	01/29/09	15:38	E_G	4884303
Surr: 4-Bromofluorobenzene	104	** • •* •••	%	70-130	100	01/29/09	15:38	E_G	4884303
Surr: Toluene-d8	102		%	74-122	100	01/29/09	9 15:38	E_G	4884303

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:SEEP			Coll	ected: 01	1/21/2009 10:00	SPL Samp	ole IC): 0901	0853-05
			Site	e: Azte	c,NM	;			
Analyses/Method	Result	QUAL	Re	p.Limit	Dil. Factor	Date Analyz	zed	Analyst	Seq. #
VOLATILE ORGANICS BY MET				MCL SV	V8260B	Uni	ts: ug/L		
Benzene	ND			5	1	01/27/09 1	l:35 l	E_G	4879308
Ethylbenzene	ND			5	1	01/27/09	I:35 I	E_G	4879308
Toluene	ND			5	1	01/27/09	1:35 I	E_G	4879308
m,p-Xylene	ND			5	1	01/27/09	l:35 l	E_G	4879308
o-Xylene	ND			5	1	01/27/09	1:35	E_G	4879308
Xylenes,Total	ND			5	1	01/27/09	I:35 I	E_G	4879308
Surr: 1,2-Dichloroethane-d4	106		%	62-130	1	01/27/09 *	I:35 I	E_G	4879308
Surr: 4-Bromofluorobenzene	110		%	70-130	1	01/27/09 1	1:35	E_G	4879308
Surr: Toluene-d8	104		%	74-122	1	01/27/09	1:35 1	E_G	4879308

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

- Estimated value between wide and rige

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Collected: 01/21/2009 9:45

SPL Sample ID: 09010853-06

			Sit	e: Azte	e,NM					
Analyses/Method	Result	QUAL	Re	p.Limit		Dil. Factor	Date Anal	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	. S	W8260B	Ur	nits: ug/L	
Benzene	250			100		20	01/29/09	15:11	E_G	4884302
Ethylbenzene	510			100		20	01/29/09	15:11	E_G	4884302
Toluene	3800			100		20	01/29/09	15:11	E_G	4884302
m,p-Xylene	4000			100		20	01/29/09	15:11	E_G	4884302
o-Xylene	1200			100		20	01/29/09	15:11	E_G	4884302
Xylenes,Total	5200			100		20	01/29/09	15:11	E_G	4884302
Surr: 1,2-Dichloroethane-d4	100		%	62-130		20	01/29/09	15:11	E_G	4884302
Surr: 4-Bromofluorobenzene	100		%	70-130		20	01/29/09	15:11	E_G	4884302
Surr: Toluene-d8	100		%	74-122		20	01/29/09	15:11	E_G	4884302

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/V}}\xspace$ - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-12

Collected: 01/21/2009 10:40

SPL Sample ID: 09010853-07

			Sit	e: Azte	c,NM					
Analyses/Method	Result	QUAL	Re	ep.Limit	Dil. Fac	tor	Date Ana	lyzed	Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B				MCL	SW	/8260B	Ur	nits: ug/L	
Benzene	1100			100	20		01/29/09	14:17	E_G	4884300
Ethylbenzene	110			5	1		01/26/09	23:46	E_G	4879305
Toluene	430			100	20		01/29/09	14:17	E_G	4884300
m,p-Xylene	290			5	1		01/26/09	23:46	E_G	4879305
o-Xylene	120			5	1		01/26/09	23:46	E_G	4879305
Xylenes,Total	410	×		5	1		01/26/09	23:46	E_G	4879305
Surr: 1,2-Dichloroethane-d4	100		%	62-130	20		01/29/09	14:17	E_G	4884300
Surr: 1,2-Dichloroethane-d4	106		%	62-130	1		01/26/09	23:46	E_G	4879305
Surr: 4-Bromofluorobenzene	110		%	70-130	20		01/29/09	14:17	E_G	4884300
Surr: 4-Bromofluorobenzene	108		%	70-130	1		01/26/09	23:46	E_G	4879305
Surr: Toluene-d8	100	٠	%	74-122	20		01/29/09	14:17	E_G	4884300
Surr: Toluene-d8	106		%	74-122 `	. 1		01/26/09	23:46	E_G	4879305

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID: DUPLICATE

Collected: 01/21/2009 10:45

SPL Sample ID: 09010853-08

			Sit	e: Azte	c,NM			
Analyses/Method	Result	QUAL	R	ep.Limit	Dil. Facto	r Date Analyz	ed Ana	lyst Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL S	W8260B	Units: u	ıg/L
Benzene	1100			100	20	01/29/09 14	:44 E_G	4884301
Ethylbenzene	140			5	1	01/27/09 0	:14 E_G	4879306
Toluene	340			100	20	01/29/09 14	:44 E_G	4884301
m,p-Xylene	400			5	1	01/27/09 0	:14 E_G	4879306
o-Xylene	150			5	1	01/27/09 0	:14 E_G	4879306
Xylenes,Total	550			5	1	01/27/09 0	:14 E_G	4879306
Surr: 1,2-Dichloroethane-d4	99.0		%	62-130	20	01/29/09 14	:44 E_G	4884301
Surr: 1,2-Dichloroethane-d4	108		%	62-130	1	01/27/09 0	:14 E_G	4879306
Surr: 4-Bromofluorobenzene	100		%	70-130	20	01/29/09 14	:44 E_G	4884301
Surr: 4-Bromofluorobenzene	106		%	70-130	. 1	01/27/09 0	:14 E_G	4879306
Surr: Toluene-d8	100		%	74-122	20	01/29/09 14	:44 E_G	4884301
Surr: Toluene-d8	106		%	74-122	1	01/27/09 0	:14 E_G	4879306

Qualifiers:

ND/U - Not Detected at the Reporting Limit B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-7

Collected: 01/21/2009 9:10

SPL Sample ID: 09010853-09

			Sit	e: Azte	ec,NM					
Analyses/Method	Result	QUAL	R	ep.Limit		Dil. Facto	r Date Ana	lyzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	S	W8260B	Ur	nits: ug/L	
Benzene	ND			5		1	01/29/09	12:28	E_G	4884296
Ethylbenzene	ND			5		1	01/29/09	12:28	E_G	4884296
Toluene	ND			5		1	01/29/09	12:28	E_G	4884296
m,p-Xylene	ND			5		1	01/29/09	12:28	E_G	4884296
o-Xylene	ND			5		1	01/29/09	12:28	E_G	4884296
Xylenes,Total	ND			5		1	01/29/09	12:28	E_G	4884296
Surr: 1,2-Dichloroethane-d4	100		%	62-130		1	01/29/09	12:28	E_G	4884296
Surr: 4-Bromofluorobenzene	106		%	70-130		1	01/29/09	12:28	E_G	4884296
Surr: Toluene-d8	102		%	74-122		1	01/29/09	12:28	E_G	4884296

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/\!V}}$ - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-11

Collected: 01/21/2009 8:50

SPL Sample ID: 09010853-10

Site: Aztec,NM										
Analyses/Method	Result	QUAL	R	ep.Limit	Dil.	Factor	Date Analy	zed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	sv	V8260B	Ur	nits: ug/L	
Benzene	ND			5		1	01/27/09	1:08	E_G	4879307
Ethylbenzene	ND			5		1	01/27/09	1:08	E_G	4879307
Toluene	ND			5		1	01/27/09	1:08	E_G	4879307
m,p-Xylene	ND	••••••••••••••••••••••••••••••••••••••		5		1	01/27/09	1:08	E_G	4879307
o-Xylene	ND			5		1	01/27/09	1:08	E_G	4879307
Xylenes,Total	ND			5		1	01/27/09	1:08	E_G	4879307
Surr: 1,2-Dichloroethane-d4	104		%	62-130		1	01/27/09	1:08	E_G	4879307
Surr: 4-Bromofluorobenzene	108		%	70-130		1	01/27/09	1:08	E_G	4879307
Surr: Toluene-d8	106		%	74-122		1	01/27/09	1:08	EG	4879307

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- $\ensuremath{\mathsf{B/\!V}}\xspace$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- ${\sf J}$ Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID: TRIP BLANK

Collected: 01/21/2009 0:00

SPL Sample ID: 09010853-11

			Sit	e: Azte	c,NM					
Analyses/Method	Result	QUAL	Re	ep.Limit		Dil. Factor	Date Ana	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	SV	V8260B	Ur	nits: ug/L	,
Benzene	ND			5		1	01/29/09	12:01	E_G	4884295
Ethylbenzene	ND			5		1	01/29/09	12:01	E_G	4884295
Toluene	ND			5		1	01/29/09	12:01	E_G	4884295
m,p-Xylene	ND			5		1	01/29/09	12:01	E_G	4884295
o-Xylene	ND			5		1	01/29/09	12:01	E_G	4884295
Xylenes,Total	ND			5		1	01/29/09	12:01	E_G	4884295
Surr: 1,2-Dichloroethane-d4	104		%	62-130		1	01/29/09	12:01	E_G	4884295
Surr: 4-Bromofluorobenzene	106		%	70-130		1	01/29/09	12:01	E_G	4884295
Surr: Toluene-d8	102		%	74-122		1	01/29/09	12:01	E_G	4884295

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- $\ensuremath{\mathsf{B/V}}\xspace$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:TMW-1

Collected: 01/21/2009 9:25

SPL Sample ID: 09010853-12

		•	Site	e: Azte	ec,NM					
Analyses/Method	Result	QUAL	Re	p.Limit	Dil	Factor	Date Anal	yzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	SV	V8260B	Ur	nits: ug/L	
Benzene	13			5		1	01/29/09	13:50	E_G	4884299
Ethylbenzene	ND			5		1	01/29/09	13:50	E_G	4884299
Toluene	ND			5		1	01/29/09	13:50	E_G	4884299
m,p-Xylene	ND			5		1	01/29/09	13:50	E_G	4884299
o-Xylene	ND			5		1	01/29/09	13:50	E_G	4884299
Xylenes,Total	ND			5		1	01/29/09	13:50	E_G	4884299
Surr: 1,2-Dichloroethane-d4	100		%	62-130		1	01/29/09	13:50	E_G	4884299
Surr: 4-Bromofluorobenzene	106		%	70-130		·1	01/29/09	13:50	E_G	4884299
Surr: Toluene-d8	104		%	74-122		1	01/29/09	13:50	EG	4884299

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

Quality Control Documentation

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Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

Surr: Toluene-d8

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

COP Hampton 4M

Analysis: Method:	Volatile Organics by SW8260B	Method 826	0 B			WorkOrder: Lab Batch ID:	09010853 R263615	
	Meti	nod Blank			Samples in Analytical Batch:			
RunID: L_090126	6B-4879299	Units:	ug/L		Lab Sample ID	Client Sar	nple ID	
Analysis Date:	01/26/2009 21:04	Analyst:	E_G		09010853-01A	MW-15		
Preparation Date:	01/26/2009 21:04	Prep By:	N	lethod:	09010853-02A	MW-1		
					09010853-03A	MW-9		
		1			09010853-05A	SEEP		
	Analyte		Result	Rep Limit	09010853-074	MW-12		
Benze	епе		ND	5.0	00010000-0174			
Ethyl	benzene		ND	5.0	09010853-08A	DUPLICA	ſE	
Tolue	ene		ND	5.0	09010853-10A	MW-11		
m,p->	Kylene		ND	5.0				
o-Xyl	ene		ND	5.0				
Xvien	nes.Total		ND	5.0				

Laboratory Control Sample (LCS)

RunID:	L_090126B-4879298	Units:	ug/L
Analysis Date:	01/26/2009 20:10	Analyst:	E_G
Preparation Date:	01/26/2009 20:10	Prep By:	Method:

62-130

70-130

74-122

106.0

106.0

108.0

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	19.0	95.0	76	126
Ethylbenzene	20.0	21.0	105	67	122
Toluene	20.0	21.0	105	70	131
m,p-Xylene	40.0	42.0	105	72	150
o-Xylene	20.0	21.0	105	78	141
Xylenes,Total	60	63	100	72	150
Surr: 1,2-Dichloroethane-d4	50.0	51	102	62	130
Surr: 4-Bromofluorobenzene	50.0	53	106	70	130
Surr: Toluene-d8	50.0	53	106	74	122

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	09010853-01		
RunID:	L_090126B-4879301	Units:	ug/L
Analysis Date:	01/26/2009 21:58	Analyst:	E_G

Qualifiers:

B/V - Analyte detected in the associated Method Blank

ND/U - Not Detected at the Reporting Limit

J - Estimated value between MDL and PQL

MI - Matrix Interference

D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010853 Page 16 2/4/2009 2:31:46 PM



Conoco Phillips

COP Hampton 4M

Analysis: Method:	Volatile Organics SW8260B	by Method 826	Method 8260B						WorkOrder: 090 Lab Batch ID: R2		010853 63615		
A	nalyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit	
Benzene		ND	20	19.0	95.0	20	19.0	95.0	0	22	76	127	
Ethylbenzene		ND	20	20.0	100	20	20.0	100	0	20	35	175	
Toluene		ND	20	20.0	100	20	20.0	100	0	24	70	131	
m,p-Xylene		ND	40	41.0	102	40	40.0	100	2.47	20	35	175	
o-Xylene		ND	20	20.0	100	20	20.0	100	0	20	35	175	
Xylenes,Total		ND	60	61	100	60	60	100	1.7	20	35	175	
Surr: 1,2-Dichlo	roethane-d4	ND	50	50	100	50	55.0	110	9.52	30	62	130	
Surr: 4-Bromoflu	uorobenzene	ND	50	55	110	50	55.0	110	0	30	70	130	
Surr: Toluene-da	8	ND	50	54	108	50	54.0	108	0	30	74	122	

Qualifiers: ND/U - Not E

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/V}}\xspace$ - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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o-Xylene

Xylenes,Total

Surr: Toluene-d8

Surr: 1,2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

COP Hampton 4M

Analysis: Method:	Volatile Organics by SW8260B	Method 826	0B			WorkOrder: Lab Batch ID:	09010853 R263896		
	Met	hod Blank			Samples in Analytical Batch:				
RunID: L_09012	9A-4884294	Units:	ug/L		Lab Sample ID	Client Sar	nple ID		
Analysis Date:	01/29/2009 11:06	Analyst:	E_G		09010853-04A	MW-16			
Preparation Date:	01/29/2009 11:06	Prep By:	r	Method:	09010853-06A	MW-5			
					09010853-07A	MW-12			
Г	A 1 1.				09010853-08A	DUPLICAT	ſE		
	Analyte		Result		09010853-09A	MW-7			
Benz	ene			5.0	09010853-11A	TRIP BLA	NK		
	ane			5.0	09010853-124	TMW-1			
m n-1	Xvlene		NE	5.0	000 10000- IZA	. 1414.4 - 1			

5.0

5.0

62-130

70-130

74-122

Laboratory Control Sample (LCS)

RunID:	L_090129A-4884293
Analysis Date:	01/29/2009 10:39
Preparation Date:	01/29/2009 10:39

ND

ND

102.0

106.0

104.0

Units: ug/L Analyst: E_G Prep By: Method:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	20.0	21.0	105	76	126
Ethylbenzene	20.0	21.0	105	67	122
Toluene	20.0	21.0	105	70	131
m,p-Xylene	40.0	43.0	108	72	150
o-Xylene	20.0	22.0	110	78	141
Xylenes,Total	60	65	110	72	150
Surr: 1,2-Dichloroethane-d4	50.0	54	108	62	130
Surr: 4-Bromofluorobenzene	50.0	54	108	70	130
Surr: Toluene-d8	50.0	52	104	74	122

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	09010853-09		
RunID:	L_090129A-4884297	Units:	ug/L
Analysis Date:	01/29/2009 12:55	Analyst:	ΕG

Qualifiers:

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

D - Recovery Unreportable due to Dilution

MI - Matrix Interference

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

ND/U - Not Detected at the Reporting Limit

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09010853 Page 18 2/4/2009 2:31:46 PM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

COP Hampton 4M

Analysis: Method:	Volatile Organics by Method 8260B SW8260B							WorkOrder: Lab Batch I	090 D: R20	09010853 R263896		
Analyte		Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene		ND	20	21.0	90.0	20	21.0	90.0	0	22	76	127
Ethylbenzene		ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
Toluene		ND	20	18.0	90.0	20	17.0	85.0	5.71	24	70	131
m,p-Xylene		ND	40	36.0	90.0	40	35.0	87.5	2.82	20	35	175
o-Xylene		ND	20	18.0	90.0	20	18.0	90.0	0	20	35	175
Xylenes,Total		ND	60	54	90	60	53	88	1.9	20	35	175
Surr: 1,2-Dichloroethane-d4		ND	50	54	108	50	51.0	102	5.71	30	62	130
Surr: 4-Bromofluorobenzene		ND	50	53	106	50	54.0	108	1.87	30	70	130
Surr: Toluene-d8		ND	50	52	104	50	51.0	102	1.94	30	74	122

Qualifiers: ND/U - Not Detect

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/\!V}}\xspace$ - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL E - Estimated Value exceeds calibration curve MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Sample Receipt Checklist And Chain of Custody

1

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Sample Receipt Checklist

Workorder: 09010853 Date and Time Received: 1/22/2009 10:00:00 AM Temperature: 2.5°C		Received By: Carrier name: Chilled by:	L_C Fedex-Priority Water Ice
1. Shipping container/cooler in good condition?	Yes 🗹	No 🗌	Not Present
2. Custody seals intact on shippping container/cooler?	Yes 🗹	No 🗔	Not Present
3. Custody seals intact on sample bottles?	Yes	No 🗌	Not Present
4. Chain of custody present?	Yes 🗹	No 🗆	
5. Chain of custody signed when relinquished and received?	Yes 🗹	No 🗆	
6. Chain of custody agrees with sample labels?	Yes 🗹	No 🗌	
7. Samples in proper container/bottle?	Yes 🗹	No ⊡	
8. Sample containers intact?	Yes 🗹	No 🗌	
9. Sufficient sample volume for indicated test?	Yes 🗹	No 🗌	
10. All samples received within holding time?	Yes 🗹	No 🗔	
11. Container/Temp Blank temperature in compliance?	Yes 🗹	No 🗌	
12. Water - VOA vials have zero headspace?	Yes 🗹	No 🗌 🛛 VC	DA Vials Not Present
13. Water - Preservation checked upon receipt (except VOA*)?	Yes	No 🗌	Not Applicable 🗹
*VOA Preservation Checked After Sample Analysis	<u>, , , , , , , , , , , , , , , , , , , </u>		
SPL Representative:	Contact Date &	Time:	
Client Name Contacted:			
Non Conformance Issues:			
Client Instructions:			
L <u></u>			

Company Name: Tetra Tech / Conoco Philips Corrtact: Kelly Blanchard Address: 6121 Indian School Rd. NE, Ste. 200 Phone/Fax: (505) 237-8440 / (505) 237-8666 Email Address: kelly,blanchard@tetratech.com Invoice To: Purchase Order No: Project Name.No: Hampton #4M Site Address: Sampled By: ChritSching, McDf.@US Sampled By: ChritSching, McDf.@US Sampled By: ChritSching, McDf.@US MW - 15 1-21-09 MW - 15 1-21-09 MW - 16 1-21-09 WW -	Semi-A Cuarte Semi-A Semi-A WC-W WC-W WC-W MOLD TRRP TRRP TRRP TRRP TRRP TRRP TRRP TRR	pting Event Descri hy untual aste Char describe below)			3833	2	Equestred /	MAI VOIC
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MW-12 1. 21.09	19 40 X		3	MOA	HLL			
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MW-7 $1,21.09$	X orba		ч С	NO4	HUL	Х		
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6121 Indian School Rd. NE Suite 200 Albuquerque, NM 87110 (505) 237-8440



TETRA TECH, INC.

August 7, 2009

Mr. Glen von Gonten State of New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

2009 AUG 1 1 υ ىي

RE: ConocoPhillips Company Randleman #I - Groundwater Monitor Well Installation and Baseline Groundwater Monitoring Report, Aztec, New Mexico

Dear Mr. von Gonten:

Enclosed please find one copy of the above-referenced document as compiled by Tetra Tech, Inc., for this Aztec-area site.

Please do not hesitate to contact me at (505) 237-8440 if you have any questions or require additional information.

Sincerely,

Kelly E. Blanchard

Kelly E. Blanchard Project Manager/Geologist

Enclosures (1)

GROUNDWATER MONITOR WELL INSTALLATION AND BASELINE GROUNDWATER MONITORING REPORT

CONOCOPHILLIPS COMPANY

RANDLEMAN #1 PRODUCTION FACILITY SAN JUAN COUNTY, NEW MEXICO

OCD # 3RP-340-0 API # 30-045-10698

Prepared for:

ConocoPhillips

Risk Management and Remediation 420 South Keeler Avenue Bartlesville, OK 74004

Prepared by:



TETRA TECH, INC.

6121 Indian School Rd. NE, Suite 200 Albuquerque, NM 87110 Tetra Tech Project No. 1158690090

August 2009

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	2.3 Groundwater Sampling Analytical Results	5
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FIGURES

			Site	Location	Map
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- 2. Site Detail Map
- 3. Generalized Geologic Cross Section
- 4. Groundwater Elevation Map June 2009
- 5. BTEX Groundwater Concentration Map June 2009

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- I. Site History Timeline
- 2. Soil Boring Laboratory Analytical Results
- 3. Groundwater Elevation Data Summary
- 4. Groundwater Laboratory Analytical Results Summary, Baseline Parameters
- 5. Groundwater Laboratory Analytical Results Summary, BTEX Parameters

APPENDICES

- Appendix A. Soil Boring Logs and Well Completion Forms
- Appendix B. Soil Boring Laboratory Analysis Report
- Appendix C Groundwater Sampling Field Forms
- Appendix D. Groundwater Laboratory Analysis Reports

GROUNDWATER MONITOR WELL INSTALLATION AND BASELINE GROUNDWATER MONITORING REPORT RANDLEMAN #I, SAN JUAN COUNTY, NEW MEXICO JUNE 2009

I.0 INTRODUCTION

This report discusses the installation of 4 groundwater monitor wells by Tetra Tech, Inc. (Tetra Tech) in June 2009 at the ConocoPhillips Company Randleman #1 site located outside of Aztec, New Mexico (Site), and presents the results of the baseline groundwater monitoring event conducted at the Site by Tetra Tech in June 2009. The Site is located in Section 13, Township 31N, Range 11W, of San Juan County, New Mexico (Figure 1). A Site detail map is included as Figure 2.

I.I Site Background

The historical timeline for the Site is summarized below, and is also presented in Table 1.

In April 1997, an unlined surface impoundment (Figure 2) was discovered to have been impacted by petroleum hydrocarbons. On April 29, 1997, excavation of the soil beneath the impoundment began; once complete, a total of 613 cubic yards of hydrocarbon impacted soil were removed and landfarmed at the nearby Randleman #3 site (Williams 2002). Three monitor wells were installed at the Site on May 14, 1997, and quarterly groundwater monitoring was conducted through March 1998. Evaluation of groundwater monitoring results initiated another excavation in April 1998 of 2,220 cubic yards of hydrocarbon impacted soil "to address residual soil contamination extending to the south of the original excavated area" (Williams, 2002). Quarterly groundwater monitoring was continued through September 2000, and after 4 consecutive quarters of groundwater quality monitoring results below New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standards for benzene, toluene, ethylbenzene, and total xylenes (BTEX), Williams Environmental Services (Williams) requested that the New Mexico Oil Conservation Division (OCD) grant closure status to the Site. In June 2002, OCD granted closure for the Site, provided that Williams plug and abandon all Site groundwater monitor wells according to OCD standards (NMEMNRD, 2002). The historical excavation area and historical groundwater monitor wells are displayed in Figure 2.

On February 23, 2009, approximately 60 barrels of condensate were released from an on-Site production tank as a result of a hole in the tank. OCD Form C-141 was filled out by ConocoPhillips staff and notice was given to OCD via telephone. Form C-141 stated that the well was shut in, that the fluids remained in the berm surrounding the production tank, and that none of the fluids were recoverable. Form C-141 additionally stated that ConocoPhillips would remove the tank and would excavate hydrocarbon impacted soils and remove them from the Site.

On February 26, 2009, Envirotech Inc. of Farmington, NM (Envirotech) arrived on Site, performed the soil excavation, and collected soil samples for analysis. The area of release was excavated to approximately 42

feet by 51 feet by 7 feet deep. A total of 7 composite soil samples were collected from the excavation – 1 from each of the walls of the excavation and 3 samples from the bottom of the excavation. Soil samples were collected in the field and were analyzed for total petroleum hydrocarbons (TPH) using Environmental Protection Agency (EPA) Method 418.1. Additionally, organic vapors were analyzed in the field using a photoionization detector (PID) and heated headspace techniques. TPH results ranged from 8 parts per million (ppm) in the soil sample collected from the north wall of the excavation to 1,080 ppm in the sample collected from the excavation. Depth of soil samples was not noted in the samples obtained from the walls of the excavation, but the samples obtained from the bottom of the excavation were obtained at 2.5 feet below ground surface (bgs) and at 3 feet bgs along the east and west sides of the excavation, respectively. The OCD recommended action level for TPH at the Site was determined to be 100 ppm. Organic vapor concentrations ranged from 6.8 ppm in the sample obtained from the north wall of the excavation. Due to levels of TPH and organic vapors above OCD action levels, the excavation was continued (Envirotech, 2009).

On February 27, 2009, Envirotech returned to the Site to continue the excavation and sampling activities. Due to the fact that soil samples collected from the north, west, and east ends of the excavation on February 26, 2009 were found to be below OCD action levels for TPH and organic vapor, the focus of the excavation on February 27, 2009 was the south wall, the southeast wall, and the bottom of the southeast corner. At the end of the day, the excavation measured 81 feet by 43 feet by 20 feet deep (total depth is given for the deepest part of the excavation; other areas determined to be below OCD action levels went to approximately 8 feet bgs). A total of 8 soil samples were collected and analyzed in the field for TPH and organic vapors. The excavation continued until all samples were found to be below the OCD action levels of 100 ppm for both TPH and organic vapors along all four walls and the bottom of the excavation. Using this excavation approach, the southeast corner became the focus of the excavation, where after obtaining soil samples at 8, 13, and 15 feet bgs with both TPH and organic vapor results greater than 100 ppm, soil sample results for both of these constituents were not detected at a depth of 20 feet bgs, and the excavation was discontinued (Envirotech, 2009). The excavation area is depicted in Figure 2.

On March 2, 2009, groundwater was found seeping into the southeast corner of the excavation at a depth of approximately 20 feet bgs. A Rock Springs vacuum truck was contracted by Envirotech to collect groundwater from the excavation; approximately 10 gallons of water were removed. After removal of collected groundwater, Envirotech obtained a soil sample from the southeast corner of the excavation at a depth of 20 feet bgs. TPH and organic vapor results were found to be above OCD action levels. During field analysis of the soil sample, more groundwater had seeped into the excavation. More water was then removed from the excavation, and additional excavation was performed in order to attempt to obtain a soil sample below OCD action levels. A groundwater sample was collected from the area where water continued to seep into the excavation, and was sent for laboratory analysis of volatile organic compounds by EPA Method 8260. The groundwater sample was found to contain benzene, total xylenes and total naphthalenes above NMWQCC groundwater quality standards. Once this sample had been obtained, the excavation caved in, making further water removal via the vacuum truck impossible (Envirotech, 2009). The excavation area is depicted in Figure 2.

Tetra Tech, Inc.

A total of 611 cubic yards of soil were removed from the Site and were transported to an OCD-permitted facility; clean fill was obtained from the landowner to backfill the excavation. Envirotech recommended the installation of groundwater monitor wells at the Site under OCD guidelines (Envirotech, 2009).

Tetra Tech installed groundwater monitor wells at the Site between June 9, 2009 and June 10, 2009. Tetra Tech conducted the first groundwater monitoring event at the Site on June 12, 2009. On June 17, 2009, depth to water measurements were again taken in Site monitor wells to determine if hydrocarbons were accumulating in the water column (see Section 1.2). On June 18, 2009, the decision was made to place hydrocarbon absorbent socks into monitor wells MW-2 and MW-3.

1.2 Groundwater Monitor Well Installation

Between June 9, 2009 and June 10, 2009, WDC Exploration and Wells (WDC) installed 4 groundwater monitor wells at the Site under the supervision of Tetra Tech: MW-1, MW-2, MW-3, and MW-4. All wells were drilled using a CME-85 drill rig, hollow stem augers, and split-spoon sampling techniques; 15 feet of .010 polyvinylchloride (PVC) slotted screening was placed in each well. MVV-1 was installed on June 10, 2009 to a total depth of 25.5 feet bgs. The depth to water was recorded at 13.98 feet bgs and the screened interval was placed from 9 feet bgs to 24 feet bgs. MW-2 was installed on June 10, 2009 to a total depth of 23.8 feet bgs. The screened interval was placed from 8.9 to 23.8 feet bgs and depth to water was recorded at 15.57 feet bgs. MW-3 was installed on June 10, 2009 to a total depth of 22 feet bgs and the depth to water was recorded at 16.0 feet bgs. The screened interval for MW-3 was placed from 6.5 to 21.5 feet bgs (flowing sands in the boring for MW-3 caused difficulty with casing and screen placement, and as a result, the screened interval was not placed at least 10 feet below the water table as discussed in the work plan for the Site). MW-4 was installed on June 9, 2009 to a total depth of 29.5 feet bgs and the depth to water was recorded at 17.68 feet bgs. The screened interval for MW-4 was placed from 11 to 26 feet bgs. Wells were constructed using 2-inch PVC casing, and were all above-ground completions set in concrete with the exception of MW-1, which was constructed as a flush-mount monitor well. After installation, each monitor well was developed using a 1.5-inch diameter, poly-vinyl disposable bailer. Between 35 and 70 gallons of water was purged from each well and was disposed of in the on-Site wastewater tank. Although no hydrocarbon sheen was noted during development of monitor wells MW-I and MW-4, a slight, discontinuous, hydrocarbon sheen was noted in the purge water from MW-2 and MW-3 during development. As a result of this finding, a hydrocarbon absorbent sock was placed in these monitor wells on June 18, 2009. Soil boring logs and well completion forms are included as Appendix A. A generalized geologic cross section for the Site is presented in Figure 3.

During soil boring activities on June 9, 2009 and June 10, 2009, soil samples were collected from the soil borings for MW-2 and MW-4 from depths of 7 to 8.5 feet bgs and from 12.5 to 14 feet bgs, respectively. Soil samples were collected from MW-3 at depths of 7.5 to 9 feet bgs and from 12.5 to 14 feet bgs. No soil sample was collected from the boring for MW-1 as this well was placed within the area of the Envirotech excavation (Figure 2). As a result, soils encountered during boring activities for this monitor well were largely composed of clean backfill material. Each soil sample was analyzed for major ions by EPA Method 300.0; for total mercury by EPA Method 7471A; total metals by EPA Methods 6010B and 6020A;

semivolatile organic compounds (SVOCs) by EPA Method 8270C; volatile organic compounds (VOCs) by EPA Method 8260B; and gasoline range organics (GRO) and diesel range organics (DRO) by EPA Method 8015B. None of the soil analytes were detected in concentrations above OCD recommended action levels. Results of the soil analysis are shown in Table 2 and Appendix B.

2.0 MONITORING SUMMARY, SAMPLING METHODOLOGY AND RESULTS

2.1 Monitoring Summary

A baseline groundwater quality monitoring event at the site was conducted on June 12, 2009. Prior to collection of groundwater samples from monitor well MW-1, MW-2, MW-3 and MW-4, depth to groundwater in each well was determined. Results are displayed in Table 3.

The casings for Site monitor wells were surveyed in June 2009 using the wellhead as a reference-elevation of 100 feet above mean sea level (amsl). The data obtained from the Site survey and from the June 2009 sampling event was used to create a groundwater elevation map for the Site (Figure 4). Using this data, it was determined that the groundwater flow direction at the Site is to the east/southeast.

2.2 Groundwater Sampling Methodology

During the baseline groundwater monitoring event, Site monitor wells were purged of at least 3 casing volumes of groundwater using a 1.5-inch diameter, poly-vinyl disposable bailer. While bailing each well, groundwater parameter data such as temperature, pH, conductivity, total dissolved solids (TDS), oxidation-reduction potential (ORP) and dissolved oxygen (DO) were collected using a YSI 556 multi-parameter sonde and results were recorded on a Tetra Tech Water Sampling Field Form (Appendix C). Collected groundwater samples were placed in laboratory prepared bottles, packed on ice, and shipped with chain-of-custody documentation. Analysis of all groundwater samples collected during the June 2009 groundwater monitoring event were performed by Southern Petroleum Laboratory (SPL) of Houston, Texas.

During the June 2009 groundwater monitoring event, each groundwater sample collected was analyzed for major ions by EPA Method 300.0; for total mercury by EPA Method 7470A; total metals by EPA Methods 6010B and 6020A; SVOCs by EPA Method 8270C; VOCs by EPA Method 8260B; alkalinity (as CaCO₃) by EPA Method 310.1; diesel range organics (DRO) and gasoline range organics (GRO) by EPA Method 8015B; and total nitrate and nitrite (as nitrogen) by standard method 4500. Results of these analyses are displayed in Table 4.

Since Site closure through OCD is dependent upon a decrease in BTEX concentrations over time, Tetra Tech has prepared an historical analytical results table for BTEX in Site wells for the June 2009 monitoring event (Table 5). Results from future groundwater monitoring events at the Site will be compiled in this table.

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2.3 Groundwater Sampling Analytical Results

The New Mexico Water Quality Control Commission (NMWQCC) mandates that groundwater quality in New Mexico be protected, and has issued groundwater quality standards in Title 20, Chapter 6, Part 2, Section 3103 of the New Mexico Administrative Code (20.6.2.3103 NMAC). Groundwater quality standards have been set for the protection of human health, domestic water supply, and irrigation use. Exceedences of NMWQCC groundwater quality standards in Site monitor wells are discussed below.

- Chloride
 - The NMWQCC domestic water supply groundwater quality standard for chloride is 250 milligrams per liter (mg/L); the groundwater sample collected from monitor well MW-4 was found to contain chloride at concentration of 2,310 mg/L.

• Sulfate

The NMWQCC domestic water supply groundwater quality standard for sulfate is 600 mg/L; groundwater samples collected from monitor well MW-1, MW-2, MW-3 and MW-4 were found to contain sulfate at concentrations of 1,690 mg/L, 1,360 mg/L, 1,510 mg/L, and 4,190 mg/L, respectively.

Aluminum

 The NMWQCC aluminum groundwater quality standard for irrigation use is 5 mg/L; groundwater samples collected from monitor well MW-1 and MW-4 were found to contain aluminum at concentrations of 9.22 mg/L and 13.6 mg/L, respectively.

• Iron

 The NMWQCC domestic water supply groundwater quality standard for iron is 1 mg/L; groundwater samples collected from monitor well MW-1, MW-2, MW-3 and MW-4 were found to contain iron at concentrations of 6.81 mg/L, 3.7 mg/L, 1.65 mg/L, and 20 mg/L, respectively.

Chromium

• The human health NMWQCC groundwater quality standard for chromium is 0.05 milligrams per liter (mg/L); the groundwater sample collected from monitor well MW-4 was found to contain chromium at a concentration of 0.117 mg/L.

Manganese

The NMWQCC domestic water supply groundwater quality standard for manganese is 0.2 milligrams per liter (mg/L); groundwater samples collected from monitor well MW-1, MW-2, MW-3 and MW-4 were found to contain manganese at concentrations of 4.79 mg/L, 3.56 mg/L, 3 mg/L, and 4.92 mg/L, respectively.

• Polycyclic Aromatic Hydrocarbons

• The human health NMWQCC groundwater quality standard for polycyclic aromatic hydrocarbons (PAHs), defined as the sum of total naphthalene and monomethylnaphthalenes, is 30 micrograms per liter (μ g/L); the groundwater sample collected from monitor well MW-3 was found to contain PAHs at a concentration of 32 μ g/L using EPA Method 8270C (SVOCs), and at a concentration of 36 mg/L using EPA Method 8260B (VOCs).

Benzene

 Benzene was found at a concentration of 10 μg/L in MW-3, the human health NMWQCC groundwater quality standard for this constituent.

Toluene

- Toluene was detected in groundwater samples collected from monitor wells MW-2 and MW-3 at concentrations of 1,100 μg/L and 1,400 μg/L, respectively. The human health NMWQCC groundwater quality standard for this constituent is 750 μg/L.
- Total Xylenes
 - The human health NMWQCC groundwater quality standard for total xylenes is 620 μ g/L, while this constituent was detected at concentrations of 2,280 μ g/L and 4,050 μ g/L in monitor wells MW-2 and MW-3, respectively.

The corresponding laboratory analysis reports for the June 2009 groundwater sampling event, including quality control summaries, are included in Appendix D. A map showing BTEX concentrations in Site wells during the June 2009 groundwater sampling event is included as Figure 5.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Tetra Tech has installed 4 groundwater monitor wells at the Site and has conducted the first baseline groundwater monitoring event at the Site. The groundwater monitor wells will be incorporated into a quarterly monitoring schedule, and the next groundwater monitoring event at the Site is scheduled for September 2009. The groundwater flow direction at the Site was determined to be to the east/southeast as of June 2009. Tetra Tech will continue to determine the groundwater flow direction at the Site and will note any changes as they occur.

As a result of the suite of chemical analyses conducted on all groundwater monitor wells at the Site during 2009, continued groundwater quality monitoring beyond BTEX analysis is warranted. Concentrations of chloride, sulfate, aluminum, iron, chromium, manganese, and PAHs have been detected above NMWQCC groundwater quality standards in varying combinations in all groundwater monitor wells at the Site. As a result, Tetra Tech recommends that these constituents be incorporated into the quarterly monitoring program for all Site groundwater monitor wells. Tetra Tech will continue to monitor for BTEX parameters in order to move toward Site closure. In addition, Tetra Tech will prepare a work plan for the OCD that will detail plans to completely delineate groundwater impacts at the Site.

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Please contact Kelly Blanchard at 505-237-8440 or kelly.blanchard@tetratech.com if you have any questions or require additional information.

4.0 **REFERENCES**

- Envirotech Incorporated (2009). Spill Cleanup Report, Located at: Burlington Resources [sic] Randleman #1 Well Site, Section 13, Township 31N, Range 11W, San Juan County, New Mexico. Prepared for ConocoPhillips. Report Dated February 2009. 3 pp (not including Figures, Tables, and Appendices).
- New Mexico Energy, Minerals and Natural Resources Department (2002). Case # 3R0-340, Randleman #1 Dehy Pit, San Juan County [sic], New Mexico. Letter from NMEMNRD to Williams Field Services. Dated June 14, 2002. 6 pp.
- Williams Environmental Services (2002). Randleman #1 Pit Remediation and Closure Report. Prepared for the New Mexico Oil Conservation Division. Report Dated February 11, 2002. 3 pp (not including Figures, Tables, and Appendices).

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FIGURES

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TABLES

DATE	ΑCΤΙΫΪΤΥ
September 20, 1951	Well spudded by Southern Union Gas Company.
August 1, 1952	Well acquired by Aztec Oil and Gas Company.
December 1976	Southland Royalty Company acquired Aztec Oil and Gas Company (exact date unknown).
November 22, 1985	Southland Royalty Company acquired by Burlington Resources.
April 1997	An unlined surface impoundment was discovered to have been impacted by petroleum hydrocarbons. On April 29, 1997, excavation of the soil beneath the impoundment began; once complete, a total of 613 cubic yards of hydrocarbon impacted soil were removed and landfarmed at the nearby Randleman #3 site.
May 14, 1997	Three groundwater monitor wells were installed at the Site. Groundwater monitoring was initiated on a quarterly basis through March 1998.
April 1998	Evaluation of groundwater monitoring results initiated another excavation of 2,220 cubic yards of hydrocarbon impacted soil "to address residual soil contamination extending to the south of the original excavated area" (Williams, 2002).
February 2002	Quarterly groundwater monitoring was continued through September 2000, and after 4 consecutive quarters of groundwater quality monitoring results below New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standards for benzene, toluene, ethylbenzene, and total xylenes (BTEX), Williams Environmental Services (Williams) requested that the New Mexico Oil Conservation Division (OCD) grant closure status to the Site.
June 2002	OCD granted closure for the Site, provided that Williams plug and abandon all Site groundwater monitoring wells according to OCD standards (NMEMNRD, 2002). The historical excavation area and historical groundwater monitor wells are displayed in Figure 2.
March 31, 2006	ConocoPhillips Company acquired Burlington Resources.
February 23, 2009	Approximately 60 barrels of condensate were found to have spilled from a hole located on the back side of an on-Site condensate tank. The condensate was released into the bermed area surrounding the tank. Upon discovery, the site operator shut in the well and notified a supervisor. Form C-141 (Appendix B) was filled out by ConocoPhillips staff and notice was given to Brandon Powell of OCD via telephone. The spilled fluids remained in the berm and none of the condensate was recovered. Form C-141 stated that the spill impacted the soil on the ground surface around the tank, that the production tank was to be removed, and that the affected soils were to be excavated.

Table 1. Randleman #1 Site History Timeline

DATE	ACTIVITY
February 26, 2009	Envirotech Inc. of Farmington, NM (Envirotech) arrived on Site, performed the soil excavation, and collected soil samples for analysis. The area of release was excavated to approximately 42 feet by 51 feet by 7 feet deep. A total of 7 composite soil samples were collected from the excavation – 1 from each of the walls of the excavation and 3 samples from the bottom of the excavation. Soil samples were collected in the field and were analyzed for total petroleum hydrocarbons (TPH) using Environmental Protection Agency (EPA) Method 418.1. Additionally, organic vapors were analyzed in the field using a Photoionization Detector (PID) and heated headspace techniques. TPH results ranged from 8 parts per million (ppm) in the soil sample collected from the north wall of the excavation to 1,080 ppm in the sample collected from the bottom of the excavation. Depth of soil samples was not noted in the samples obtained from the walls of the excavation, but the samples obtained from the bottom of the excavation level for TPH at the Site was determined to be 100 ppm. Organic vapor concentrations ranged from 6.8 ppm in the sample obtained from the south wall of the excavation. The OCD recommended action level for TPH at the Site was determined to be 100 ppm. Organic vapor concentrations ranged from 6.8 ppm in the sample obtained from the south wall of the excavation. The OCD recommended action level for organic vapor (in lieu of benzene and benzene, toluene, ethylbenzene, and total xylenes (BTEX) concentrations) is 100 ppm. Due to levels of TPH and organic vapors above OCD action levels, the excavation was continued (Envirotech, 2009).
February 27, 2009	Envirotech returned to the Site to continue the excavation and sampling activities. Due to the fact that soil samples collected from the north, west, and east ends of the excavation on February 26, 2009 were found to be below OCD action levels for TPH and organic vapor, the focus of the excavation on February 27, 2009 was the south wall, the southeast wall, and the bottom of the southeast corner. At the end of the day, the excavation measured 81 feet by 43 feet by 20 feet deep (total depth is given for the deepest part of the excavation; other areas determined to be below OCD action levels went to approximately 8 feet bgs). A total of 8 soil samples were collected and analyzed in the field for TPH and organic vapors. The excavation continued until all samples were found to be below the OCD action levels of 100 ppm for both TPH and organic vapors along all four walls and the bottom of the excavation, where after obtaining soil samples at 8, 13, and 15 feet bgs with both TPH and organic vapor results greater than 100 ppm, soil sample results for both of these constituents were not detected at a depth of 20 feet bgs, and the excavation was discontinued (Envirotech, 2009).

Table 1. Randleman #1 Site History Timeline

DATE	ACTIVITY
March 2, 2009	Groundwater was found seeping into the southeast corner of the excavation at a depth of 20 feet bgs. A Rock Springs vacuum truck was contracted by Envirotech to collect groundwater from the excavation; approximately 10 gallons of water were removed. After removal of collected groundwater, Envirotech obtained a soil sample from the southeast corner of the excavation at a depth of 20 feet bgs. TPH and organic vapor results were found to be above OCD action levels. During field analysis of the soil sample, more groundwater had seeped into the excavation. More water was then removed from the excavation, and additional excavation was performed in order to attempt to obtain a soil sample below OCD action levels. A groundwater sample was collected from the area where water continued to seep into the excavation, and was sent for laboratory analysis of volatile organic compounds by EPA Method 8260. The groundwater sample was found to contain benzene, total xylenes and total naphthalenes above New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standards. Once this sample had been obtained, the excavation caved in, making further water removal via the vacuum truck impossible (Envirotech, 2009).
June 9, 2009 through June 11, 2009	Tetra Tech installs 4 groundwater monitor wells at the Site; MW-1, MW-2, MW-3 and MW-4.
June 12, 2009	Tetra Tech conducts the first groundwater monitoring event at the Site.
June 17, 2009	Depth to water measurements were taken in Site monitor wells to determine if hydrocarbons were accumulating in the water column.
June 18, 2009	Hydrocarbon-absorbent socks were placed in monitor wells MW-2 and MW-3 by Tetra Tech.

Table 2. Soil Boring Laboratory Anal	ytical kesu	its - Conoco	Phillips Randleman	1#1			
Constituent			Sample ID (so	I samples collected	on June 9th, 2009 and	June 10th, 2009)	
lons	Method	<u>Units</u>	MW-2 (7-8.5 feet)	MW-3 (7.5 - 9 feet)	MW-3 (12.5-14 feet)	MW-4 (12.5-14 feet)	NMOCD
Bromide	E300.0	mg/kg - dry	<6.31	<6.22	<5.66	<5.29	NE
Chloride	E300.0	mg/kg - dry	<6.31	<6.22	<5.66	324	NE
Fluoride	E300.0	mg/kg - dry	9.36	13.4	<5.66	<5.29	NE
Orthophospate (as P)	E300.0	mg/kg - dry	<6.31	<6.22	<5.66	<5.29	NE
Sulfate	E300.0	mg/kg - dry	351	187	2050	254	NE
Nitrate (as N)	E300.0	mg/kg - dry	<6.31	< 6.22	<5.66	< 5.29	NE
Nitrite (as N)	E300.0	mg/kg - dry	<6.31	< 6.22	<5.66	< 5.29	NE
Metals, Total	Method	Units	MW-2 (7-8.5 feet)	MW-3 (7.5 - 9 feet)	MW-3 (12.5-14 feet)	MW-4 (12.5-14 feet)	NMOCD
Mercury	SW7471A	lma/ka - dry	< 0.0378	< 0.0373	< 0.0339	<0.0318	NE
Aluminum	SW6010B	lma/kg - dry	3.010	2.050	3.020	6.320	NE
Boron	SW6010B	lma/kg - dry	2.18	1.48	1.93	2.88	NE
Calcium	SW6010B	Img/kg - dry	3,250	1.350	3.940	14,200	NE
Iron	SW6010B	ma/ka - dry	5 420	3 400	4 950	11 600	NE
Magnesium	SW6010B	ma/ka - dry	943	563	835	2,360	NE
Potassium	SW6010B	mg/kg - dry	642	361	534	883	NE
Sodium	SW6010B	ma/ka - dry	117	130	262	635	NE
Strontium	SW6010B	ma/ka - dry	45.2	60.7	74	73.5	NE
Tin .	SW6010B	ma/ka - day	0.656	<0.622	0.871	0.699	
Antimony	SW6020A	mg/kg - dry	<0.630	<0.022	<0.566	<0.529	
Anumony	SW00205	my/ky - ury	2.031	1 51	10	>0.32 3 2.35	
Arsenic Darium	SW00205	my/ky - dry	2.42	1.01	145	2.33	
Danum	SW0020A	my/ky - ury	-0 50 <i>4</i>	-0.408	-0.452	24J -0 424	
Deryillum	SWOUZUA	mg/kg - ury	<0.004 <0.004	-0.622	NU.40Z	NU.424	
	SWOUZUA	mg/kg - ury	<0.031	<u.022< td=""><td>000.02</td><td><u.329< td=""><td></td></u.329<></td></u.022<>	000.02	<u.329< td=""><td></td></u.329<>	
	SVVOUZUA	mg/kg - ary	2.08	2.00	3.93	48.9	
Cobalt	SW6020A	mg/kg - ary	2.24	1.63	2.48	4.49	
Copper	SW6020A	mg/kg - dry	5.37	2.99	5.//	11.2	NE
Lead	SW6020A	mg/kg - dry	3.97	2.51	4.26	5.94	NE
Manganese	SW6020A	mg/kg - dry	140	100	193	364	NE
Molybdenum	SW6020A	mg/kg - dry	<0.631	<0.622	< 0.566	1.84	NE
Nickel	SW6020A	mg/kg - dry	2.81	2.17	3.37	6.41	NE
Selenium	SW6020A	mg/kg - dry	<0.631	<0.622	< 0.566	<0.529	NE
Silver	SW6020A	mg/kg - dry	<0.631	<0.622	<0.566	<0.529	NE
Thallium	SW6020A	mg/kg - dry	<0.631	<0.622	<0.566	<0.529	NE
Vanadium	SW6020A	mg/kg - dry	6.26	3.84	6.29	15.6	NE
Zinc	SW6020A	mg/kg - dry	13.4	7.24	12.6	22.2	NE
SVOCS (detections only)	Method	Units	MW-2 (7-8.5 feet)	MW-3 (7.5 - 9 feet)	MW-3 (12.5-14 feet)	MW-4 (12.5-14 feet)	NMOCD
As listed	8270C	µg/kg - dry					
VOCs (detections and BTEX only)	Method	Units	MW-2 (7-8.5 feet)	MW-3 (7.5 - 9 feet)	MW-3 (12.5-14 feet)	MW-4 (12.5-14 feet)	NMOCD
1,2,4-Trimethylbenzene	8260B	µg/kg - dry	<6.3	< 6.2	2900	< 5.3	NE
1.3.5-Trimethylbenzene	8260B	ug/kg - dry	<6.3	< 6.2	220	< 5.3	NE
4-Isopropyltoluene	8260B	ua/kg - dry	<6.3	< 6.2	49	< 5.3	NE
Isopropylbenzene	8260B	ug/kg - dry	<6.3	< 6.2	110	< 5.3	NE
Naphthalene	8260B	uq/kg - dry	<6.3	< 6.2	11	< 5.3	NÉ
n-Butvibenzene	8260B	ua/ka - dry	<6.3	< 6.2	12	< 5.3	NE
n-Propylbenzene	8260B	lua/ka - dry	<6.3	< 6.2	180	< 5.3	NE
sec-Butvlbenzene	8260B	lua/ka - dry	<6.3	< 6.2	48	< 5.3	NE
tert-Butylbenzene	8260B	ua/ka - dry	<6.3	< 6.2	54	< 5.3	NE
Renzene	8260B	ua/ka - dry	<6.3	< 6.2	<5.7	<5.3	10.000
Toluene	8260B	un/ka - dry	<6.3	< 6.2	92	<5.3	NE
Ethylhenzene	8260B	un/ka - dry	<6.3	< 6.2	200	<5.3	NE
Total Xvlenes	8260B	ug/kg - dry	<6.3	< 6.2	1 410	<5.3	NE
Total BTEX		ua/ka - dry	<6.3	< 6.2	1.702	<5.3	50.000
Other	Method	Unite	MW-2 (7-8 5 feet)	M/A/-3 (7 5 - 9 feet)	MIN-3 /12 5-14 feet)	MW_A (12 5-14 feet)	NMOCD
Alkalinity*	F310 1	ma/ka - dry	207	NΔ	NIA	NΔ	NE
Percent Moisture	02216		20.7	19.6	11.6	5 55	NE
Camivelatile Hudroserhans	Mathad	/0	20.1	10.0	ADA/ 2 (42 5 44 6eet)		
Semivolatile Hydrocarbons	WIETHOU CW/901ED		MW-2 (/-0.3 1864	MW-3 (7.5 - 9 leeu	1/////////////////////////////////////	MW-4 (12.3-14 leeu	NINCCO
Gasoline Range Organics	SWOUTSE	mg/kg - ury	<0.13	<0.12 <6.2	2.3	<0.11	100
Diesei Railye Organics	344001007		NO.3	NO.2	30	~0.0	

Notes: MW = monitor well NMOCD = New Mexico Oil Conservation Division recommended action level

SVOCs = semi-volatile organic compounds

VOCs = volatile organic compounds w/Ccs = volatile organic compounds mg/kg - dry = milligrams per kilogram, analyzed after residual water removed from the soil μ g/kg - dry = micrograms per kilogram P = phosphate

N = nitrogen NE = not established

*SPL failed to analyze MW-3 or MW-4 soil boring soil samples for alkalinity where "NA" is noted in the table. The chain of custody reveals that Tetra Tech requested this analysis on all soil samples, however.

Table 3 - Groundwater Elevation Data Summary

Weil ID	Total Depth (ft bgs)	Screen Interval (ft)	*Elevation (ft) (TOC)	Date Measured	Depth to Groundwater (ft below TOC)	Relative Groundwater Elevation
	75 F	NC _ 0	05 10	6/12/2009	13.98	81.21
	0.07	0 - 44	61.00	6/17/2009	13.96	81.23
	73 RN	80-738	06 70	6/12/2009	15.57	81.22
7- 4 4 1 4 1	20.02	0.0 - 20.0	2.00	6/17/2009	15.63	81.16
MVV-3	22 UU	65-215	15 A0	6/12/2009	16.00	80.31
	22:22	0.1 2 - 0.0	- 0.00	6/17/2009	15.97	80.34
	20 EU	11 <u>-</u> 26	28 80	6/12/2009	17.68	81.15
	20.00		00.00	6/17/2009	17.52	81.31

ft = Feet TOC = Top of casing bgs = below ground surface * Elevation relative to wellhead, set at 100 feet. 1 of 1

Randleman #1

Constituent		y, Dasenne	Sample	ID (samp	les collect	ed on June	12 2009)	
oonattuent			Joannpie	The (autility			(2, 2000)	NMWOCC Groundwater
lons	Method	Unite	MW-1	MW-2	MW-3	Dunlicate	MW-4	Quality Standard
Bromide	F300.0	mg/l	< 0.5	<0.5	<0.5	NA	< 0.5	NE
Chloride	E300.0	mg/L	119	40.1	40.3	NA	2 310	250
Fluoride	E300.0	mg/L	0.518	0.621	<0.5	NA	0.652	1.6
Orthophospate (as P)	E300.0	mg/L	< 0.5	< 0.5	<0.5	NA	< 0.5	NE
Sulfate	E300.0	mg/L	1.690	1.360	1.510	NA	4.190	600
Nitrate (as N)	E300.0	ma/l	0.78	0.52	< 0.5	NA	< 0.5	10
Nitrite (as N)	E300.0	ma/L	< 0.5	< 0.5	< 0.5	NA	< 0.5	NE
	1							NMWQCC Groundwater
Metals, Total	Method	Units	MW-1	MW-2	MW-3	Duplicate	MW-4	Quality Standard
Mercury	SW7470A	mo/i	<0.0002	<0.0002	<0.0002	NA	< 0.0002	0.002
Aluminum	SW6010B	ma/L	9.22	2.99	1.1	NA	13.6	5
Boron	SW6010B	ma/L	0.135	<0.1	0.107	NA	0.523	0.75
Calcium	SW6010B	ma/L	473	528	527	NA	496	NE
Iron	SW6010B	mg/L	6.81	3.7	1.65	NA	20	1.0
Magnesium	SW6010B	ma/L	27.1	19.7	23.9	NA	32.2	NE
Potassium	SW6010B	mg/L	7.31	7.53	6	NA	19.1	NE
Sodium	SW6010B	ma/L	454	196	242	NA	2720	NE
Strontium	SW6010B	mg/L	8.51	8.54	10.5	NA	11.6	NE
Tin	SW6010B	ma/L	<0.005	<0.005	0.0061	NA	< 0.005	NE
Antimony	SW6020A	mg/L	< 0.005	<0.005	< 0.005	NA	< 0.005	NE
Arsenic	SW6020A	mg/L	< 0.005	0.00759	< 0.005	NA	<0.005	0.1
Barium	SW6020A	ma/L	0.0857	0.107	0.0537	NA	0.131	1.0
Bervilium	SW6020A	ma/L	< 0.004	< 0.004	< 0.004	NA	0.00468	NE
Cadmium	SW6020A	ma/L	< 0.005	< 0.005	< 0.005	NA	< 0.005	0.01
Chromium	SW6020A	mg/L	0.00601	< 0.005	< 0.005	NA	0.117	0.05
Cobalt	SW6020A	ma/L	0.0157	< 0.005	< 0.005	NA	0.0312	0.05
Copper	SW6020A	mg/L	0.022	0.00699	< 0.005	NA	0.041	1.0
Lead	SW6020A	ma/L	0.0124	0.00561	< 0.005	NA	0.0418	0.05
Manganese	SW6020A	ma/L	4.79	3.56	3	NA	4.92	0.2
Molybdenum	SW6020A	ma/L	< 0.01	< 0.01	<0.01	NA	0.0146	1.0
Nickel	SW6020A	ma/L	0.0185	0.0107	0.00971	NA	0.0372	0.2
Selenium	SW6020A	mg/L	< 0.005	< 0.005	< 0.005	NA	0.00558	0.05
Silver	SW6020A	ma/L	< 0.005	< 0.005	< 0.005	NA	< 0.005	0.05
Thailium	SW6020A	mg/L	< 0.005	< 0.005	< 0.005	NA	< 0.005	NE
Vanadium	SW6020A	mg/L	0.012	0.00592	< 0.005	NA	0.0269	NE
Zinc	SW6020A	mg/L	0.0322	0.0152	<0.01	NA	0.103	10
	1							NMWQCC Groundwater
SVOCS (detections only)	Method	Units	MW-1	MW-2	MW-3	Duplicate	MW-4	Quality Standard
2,4-Dimethylphenol	8270C	μg/L	<5	<5	18	NA	<5	NE
2-Methvinaphthalene	8270C	ua/L	<5	13	12	NA	<5	see
Naphthalene	8270C	μα/L	<5	14	20	NA	<5	below
Sum of 2-Methylnaphthalene & Naphthalene	8270C	μg/L		27	32	NA		30
Benzyl alcohol	8270C	μα/L	<5	6.8	<5		<5	NE
2-Methylphenol	8270C	μα/L	<5	<5	7.2	NA	<5	NE
3&4-Methylphenol	8270C	μg/L	<5	<5	8.3	NA	<5	NE
								NMWQCC Groundwater
VOCs (detections and BTEX only)	Method	Units	MW-1	MW-2	MW-3	Duplicate	MW-4	Quality Standard
1.2.4-Trimethylbenzene	8260B	μα/L	< 5	300	440	NA	< 5	NE
1.3.5-Trimethylbenzene	8260B	ua/L	< 5	96	140	NA	< 5	NE
4-Isopropyltoluene	8260B	μα/L	< 5	7.2	6.3	NA	< 5	NE
Isopropylbenzene	8260B	μα/L	< 5	24	46	NA	< 5	NE
Naphthalene	8260B	μg/L	< 5	21	36	NA	< 5	30
n-Butylbenzene	8260B	μg/L	< 5	5.2	< 5	NA	< 5	NE
n-Propylbenzene	8260B	μg/L	< 5	25	48	NA	< 5	NE
sec-Butylbenzene	8260B	μg/L	< 5	6.6	6.1	NA	< 5	NE
Benzene	8260B	μg/L	5.1	9.4	10	10	< 5	10
Toluene	8260B	μg/L	7.6	1,100	1,400	1,400	< 5	750
Ethylbenzene	8260B	μg/L	< 5	180	490	540	< 5	750
Total Xylenes	8260B	μg/L	9.7	2,280	4,050	4,300	< 5	620
								NMWQCC Groundwater
Other	Method	Units	MW-1	<u>MW-2</u>	MW-3	Duplicate	<u>MW-4</u>	Quality Standard
Alkalinity (as Calcium Carbonate)	SM2320B	mg/L	165	215	99	NA	200	NE
Diesel Range Organics	SW8015B	mg/L	< 0.1	0.76	1.2	NA	< 0.1	NE
Gasoline Range Organics	SW8015B	mg/L	0.22	11	21	NA	< 0.1	NE

eeeDhilling Dandlemon #1 Table 4 C

Notes: MW = monitoring well NMWQCC = New Mexico Water Quality Control Commission Constituents in **BOLD** are in excess of NMWQCC groundwater quality standards

Constituents in **BOLD** are in excess of NMW SVOCs = semi-volatile organic compounds VOCs = volatile organic compounds mg/L = milligrams per liter pg/L = micrograms per liter P = phosphate N = nitrogen NE = not established NA = not analyzed

Randleman #1

Table 5. Groundwater	Laboratory A	nalytical Results Si	<u>ummary, BTEX Par</u>	ameters - ConocoPhillip	s Randleman #1
Well ID	Date	Benzene (μg/L)	Toluene (μg/L)	Ethylbenzene (µg/L)	Total Xylenes (μg/L)
MW-1	6/12/2009	5.1	7.6	< 5	9.7
MW-2	6/12/2009	9.4	1,100	180	2,280
MW-3	6/12/2009	10	1,400	490	4,050
MW-3 Duplicate	6/12/2009	10	1,400	540	4,300
MW-4	6/12/2009	<5	<5	<5	<5
NMWQCC					
Groundwater Quality					
Standards		10	750	750	620

Notes:

MW = monitoring well

Constituents in BOLD are in excess of NMWQCC groundwater quality standards NMWQCC = New Mexico Water Quality Control Commission μ g/L = micrograms per liter (parts per billion) < 5 = Below laboratory detection limit of 5 μ g/L

Tetra Tech

APPENDICES

APPENDIX A

Soil Boring Logs and Well Completion Forms



Site Location: Aztec, NM Project: Randleman No. 1 Boring ID: MW-1 Logged by: Kelly Blanchard

Boring advanced by: WDC Exploration and Wells **Total depth:** 25.5 feet **Date advanced:** 6/9/2009

DEPTH (in feet bgs) INTERPRETED LITHOLOGY

DESCRIPTIONS





Site Location: Aztec, NM Project: Randleman No. 1 Boring ID: MW-2 Logged by: Christine Mathews Total depth: 23.8 feet

Boring advanced by: WDC Exploration and Wells Total depth: 23.8 feet Date advanced: 6/10/2009

DEPTH (in feet bgs) INTERPRETED LITHOLOGY

DESCRIPTIONS





Site Location: Aztec, NM

Project: Randleman No. 1

Boring ID: MW-3 Logged by: Cassandre Brown Total depth: 22 feet

Boring advanced by: WDC Exploriton and Wells Total depth: 22 feet Date advanced: 6/10/2009

DEPTH (in feet bgs) INTERPRETED LITHOLOGY

DESCRIPTIONS





Site Location: Aztec, NM Project: Randleman No. 1 Boring ID: MW-4 Logged by: Kelly Blanchard

Boring advanced by: WDC Exploration and Wells **Total depth:** 29.5 feet **Date advanced:** 6/9/2009

DEPTH (in feet bgs) INTERPRETED LITHOLOGY

DESCRIPTIONS



Aztec, NM / Randleman No. 1 / July 21, 2009

					Well ID MW-1	
TETRAT	CH, INC. Well Completion Diagram			Flu	Flush Mount	
<u> </u>						
Job Name		Randleman #1			Steel Casing	
Job No.	114-690115	Date	6/10/2009		Other:	
Project Manager		Kelly Blanchard			2" locking cap	
Well I.D.		MW-1			Casing:	
Field Geologist		Cassie Brown			0 ft. to 9	
Driller_		Matt Cain - WDC			8 inch diameter Borehole:	
Equipment_		CME 85			0 ft. to 25.5	
Matari	ale				Outer Casing:	
materi	uið				ft. to	
700 Pounds	Silica	Sand	Filter Pack		Concrete: approx. 4 sq. ft v	
100 Pounds	Chi	ps	Bentonite Seal		0 ft. to 1	
Gallons			Grout		Grout:	
Pounds _			Concrete		1 ft. to 4.75	
Feet of nat	ive fill/ slough					
9 Feet of	2 inch	pvc	Blank Casing		Bentonite Seal:	
15 Feet of	2 inch	010 pvc	Slotted Screen		<u>4.75</u> ft. to <u>7.75</u>	
Feet of			Outer Casing		Filter Pack:	
Feet of			Sump/ Silt Trap		7.75 ft. to 24	
lacement Method_					Slotted Screen:	
Notes_	Casing and s	screen joint type -	flush thread		9 ft. to 24	
-					Native fill/ stough:	
Devel	opment				ft. to	
	\ 	land he?			8 inch diameter Borehole:	
		ano-0811			0 ft. to5.5	
Date	6/11/2009				Sump/ Silt Trap:	
Amount Purged _	60	gallons			ft. to25.5	
Notes	purge water was disposed of in the waste				Total Depth Borehole (feet) 25.5	
-		water tank on-site				

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			Wett ID MW-2		
H	Well Compl	St	ickup (feet): approx. 3 ft.		
Job Name	Randlema	n #1		Steel Casing	
Job No	114-690115 Date	6/10/2009		· Other:	
Project Manager	Kelly Blanc	hard		2" locking cap	
Well I.D.	MW-2			Casing:	
Field Geologist	Cassie Bro		0 ft. to 8.9		
Driller	Matt Cain -	WDC		8 inch diameter Borehole:	
Equipment_	CME 85		ft. to3.8		
Materi	ale			Outer Casing:	
Water I		······································		ft. to	
450 Pounds	Silica Sand	Filter Pack		Concrete: approx. 4 sq. ft pads	
150 Pounds _	Chips	Bentonite Seal		0ft. to	
Gallons _		Grout		Grout: (bentonite used)	
Pounds _		Concrete		ft. to	
Feet of nat	ive fill/ slough				
11.5 Feet of	2 inch pvc	Blank Casing		Bentonite Seal:	
15 Feet of	2 inch 010 pv	Slotted Screen			
Feet of	·····	Outer Casing		Filter Pack:	
Feet of		Sump/ Silt Trap		<u>5</u> ft. to <u>23.8</u>	
acement Method				Slotted Screen:	
Notes_	type - flush thread		8.9 ft. to 23.8		
-				Native fill/ slough:	
Devel	opment			ft. to	
fethod	Hand Bailer			8 inch diameter Borehole:	
Date .	6/10/2009			ft. to	
	70	~		Sump/ Silt Trap:	
	galion			Total Depth Borehole (feet	
Notes_	re-charge is slower in this well. Pump	would draw well down quickly.	San Andrew State (1997) San Angel State (1997) San Angel State (1997) San Angel State (1997)	23.8	

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Randleman #1 14-690115 Date Kelly Blanchard MW-3	Diagram 6/10/2009	s	tickup (feet):	approx. 3 ft. asing
Randleman #1 14-690115 Date Kelly Blanchard MW-3	6/10/2009		Steel C	asing
LI4-690115 Date	6/10/2009			asing
Kelly Blanchard MW-3			I Uthe	er:
MW-3			2"1	locking cap
			Casing:	
Cassie Brown			ff	t. to <u>6.5</u>
Matt Cain - WDC			8 Borehole:	inch diameter
CME 85			ft	. to <u>22</u>
			Outer Casir	n g :
<u> </u>			ft	. to
Silica Sand	Filter Pack		Concrete: a	approx. 4 sq. ft
Chips	Bentonite Seal		fi	t. to
	Grout		Grout: (bei	ntonite used)
	Concrete		ff	ι. to
bugh				
inch pvc	Blank Casing		Bentonite S	ieal:
inch 010 pvc	Slotted Screen		∦ <u> </u>	. to <u>4.5</u>
	Outer Casing		i Filter Pack:	
	Sump/ Silt Trap		<u>4.5</u> fi	t. to <u>21.5</u>
			Slotted Scr	een:
Casing and screen joint type - fl	ush thread		<u>6.5</u> f	t. to <u>21.5</u>
			Native fill/ s	slough:
			੍ਹੀf	t. to
			8 inch diam Borehole:	ieter
Submersible Pump / Bailer			ft	. to <u>21.5</u>
2000			Sump/ Silt	Trap:
2003			N	
				t. to <u>22</u>
, , ,	ugn inch pvc inch 010 pvc Casing and screen joint type - fl Submersible Pump / Bailer	ugn pvc Blank Casing inch 010 pvc Slotted Screen Outer Casing Outer Casing Sump/ Silt Trap Sump/ Silt Trap Casing and screen joint type - flush thread Outer Submersible Pump / Bailer 2009	ugn inch pvc Blank Casing inch 010 pvc Slotted Screen Outer Casing Outer Casing	ugn Bentonite S inch pvc Blank Casing inch 010 pvc Slotted Screen Outer Casing 4.5 ft Sump/ Silt Trap Slotted Scr 6.5 Casing and screen joint type - flush thread 6.5 ft Submersible Pump / Bailer 0 ft 2009 Sump / Silt 5

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\frown					Well ID	MW-4
TETRAT	ECH, INC. Well	Completion I	Diagram	St	ickup (feet):	approx. 3 ft.
Job Name	F	Randleman #1			Steel C	asino
Job No.	114-690115	Date	6/9/2009		Othe	:r:
Project Manager	к	elly Blanchard			2"1	ocking cap
- Well I.D.		MW-4			Casing:	
- Field Geologist	Cassie Brown, Kel	ly Blanchard, Chris	stine Mathews		<u>0</u> ft	. to <u>11</u> ft.
- Driller	М	att Cain - WDC			8 Borehole:	inch diameter
- Equipment		CME 85			ft	. to <u>29.5</u> ft.
					Outer Casir	ng:
		<u> </u>			ftft	. to ft.
1000 Pounds	Silica Sa	Ind	Filter Pack		Concrete: a	pprox. 4 sq. ft well
100 Pounds	Chips	i	Bentonite Seal		ft	. to <u>1</u> ft.
Gallons			Grout		Grout	
Pounds			Concrete		1 ft	.to 6 ft.
Feet of nat	ive fill/ slough					
10 Feet of	2 inch	рус	Blank Casing		Bentonite S	eal:
15 Feet of	2 inch	010 рvс	Slotted Screen		6 ft	. to <u>9</u> ft.
Feet of			Outer Casing		Filter Pack:	
4 Feet of	Colorado	Silica	Sump/ Silt Trap		<u>9</u> ft	. to <u>26</u> ft.
Placement Method					Slotted Scr	een:
Notes_	Casing and sc	reen joint type - flu	sh thread		ft	. to <u>26</u> ft.
-					Native fill/ s	lough:
Devel	opment				ft ft	. to ft.
	•				8 inch diam Borehole:	eter
Method	Submer	sible Pump			ft	. to <u>29.5</u> ft.
Date	6/10/2009				Sump/ Silt	Trap:
Amount Purged	45	_gallons			ft	. to <u>29.5</u> ft.
Notes_	purge wate	r was disposed of	in the		Total Depth 29.5	Borehole (feet):
-	on-sit	e waste water tan	<	an a		

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APPENDIX B

Soil Boring Laboratory Analysis Report



Conoco Phillips

Certificate of Analysis Number: 09060712							
Report To:	Project Name:	Randleman #1					
Tetra Tech, Inc.	<u>Site:</u>	San Juan County, NM					
Kelly Blanchard	Site Address:						
6121 Indian School Road, N.E.							
Suite 200 Albuquerque	PO Number:						
NM	<u>State:</u>	New Mexico					
87110-	State Cert. No.:						
ph: (505) 237-8440 fax:	Date Reported:	6/29/2009					

This Report Contains A Total Of 66 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

Test results meet all requirements of NELAC, unless specified in the narrative.



Case Narrative for: Conoco Phillips

Certificate of Analysis Number:

09060712

Report To:	Project Name: Randleman #1
Tetra Tech, Inc.	Site: San Juan County, NM
Kelly Blanchard	Site Address:
6121 Indian School Road, N.E.	
Suite 200	DO Number
Albuquerque	PO Number:
NM	State: New Mexico
87110-	State Cert. No.:
ph: (505) 237-8440 fax:	Date Reported: 6/29/2009

I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II: ANALYSES AND EXCEPTIONS:

Semivolatile Hydrocarbons (8015):

Sample "(7-8.5) MW-2" (SPL ID: 09060712-01) has light hydrocarbons from C9-C44 which are below the reporting limit.

Sample "MW-4 (12.5-14)" (SPL ID: 09060712-02) has light hydrocarbons from C9-C18 which do not resemble a specific pattern, and heavy hydrocarbons from C18-C44. Per client's request sample was reported as Oil range organics (C19-C36), however, sample pattern resembles crude oil pattern.

Sample has heavy coelution of different hydroarbon components. Per client's request hydrocarbons were reported as such diesel range organics (C9-C18) and Oil range organics (C19-C36), however, sample pattern resembles crude oil pattern.

Sample has light hydrocarbons from C9-C44 which are below the reporting limit and does not resemble any specific hydrocarbon pattern

Total Metals (6010):

Sample ID "MW-3 (12.5-14)" (SPL ID:09060712-03) was randomly selected for use in SPL's quality control program for the Total Metals analysis by SW846 Method 6010B (Batch ID:91142). The Matrix Spike (MS) recovery was outside of the advisable quality control limits due to possible matrix interference for the following analyte:

Potassium

A Post Digestion Spike (PDS) and Post Digestion Spike Duplicate (PDSD) was performed and all recoveries were within quality control limits. A Laboratory Control Sample (LCS) was analyzed as a quality control check for the analytical batch and all recoveries were within acceptable limits.

Sample ID "MW-3 (12.5-14)" (SPL ID:09060712-03) was randomly selected for use in SPL's quality control program for the Total Metals analysis by SW846 Method 6020A (Batch ID:91142-I). The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries were outside of the advisable quality control limits due to possible matrix interference for the following analytes:

Antimony Zinc

A Post Digestion Spike (PDS) and Post Digestion Spike Duplicate (PDSD) was performed and all recoveries were within quality control limits. A Laboratory Control Sample (LCS) was analyzed as a quality control check for the analytical batch and all recoveries were within acceptable limits.

Sample ID "MW-3 (12.5-14)" (SPL ID:09060712-03) was randomly selected for use in SPL's quality control program for the Total Metals analysis by SW846 Method 6020A (Batch ID:91242). The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries were outside of the advisable

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09060712 Page 1

6/29/2009

Erica Cardenas Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.



Case Narrative for: Conoco Phillips

Certificate of Analysis Number:

09060712

quality control limits due to possible matrix interference for the following analytes:

Sodium

A Post Digestion Spike (PDS) and Post Digestion Spike Duplicate (PDSD) was performed and all recoveries were within quality control limits. A Laboratory Control Sample (LCS) was analyzed as a quality control check for the analytical batch and all recoveries were within acceptable limits.

lon Chromatography (300):

Sample ID "MW-3 (12.5-14)" (SPL ID:09060712-03) was randomly selected for use in SPL's quality control program for the Ion Chromatography analysis by EPA Method 300.0 MOD (Batch ID:R276034). The Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries were outside of the advisable quality control limits due to possible matrix interference for the following analytes:

Ortho-phosphate (As P) Sulfate

A Laboratory Control Sample (LCS) was analyzed as a quality control check for the analytical batch and all recoveries were within acceptable limits.

III. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg\kg-dry " or " ug\kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

a Cardinas

09060712 Page 2 6/29/2009

Erica Cardenas Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.



Conoco Phillips

	Certificate of Analysis Number:						
<u>09060712</u>							
<u>Report To:</u>	Tetra Tech, Inc. Kelly Blanchard 6121 Indian School Road, N.E. Suite 200	Project Name:Randleman #1Site:San Juan County, NMSite Address:					
	Albuquerque NM 87110- ph: (505) 237-8440 fax: (505) 881-3283	<u>PO Number:</u> <u>State:</u> New Mexico <u>State Cert. No.:</u>					
<u>Fax To:</u>		Date Reported: 6/29/2009					

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
(7-8.5) MW-2	09060712-01	Soil	6/10/2009 10:50:00 AM	6/12/2009 9:00:00 AM	327652	
MW-4 (12.5-14)	09060712-02	Soil	6/9/2009 3:10:00 PM	6/12/2009 9:00:00 AM	327652	
MW-3 (12.5-14)	09060712-03	Soil	6/10/2009 1:45:00 PM	6/12/2009 9:00:00 AM	327652	
MW-3 (7.5-9)	09060712-04	Soil	6/10/2009 1:32:00 PM	6/12/2009 9:00:00 AM	327652	
TRIP BLANK	09060712-05	Water	6/10/2009	6/12/2009 9:00:00 AM	327652	

- Ca Cardinas 5 5

6/29/2009

Date

Erica Cardenas Project Manager

> Kesavalu M. Bagawandoss Ph.D., J.D. Laboratory Director

> > Ted Yen Quality Assurance Officer

> > > 09060712 Page 3 6/29/2009 4:34:59 PM



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

5) MW-2			Coll	ected: (06/10/2009	10:50	SPL San	ıple	I D: 0906	50712-01
		·	Sit	e: Sa	n Juan Co	unty, Ni	м			
Res	ult	QUAL	Re	ep.Limit	D	I. Factor	Date Anal	yzed	Analyst	Seq. #
O3), TOTAL					MCL		E310.1	U	nits: mg/K	g-dry
03) 2	27			25.2		1	06/15/09	12:30	PAC	5067063
RGANICS					MCL	SI	N8015B	U	nits: mg/k	g-dry
s N	1D			0.13		1	06/19/09	11:26	WLV	5075620
ene 1	01		%	63-142		1	06/19/09	11:26	WLV	5075620
nzene 1	01		%	50-159		1	06/19/09	11:26	WLV	5075620
Prep Date		Prep Initials	Prep	Factor						
06/19/2009 9:19		XML	1.00							
РНҮ					MCL	E300	.0 MOD	U	nits: mg/k	g-dry
١	1D			6.31		1	06/17/09	19:07	BDG	5073746
N	1D			6.31		1	06/17/09	19:07	BDG	5073746
9.	36			6.31		1	06/17/09	19:07	BDG	5073746
N	١D			6.31		1	06/19/09	19:57	BDG	5076746
3	51			12.6		2	06/19/09	20:16	BDG	5076747
N	١D			6.31		1	06/17/09	19:07	BDG	5073686
Ν	1D	,		6.31		1	06/17/09	19:07	BDG	5073686
					MCL	SI	N7471A	U	nits: ma/k	a-dry
Ν	١D			0.0378		1	06/17/09	14:57	F_S	5071955
Pren Date		Pren Initials	Pren	Factor						
06/17/2009 12:00		F S	1.00							
		·			MCL	51	N6010B	11.	oite: ma/k	a-dry
30	10		··· ·	12.6	MOL	1	06/18/09	14:17	EG	5073488
2.	18			1.26		1	06/18/09	14:17	EG	5073488
32	50			12.6		1	06/18/09	14:17	EG	5073488
54	20			1.26		1	06/18/09	14:17	EG	5073488
9	43			12.6		1	06/18/09	14:17	EG	5073488
6	42		-	63.1		1	06/18/09	14:17	EG	5073488
1	17			12.6		1	06/19/09	10:49	EG	5075345
45	5.2			0.378		1	06/18/09	14:17	EG	5073488
						-				
	S) INIV-2 Res O3), TOTAL >3) 2 RGANICS > >ne 1 1zene 1 Prep Date 06/19/2009 9:19 PHY N 9, 33 9, 1, 10, 11, 11, 11, 11, 11, 11, 11, 11, 11, 11, 11, 11, 11, 11, 11, 11, 11, 11, 11, 12, <th14,< th=""></th14,<>	Result O3), TOTAL)3) 227 RGANICS > > ND nne 101 >zene 101 Prep Date 06/19/2009 9:19 PHY ND ND 9.36 ND 351 ND 351 ND ND 06/17/2009 12:00 ND Prep Date 06/10B, TOTAL 3010 2.18 3250 5420 943 642 117 45.2	Result QUAL O3), TOTAL 3) 227 RGANICS > ND >ne 101 1 >zene 101 1 Prep Date Prep Initials 06/19/2009 9:19 XML PHY ND ND 1 ND 9.36 ND 351 ND ND 1 1 PHY ND 1 1 ND ND 1 1 06/19/2009 9:19 XML 1 1 ND ND 1 1 1 06/19/2009 9:19 XML 1 1 ND ND 1 1 1 ND ND 1 1 1 ND 1 1 1 1	S) NW-2 Con Result QUAL Re O3), TOTAL 33) 227 RGANICS ND ND ane 101 % Vzene 101 % Prep Date Prep Initials Prep 06/19/2009 9:19 XML 1.00 PHY ND 1.00 PHY ND 351 ND 351 ND ND ND 351 ND ND 351 ND 06/17/2009 1.00 Frep Date Prep Initials Prep 06/17/2009 12:00 F_S 1.00 6010B, TOTAL 3010 2.18 3250 5420 943 642 943 642 117 45.2 117	S) NW-2 Conected: - Site: Sa Result QUAL Rep.Limit O3), TOTAL	S) MW-2 Conected: Conected: <thc< td=""><td>S) MV-2 Conected: OB/10/2009 IO.30 Site: San Juan County, Ni Result QUAL Rep.Limit Dil. Factor O3), TOTAL MCL Site: San Juan County, Ni RGANICS MCL Site: San Juan County, Ni RGANICS MCL Site: San Juan County, Ni Inne 101 % 63-142 1 Inne 101 % 63-142 1 Izene 101 % 50-159 1 Prep Date Prep Initials Prep Factor Io6/19/2009 9:19 XML 1.00 PHY MCL E300 ND 6.31 1 Inne ND 6.31 1 ND 6.31 1 1 Site ND 6.31 1 ND 6.31 1 1 ND 6.31 1 1 ND 6.31 1 1 ND 0.0378</td><td>S/ MW-2 Connected: 00/10/2009 S/L San Site: San Juan County, NM MCL E310.1 03), TOTAL MCL E310.1 Dil. Factor Date Anal 03), TOTAL MCL E310.1 Dil. Factor Date Anal 03), TOTAL MCL E310.1 Dil. Factor Date Anal 03), TOTAL MCL SW8015B Site: <</td><td>S) MW-2 Connected: Objected: <th< td=""><td>S) MV-2 Connected: Obj (0/2009 10:30) SPL Sample ID: Ost (0/2009 10:30) Site: San Juan County, NM Result QUAL Rep.Limit Dil. Factor Date Analyzed Analyst O3), TOTAL MCL E310.1 Units: mg/K D3) 227 25.2 1 06/15/09 12:30 PAC RGANICS MCL SW8015B Units: mg/K ND 0.13 1 06/19/09 11:26 WLV ane 101 % 63-142 1 06/19/09 11:26 WLV ane 101 % 50-159 1 06/19/09 11:26 WLV ane 101 % 50-159 1 06/19/09 11:26 WLV ane 101 % 50-159 1 06/19/09 11:26 WLV prep Date Prep Initials Prep Factor 06/19/09 11:26 WLV MD 6.31 1 06/19/09 11:26 WLV ND 6.31 1 06/19/09 11:26 WLV ND 6.31 1 06/19/09 11:26 WLV</td></th<></td></thc<>	S) MV-2 Conected: OB/10/2009 IO.30 Site: San Juan County, Ni Result QUAL Rep.Limit Dil. Factor O3), TOTAL MCL Site: San Juan County, Ni RGANICS MCL Site: San Juan County, Ni RGANICS MCL Site: San Juan County, Ni Inne 101 % 63-142 1 Inne 101 % 63-142 1 Izene 101 % 50-159 1 Prep Date Prep Initials Prep Factor Io6/19/2009 9:19 XML 1.00 PHY MCL E300 ND 6.31 1 Inne ND 6.31 1 ND 6.31 1 1 Site ND 6.31 1 ND 6.31 1 1 ND 6.31 1 1 ND 6.31 1 1 ND 0.0378	S/ MW-2 Connected: 00/10/2009 S/L San Site: San Juan County, NM MCL E310.1 03), TOTAL MCL E310.1 Dil. Factor Date Anal 03), TOTAL MCL E310.1 Dil. Factor Date Anal 03), TOTAL MCL E310.1 Dil. Factor Date Anal 03), TOTAL MCL SW8015B Site: <	S) MW-2 Connected: Objected: Objected: <th< td=""><td>S) MV-2 Connected: Obj (0/2009 10:30) SPL Sample ID: Ost (0/2009 10:30) Site: San Juan County, NM Result QUAL Rep.Limit Dil. Factor Date Analyzed Analyst O3), TOTAL MCL E310.1 Units: mg/K D3) 227 25.2 1 06/15/09 12:30 PAC RGANICS MCL SW8015B Units: mg/K ND 0.13 1 06/19/09 11:26 WLV ane 101 % 63-142 1 06/19/09 11:26 WLV ane 101 % 50-159 1 06/19/09 11:26 WLV ane 101 % 50-159 1 06/19/09 11:26 WLV ane 101 % 50-159 1 06/19/09 11:26 WLV prep Date Prep Initials Prep Factor 06/19/09 11:26 WLV MD 6.31 1 06/19/09 11:26 WLV ND 6.31 1 06/19/09 11:26 WLV ND 6.31 1 06/19/09 11:26 WLV</td></th<>	S) MV-2 Connected: Obj (0/2009 10:30) SPL Sample ID: Ost (0/2009 10:30) Site: San Juan County, NM Result QUAL Rep.Limit Dil. Factor Date Analyzed Analyst O3), TOTAL MCL E310.1 Units: mg/K D3) 227 25.2 1 06/15/09 12:30 PAC RGANICS MCL SW8015B Units: mg/K ND 0.13 1 06/19/09 11:26 WLV ane 101 % 63-142 1 06/19/09 11:26 WLV ane 101 % 50-159 1 06/19/09 11:26 WLV ane 101 % 50-159 1 06/19/09 11:26 WLV ane 101 % 50-159 1 06/19/09 11:26 WLV prep Date Prep Initials Prep Factor 06/19/09 11:26 WLV MD 6.31 1 06/19/09 11:26 WLV ND 6.31 1 06/19/09 11:26 WLV ND 6.31 1 06/19/09 11:26 WLV

Prep Method	Prep Date	Prep Initials	Prep Factor
SW 3050B	06/18/2009 17:00	AB1	1.00
SW 3050B	06/16/2009 10:30	AB1	1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

- >MCL Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution
- MI Matrix Interference



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:(7-8.5) MW-2

Collected: 06/10/2009 10:50

SPL Sample ID: 09

09060712-01

Site: San Juan County, NM								
Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #	
METALS BY METHOD 60	20A, TOTAL			MCL SV	V6020A Un	its: mg/kg	g-dry	
Antimony	ND		0.631	1	06/17/09 22:55	AL_H	507240	
Arsenic	2.42		0.631	1	06/17/09 22:55	AL_H	507240	
Barium	66.3		0.631	1	06/18/09 13:09	AL_H	507306	
Beryllium	ND		0.504	1	06/18/09 13:09	AL_H	507306	
Cadmium	ND		0.631	1	06/17/09 22:55	AL_H	507240	
Chromium	2.68		0.631	1	06/17/09 22:55	AL_H	507240	
Cobalt	2.24		0.631	1	06/17/09 22:55	AL_H	507240	
Copper	5.37		0.631	1	06/17/09 22:55	AL_H	507240	
Lead	3.97		0.631	1	06/17/09 22:55	AL_H	507240	
Manganese	140		0.631	1	06/18/09 13:09	AL_H	507306	
Molybdenum	ND	·	0.631	1	06/17/09 22:55	AL_H	507240	
Nickel	2.81		0.631	1	06/17/09 22:55	AL_H	507240	
Selenium	ND		0.631	1	06/17/09 22:55	AL_H	507240	
Silver	ND		0.631	1	06/17/09 22:55	AL_H	5072400	
Thallium	ND		0.631	1	06/17/09 22:55	AL_H	5072400	
Vanadium	6.26		0.631	1	06/17/09 22:55	AL_H	507240	
Zinc	13.4		1 26	1	06/17/09 22:55	AL H	507240	

Prep Method	Prep Date	Prep Initials	Prep Factor
SW 3050B	06/16/2009 10:30	AB1	1.00

PERCENT MOISTURE			MCL		D2216	Ur	nits: wt%	
Percent Moisture	20.7	0		1	06/15/09 1	7:02	EB1	5068030
SEMIVOLATILE HYDROCARBOI	NS		MCL		SW8015B	Ur	nits: mg/kg	g-dry
Diesel Range Organics	. ND	6.3		1	06/19/09	1:18	NW	5085860
Fuel Oil Range Organics	ND	13		1	06/19/09	1:18	NW	5085860
Hydraulic Fluid Range Organics	ND	13		1	06/19/09	1:18	NW	5085860
Kerosene Range Organics	ND	13		1	06/19/09	1:18	NW	5085860
Mineral Spirits Range Organics	ND	13		1	06/19/09	1:18	NW	5085860
Oil Range Organics	ND	13		1	06/19/09	1:18	NW	5085860
Surr: n-Pentacosane	68.3	% 20-154		1	06/19/09	1:18	NW	5085860

Prep Method	Prep Date	Prep Initials	Prep Factor
SW 3550B	06/18/2009 14:12	QMT	1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

09060712 Page 5 6/29/2009 4:35:15 PM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:(7-8.5) MW-2

Collected: 06/10/2009 10:50

SPL Sample ID: 09

09060712-01

Analyses/Method Result QUAL Rep. Limit DIL Factor Date Analyze Analyse Seq. # SEMIVOLATILE ORGANICS BY METHOD 8270C MCL SW8270C Units: ug/kg-dr 1.2-bichtorobenzene ND 420 1 06/1809 19:57 GY 5074321 1.2-bichtorobenzene ND 420 1 06/1809 19:57 GY 5074321 1.4-bichtorobenzene ND 420 1 06/1809 19:57 GY 5074321 2.4-5.Trichkorophenol ND 420 1 06/1809 19:57 GY 5074321 2.4-Dichtorobenzene ND 420 1 06/1809 19:57 GY 5074321 2.4-Dintorophenol ND 420 1 06/1809 19:57 GY 5074321 2.4-Dintorobuene ND 420 1 06/1809 19:57 GY 5074321 2.4-Dintorobuene ND 420 1 06/1809 19:57 GY 5074321 2.4-Dintorobuene ND 420 1			Site: San	Juan County, N	vi		
SEMIVOLATILE ORGANICS BY METHOD 8270C MCL SW8270C Units: ug/kg-dry 1,2,2-hichtorobenzene ND 420 1 06/18/09 19:57 GY 5074321 1,2-Dichtorobenzene ND 420 1 06/18/09 19:57 GY 5074321 1,2-Dichtorobenzene ND 420 1 06/18/09 19:57 GY 5074321 1,4-Dichtorobenzene ND 420 1 06/18/09 19:57 GY 5074321 2,4,5-Trichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dichtorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dintoroblene ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dintoroblene ND 1000 1 06/18/09 19:57 GY 5074321 2,4-Dintroblene ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dintroblene ND 420 1 06/18/09 19:57 GY	Analyses/Method	Result QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
1,2-Linchorobenzene ND 420 1 06/18/09 19:57 GY 5074321 1,2-Diphenyhydrazine ND 420 1 06/18/09 19:57 GY 5074321 1,2-Diphenyhydrazine ND 420 1 06/18/09 19:57 GY 5074321 1,4-Dichlorobenzene ND 420 1 06/18/09 19:57 GY 5074321 2,4,5-Trichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4,5-Trichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dimethylphenol ND 420 1	SEMIVOLATILE ORGANICS B	Y METHOD 8270C		MCL SV	V8270C Un	its: ug/kg	-dry
1,2-Dichlorobenzene ND 420 1 06/18/09 19:57 GY 5074321 1,2-Dichlorobenzene ND 420 1 06/18/09 19:57 GY 5074321 1,3-Dichlorobenzene ND 420 1 06/18/09 19:57 GY 5074321 2,4,5-Trichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4,6-Trichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dintrobhenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dintrobhenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dintrobluene ND 1000 1 06/18/09 19:57 GY 5074321 2,4-Dintrobluene ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dintrobluene ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dintrobluene ND 420 1 06/18/09	1,2,4-Trichlorobenzene	ND	420	1	06/18/09 19:57	GY	5074321
1,2-Diphenythydrazine ND 420 1 06/18/09 19:57 GY 5074321 1,3-Dichlorobenzene ND 420 1 06/18/09 19:57 GY 5074321 1,4-Dichlorobenzene ND 420 1 06/18/09 19:57 GY 5074321 2,4,5-Trichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dintrophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dintrotoluene ND 1000 1 06/18/09 19:57 GY 5074321 2,4-Dintrotoluene ND 1000 1 06/18/09 19:57 GY 5074321 2,4-Dintrotoluene ND 420 1 06/18/09 19:57 GY 5074321 2,-Chiorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,-Nitrophenol ND 420 1 06/18/09	1,2-Dichlorobenzene	ND	420	1	06/18/09 19:57	GY	5074321
1,3-Dichlorobenzene ND 420 1 06/18/09 19:57 GY 5074321 1,4-Dichlorobenzene ND 420 1 06/18/09 19:57 GY 5074321 2,4,5-Trichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dicthyrophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dicthyrophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dinetryphenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dinitryphenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dinitryphenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dinitryphenol ND 420 1 06/18/09 19:57 GY 5074321 2,-Chioronphithalene ND 420 1 06/18/09 19:57 GY 5074321 2-Nitrophithalene ND 420 1 06/18	1,2-Diphenylhydrazine	ND	420	1	06/18/09 19:57	GY	5074321
1.4-Dicklorobenzene ND 420 1 06/18/09 19:57 GY 5074321 2.4,5-Trichlorophenol ND 1000 1 06/18/09 19:57 GY 5074321 2.4,6-Trichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2.4-Dirkhrophenol ND 420 1 06/18/09 19:57 GY 5074321 2.4-Dirkhrophenol ND 1000 1 06/18/09 19:57 GY 5074321 2.4-Dirkhrophenol ND 1000 1 06/18/09 19:57 GY 5074321 2.4-Dirkhrophenol ND 420 1 06/18/09 19:57 GY 5074321 2.Chorophenol ND 420 1 06/18/09 19:57 GY 5074321 2.Nitrophinalene ND 420 1 06/18/09 19:57 GY 5074321 2.Nitrophinal ND 1000 1 06/18/09 19:57 GY 5074321 3.3'Dichlorobenzidine ND 1000 1 06/18/09	1,3-Dichlorobenzene	ND	420	1	06/18/09 19:57	GY	5074321
2,4,5-Trichlorophenol ND 1000 1 06/18/09 19:57 GY 5074321 2,4,6-Trichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dinitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 2,4-Dinitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 2,4-Dinitrobluene ND 420 1 06/18/09 19:57 GY 5074321 2,Chlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,Chlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,Chlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,Methynaphthalene ND 420 1 06/18/09 19:57 GY 5074321 3,3'-Dichtorboendidine ND 420 1 06/18/09	1,4-Dichlorobenzene	ND	420	1	06/18/09 19:57	GY	5074321
2,4,6-Trichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dinethylphenol ND 420 1 06/18/09 19:57 GY 5074321 2,4-Dinitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 2,4-Dinitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 2,4-Dinitrophenol ND 420 1 06/18/09 19:57 GY 5074321 2,6-Dinitrotoluene ND 420 1 06/18/09 19:57 GY 5074321 2.Chloronaphthalane ND 420 1 06/18/09 19:57 GY 5074321 2.Nitrophenol ND 420 1 06/18/09 19:57 GY 5074321 2.Nitrophenol ND 420 1 06/18/09 19:57 GY 5074321 2.Nitrophenol ND 420 1 06/18/09 19:57 GY 5074321 3.3'Dichkroobenzidine ND 420 1 06/18/09 19:57 </td <td>2,4,5-Trichlorophenol</td> <td>ND</td> <td>1000</td> <td>1</td> <td>06/18/09 19:57</td> <td>GY</td> <td>5074321</td>	2,4,5-Trichlorophenol	ND	1000	1	06/18/09 19:57	GY	5074321
2.4-Dichlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2.4-Diintrophenol ND 420 1 06/18/09 19:57 GY 5074321 2.4-Diintrotoluene ND 1000 1 06/18/09 19:57 GY 5074321 2.4-Diintrotoluene ND 420 1 06/18/09 19:57 GY 5074321 2.Chiorophenol ND 420 1 06/18/09 19:57 GY 5074321 2.Chiorophenol ND 420 1 06/18/09 19:57 GY 5074321 2.Witrophenol ND 420 1 06/18/09 19:57 GY 5074321 2.Nitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 3.3'-Dichtorobenzidine ND 420 1 06/18/09 19:57 GY 5074321 4.6-Dinitro-2-methylphenol ND 1000 1 06/18/09 19:57 GY 5074321 4.7-Chioroaniline ND 420 1 06/18/09 19:	2,4,6-Trichlorophenol	ND	420	1	06/18/09 19:57	GY	5074321
2.4-Dimethylphenol ND 420 1 06/18/09 19:57 GY 5074321 2.4-Dinitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 2.4-Dinitrobluene ND 1000 1 06/18/09 19:57 GY 5074321 2.6-Dinitrobluene ND 420 1 06/18/09 19:57 GY 5074321 2.6-Dinitrobluene ND 420 1 06/18/09 19:57 GY 5074321 2.Chlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2.Nitrophenol ND 420 1 06/18/09 19:57 GY 5074321 3.3'-Dichlorobenzidine ND 420 1 06/18/09 19:57 GY 5074321 3.4'Dichlorobenzidine ND 420 1 06/18/09 19:57 GY 5074321 4.6-Dinitro-2-methylphenol ND 1000 1 06/18/09 19:57 GY 5074321 4.Chloro-3-methylphenol ND 420 1 <	2,4-Dichlorophenol	ND	420	1	06/18/09 19:57	GY	5074321
2,4-Dinitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 2,4-Dinitrotoluene ND 1000 1 06/18/09 19:57 GY 5074321 2,6-Dinitrotoluene ND 420 1 06/18/09 19:57 GY 5074321 2-Chicorophthalene ND 420 1 06/18/09 19:57 GY 5074321 2-Chicorophthalene ND 420 1 06/18/09 19:57 GY 5074321 2-Mitrophthalene ND 420 1 06/18/09 19:57 GY 5074321 2-Nitrophenol ND 420 1 06/18/09 19:57 GY 5074321 3-Nitroaniline ND 420 1 06/18/09 19:57 GY 5074321 3-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4-Chicroaniline ND 420 1 06/18/09 19:57 GY 5074321 4-Chicroaniline ND 420 1 06/18/09 19:57	2,4-Dimethylphenol	ND	420	1	06/18/09 19:57	GY	5074321
2.4-Dinitrotoluene ND 1000 1 06/18/09 19:57 GY 5074321 2.6-Dinitrotoluene ND 420 1 06/18/09 19:57 GY 5074321 2-Chloronaphthalene ND 420 1 06/18/09 19:57 GY 5074321 2-Chlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2-Methylnaphthalene ND 420 1 06/18/09 19:57 GY 5074321 2-Nitrophenol ND 420 1 06/18/09 19:57 GY 5074321 3.3-Dichtorobenzidine ND 420 1 06/18/09 19:57 GY 5074321 3.3-Dichtorobenzidine ND 420 1 06/18/09 19:57 GY 5074321 4-Bromophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroaniline ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroaniline ND 420 1 06/18	2,4-Dinitrophenol	ND	1000	1	06/18/09 19:57	GY	5074321
2,6-Dinitrotoluene ND 420 1 06/18/09 19:57 GY 5074321 2-Chloronaphthalene ND 420 1 06/18/09 19:57 GY 5074321 2-Chlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2-Methylnaphthalene ND 420 1 06/18/09 19:57 GY 5074321 2-Nitroaniline ND 420 1 06/18/09 19:57 GY 5074321 3.7 Dichlorobenzidine ND 420 1 06/18/09 19:57 GY 5074321 3.7 Dichlorobenzidine ND 420 1 06/18/09 19:57 GY 5074321 3.7 Dichlorobenzidine ND 1000 1 06/18/09 19:57 GY 5074321 4.6 Dinitro-2-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4.5 Dinitro-2-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4.5 Dinitro-2-methylphenol ND 420 <t< td=""><td>2,4-Dinitrotoluene</td><td>ND</td><td>1000</td><td>1</td><td>06/18/09 19:57</td><td>GY</td><td>5074321</td></t<>	2,4-Dinitrotoluene	ND	1000	1	06/18/09 19:57	GY	5074321
2-Chloronaphthalene ND 420 1 06/18/09 19:57 GY 5074321 2-Chlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2-Methylnaphthalene ND 420 1 06/18/09 19:57 GY 5074321 2-Nitroanilline ND 1000 1 06/18/09 19:57 GY 5074321 2-Nitroanilline ND 1000 1 06/18/09 19:57 GY 5074321 3-Nitroanilline ND 420 1 06/18/09 19:57 GY 5074321 4-6-Dinitro-2-methylphenol ND 1000 1 06/18/09 19:57 GY 5074321 4-Chloroa-smethylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroa-smethylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroanilline ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroanilline ND 420 1 0	2,6-Dinitrotoluene	ND	420	1	06/18/09 19:57	GY	5074321
2-Chlorophenol ND 420 1 06/18/09 19:57 GY 5074321 2-Methytnaphthalene ND 420 1 06/18/09 19:57 GY 5074321 2-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 2-Nitrophenol ND 420 1 06/18/09 19:57 GY 5074321 3.3-Dichlorobenzidine ND 420 1 06/18/09 19:57 GY 5074321 3.4-Dichlorobenzidine ND 1000 1 06/18/09 19:57 GY 5074321 4-Bromophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroa-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroa-miline ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroa-illine ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroa-illine ND 420 1 06/18	2-Chloronaphthalene	ND	420	1	06/18/09 19:57	GY	5074321
2-Methylnaphthalene ND 420 1 06/18/09 19:57 GY 5074321 2-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 2-Nitrophenol ND 420 1 06/18/09 19:57 GY 5074321 3,3'-Dichlorobenzidine ND 420 1 06/18/09 19:57 GY 5074321 4,6-Dinitro-2-methylphenol ND 1000 1 06/18/09 19:57 GY 5074321 4.6-Dinitro-2-methylphenol ND 1000 1 06/18/09 19:57 GY 5074321 4.6-Dinitro-2-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroa-Illine ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroa-Illine ND 1000 1 06/18/09 19:57 GY 5074321 4-Chloroa-Illine ND 1000 1 06/18/09 1	2-Chlorophenol	ND	420	1	06/18/09 19:57	GY	5074321
2-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 2-Nitrophenol ND 420 1 06/18/09 19:57 GY 5074321 3.3'-Dichlorobenzidine ND 420 1 06/18/09 19:57 GY 5074321 3-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4.6-Dinitro-2-methylphenol ND 1000 1 06/18/09 19:57 GY 5074321 4.Formophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroa-initine ND 1000 1 06/18/09 19:57 GY 5074321 4-Chloroa-inenyl phenyl ether ND 420 1	2-Methylnaphthalene	ND	420	1	06/18/09 19:57	GY	5074321
2-Nitrophenol ND 420 1 06/18/09 19:57 GY 5074321 3,3'-Dichlorobenzidine ND 420 1 06/18/09 19:57 GY 5074321 3-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4-Bromophenyl phenyl ether ND 1000 1 06/18/09 19:57 GY 5074321 4-Chloro-3-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chloro-aniline ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroaniline ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroaniline ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4-Chloroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4-Chloroaniline ND 420 1 06/18/09 19:	2-Nitroaniline	ND	1000	1	06/18/09 19:57	GY	5074321
3.3'-Dichlorobenzidine ND 420 1 06/18/09 19:57 GY 5074321 3-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4,6-Dinitro-2-methylphenol ND 1000 1 06/18/09 19:57 GY 5074321 4-Bromophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Chloro-3-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chloro-3-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chlorophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Chlorophenyl phenyl ether ND 1000 1 06/18/09 19:57 GY 5074321 4-Chlorophenyl phenyl ether ND 1000 1 06/18/09 19:57 GY 5074321 4-Chlorophenyl phenyl ether ND 420 <td< td=""><td>2-Nitrophenol</td><td>· ND</td><td>420</td><td>1</td><td>06/18/09 19:57</td><td>GY</td><td>5074321</td></td<>	2-Nitrophenol	· ND	420	1	06/18/09 19:57	GY	5074321
3-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4,6-Dinitro-2-methylphenol ND 1000 1 06/18/09 19:57 GY 5074321 4-Bromophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Chloro-3-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chloro-3-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroaniline ND 420 1 06/18/09 19:57 GY 5074321 4-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4-Nitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 Acenaphthene ND 420 1 06/18/09 19:57 GY 5074321 Anitine ND 420 1 06/18/09 19:57	3,3'-Dichlorobenzidine	ND	420	1	06/18/09 19:57	GY	5074321
4,6-Dinitro-2-methylphenol ND 1000 1 06/18/09 19:57 GY 5074321 4-Bromophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Chloro-3-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chloro-3-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroaniline ND 420 1 06/18/09 19:57 GY 5074321 4-Chlorophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4-Nitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 Acenaphthene ND 420 1 06/18/09 19:57 GY 5074321 Acenaphthylene ND 420 1 06/18/09 19:5	3-Nitroaniline	ND	1000	1	06/18/09 19:57	GY	5074321
4-Bromophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Chloro-3-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroaniline ND 420 1 06/18/09 19:57 GY 5074321 4-Chlorophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4-Nitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 Acenaphthene ND 420 1 06/18/09 19:57 GY 5074321 Acenaphthene ND 420 1 06/18/09 19:57 GY 5074321 Acenaphthylene ND 420 1 06/18/09 19:57 GY 5074321 Acenaphthylene ND 420 1 06/18/09 19:57 GY 5074321 Acenaphthylene ND 420 1 06/18/09 19:57	4,6-Dinitro-2-methylphenol	ND	1000	1	06/18/09 19:57	GY	5074321
4-Chloro-3-methylphenol ND 420 1 06/18/09 19:57 GY 5074321 4-Chloroaniline ND 420 1 06/18/09 19:57 GY 5074321 4-Chlorophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4-Nitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 Acenaphthene ND 1000 1 06/18/09 19:57 GY 5074321 Acenaphthylene ND 420 1 06/18/09 19:57 GY 5074321 Antiree ND 420 1 06/18/09 19:57 GY 5074321 Anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY	4-Bromophenyl phenyl ether	ND	420	1	06/18/09 19:57	GY	5074321
4-Chloroaniline ND 420 1 06/18/09 19:57 GY 5074321 4-Chlorophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4-Nitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 Acenaphthene ND 1000 1 06/18/09 19:57 GY 5074321 Acenaphthene ND 420 1 06/18/09 19:57 GY 5074321 Acenaphthylene ND 420 1 06/18/09 19:57 GY 5074321 Aniline ND 420 1 06/18/09 19:57 GY 5074321 Anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(b)fluoranthene ND 420 1 06/18/09 19:57 GY	4-Chloro-3-methylphenol	ND	420	1	06/18/09 19:57	GY	5074321
4-Chlorophenyl phenyl ether ND 420 1 06/18/09 19:57 GY 5074321 4-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4-Nitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 Acenaphthene ND 420 1 06/18/09 19:57 GY 5074321 Acenaphthylene ND 420 1 06/18/09 19:57 GY 5074321 Aniline ND 420 1 06/18/09 19:57 GY 5074321 Anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(b)fluoranthene ND 420 1 06/18/09 19:57 GY 507432	4-Chloroaniline	ND	420	1	06/18/09 19:57	GY	5074321
4-Nitroaniline ND 1000 1 06/18/09 19:57 GY 5074321 4-Nitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 Acenaphthene ND 420 1 06/18/09 19:57 GY 5074321 Acenaphthylene ND 420 1 06/18/09 19:57 GY 5074321 Anenaphthylene ND 420 1 06/18/09 19:57 GY 5074321 Anitine ND 420 1 06/18/09 19:57 GY 5074321 Anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(b)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(k)fluoranthene ND 420 1 06/18/09 19:57 GY	4-Chlorophenyl phenyl ether	ND	420	1	06/18/09 19:57	GY	5074321
4-Nitrophenol ND 1000 1 06/18/09 19:57 GY 5074321 Acenaphthene ND 420 1 06/18/09 19:57 GY 5074321 Acenaphthylene ND 420 1 06/18/09 19:57 GY 5074321 Aniline ND 420 1 06/18/09 19:57 GY 5074321 Aniline ND 420 1 06/18/09 19:57 GY 5074321 Anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benz(a)anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(b)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(g,h,i)perylene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(k)fluoranthene ND 420 1 06/18/09 19:57 GY <t< td=""><td>4-Nitroaniline</td><td>· ND</td><td>1000</td><td>1</td><td>06/18/09 19:57</td><td>GY</td><td>5074321</td></t<>	4-Nitroaniline	· ND	1000	1	06/18/09 19:57	GY	5074321
AcenaphtheneND420106/18/09 19:57GY5074321AcenaphthyleneND420106/18/09 19:57GY5074321AnilineND420106/18/09 19:57GY5074321AnilineND420106/18/09 19:57GY5074321AnthraceneND420106/18/09 19:57GY5074321Benz(a)anthraceneND420106/18/09 19:57GY5074321Benzo(a)pyreneND420106/18/09 19:57GY5074321Benzo(b)fluorantheneND420106/18/09 19:57GY5074321Benzo(g,h,i)peryleneND420106/18/09 19:57GY5074321Benzo(k)fluorantheneND420106/18/09 19:57GY5074321Benzo(k)fluorantheneND420106/18/09 19:57GY5074321Benzo(k)fluorantheneND420106/18/09 19:57GY5074321Benzo(k)fluorantheneND420106/18/09 19:57GY5074321Benzol caidND420106/18/09 19:57GY5074321Benzyl alcoholND420106/18/09 19:57GY5074321Bis(2-chloroethoxy)methaneND420106/18/09 19:57GY5074321Bis(2-chloroethyl)etherND420106/18/09 19:57GY5074321	4-Nitrophenol	ND	1000	1	06/18/09 19:57	GY	5074321
Acenaphthylene ND 420 1 06/18/09 19:57 GY 5074321 Aniline ND 420 1 06/18/09 19:57 GY 5074321 Aniline ND 420 1 06/18/09 19:57 GY 5074321 Anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benz(a)anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benz(a)anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(b)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(g,h,i)perylene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(k)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzoic acid ND 2000 1 06/18/09 19:57 GY	Acenaphthene	ND	420	1	06/18/09 19:57	GY	5074321
Aniline ND 420 1 06/18/09 19:57 GY 5074321 Anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benz(a)anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benz(a)anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(g,h,i)perylene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(k)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzoic acid ND 2000 1 06/18/09 19:57 GY 5074321 Benzyl alcohol ND 420 1 06/18/09 19:57 GY	Acenaphthylene	ND	420	1	06/18/09 19:57	GY	5074321
Anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benz(a)anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benz(a)anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(g)hiluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(g,h,i)perylene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(k)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzoic acid ND 2000 1 06/18/09 19:57 GY 5074321 Benzyl alcohol ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57	Aniline	ND	420	1	06/18/09 19:57	GY	5074321
Benz(a)anthracene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(b)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(g,h,i)perylene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(k)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzoic acid ND 2000 1 06/18/09 19:57 GY 5074321 Benzyl alcohol ND 2000 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57	Anthracene	ND	420	1	06/18/09 19:57	GY	5074321
Benzo(a)pyrene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(b)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(g,h,i)perylene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(g,h,i)perylene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(k)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(a)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzoic acid ND 2000 1 06/18/09 19:57 GY 5074321 Benzyl alcohol ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethyl)ether ND 420 1 06/18/09 19:57 GY 5074321	Benz(a)anthracene	ND	420	1	06/18/09 19:57	GY	5074321
Benzo(b)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(g,h,i)perylene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(k)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(k)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzoic acid ND 2000 1 06/18/09 19:57 GY 5074321 Benzyl alcohol ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethyl)ether ND 420 1 06/18/09 19:57 GY 5074321	Benzo(a)pyrene	ND	420	1	06/18/09 19:57	GY	5074321
Benzo(g,h,i)perylene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(k)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzo(k)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzoic acid ND 2000 1 06/18/09 19:57 GY 5074321 Benzyl alcohol ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57 GY 5074321	Benzo(b)fluoranthene	ND	420	1	06/18/09 19:57	GY	5074321
Benzo(k)fluoranthene ND 420 1 06/18/09 19:57 GY 5074321 Benzoic acid ND 2000 1 06/18/09 19:57 GY 5074321 Benzyl alcohol ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethyl)ether ND 420 1 06/18/09 19:57 GY 5074321	Benzo(g,h,i)perylene	ND	420	1	06/18/09 19:57	GY	5074321
Benzoic acid ND 2000 1 06/18/09 19:57 GY 5074321 Benzyl alcohol ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethyl)ether ND 420 1 06/18/09 19:57 GY 5074321	Benzo(k)fluoranthene	ND	420	1	06/18/09 19:57	GY	5074321
Benzyl alcohol ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethyl)ether ND 420 1 06/18/09 19:57 GY 5074321	Benzoic acid	ND	2000	1	06/18/09 19:57	GY	5074321
Bis(2-chloroethoxy)methane ND 420 1 06/18/09 19:57 GY 5074321 Bis(2-chloroethyl)ether ND 420 1 06/18/09 19:57 GY 5074321	Benzyl alcohol	ND	420	1	06/18/09 19:57	GY	5074321
Bis(2-chloroethyl)ether ND 420 1 06/18/09 19:57 GY 5074321	Bis(2-chloroethoxy)methane	ND	420	1	06/18/09 19:57	GY	5074321
	Bis(2-chloroethyl)ether	ND	420	1	06/18/09 19:57	GY	5074321

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

09060712 Page 6 6/29/2009 4:35:15 PM



8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:(7-8.5) MW-2

Collected: 06/10/2009 10:50

SPL Sample ID: 09060712-01

			Site:	San Jua	an County, NM			
Analyses/Method	Result	QUAL	Rep.Li	mit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND			420	1	06/18/09 19:57	GY	5074321
Bis(2-ethylhexyl)phthalate	ND			420	1	06/18/09 19:57	GY	5074321
Butyl benzyl phthalate	ND			420	1	06/18/09 19:57	GY	5074321
Carbazole	ND			420	1	06/18/09 19:57	GY	5074321
Chrysene	ND			420	1	06/18/09 19:57	GY	5074321
Dibenz(a,h)anthracene	ND			420	1	06/18/09 19:57	GY	5074321
Dibenzofuran	ND			420	1	06/18/09 19:57	GY	5074321
Diethyl phthalate	ND			420	1	06/18/09 19:57	GY	5074321
Dimethyl phthalate	ND			420	1	06/18/09 19:57	GY	5074321
Di-n-butyl phthalate	ND			420 [.]	1	06/18/09 19:57	GY	5074321
Di-n-octyl phthalate	ND			420	1	06/18/09 19:57	GY	5074321
Fluoranthene	ND			420	1	06/18/09 19:57	GY	5074321
Fluorene	ND			420	1	06/18/09 19:57	GY	5074321
Hexachlorobenzene	ND			420	1	06/18/09 19:57	GY	5074321
Hexachlorobutadiene	ND			420	1	06/18/09 19:57	GY	5074321
Hexachlorocyclopentadiene	ND			420	1	06/18/09 19:57	GY	5074321
Hexachloroethane	ND			420	1	06/18/09 19:57	GY	5074321
Indeno(1,2,3-cd)pyrene	ND			420	1	06/18/09 19:57	GY	5074321
Isophorone	ND			420	1	06/18/09 19:57	GY	5074321
Naphthalene	ND			420	1	06/18/09 19:57	GY	5074321
Nitrobenzene	ND	,		420	1	06/18/09 19:57	GY	5074321
N-Nitrosodi-n-propylamine	ND			420	1	06/18/09 19:57	GY	5074321
N-Nitrosodiphenylamine	ND			420	1	06/18/09 19:57	GY	5074321
Pentachlorophenol	ND		. 1	. 000	1	06/18/09 19:57	GY	5074321
Phenanthrene	ND			420	1	06/18/09 19:57	GY	5074321
Phenol	ND			420	1	06/18/09 19:57	GY	5074321
Pyrene	ND			420	1	06/18/09 19:57	GY	5074321
Pyridine	ND			420	1	06/18/09 19:57	GY	5074321
2-Methylphenol	ND			420	1	06/18/09 19:57	GY	5074321
3 & 4-Methylphenol	ND			420	1	06/18/09 19:57	GY	5074321
Surr: 2,4,6-Tribromophenol	92.0		% 19-	135	1	06/18/09 19:57	GY	5074321
Surr: 2-Fluorobiphenyl	70.6		% 15-	140	1	06/18/09 19:57	GY	5074321
Surr: 2-Fluorophenol	64.0		% 15-	122	1	06/18/09 19:57	GY	5074321
Surr: Nitrobenzene-d5	59.4		% 10-	134	1	06/18/09 19:57	GY	5074321
Surr: Phenol-d5	62.4		% 10-	123	1	06/18/09 19:57	GY	5074321
Surr: Terphenyl-d14	69.4		% 18-	166	1	06/18/09 19:57	GY	5074321

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550C	06/15/2009 10:31	FAK	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

09060712 Page 7 6/29/2009 4:35:15 PM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

SPL Sample ID:

09060712-01

Client Sample ID:(7-8.5) MW-2

Collected: 06/10/2009 10:50

		Site: San		Dunty, Nr	/			
Result	QUAL	Rep.Limit		Dil. Factor	Date Anal	yzed	Analyst	Seq. #
RBONS			MCL		E418.1	Un	its: mg/kg	g-dry
ND		13	-	1	06/15/09	15:24	LLL	5067477
	Result RBONS ND	Result QUAL RBONS ND	Result QUAL Rep.Limit RBONS ND 13	Result QUAL Rep.Limit I RBONS MCL ND 13	Result QUAL Rep.Limit Dil. Factor RBONS MCL ND 13 1	Result QUAL Rep.Limit Dil. Factor Date Analy RBONS MCL E418.1 ND 13 1 06/15/09	ResultQUALRep.LimitDil. FactorDate AnalyzedRBONSMCLE418.1UnND13106/15/09 15:24	Result QUAL Rep.Limit Dil. Factor Date Analyzed Analyst RBONS MCL E418.1 Units: mg/kg ND 13 1 06/15/09 15:24 LLL

Prep Method	Prep Date	Prep Initials	Prep Factor
	06/15/2009 11:10		1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

> 09060712 Page 8 6/29/2009 4:35:15 PM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:(7-8.5) MW-2

Collected: 06/10/2009 10:50

09060712-01 SPL Sample ID:

			Site: San	Juan County, N	М		
Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY ME	ETHOD 8260B			MCL SI	N8260B Ur	nits: ug/kg	j-dry
1,1,1,2-Tetrachloroethane	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,1,1-Trichloroethane	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,1,2,2-Tetrachloroethane	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,1,2-Trichloroethane	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,1-Dichloroethane	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,1-Dichloroethene	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,1-Dichloropropene	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,2,3-Trichlorobenzene	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,2,3-Trichloropropane	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,2,4-Trichlorobenzene	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,2,4-Trimethylbenzene	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,2-Dibromo-3-chloropropane	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,2-Dibromoethane	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,2-Dichlorobenzene	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,2-Dichloroethane	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,2-Dichloropropane	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,3,5-Trimethylbenzene	ND		6.3	1.	06/15/09 16:42	E_G	5068517
1,3-Dichlorobenzene	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,3-Dichloropropane	ND		6.3	1	06/15/09 16:42	E_G	5068517
1,4-Dichlorobenzene	ND		6.3	1	06/15/09 16:42	E_G	5068517
2,2-Dichloropropane	ND		6.3	1	06/15/09 16:42	E_G	5068517
2-Butanone	ND		25	1	06/15/09 16:42	E_G	5068517
2-Chloroethyl vinyl ether	ND		13	1	06/15/09 16:42	E_G	5068517
2-Chlorotoluene	ND		6.3	1	06/15/09 16:42	E_G	5068517
2-Hexanone	ND		13	1	06/15/09 16:42	E_G	5068517
4-Chlorotoluene	ND		6.3	. 1	06/15/09 16:42	E_G	5068517
4-Isopropyltoluene	ND		6.3	. 1	06/15/09 16:42	E_G	5068517
4-Methyl-2-pentanone	ND		13	1	06/15/09 16:42	E_G	5068517
Acetone	ND		130	1	06/15/09 16:42	E_G	5068517
Acrylonitrile	ND		63	1	06/15/09 16:42	E_G	5068517
Benzene	ND		6.3	1	06/15/09 16:42	E_G	5068517
Bromobenzene	ND		6.3	1	06/15/09 16:42	E_G	5068517
Bromochloromethane	ND		6.3	1	06/15/09 16:42	E_G	5068517
Bromodichloromethane	ND		6.3	1	06/15/09 16:42	E_G	5068517
Bromoform	ND		6.3	1	06/15/09 16:42	E_G	5068517
Bromomethane	ND		13	1	06/15/09 16:42	E_G	5068517
Carbon disulfide	ND		6.3	1	06/15/09 16:42	E_G	5068517
Carbon tetrachloride	ND		6.3	1	06/15/09 16:42	E_G	5068517
Chlorobenzene	ND		6.3	1	06/15/09 16:42	E_G	-5068517

Qualifiers:

ND/U - Not Detected at the Reporting Limit

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count



8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:(7-8.5) MW-2

Collected: 06/10/2009 10:50

SPL Sample ID: 09060712-01

Analyses/Method	Result	OLIAI	R	n Limit	Dil Eactor	Date Analyzed	Analyst	Sea #
Chloroethane	ND	QUAL	Ne	13	1	06/15/09 16:42	FG	506851
Chloroform				6.3	1	06/15/09 16:42	<u> </u>	506851
Chloromethane	ND			13	1	06/15/09 16:42	<u> </u>	506851
Dibromochloromethane	ND			63	1	06/15/09 16:42	E G	506851
Dibromometbane				6.3	1	06/15/09 16:42	E_0	506851
Dichlorodifluoromethane	ND			13	1	06/15/09 16:42	<u> </u>	506851
Ethylbenzene	ND			63	1	06/15/09 16:42	<u> </u>	506851
Hexachlorobutadiene	ND			6.3	1	06/15/09 16:42	<u> </u>	506851
Isopronylbenzene				6.3	1	06/15/09 16:42	<u> </u>	506851
Methyl tert-butyl ether	ND			6.3	1	06/15/09 16:42	<u> </u>	506851
Methylene chloride	ND			6.3	1	06/15/09 16:42	<u> </u>	506851
Naphthalene	ND			6.3	1	06/15/09 16:42	<u> </u>	506851
n-Butvibenzene				6.3	1	06/15/09 16:42	 F G	506851
n-Propyibenzene	ND			6.3	1	06/15/09 16:42	E G	506851
sec-Butylbenzene	ND			6.3	1	06/15/09 16:42	<u> </u>	506851
Styrene	ND			6.3	. 1	06/15/09 16:42	E G	5068517
tert-Butvibenzene	ND			6.3	1	06/15/09 16:42	<u> </u>	506851
Tetrachloroethene	ND			6.3	1	06/15/09 16:42	EG	506851
Toluene	ND			6.3	1	06/15/09 16:42	<u> </u>	506851
Trichloroethene	ND		•	6.3	1	06/15/09 16:42	EG	506851
Trichlorofluoromethane	ND			6.3	1	06/15/09 16:42	EG	506851
Vinvl acetate	ND			13	1	06/15/09 16:42	EG	506851
Vinyl chloride	ND			13	1	06/15/09 16:42	EG	506851
cis-1,2-Dichloroethene	ND			6.3	1	06/15/09 16:42	EG	5068517
cis-1,3-Dichloropropene	ND			6.3	1	06/15/09 16:42	E G	5068517
m,p-Xylene	ND			6.3	1	06/15/09 16:42	EG	5068517
o-Xylene	ND			6.3	1	06/15/09 16:42	EG	5068517
trans-1,2-Dichloroethene	ND			6.3	1	06/15/09 16:42	E_G	5068517
trans-1,3-Dichloropropene	ND	· · ·		6.3	1	06/15/09 16:42	E_G	5068517
Xylenes,Total	ND			6.3	1	06/15/09 16:42	E_G	5068517
1,2-Dichloroethene (total)	ND			6.3	1	06/15/09 16:42	E_G	5068517
Surr: 1,2-Dichloroethane-d4	103		%	71-130	1	06/15/09 16:42	E_G	5068517
Surr: 4-Bromofluorobenzene	95.0		%	65-131	1	06/15/09 16:42	E_G	5068517
Surr: Toluene-d8	105		%	75-136	1	06/15/09 16:42	EG	5068517

SW/5030B 06/13/2009 11:14 E.C. 1.00	Prep Initials Prep Fact	<u>Prep Date</u>	Prep Method
	1:14 E_G 1.00	06/13/2009 11:14	SW 5030B

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/V}}\xspace$ - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW	-4 (12.5-14)	_	Colle	ected: 06	5/09/2009 1	5:10	SPL San	nple I	D : 0906	0712-02
			Site	: San	Juan Cour	nty, NI	Л			
Analyses/Method	Resul	QUAL	Rej	p.Limit	Dil.	Factor	Date Anal	yzed	Analyst	Seq. #
GASOLINE RANGE O	RGANICS				MCL	SV	V8015B	Ur	nits: mg/kg	j-dry
Gasoline Range Organic	s ND			0.11		1	06/19/09	11:55	WLV	5075621
Surr: 1,4-Difluorobenz	ene 101		%	63-142		1	06/19/09	11:55	WLV	5075621
Surr: 4-Bromofluorobe	nzene 101		%	50-159		1	06/19/09	11:55	WLV	5075621
Prep Method	Prep Date	Prep Initials	Prep f	actor						
SW 5030B	06/19/2009 9:22	XML	1.00							
ION CHROMATOGRA	РНҮ				MCL	E300	.0 MOD	Ur	nits: mg/kg	j-dry
Bromide	ND			5.29		1	06/17/09	19:26	BDG	5073747
Chloride	324			10.6		2	06/19/09	20:55	BDG	5076749
Fluoride	ND			5.29		1	06/17/09	19:26	BDG	5073747
Ortho-phosphate (As P)	ND			5.29		1	06/19/09	20:35	BDG	5076748
Sulfate	254			10.6		2	06/19/09	20:55	BDG	5076749
Nitrogen, Nitrate (As N)	ND			5.29		1	06/17/09	19:26	BDG	5073687
Nitrogen, Nitrite (As N)	ND			5.29		1	06/17/09	19:26	BDG	5073687
MERCURY, TOTAL					MCL	SV	V7471A	Ur	nits: mg/kg	j-dry
Mercury	ND			0.0318		1	06/17/09	15:09	F_S	5071960
Prep Method	Prep Date	Prep Initials	Prep F	actor						
SW7471A	06/17/2009 12:00	F_S	1.00							
METALS BY METHOD	6010B, TOTAL				MCL	SV	V6010B	Ur	nits: mg/kg	j-dry
Aluminum	6320			10.6		1	06/18/09	14:21	EG	5073489
Boron	2.88			1.06		1	06/18/09	14:21	EG	5073489
Calcium	14200	·		10.6		1	06/18/09	14:21	EG	5073489
Iron	11600			1.06		1	06/18/09	14:21	EG	5073489

10.6

52.9

10.6

0.318

0.529

Prep Initials Prep Factor

1.00

1.00

Qualifiers:

Magnesium

Potassium

Strontium

Prep Method

SW 3050B

SW 3050B

Sodium

Tin

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits

2360

883

635

73.5

0.699

AB1

AB1

- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

Prep Date

06/18/2009 17:00

06/16/2009 10:30

- >MCL Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

1

1

1

1

1

06/18/09 14:21 EG

EG

EG

EG

EG

06/18/09 14:21

06/19/09 10:53

06/18/09 14:21

06/18/09 14:21

5073489

5073489

5075346

5073489

5073489



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

09060712-02

Client Sample ID:MW-4 (12.5-14)

Collected: 06/09/2009 15:10 SPL Sample ID:

			Site: San	Juan County, NM	n		
Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
METALS BY METHOD 60	020A, TOTAL			MCL SV	V6020A Un	its: mg/kg	g-dry
Antimony	ND		0.529	1	06/17/09 23:00	AL_H	5072407
Arsenic	2.35		0.529	1	06/17/09 23:00	AL_H	5072407
Barium	245		0.529	1	06/18/09 13:14	AL_H	5073067
Beryllium	ND		0.424	1	06/18/09 13:14	AL_H	5073067
Cadmium	ND		0.529	1	06/17/09 23:00	AL_H	5072407
Chromium	48.9		0.529	1	06/17/09 23:00	AL_H	5072407
Cobalt	4.49		0.529	1	06/17/09 23:00	AL_H	5072407
Copper	11.2		0.529	1	06/17/09 23:00	AL_H	5072407
Lead	5.94		0.529	1	06/17/09 23:00	AL_H	5072407
Manganese	364		0.529	1	06/18/09 13:14	AL_H	5073067
Molybdenum	1.84		0.529	1	06/17/09 23:00	AL_H	5072407
Nickel	6.41		0.529	· 1	06/17/09 23:00	AL_H	5072407
Selenium	ND		0.529	1	06/17/09 23:00	AL_H	5072407
Silver	ND		0.529	1	06/17/09 23:00	AL_H	5072407
Thallium	ND		0.529	1	06/17/09 23:00	AL_H	5072407
Vanadium	15.6		0.529	1	06/17/09 23:00	AL_H	5072407
Zinc	22.2		1.06	1	06/17/09 23:00	AL_H	5072407

Prep Method	Prep Date	Prep Initials	Prep Factor
SW 3050B	06/16/2009 10:30	AB1	1.00

PERCENT MOISTURE			MCL		D2216	Ur	nits: wt%	
Percent Moisture	5.55	0	•	1	06/15/09 1	17:02	EB1	5068029
SEMIVOLATILE HYDROCARBO	NS		MCL		SW8015B	Ur	nits: mg/kg	g-dry
Diesel Range Organics	ND	5.3		1	06/19/09	2:39	NW	5085864
Fuel Oil Range Organics	ND	11		1	06/19/09	2:39	NW	5085864
Hydraulic Fluid Range Organics	ND	11		1	06/19/09	2:39	NW	5085864
Kerosene Range Organics	ND	11		1	06/19/09	2:39	NW	5085864
Mineral Spirits Range Organics	ND	11		1	06/19/09	2:39	NW	5085864
Oil Range Organics	43	11		1	06/19/09	2:39	NW	5085864
Surr: n-Pentacosane	62.7	% 20-154		1	06/19/09	2:39	NW	5085864

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	06/18/2009 14:12	QMT	1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

- >MCL Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution
- MI Matrix Interference



8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-4 (12.5-14)

Collected: 06/09/2009 15:10

SPL Sample ID: 09060712-02

Analyses/Method Result QUAL Rep.Limit Dil. Factor Data Analyzed Analyst Seq. # SEMIVOLATILE ORGANICS BY METHOD 8270C MCL SW8270C Units: ug/kg-dry 1.2-01chlorobenzene ND 350 1 06/f1809 20:30 GY 5074322 1.2-01chlorobenzene ND 350 1 06/f1809 20:30 GY 5074322 1.2-01chlorobenzene ND 350 1 06/f1809 20:30 GY 5074322 2.4-5 Trichlorophenol ND 350 1 06/f1809 20:30 GY 5074322 2.4-5 Trichlorophenol ND 350 1 06/f1809 20:30 GY 5074322 2.4-Dinktrophenol ND 350 1 06/f1809 20:30 GY 5074322 2.4-Dinktrophenol ND 350 1 06/f1809 20:30 GY 5074322 2.4-Dinktrophenol ND 350 1 06/f1809 20:30 GY 5074322 2.4-Dinktrobuene ND 350 1 <td< th=""><th></th><th></th><th>Site: San</th><th>Juan County, NM</th><th>ħ.</th><th></th><th></th></td<>			Site: San	Juan County, NM	ħ.		
SEMIVOLATILE ORGANICS BY METHOD 8270C MCL SW8270C Units: ug/kg-dry 1,2-bichicrobenzene ND 350 1 06/18/09 20:30 GY 5074322 1,2-bichicrobenzene ND 350 1 06/18/09 20:30 GY 5074322 1,2-bichicrobenzene ND 350 1 06/18/09 20:30 GY 5074322 2,4-5-Trichlorophenol ND 350 1 06/18/09 20:30 GY 5074322 2,4-5-Trichlorophenol ND 350 1 06/18/09 20:30 GY 5074322 2,4-5-Trichlorophenol ND 350 1 06/18/09 20:30 GY 5074322 2,4-Dinitrophenol ND 350 1 06/18/09 20:30 GY 5074322 2,4-Dinitrobhene ND 850 1 06/18/09 20:30 GY 5074322 2,4-Dinitrobhene ND 350 1 06/18/09 20:30 GY 5074322 2,4-Dinitrobhene ND 350 1 06/18/09 20:30 GY	Analyses/Method	Result QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
1.2.4-Trichlorobenzene ND 350 1 06/18/09 20:30 GY 57/74322 1.2-Diphenyflydrazine ND 350 1 06/18/09 20:30 GY 50/74322 1.2-Diphenyflydrazine ND 350 1 06/18/09 20:30 GY 50/74322 1.4-Dichlorobenzene ND 350 1 06/18/09 20:30 GY 50/74322 2.4,5-Trichlorophenol ND 350 1 06/18/09 20:30 GY 50/74322 2.4,6-Trichlorophenol ND 350 1 06/18/09 20:30 GY 50/74322 2.4-Dimthylphenol ND 350 1 06/18/09 20:30 GY 50/74322 2.4-Dinitroblene ND 850 1 06/18/09 20:30 GY 50/74322 2.4-Dinitroblene ND 350 1 06/18/09 20:30 GY 50/74322 2.4-Dinitroblene ND 350 1 06/18/09 20:30 GY 50/74322 2.4-Dinitroblene ND 350 1	SEMIVOLATILE ORGANICS E	BY METHOD 8270C		MCL SV	V8270C Un	its: ug/kg	-dry
1.2-Dichlorobenzene ND 350 1 06/18/09 20:30 GY 5774322 1.2-Dichlorobenzene ND 350 1 06/18/09 20:30 GY 5074322 1.4-Dichlorobenzene ND 350 1 06/18/09 20:30 GY 5074322 2.4.5-Trichlorophenci ND 850 1 06/18/09 20:30 GY 5074322 2.4.6-Trichlorophenci ND 350 1 06/18/09 20:30 GY 5074322 2.4-Dirichlorophenci ND 350 1 06/18/09 20:30 GY 5074322 2.4-Dinitrobleme ND 350 1 06/18/	1,2,4-Trichlorobenzene	ND	350	1	06/18/09 20:30	GY	5074322
1.2-Diphenylhydrazine ND 350 1 06/18/09 20:30 GY 507/1322 1.3-Dichlorobenzene ND 350 1 06/18/09 20:30 GY 507/1322 2.4.5-Trichlorophenol ND 350 1 06/18/09 20:30 GY 507/1322 2.4.5-Trichlorophenol ND 350 1 06/18/09 20:30 GY 507/1322 2.4-Dichlorophenol ND 350 1 06/18/09 20:30 GY 507/1322 2.4-Dinktrophenol ND 350 1 06/18/09 20:30 GY 507/1322 2.4-Dinktrobleme ND 850 1 06/18/09 20:30 GY 507/1322 2.4-Dinktrobleme ND 350 1 06/18/09 20:30 GY 507/1322 2.Chlorophenol ND 350 1 06/18/09 20:30 GY 507/1322 2.Albinktrobleme ND 350 1 06/18/09 20:30 GY 507/1322 2.Albitrophinol ND 350 1 0	1,2-Dichlorobenzene	ND	350	1	06/18/09 20:30	GY	5074322
1.3-Dichlorobenzene ND 350 1 06/18/09 20:30 GY 507/4322 2.4.5-Trichlorophenol ND 350 1 06/18/09 20:30 GY 507/4322 2.4.6-Trichlorophenol ND 350 1 06/18/09 20:30 GY 507/4322 2.4.0-Trichlyphenol ND 350 1 06/18/09 20:30 GY 507/4322 2.4-Direthyphenol ND 350 1 06/18/09 20:30 GY 507/4322 2.4-Dinethyphenol ND 350 1 06/18/09 20:30 GY 507/4322 2.4-Dinethyphenol ND 350 1 06/18/09 20:30 GY 507/4322 2.4-Dinethyphenol ND 350 1 06/18/09 20:30 GY 507/4322 2.4-Dinethynaphthalene ND 350 1 06/18/09 20:30 GY 507/4322 2Methy/naphthalene ND 350 1 06/18/09 20:30 GY 507/4322 2Nitrophinol ND 350 1	1,2-Diphenylhydrazine	ND	350	1	06/18/09 20:30	GY	5074322
1.4-Dichlorobenzene ND 350 1 06/18/09 20:30 GY 5074322 2.4, 6-Trichlorophenol ND 850 1 06/18/09 20:30 GY 5074322 2.4-Dichlorophenol ND 350 1 06/18/09 20:30 GY 5074322 2.4-Dichlorophenol ND 350 1 06/18/09 20:30 GY 5074322 2.4-Dintroblenol ND 850 1 06/18/09 20:30 GY 5074322 2.4-Dintroblene ND 850 1 06/18/09 20:30 GY 5074322 2.4-Dintroblene ND 350 1 06/18/09 20:30 GY 5074322 2.Chloronphthalene ND 350 1 06/18/09 20:30 GY 5074322 2.Nitrophthalene ND 350 1 06/18/09 20:30 GY 5074322 2.Nitrophtenol ND 350 1 06/18/09 20:30 GY 5074322 2.Nitrophtenol ND 350 1 06/18/09 20:30 </td <td>1,3-Dichlorobenzene</td> <td>ND</td> <td>350</td> <td>1</td> <td>06/18/09 20:30</td> <td>GY</td> <td>5074322</td>	1,3-Dichlorobenzene	ND	350	1	06/18/09 20:30	GY	5074322
2.4.5-Trichlorophenol ND 850 1 06/18/09 20:30 GY 5074322 2.4.0-Enktorophenol ND 350 1 06/18/09 20:30 GY 5074322 2.4-Dichkorophenol ND 350 1 06/18/09 20:30 GY 5074322 2.4-Dichkorophenol ND 350 1 06/18/09 20:30 GY 5074322 2.4-Dinktorophenol ND 850 1 06/18/09 20:30 GY 5074322 2.4-Dinktooluene ND 350 1 06/18/09 20:30 GY 5074322 2.4-Dinktooluene ND 350 1 06/18/09 20:30 GY 5074322 2.Anthrynaphthalene ND 350 1 06/18/09 20:30 GY 5074322 2.Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 2.Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 2.Nitrophenol ND 350 1 06/18/09 20:30	1,4-Dichlorobenzene	ND	350	1	06/18/09 20:30	GY	5074322
2,4,6-Trichlorophenol ND 350 1 06/18/09 20:30 GY 5074322 2,4-Dinethylphenol ND 350 1 06/18/09 20:30 GY 5074322 2,4-Dinethylphenol ND 350 1 06/18/09 20:30 GY 5074322 2,4-Dinitrodoluene ND 850 1 06/18/09 20:30 GY 5074322 2,6-Dinitrodoluene ND 350 1 06/18/09 20:30 GY 5074322 2,6-Loinitrodoluene ND 350 1 06/18/09 20:30 GY 5074322 2-Chloronaphthalene ND 350 1 06/18/09 20:30 GY 5074322 2-Mitrophenol ND 350 1 06/18/09 20:30 GY 5074322 2-Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 2-Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 3-Nitroaniine ND 350 1 06/18/09 20:30	2,4,5-Trichlorophenol	ND	850	· 1	06/18/09 20:30	GY	5074322
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2.4-Dimethylphenol ND 350 1 06/18/09 20:30 GY 5074322 2.4-Dinitrophenol ND 850 1 06/18/09 20:30 GY 5074322 2.4-Dinitrodulene ND 850 1 06/18/09 20:30 GY 5074322 2.6-Dinitrodulene ND 350 1 06/18/09 20:30 GY 5074322 2.Chloronphthalene ND 350 1 06/18/09 20:30 GY 5074322 2Methylnaphthalene ND 350 1 06/18/09 20:30 GY 5074322 2Mitrophenol ND 350 1 06/18/09 20:30 GY 5074322 2Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 3.3-Dichlorobenzidine ND 350 1 06/18/09 20:30 GY 5074322 4.6-Dinitro-2-methylphenol ND 850 1 06/18/09 20:30 GY 5074322 4.6-Loritor2-methylphenol ND 350 1 <t< td=""><td>2,4-Dichlorophenol</td><td>ND</td><td>350</td><td>1</td><td>06/18/09 20:30</td><td>GY</td><td>5074322</td></t<>	2,4-Dichlorophenol	ND	350	1	06/18/09 20:30	GY	5074322
2,4-Dinitrophenol ND 850 1 06/18/09 20:30 GY 5074322 2,4-Dinitrotoluene ND 850 1 06/18/09 20:30 GY 5074322 2,6-Dinitrotoluene ND 350 1 06/18/09 20:30 GY 5074322 2-Chloronaphthalene ND 350 1 06/18/09 20:30 GY 5074322 2-Chloronaphthalene ND 350 1 06/18/09 20:30 GY 5074322 2-Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 2-Nitrophenol ND 850 1 06/18/09 20:30 GY 5074322 2-Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 3-Nitroaniline ND 350 1 06/18/09 20:30 GY 5074322 4-Bromophenyl phenyl ether ND 850 1 06/18/09 20:30 GY 5074322 4-Chloroaniline ND 350 1 06/18/09 20:30	2,4-Dimethylphenol	ND	350	1	06/18/09 20:30	GY	5074322
2,4-Dinitrololuene ND 850 1 06/18/09 20:30 GY 5074322 2,6-Dinitrololuene ND 350 1 06/18/09 20:30 GY 5074322 2-Chlorophend ND 350 1 06/18/09 20:30 GY 5074322 2-Chlorophend ND 350 1 06/18/09 20:30 GY 5074322 2-Methylnaphthalene ND 350 1 06/18/09 20:30 GY 5074322 2-Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 2-Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 3.3' Dichlorobenzidine ND 350 1 06/18/09 20:30 GY 5074322 3.4' Dichlorobenzidine ND 850 1 06/18/09 20:30 GY 5074322 3.4' Dichlorobenzidine ND 850 1 06/18/09 20:30 GY 5074322 4-Chloro-Amethylphenol ND 350 1 06/18/09 2	2,4-Dinitrophenol	ND	850	1	06/18/09 20:30	GY	5074322
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2-Chloronaphthalene ND 350 1 06/18/09 20:30 GY 5074322 2-Chlorophenol ND 350 1 06/18/09 20:30 GY 5074322 2-Methylnaphthalene ND 350 1 06/18/09 20:30 GY 5074322 2-Nitroanliline ND 850 1 06/18/09 20:30 GY 5074322 2-Nitroanliline ND 850 1 06/18/09 20:30 GY 5074322 3.'Dichlorobenzidine ND 350 1 06/18/09 20:30 GY 5074322 3.'Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4.'Bromophenyl phenyl ether ND 850 1 06/18/09 20:30 GY 5074322 4-Chloro-3-methyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Chloro-s-methyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Chlorophenyl phenyl ether ND 350	2,6-Dinitrotoluene	ND	350	1	06/18/09 20:30	GY	5074322
2-Chlorophenol ND 350 1 06/18/09 20:30 GY 5074322 2-Methylnaphthalene ND 350 1 06/18/09 20:30 GY 5074322 2-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 2-Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 3.3-Dichlorobenzidine ND 350 1 06/18/09 20:30 GY 5074322 3.4-Dichlorobenzidine ND 350 1 06/18/09 20:30 GY 5074322 4-Bromophenyl phenyl ether ND 850 1 06/18/09 20:30 GY 5074322 4-Chloro-3-methylphenol ND 350 1 06/18/09 20:30 GY 5074322 4-Chloro-Anitine ND 350 1 06/18/09 20:30 GY 5074322 4-Chlorophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 350 1 <	2-Chloronaphthalene	ND	350	1	06/18/09 20:30	GY	5074322
2-Methylnaphthalene ND 350 1 06/18/09 20:30 GY 5074322 2-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 2-Nitroaniline ND 350 1 06/18/09 20:30 GY 5074322 3.*Dichlorobenzidine ND 350 1 06/18/09 20:30 GY 5074322 3.*Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4.6-Dinitro-2-methylphenol ND 850 1 06/18/09 20:30 GY 5074322 4-Chloro-3-methylphenol ND 350 1 06/18/09 20:30 GY 5074322 4-Chloro-3-methylphenol ND 350 1 06/18/09 20:30 GY 5074322 4-Chloroaniline ND 350 1 06/18/09 20:30 GY 5074322 4-Chloroaniline ND 350 1 06/18/09 20:30 GY 5074322 4-Chloroaniline ND 350 1 06/18/	2-Chlorophenol	ND	350	1	06/18/09 20:30	GY	5074322
2-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 2-Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 3.3-Dichlorobenzidine ND 350 1 06/18/09 20:30 GY 5074322 3-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4.6-Dinitro-2-methylphenol ND 850 1 06/18/09 20:30 GY 5074322 4-Chloro-3-methylphenol ND 350 1 06/18/09 20:30 GY 5074322 4-Chloro-3-methylphenol ND 350 1 06/18/09 20:30 GY 5074322 4-Chlorophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Chlorophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 Acenaphthene ND 350 1	2-Methylnaphthalene	ND .	350	1	06/18/09 20:30	GY	5074322
2-Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 3,3'-Dichlorobenzidine ND 350 1 06/18/09 20:30 GY 5074322 3-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4,6-Dinitro-2-methylphenol ND 850 1 06/18/09 20:30 GY 5074322 4-Bromophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Chloroaniline ND 350 1 06/18/09 20:30 GY 5074322 4-Chloroaniline ND 350 1 06/18/09 20:30 GY 5074322 4-Chloroaniline ND 350 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 350 1 06/18/09 20:30 <td>2-Nitroaniline</td> <td>ND</td> <td>850</td> <td>1</td> <td>06/18/09 20:30</td> <td>GY</td> <td>5074322</td>	2-Nitroaniline	ND	850	1	06/18/09 20:30	GY	5074322
3.3'-Dichlorobenzidine ND 350 1 06/18/09 20:30 GY 5074322 3-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4,6-Dinitro-2-methylphenol ND 850 1 06/18/09 20:30 GY 5074322 4-Bromophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Chloro-3-methylphenol ND 350 1 06/18/09 20:30 GY 5074322 4-Chlorophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Chlorophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4-Nitrophenol ND 350 1 06/18/09 20:30 GY 5074322 Acenaphthene ND 350 1 06/18/09	2-Nitrophenol	ND	350	1	06/18/09 20:30	GY	5074322
3-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4,6-Dinitro-2-methylphenol ND 850 1 06/18/09 20:30 GY 5074322 4-Bromophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Chloro-3-methylphenol ND 350 1 06/18/09 20:30 GY 5074322 4-Chloro-3-methylphenol ND 350 1 06/18/09 20:30 GY 5074322 4-Chlorophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Chlorophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 350 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 350 1 06/18/09 20:30 GY 5074322 Acenaphthylene ND 350 1<	3,3'-Dichlorobenzidine	ND .	350	1	06/18/09 20:30	GY	5074322
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4-Bromophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Chloro-3-methylphenol ND 350 1 06/18/09 20:30 GY 5074322 4-Chloro-3-methylphenol ND 350 1 06/18/09 20:30 GY 5074322 4-Chlorophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 350 1 06/18/09 20:30 GY 5074322 4-Nitrophenol ND 850 1 06/18/09 20:30 GY 5074322 Acenaphthene ND 850 1 06/18/09 20:30 GY 5074322 Acenaphthylene ND 350 1 06/18/09 20:30 GY 5074322 Antiracene ND 350 1 06/18/09 20:30 GY 5074322 Anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(a)pyrene ND 350 1 06/18/09 20:30	4,6-Dinitro-2-methylphenol	ND	850	1	06/18/09 20:30	GY	5074322
4-Chloro-3-methylphenol ND 350 1 06/18/09 20:30 GY 5074322 4-Chloroaniline ND 350 1 06/18/09 20:30 GY 5074322 4-Chlorophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4-Nitrophenol ND 850 1 06/18/09 20:30 GY 5074322 Acenaphthene ND 850 1 06/18/09 20:30 GY 5074322 Acenaphthylene ND 350 1 06/18/09 20:30 GY 5074322 Acenaphthylene ND 350 1 06/18/09 20:30 GY 5074322 Antiracene ND 350 1 06/18/09 20:30 GY 5074322 Benza(a)anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(a)pyrene ND 350 1 06/18/09 20:30 <td< td=""><td>4-Bromophenyl phenyl ether</td><td>ND</td><td>350</td><td>1</td><td>06/18/09 20:30</td><td>GY</td><td>5074322</td></td<>	4-Bromophenyl phenyl ether	ND	350	1	06/18/09 20:30	GY	5074322
4-Chloroaniline ND 350 1 06/18/09 20:30 GY 5074322 4-Chlorophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4-Nitrophenol ND 850 1 06/18/09 20:30 GY 5074322 Acenaphthene ND 350 1 06/18/09 20:30 GY 5074322 Acenaphthene ND 350 1 06/18/09 20:30 GY 5074322 Acenaphthylene ND 350 1 06/18/09 20:30 GY 5074322 Acenaphthylene ND 350 1 06/18/09 20:30 GY 5074322 Anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benza(a)anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(a)pyrene ND 350 1 06/18/09 20:30 GY	4-Chloro-3-methylphenol	ND	350	1	06/18/09 20:30	GY	5074322
4-Chlorophenyl phenyl ether ND 350 1 06/18/09 20:30 GY 5074322 4-Nitroaniline ND 850 1 06/18/09 20:30 GY 5074322 4-Nitrophenol ND 850 1 06/18/09 20:30 GY 5074322 Acenaphthene ND 350 1 06/18/09 20:30 GY 5074322 Acenaphthylene ND 350 1 06/18/09 20:30 GY 5074322 Aniline ND 350 1 06/18/09 20:30 GY 5074322 Aniline ND 350 1 06/18/09 20:30 GY 5074322 Anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benza(a)anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(a)pyrene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(g,h,i)perylene ND 350 1 06/18/09 20:30 GY <	4-Chloroaniline	ND	350	1	06/18/09 20:30	GY	5074322
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Acenaphthene ND 350 1 06/18/09 20:30 GY 5074322 Acenaphthylene ND 350 1 06/18/09 20:30 GY 5074322 Aniline ND 350 1 06/18/09 20:30 GY 5074322 Aniline ND 350 1 06/18/09 20:30 GY 5074322 Anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benz(a)anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(a)pyrene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(b)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(g,h,i)perylene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(c)fluoranthene ND 350 1 06/18/09 20:30 GY	4-Nitrophenol	ND	850	1	06/18/09 20:30	GY	5074322
Acenaphthylene ND 350 1 06/18/09 20:30 GY 5074322 Aniline ND 350 1 06/18/09 20:30 GY 5074322 Anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benz(a)anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benz(a)anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benz(a)anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(a)pyrene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(b)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(g,h,i)perylene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzoic acid ND 1700 1 06/18/09 20:30 GY </td <td>Acenaphthene</td> <td>ND</td> <td>350</td> <td>1</td> <td>06/18/09 20:30</td> <td>GY</td> <td>5074322</td>	Acenaphthene	ND	350	1	06/18/09 20:30	GY	5074322
Aniline ND 350 1 06/18/09 20:30 GY 5074322 Anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benz(a)anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benz(a)anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(a)pyrene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(b)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(g,h,i)perylene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzoic acid ND 1700 1 06/18/09 20:30 GY 5074322 Benzyl alcohol ND 350 1 06/18/09 20:30 G	Acenaphthylene	ND	350	1	06/18/09 20:30	GY	5074322
Anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benz(a)anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(a)pyrene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(a)pyrene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(b)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(g,h,i)perylene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(g,h,i)perylene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzoic acid ND 1700 1 06/18/09 20:30 GY 5074322 Benzyl alcohol ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 <td>Aniline</td> <td>ND</td> <td>350</td> <td>1</td> <td>06/18/09 20:30</td> <td>GY</td> <td>5074322</td>	Aniline	ND	350	1	06/18/09 20:30	GY	5074322
Benz(a)anthracene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(a)pyrene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(a)pyrene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(b)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(g,h,i)perylene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzoic acid ND 1700 1 06/18/09 20:30 GY 5074322 Benzyl alcohol ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)ether ND 350 1 06/	Anthracene	ND	350	1	06/18/09 20:30	GY	5074322
Benzo(a)pyrene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(b)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(g,h,i)perylene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzoic acid ND 1700 1 06/18/09 20:30 GY 5074322 Benzyl alcohol ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxyl)ether ND 350 1 06/18/09 20:30 GY 5074322	Benz(a)anthracene	ND	350	1	06/18/09 20:30	GY	5074322
Benzo(b)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(g,h,i)perylene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzoic acid ND 1700 1 06/18/09 20:30 GY 5074322 Benzyl alcohol ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethyl)ether ND 350 1 06/18/09 20:30 GY 5074322	Benzo(a)pyrene	ND	350	1	06/18/09 20:30	GY	5074322
Benzo(g,h,i)perylene ND 350 1 06/18/09 20:30 GY 5074322 Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzoic acid ND 350 1 06/18/09 20:30 GY 5074322 Benzoic acid ND 1700 1 06/18/09 20:30 GY 5074322 Benzyl alcohol ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethyl)ether ND 350 1 06/18/09 20:30 GY 5074322	Benzo(b)fluoranthene	ND	350	1	06/18/09 20:30	GY	5074322
Benzo(k)fluoranthene ND 350 1 06/18/09 20:30 GY 5074322 Benzoic acid ND 1700 1 06/18/09 20:30 GY 5074322 Benzyl alcohol ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322	Benzo(g,h,i)perylene	ND	350	1	06/18/09 20:30	GY	5074322
Benzoic acid ND 1700 1 06/18/09 20:30 GY 5074322 Benzyl alcohol ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethyl)ether ND 350 1 06/18/09 20:30 GY 5074322	Benzo(k)fluoranthene	ND	350	1	06/18/09 20:30	GY	5074322
Benzyl alcohol ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethyl)ether ND 350 1 06/18/09 20:30 GY 5074322	Benzoic acid	ND	1700	1	06/18/09 20:30	GY	5074322
Bis(2-chloroethoxy)methane ND 350 1 06/18/09 20:30 GY 5074322 Bis(2-chloroethyl)ether ND 350 1 06/18/09 20:30 GY 5074322	Benzyl alcohol	ND	350	1	06/18/09 20:30	GY	5074322
Bis(2-chloroethyl)ether ND 350 1 06/18/09 20:30 GY 5074322	Bis(2-chloroethoxy)methane	ND	350	1	06/18/09 20:30	GY	5074322
	Bis(2-chloroethyl)ether	ND	350	1	06/18/09 20:30	GY	5074322

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Client Sample ID:MW-4 (12.5-14)

Collected: 06/09/2009 15:10

SPL Sample ID: 09060712-02

Site: San Juan County, NM									
Analyses/Method	Result	QUAL	Rep.L	.imit	Dil. Factor	Date Analyzed	Analyst	Seq. #	
Bis(2-chloroisopropyl)ether	ND		_	350	1	06/18/09 20:30	GY	5074322	
Bis(2-ethylhexyl)phthalate	ND		350		1	06/18/09 20:30	GY	5074322	
Butyl benzyl phthalate	ND			350	1	06/18/09 20:30	GY	5074322	
Carbazole	ND			350	1	06/18/09 20:30	GY	5074322	
Chrysene	ND			350	1	06/18/09 20:30	GY	5074322	
Dibenz(a,h)anthracene	ND			350	1	06/18/09 20:30	GY	5074322	
Dibenzofuran	ND			350	1	06/18/09 20:30	GY	5074322	
Diethyl phthalate	ND			350	1	06/18/09 20:30	GY	5074322	
Dimethyl phthalate	ND			350	1	06/18/09 20:30	GY	5074322	
Di-n-butyl phthalate	ND			350	1	06/18/09 20:30	GY	5074322	
Di-n-octyl phthalate	ND			350	1	06/18/09 20:30	GY	5074322	
Fluoranthene	ND			350	1	06/18/09 20:30	GY	5074322	
Fluorene	ND			350	1	06/18/09 20:30	GY	5074322	
Hexachlorobenzene	ND			350	1	06/18/09 20:30	GY	5074322	
Hexachlorobutadiene	ND			350	1	06/18/09 20:30	GY	5074322	
Hexachlorocyclopentadiene	ND			350	1	06/18/09 20:30	GY	5074322	
Hexachloroethane	ND			350	1	06/18/09 20:30	GY	5074322	
Indeno(1,2,3-cd)pyrene	ND			350	1	06/18/09 20:30	GY	5074322	
Isophorone	ND			350	1	06/18/09 20:30	GY	5074322	
Naphthalene	ND			350	1	06/18/09 20:30	GY	5074322	
Nitrobenzene	ND			350	1	06/18/09 20:30	GY	5074322	
N-Nitrosodi-n-propylamine	ND			350	1	06/18/09 20:30	GY	5074322	
N-Nitrosodiphenylamine	ND			350	1	06/18/09 20:30	GY	5074322	
Pentachlorophenol	ND			850	1	06/18/09 20:30	GY	5074322	
Phenanthrene	ND			350	1	06/18/09 20:30	GY	5074322	
Phenol	ND			350	1	06/18/09 20:30	GY	5074322	
Pyrene	ND			350	1	06/18/09 20:30	GY	5074322	
Pyridine	ND			350	1	06/18/09 20:30	GY	5074322	
2-Methylphenol	ND			350	1	06/18/09 20:30	GY	5074322	
3 & 4-Methylphenol	ND			350	1	06/18/09 20:30	GY	5074322	
Surr: 2,4,6-Tribromophenol	81.6		% 19	-135	1	06/18/09 20:30	GY	5074322	
Surr: 2-Fluorobiphenyl	63.5		% 15	-140	1	06/18/09 20:30	GY	5074322	
Surr: 2-Fluorophenol	57.6		% 15	-122	1	06/18/09 20:30	GY	5074322	
Surr: Nitrobenzene-d5	51.8		% 10	-134	1	06/18/09 20:30	GY	5074322	
Surr: Phenol-d5	55.6		% 10	-123	1	06/18/09 20:30	GY	5074322	
Surr: Terphenyl-d14	63.5		% 18	-166	1	06/18/09 20:30	GY	5074322	

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550C	06/15/2009 10:31	FAK	1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- $\ensuremath{\mathsf{B/\!V}}\xspace$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

09060712 Page 14 6/29/2009 4:35:17 PM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-4 (12.5-14)				Collected: 06/09/2009 15:10				SPL San	nple l	D: 0906	0712-02
				Site:	San	Juan Cour	nty, NI	N			
Analyses/Method		Result	QUAL	Rep.L	imit	Dil.	Factor	Date Ana	yzed	Analyst	Seq. #
TOTAL PETROLEUM	HYDROCARB	ONS				MCL		E418.1	Ur	nits: mg/kg	g-dry
Petroleum Hydrocarbons	,TR	130			11		1	06/15/09	15:24	LLL	5067478
Prep Method	Prep Date		Prep Initials	Prep Fac	tor						
· · · · · ·	06/15/2009 11:	10		1.00							

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

> 09060712 Page 15 6/29/2009 4:35:17 PM



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-4 (12.5-14)

Collected: 06/09/2009 15:10

SPL Sample ID: 09060712-02

Analyses/Method Result QUA Rep. Limit Dill. Factor Date Analyzet Analyzet Seq. # VOLATILE ORGANICS BY METHOD 8260B MCL SW8260B Units: ug/kg-dry 1.1,12-Trichiorocethane ND 5.3 1 06/1509 18:15 E_G 5068520 1.1,2-2 Tetrachlorocethane ND 5.3 1 06/1509 18:15 E_G 5068520 1.1,2-2 Trichiorocethane ND 5.3 1 06/1509 18:15 E_G 5068520 1.1-Dichiorocethane ND 5.3 1 06/1509 18:15 E_G 5068520 1.1-Dichiorochane ND 5.3 1 06/1509 18:15 E_G 5068520 1.2.3-Trichiorobanzene ND 5.3 1 06/1509 18:15 E_G 5068520 1.2.3-Trichiorobanzene ND 5.3 1 06/1509 18:15 E_G 5068520 1.2.4-Trichiorobanzene ND 5.3 1 06/1509 18:15 <td< th=""><th></th><th></th><th>Site:</th><th>San</th><th>Juan County, NI</th><th>м</th><th></th><th></th></td<>			Site:	San	Juan County, NI	м		
VOLATILE ORGANICS BY METHOD 8260B MCL SW8260B Units: ug/kg-dry 1,1,1-Trichioroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1,2-Zietrachloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1,2-Zietrachloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichloroptopene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-3-Trichloroptopane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-4-Trichloroberzene ND 5.3	Analyses/Method	Result QUA	L Rep.Li	mit	Dil. Factor	Date Analyzed	Analyst	Seq. #
1,1,12-Tertachloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1,12-Trichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,12,2-Trichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,12-Dichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2.3-Trichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2.3-Trichloropenae ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2.4-Trimethybenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dibrono-2-bichopropane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichloropane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichloropane ND 5.3<	VOLATILE ORGANICS BY ME	THOD 8260B			MCL SI	W8260B U	nits: ug/kg	-dry
1,1-1:Trichloroethane ND 5.3 1 00/15/09 18:15 E_G 5068520 1,1.2.2.7.Ertachloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1.2.Trichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichloropopene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2.3-Trichloropopane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2.4-Trichloroporpane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2.4-Trichloroporpane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2.4-Dichorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichoroporpane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichoroporpane ND 5.3	1,1,1,2-Tetrachloroethane	ND		5.3	1	06/15/09 18:15	E_G	5068520
1,1,2-Trichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichloropropene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2.3-Trichlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2.4-Trichlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2.4-Trichlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2.4-Trinkhylbenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichroobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichroobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,3-Dichrobenzene ND 5.3 <t< td=""><td>1,1,1-Trichloroethane</td><td>ND</td><td></td><td>5.3</td><td>1</td><td>06/15/09 18:15</td><td>E_G</td><td>5068520</td></t<>	1,1,1-Trichloroethane	ND		5.3	1	06/15/09 18:15	E_G	5068520
1,1_2-Trichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichloroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichloropropene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2,3-Trichloroberzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2,4-Trichloroberzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2,4-Trichloroberzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dibromo-schloropropane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichropropane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichropropane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichropropane ND 5.3	1,1,2,2-Tetrachloroethane	ND		5.3	1	06/15/09 18:15	E_G	5068520
1,1-Dichkoroethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,1-Dichkoropene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-3-Trichkoropene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-3-Trichkoropene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-4-Trichkorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-4-Trinkorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dibromo-3-chioropropane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichkonoethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichkonoethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,2-Dichkonopane ND 5.3 1 06/15/09 18:15 E_G 5068520 1,3-Dichkoropanen ND 5.3 1 </td <td>1,1,2-Trichloroethane</td> <td>ND</td> <td></td> <td>5.3</td> <td>1</td> <td>06/15/09 18:15</td> <td>E_G</td> <td>5068520</td>	1,1,2-Trichloroethane	ND		5.3	1	06/15/09 18:15	E_G	5068520
1.1-Dichlorosethene ND 5.3 1 06/15/09 18:15 E_G 5068520 1.1-Dichloropropene ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2,3-Trichloropropene ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2,4-Trichlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2,4-Trimethybenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2-Dibromosthane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2-Dibromosthane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2-Dichloropethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2-Dichloropethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2-Dichloropropane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.3-Dichloropropane ND 5.3 1	1,1-Dichloroethane	ND		5.3	1	06/15/09 18:15	E_G	5068520
1.1-Dichloropropene ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2.3-Trichloropropane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2.4-Trichloropropane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2.4-Trichlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2-Ditorno-3-chloropropane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2-Ditorno-3-chloropropane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2-Ditornoethane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.2-Dichloroptopane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.3-Dichloroptopane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.3-Dichloroptopane ND 5.3 1 06/15/09 18:15 E_G 5068520 1.3-Dichloropropane ND 5.3	1,1-Dichloroethene	ND		5.3	1	06/15/09 18:15	E_G	5068520
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Acrylonitrile ND 53 1 06/15/09 18:15 E_G 5068520 Benzene ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromochloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromodichloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromodichloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromodefname ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromomethane ND 11 1 06/15/09 18:15 E_G 5068520 Carbon disulfide ND 5.3 1 06/15/09 18:15 E_G 5068520 Carbon tetrachloride ND 5.3 1 06/15/09 18:15 E_G	Acetone	ND		110	1	06/15/09 18:15	EG	5068520
Benzene ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromochloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromodichloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromodichloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromodern ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromomethane ND 11 1 06/15/09 18:15 E_G 5068520 Carbon disulfide ND 5.3 1 06/15/09 18:15 E_G 5068520 Carbon tetrachloride ND 5.3 1 06/15/09 18:15 E_G 5068520 Chlorobenzene ND 5.3 1 06/15/09 18:15 E_G </td <td>Acrylonitrile</td> <td>ND</td> <td></td> <td>53</td> <td>1</td> <td>06/15/09 18:15</td> <td>EG</td> <td>5068520</td>	Acrylonitrile	ND		53	1	06/15/09 18:15	EG	5068520
Bromobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromochloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromodichloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromodichloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromoform ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromothane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromotethane ND 11 1 06/15/09 18:15 E_G 5068520 Carbon disulfide ND 5.3 1 06/15/09 18:15 E_G 5068520 Carbon tetrachloride ND 5.3 1 06/15/09 18:15 E_G 5068520 Chlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520	Benzene	ND		5.3	1	06/15/09 18:15	EG	5068520
Bromochloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromodichloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromodichloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromoform ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromomethane ND 11 1 06/15/09 18:15 E_G 5068520 Carbon disulfide ND 5.3 1 06/15/09 18:15 E_G 5068520 Carbon tetrachloride ND 5.3 1 06/15/09 18:15 E_G 5068520 Chlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520	Bromobenzene	ND		5.3	1	06/15/09 18:15	E_G	5068520
Bromodichloromethane ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromoform ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromomethane ND 11 1 06/15/09 18:15 E_G 5068520 Carbon disulfide ND 5.3 1 06/15/09 18:15 E_G 5068520 Carbon disulfide ND 5.3 1 06/15/09 18:15 E_G 5068520 Carbon tetrachloride ND 5.3 1 06/15/09 18:15 E_G 5068520 Chlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520	Bromochloromethane	ND	······	5.3	1	06/15/09 18:15	E_G	5068520
Bromoform ND 5.3 1 06/15/09 18:15 E_G 5068520 Bromomethane ND 11 1 06/15/09 18:15 E_G 5068520 Carbon disulfide ND 5.3 1 06/15/09 18:15 E_G 5068520 Carbon disulfide ND 5.3 1 06/15/09 18:15 E_G 5068520 Carbon tetrachloride ND 5.3 1 06/15/09 18:15 E_G 5068520 Chlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520	Bromodichloromethane	ND		5.3	1	06/15/09 18:15	E_G	5068520
Bromomethane ND 11 1 06/15/09 18:15 E_G 5068520 Carbon disulfide ND 5.3 1 06/15/09 18:15 E_G 5068520 Carbon tetrachloride ND 5.3 1 06/15/09 18:15 E_G 5068520 Chlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520	Bromoform	ND		5.3	1	06/15/09 18:15	E_G	5068520
Carbon disulfide ND 5.3 1 06/15/09 18:15 E_G 5068520 Carbon tetrachloride ND 5.3 1 06/15/09 18:15 E_G 5068520 Chlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520	Bromomethane	ND		11	1	06/15/09 18:15	E_G	5068520
Carbon tetrachloride ND 5.3 1 06/15/09 18:15 E_G 5068520 Chlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520	Carbon disulfide	ND		5.3	1	06/15/09 18:15	E_G	5068520
Chlorobenzene ND 5.3 1 06/15/09 18:15 E_G 5068520	Carbon tetrachloride	ND		5.3	1	06/15/09 18:15	E_G	5068520
	Chlorobenzene	ND		5.3	1	06/15/09 18:15	E_G	5068520

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-4 (12.5-14)

Collected: 06/09/2009 15:10

SPL Sample ID: 09060712-02

			Site:	San Ju	an County, NM			
Analyses/Method	Result	QUAL	Rep.L	imit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND			11	1	06/15/09 18:15	E_G	5068520
Chloroform	ND			5.3	1	06/15/09 18:15	E_G	5068520
Chloromethane	ND			11	1	06/15/09 18:15	E_G	5068520
Dibromochloromethane	ND			5.3	1	06/15/09 18:15	E_G	5068520
Dibromomethane	ND			5.3	1	06/15/09 18:15	E_G	5068520
Dichlorodifluoromethane	ND			11	1	06/15/09 18:15	E_G	5068520
Ethylbenzene	ND			5.3	1	06/15/09 18:15	E_G	5068520
Hexachlorobutadiene	ND			5.3	1	06/15/09 18:15	E_G	5068520
lsopropylbenzene	ND			5.3	1	06/15/09 18:15	E_G	5068520
Methyl tert-butyl ether	ND			5.3	1	06/15/09 18:15	E_G	5068520
Methylene chloride	ND			5.3	1	06/15/09 18:15	E_G	5068520
Naphthalene	ND			5.3	1	06/15/09 18:15	E_G	5068520
n-Butylbenzene	ND			5.3	1	06/15/09 18:15	E_G	5068520
n-Propylbenzene	ND			5.3	1	06/15/09 18:15	E_G	5068520
sec-Butylbenzene	ND			5.3	1	06/15/09 18:15	E_G	5068520
Styrene	ND			5.3	1	06/15/09 18:15	E_G	5068520
tert-Butylbenzene	ND			5.3	1	06/15/09 18:15	E_G	5068520
Tetrachloroethene	ND			5.3	1	06/15/09 18:15	E_G	5068520
Toluene	ND			5.3	1	06/15/09 18:15	E_G	5068520
Trichloroethene	ND			5.3	1	06/15/09 18:15	E_G	5068520
Trichlorofluoromethane	ND			5.3	1	06/15/09 18:15	E_G	5068520
Vinyl acetate	ND			11	1	06/15/09 18:15	E_G	5068520
Vinyl chloride	ND			11	1	06/15/09 18:15	E_G	5068520
cis-1,2-Dichloroethene	ND			5.3	1	06/15/09 18:15	E_G	5068520
cis-1,3-Dichloropropene	ND	• •		5.3	1	06/15/09 18:15	E_G	5068520
m,p-Xylene	ND			5.3	1	06/15/09 18:15	E_G	5068520
o-Xylene	ND			5.3	1	06/15/09 18:15	E_G	5068520
trans-1,2-Dichloroethene	ND			5.3	1	06/15/09 18:15	E_G	5068520
trans-1,3-Dichloropropene	ND			5.3	1	06/15/09 18:15	E_G	5068520
Xylenes,Total	ND			5.3	1	06/15/09 18:15	E_G	5068520
1,2-Dichloroethene (total)	ND			5.3	1	06/15/09 18:15	E_G	5068520
Surr: 1,2-Dichloroethane-d4	104		% 71-	130	1	06/15/09 18:15	E_G	5068520
Surr: 4-Bromofluorobenzene	95.9		% 65-	131	1	06/15/09 18:15	E_G	5068520
Surr: Toluene-d8	106		% 75-	136	1	06/15/09 18:15	EG	5068520

Prep Method	Prep Date	Prep Initials	Prep Factor
SW5030B	06/13/2009 11:15	E_G	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Client Sample ID:MW-3 (12.5-14)

Collected: 06/10/2009 13:45 S

SPL Sample ID: 09060712-03

				Sit	e: Sa	n Juan Co	ounty, Nl	Vi			
Analyses/Method	R	esult	QUAL	R	ep.Limit	l	Dil. Factor	Date Analy	zed	Analyst	Seq. #
GASOLINE RANGE O	RGANICS		** ****			MCL	SI	N8015B	Ur	nits: mg/kg	g-dry
Gasoline Range Organic	S	2.3			0.57		1	06/19/09 1	2:23	WLV	5075710
Surr: 1,4-Difluorobenz	ene	106		%	63-142		1	06/19/09 1	2:23	WLV	5075710
Surr: 4-Bromofluorobe	nzene	118		%	50-159		1	06/19/09 1	2:23	WLV	5075710
Prep_Method	Prep Date	•••	Prep Initials	Prep	Factor						
SW 5030B	06/19/2009 9:24		XML	5.00							
ION CHROMATOGRA	PHY					MCL	E300	.0 MOD	Ur	nits: mg/kg	j-dry
Bromide		ND			5.66		1	06/17/09 1	9:45	BDG	5073748
Chloride		ND			5.66		1	06/17/09 1	9:45	BDG	5073748
Fluoride		ND	·		5.66		1	06/17/09 1	9:45	BDG	5073748
Ortho-phosphate (As P)		ND			5.66		1	06/19/09 2	21:14	BDG	5076750
Sulfate	2	2050			113		20	06/19/09 2	21:33	BDG	5076751
Nitrogen, Nitrate (As N)		ND			5.66		1	06/17/09 1	9:45	BDG	5073688
Nitrogen, Nitrite (As N)		ND			5.66		1	06/17/09 1	9:45	BDG	5073688
MERCURY, TOTAL			••••••			MCL	SI	N7471A	Ur	nits: mg/kg	j-dry
Mercury		ND			0.0339		1	06/17/09 1	5:12	F_S	5071961

Prep Method	Prep Date	Prep Initials	Prep Factor
SW7471A	06/17/2009 12:00	F_S	1.00

METALS BY METHOD 6010B, TOTAL			MCL		SW6010B	Units: mg/kg-dry		/kg-dry
Aluminum	3020	11.3		1	06/18/09 1	3:43	EG	5073480
Boron	1.93	1.13		1	06/18/09 1	3:43	EG	5073480
Calcium	3940	11.3	-* ··· ·	1	06/18/09 1	3:43	EG	5073480
Iron	4950	1.13		1	06/18/09 1	3:43	EG	5073480
Magnesium	835	11.3		1	06/18/09 13	3:43	EG	5073480
Potassium	534	56.6		1	06/18/09 1	3:43	EG	5073480
Sodium	262	11.3		1	06/19/09 10	D: 1 4	EG	5075337
Strontium	74	0.339		1	06/18/09 1	3:43	EG	5073480
Tin	0.871	0.566		1	06/18/09 1	3:43	EG	5073480

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	06/18/2009 17:00	AB1	1.00
SW 3050B	06/16/2009 10:30	AB1	1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Client Sample ID:MW-3 (12.5-14)

Collected: 06/10/2009 13:45

San Juan County, NM

09060712-03 SPL Sample ID:

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
METALS BY METHOD 60	20A, TOTAL		····· • ···· · · · · · · · · · · · · ·	MCL SV	V6020A U	nits: mg/k	g-dry
Antimony	ND		0.566	1	06/17/09 22:1	5 AL_H	5072398
Arsenic	1.9		0.566	1	06/17/09 22:1	5 AL_H	5072398
Barium	145		0.566	1	06/18/09 12:30) AL_H	5073058
Beryllium	ND		0.452	1	06/18/09 12:30) AL_H	5073058
Cadmium	ND		0.566	1	06/17/09 22:1	5 AL_H	5072398
Chromium	3.93		0.566	1	06/17/09 22:1	5 AL_H	5072398
Cobalt	2.48		0.566	1	06/17/09 22:1	5 AL_H	5072398
Copper	5.77		0.566	1	06/17/09 22:1	5 AL_H	5072398
Lead	4.26		0.566	1	06/17/09 22:1	5 AL_H	5072398
Manganese	193		0.566	1	06/18/09 12:30	AL_H	5073058
Molybdenum	ND	· · · · · · · · · · · · · · · · · · ·	0.566	1	06/17/09 22:1	5 AL_H	5072398
Nickel	3.37		0.566	1	06/17/09 22:1	5 AL_H	5072398
Selenium	ND		0.566	1	06/17/09 22:1	5 AL_H	5072398
Silver	ND		0.566	1	06/17/09 22:1	5 AL_H	5072398
Thallium	ND		0.566	1	06/17/09 22:1	5 AL_H	5072398
Vanadium	6.29		0.566	1	06/17/09 22:1	5 AL_H	5072398
Zinc	12.6		1.13	· 1	06/17/09 22:1	5 AL_H	5072398

Site:

Prep Method	Prep Date	Prep Initials	Prep Factor
SW 3050B	06/16/2009 10:30	AB1	1.00

PERCENT MOISTURE		MCI	-	D2216	Units: wt%	
Percent Moisture	11.6	, 0,	1	06/15/09	17:02 EB1	5068028
SEMIVOLATILE HYDROCARBO	NS	MCI	-	SW8015B	Units: mg/l	kg-dry
Diesel Range Organics	30	5.7	1	06/19/09	2:18 NW	5085863
Fuel Oil Range Organics	ND	11	1	06/19/09	2:18 NW	5085863
Hydraulic Fluid Range Organics	ND	11	1	06/19/09	2:18 NW	5085863
Kerosene Range Organics	ND	11	1	06/19/09	2:18 NW	5085863
Mineral Spirits Range Organics	ND	11	1	06/19/09	2:18 NW	5085863
Oil Range Organics	44	11	1	06/19/09	2:18 NW	5085863
Surr: n-Pentacosane	108	% 20-154	1	06/19/09	2:18 NW	5085863

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	06/18/2009 14:12	QMT	1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-3 (12.5-14)

Collected: 06/10/2009 13:45

09060712-03 SPL Sample ID:

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Analyses/Method Result QUAL Rep.Limit Dil. Factor Date Analyzed Analyst Seq. # SEMIVOLATILE ORGANICS BY METHOD 8270C MCL SW8270C Units: ug/kg-dry 1.2-bichtorobenzene ND 370 1 06/f10092103 GY 5074333 1.2-bichtorobenzene ND 370 1 06/f18092103 GY 5074333 1.3-bichtorobenzene ND 370 1 06/f18092103 GY 5074333 1.4-Dichtorobenzene ND 370 1 06/f18092103 GY 5074333 2.4-6-Trichtorophenol ND 370 1 06/f18092103 GY 5074333 2.4-Dintorophenol ND 370 1 06/f18092103 GY 5074333 2.4-Dintorophenol ND 900 1 06/f18092103 GY 5074333 2.4-Dintorophenol ND 370 1 06/f18092103 GY 5074333 2.4-Dintorophenol ND 370 1 06/f18092103 <th></th> <th></th> <th>Site: San</th> <th>Juan County, NM</th> <th>1</th> <th></th> <th></th>			Site: San	Juan County, NM	1		
SEMIVOLATILE ORGANICS BY METHOD 8270C MCL SW8270C Units: ug/kg-dry 1,2-Lichloroberzene ND 370 1 06/18/09 21:03 GY 5074333 1,2-Dichloroberzene ND 370 1 06/18/09 21:03 GY 5074333 1,2-Dichloroberzene ND 370 1 06/18/09 21:03 GY 5074333 1,4-Dichloroberzene ND 370 1 06/18/09 21:03 GY 5074333 2,4,6-Trichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2,4-Dichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2,4-Dinitrophenol ND 370 1 06/18/09 21:03 GY 5074333 2,4-Dinitroduene ND 370 1 06/18/09 21:03 GY 5074333 2,4-Dinitroduene ND 370 1 06/18/09 21:03 GY 5074333 2,4-Dinitroduene ND 370 1 06/18/09 21:03 GY	Analyses/Method	Result QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
1,2,4-Trichlorobenzene ND 370 1 06/18/09 21:03 GY 5074333 1,2-Diphoryhydrazine ND 370 1 06/18/09 21:03 GY 5074333 1,2-Diphoryhydrazine ND 370 1 06/18/09 21:03 GY 5074333 1,4-Dickhorobenzene ND 370 1 06/18/09 21:03 GY 5074333 2,4,5-Trichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2,4-Dichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2,4-Diintrophenol ND 370 1 06/18/09 21:03 GY 5074333 2,4-Diintrobuene ND 370 1 06/18/09 21:03 GY 5074333 2,4-Diintrobuene ND 900 1 06/18/09 21:03 GY 5074333 2,4-Diintrobuene ND 370 1 06/18/09 21:03 GY 5074333 2,4-Diintrobuene ND 370 1 06/1	SEMIVOLATILE ORGANICS E	BY METHOD 8270C		MCL SV	V8270C Ur	its: ug/kg	-dry
1.2-Dichlorobenzene ND 370 1 06/18/09 21:03 GY 5074333 1.3-Dichlorobenzene ND 370 1 06/18/09 21:03 GY 5074333 1.3-Dichlorobenzene ND 370 1 06/18/09 21:03 GY 5074333 2.4.5-Trichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4.5-Trichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Diritroblenzene ND 370 1 06/18/09 21:03 GY 5074333 2.4-Diritroblenene ND 900 1 06/18/09 21:03 GY 5074333 2.4-Diritroblenene ND 900 1 06/18/09 21:03 GY 5074333 2.4-Diritroblenene ND 370 1 06/18/09 21:03 GY 5074333 2.4-Diritroblenene ND 370 1 06/18/09 21:03 GY 5074333 2.4-Diritroblenene ND 370 1 <	1,2,4-Trichlorobenzene	ND	370	1	06/18/09 21:03	GY	5074333
1.2-Diphenyflydrazine ND 370 1 06/18/09 21:03 GY 5074333 1.4-Dichlorobenzene ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dichlorobenzene ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dinitrotoluene ND 900 1 06/18/09 21:03 GY 5074333 2.4-Dinitrotoluene ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dinitrotoluene ND 370 1 06/18/09 21:03 GY 5074333 2.Chiorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.Nitrophenol ND 370 1 06/18/09 21	1,2-Dichlorobenzene	ND	370	1	06/18/09 21:03	GY	5074333
1.3-Dichlorobenzene ND 370 1 06/18/09 21:03 GY 5074333 1.4-Dichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4.5-Trichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4.0-Enchydphenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Direnthydphenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Direnthydphenol ND 900 1 06/18/09 21:03 GY 5074333 2.4-Direnthydphenol ND 900 1 06/18/09 21:03 GY 5074333 2.4-Direnthydphenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Direnthydphenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Direnthydphenol ND 370 1 06/18/09 21:03 GY 5074333 2-Nitroaniline ND 370 1 0	1,2-Diphenylhydrazine	ND	370	1	06/18/09 21:03	GY	5074333
1.4-Dichlorobenzene ND 370 1 06/18/09 21:03 GY 5074333 2.4.5-Trichlorophenol ND 900 1 06/18/09 21:03 GY 5074333 2.4.5-Trichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dintrophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dintrophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dintrophenol ND 900 1 06/18/09 21:03 GY 5074333 2.4-Dintrophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dintrophenol ND 370 1 06/18/09 21:03 GY 5074333 2-Chlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2-Nitrophenol ND 370 1 06/18/09 21:03 GY 5074333 2-Nitrophenol ND 370 1 06/18/09 21:	1,3-Dichlorobenzene	ND	370	1	06/18/09 21:03	GY	5074333
2.4.5-Trichlorophenol ND 900 1 06/18/09 21:03 GY 5074333 2.4-Dichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dichlorophenol ND 900 1 06/18/09 21:03 GY 5074333 2.4-Dichlorophenol ND 900 1 06/18/09 21:03 GY 5074333 2.4-Dichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.6-Dinitrotoluene ND 370 1 06/18/09 21:03 GY 5074333 2.Chlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.Mitroaniline ND 370 1 06/18/09 21:03 GY 5074333 2.Nitroaniline ND 370 1 06/18/09 21:03 GY 5074333 3.3'-Dichlorobenzidine ND 370 1 06/18/09 21:	1,4-Dichlorobenzene	ND	370	1	06/18/09 21:03	GY	5074333
2,4,6-Trichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2,4-Direktyphenol ND 370 1 06/18/09 21:03 GY 5074333 2,4-Direktyphenol ND 370 1 06/18/09 21:03 GY 5074333 2,4-Direktyphenol ND 900 1 06/18/09 21:03 GY 5074333 2,4-Direktyphenol ND 900 1 06/18/09 21:03 GY 5074333 2,6-Diriktrotoluene ND 370 1 06/18/09 21:03 GY 5074333 2-Chlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2-Nitrophenol ND 370 1 06/18/09 21:03 GY 5074333 2-Nitrophenol ND 370 1 06/18/09 21:03 GY 5074333 3-Nitrophenol ND 370 1 06/18/09 21:03 GY 5074333 3-Nitrophenol ND 370 1 06/18/09 21:03 <tg< td=""><td>2,4,5-Trichlorophenol</td><td>ND</td><td>900</td><td>1</td><td>06/18/09 21:03</td><td>GY</td><td>5074333</td></tg<>	2,4,5-Trichlorophenol	ND	900	1	06/18/09 21:03	GY	5074333
2.4-Dichlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dinitrophenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dinitroclouene ND 900 1 06/18/09 21:03 GY 5074333 2.4-Dinitroclouene ND 370 1 06/18/09 21:03 GY 5074333 2.Chloronaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2.Chloronaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2.Mitroaniline ND 370 1 06/18/09 21:03 GY 5074333 2.Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 3.*Dichorobenzidine ND 370 1 06/18/09 21:03 GY 5074333 3.*Dichorobenzidine ND 370 1 06/18/09 21:03 GY 5074333 3.*Dichorobenzidine ND 900 1 06/18/09 21	2,4,6-Trichlorophenol	ND	370	1	06/18/09 21:03	GY	5074333
2.4-Dimethylphenol ND 370 1 06/18/09 21:03 GY 5074333 2.4-Dinitrophenol ND 900 1 06/18/09 21:03 GY 5074333 2.4-Dinitrobluene ND 900 1 06/18/09 21:03 GY 5074333 2.6-Dinitrobluene ND 370 1 06/18/09 21:03 GY 5074333 2.Chloronaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2Mitrophenol ND 370 1 06/18/09 21:03 GY 5074333 2Nitrophenol ND 370 1 06/18/09 21:03 GY 5074333 2Nitrophenol ND 370 1 06/18/09 21:03 GY 5074333 3.3-Dichiorobenzidine ND 370 1 06/18/09 21:03 GY 5074333 3.3-Dichiorobenzidine ND 370 1 06/18/09 21:03 GY 5074333 4.6-Dinitro-2-methylphenol ND 370 1 06/18/0	2,4-Dichlorophenol	ND	370	1	06/18/09 21:03	GY	5074333
2.4-Dinitrophenol ND 900 1 06/18/09 21:03 GY 5074333 2.4-Dinitrotoluene ND 370 1 06/18/09 21:03 GY 5074333 2.6-Dinitrotoluene ND 370 1 06/18/09 21:03 GY 5074333 2-Chicronaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2-Chicronaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 2-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 3-Nitroaniline ND 370 1 06/18/09 21:03 GY 5074333 4-Chiorobenzidine ND 370 1 06/18/09 21:03 GY 5074333 4-Chiorobenzidine ND 900 1 06/18/09 21:03 GY 5074333 4-Chiorobenzidine ND 370 1 06/18/09 21:03	2,4-Dimethylphenol	ND	370	1	06/18/09 21:03	GY	5074333
2,4-Dinitrotoluene ND 900 1 06/18/09 21:03 GY 5074333 2,6-Dinitrotoluene ND 370 1 06/18/09 21:03 GY 5074333 2-Chloronaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2-Chlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2-Nitrophenol ND 370 1 06/18/09 21:03 GY 5074333 2-Nitrophenol ND 900 1 06/18/09 21:03 GY 5074333 3.3'-Dichlorobenzidine ND 370 1 06/18/09 21:03 GY 5074333 3.3'-Dichlorobenzidine ND 370 1 06/18/09 21:03 GY 5074333 4-Bromophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1	2,4-Dinitrophenol	ND	900	1	06/18/09 21:03	GY	5074333
2,6-Dinitrotoluene ND 370 1 06/18/09 21:03 GY 5074333 2-Chloronaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2-Chloronaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2-Methylnaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 3-Nitroaniline ND 370 1 06/18/09 21:03 GY 5074333 3-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4-Bromophenyl phenol ND 900 1 06/18/09 21:03 GY 5074333 4-Chloro-S-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-S-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-S-methylphenol ND 370 1 <td< td=""><td>2,4-Dinitrotoluene</td><td>ND</td><td>900</td><td>1</td><td>06/18/09 21:03</td><td>GY</td><td>5074333</td></td<>	2,4-Dinitrotoluene	ND	900	1	06/18/09 21:03	GY	5074333
2-Chloronaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2-Chlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2-Methylnaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 2-Nitroaniline ND 370 1 06/18/09 21:03 GY 5074333 3-Nitroaniline ND 370 1 06/18/09 21:03 GY 5074333 3-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4-Bromophenyl phenyl ether ND 970 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloroaniline ND 370 1 06/18/09 21:03 GY 5074333 4-Chloroaniline ND 370 1 06/18/09 21:03 <td>2,6-Dinitrotoluene</td> <td>ND</td> <td>370</td> <td>1</td> <td>06/18/09 21:03</td> <td>GY</td> <td>5074333</td>	2,6-Dinitrotoluene	ND	370	1	06/18/09 21:03	GY	5074333
2-Chlorophenol ND 370 1 06/18/09 21:03 GY 5074333 2-Methylnaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 2-Nitrophenol ND 370 1 06/18/09 21:03 GY 5074333 3.3'-Dichlorobenzidine ND 370 1 06/18/09 21:03 GY 5074333 3-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4-Bromophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Nitroaniline ND 370 1	2-Chloronaphthalene	ND	370	1	06/18/09 21:03	GY	5074333
2-Methylnaphthalene ND 370 1 06/18/09 21:03 GY 5074333 2-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 2-Nitrophenol ND 370 1 06/18/09 21:03 GY 5074333 3.3'-Dichlorobenzidine ND 370 1 06/18/09 21:03 GY 5074333 3.Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4.6-Dinitro-2-methylphenol ND 900 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-a-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-alline ND 370 1 06/18/09 21:03 GY 5074333 4-Nitroaniline ND 370 1 06/18/09 21:03 GY 5074333 4-Nitrophenol ND 370 1 06/18/09	2-Chlorophenol	ND	370	1	06/18/09 21:03	GY	5074333
2-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 2-Nitrophenol ND 370 1 06/18/09 21:03 GY 5074333 3.3'-Dichlorobenzidine ND 370 1 06/18/09 21:03 GY 5074333 3.Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4.6-Dinitro-2-methylphenol ND 900 1 06/18/09 21:03 GY 5074333 4-Bromophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloroaniline ND 370 1 06/18/09 21:03 GY 5074333 4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Nitrophenol ND 370 1 06/18/09 21:03 GY 5074333 4-Nitrophenol ND 370 1 <td< td=""><td>2-Methylnaphthalene</td><td>ND</td><td>370</td><td>1</td><td>06/18/09 21:03</td><td>GY</td><td>5074333</td></td<>	2-Methylnaphthalene	ND	370	1	06/18/09 21:03	GY	5074333
2-Nitrophenol ND 370 1 06/18/09 21:03 GY 5074333 3,3'-Dichlorobenzidine ND 370 1 06/18/09 21:03 GY 5074333 3-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4-B-Dinitro-2-methylphenol ND 900 1 06/18/09 21:03 GY 5074333 4-B-Dinitro-2-methylphenol ND 900 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Nitrophenol ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthene ND 370 1 06/18/09 21:03 GY 5074333 Acenaphthylene ND 370 1	2-Nitroaniline	ND	900	1	06/18/09 21:03	GY	5074333
3,3'-Dichlorobenzidine ND 370 1 06/18/09 21:03 GY 5074333 3-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4,6-Dinitro-2-methylphenol ND 900 1 06/18/09 21:03 GY 5074333 4-Bromophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloroaniline ND 370 1 06/18/09 21:03 GY 5074333 4-Chloroaniline ND 900 1 06/18/09 21:03 GY 5074333 4-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 A-chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 Acenaphthene ND 370 1	2-Nitrophenol	ND	370	1	06/18/09 21:03	GY	5074333
3-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4,6-Dinitro-2-methylphenol ND 900 1 06/18/09 21:03 GY 5074333 4-Bromophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloroaniline ND 370 1 06/18/09 21:03 GY 5074333 4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthene ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthylene ND 370 1 06/18/09 21:03 GY 5074333 Aniline ND 370 1 06/1	3,3'-Dichlorobenzidine	ND	370	1	06/18/09 21:03	GY	5074333
4,6-Dinitro-2-methylphenol ND 900 1 06/18/09 21:03 GY 5074333 4-Bromophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloroaniline ND 370 1 06/18/09 21:03 GY 5074333 4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Nitrophenol ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthene ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthylene ND 370 1 06/18/09 21:03 GY 5074333 Acenaphthylene ND 370 1 06/18/09 21:03 GY 5074333 Anthracene ND 370 1 <t< td=""><td>3-Nitroaniline</td><td>ND</td><td>900</td><td>1</td><td>06/18/09 21:03</td><td>GY</td><td>5074333</td></t<>	3-Nitroaniline	ND	900	1	06/18/09 21:03	GY	5074333
4-Bromophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloroaniline ND 370 1 06/18/09 21:03 GY 5074333 4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4-Nitrophenol ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthene ND 370 1 06/18/09 21:03 GY 5074333 Acenaphthylene ND 370 1 06/18/09 21:03 GY 5074333 Antiracene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)prene ND 370 1 06/18/09 21:03<	4,6-Dinitro-2-methylphenol	ND	900	1	06/18/09 21:03	GY	5074333
4-Chloro-3-methylphenol ND 370 1 06/18/09 21:03 GY 5074333 4-Chloroaniline ND 370 1 06/18/09 21:03 GY 5074333 4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4-Nitrophenol ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthene ND 370 1 06/18/09 21:03 GY 5074333 Acenaphthylene ND 370 1 06/18/09 21:03 GY 5074333 Antiracene ND 370 1 06/18/09 21:03 GY 5074333 Benz(a)anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03	4-Bromophenyl phenyl ether	ND	370	1	06/18/09 21:03	GY	5074333
4-Chloroaniline ND 370 1 06/18/09 21:03 GY 5074333 4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4-Nitrophenol ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthene ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthene ND 370 1 06/18/09 21:03 GY 5074333 Acenaphthylene ND 370 1 06/18/09 21:03 GY 5074333 Acenaphthylene ND 370 1 06/18/09 21:03 GY 5074333 Anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(b)fluoranthene ND 370 1 06/18/09 21:03 GY	4-Chloro-3-methylphenol	ND	370	1	06/18/09 21:03	GY	5074333
4-Chlorophenyl phenyl ether ND 370 1 06/18/09 21:03 GY 5074333 4-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4-Nitrophenol ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthene ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthylene ND 370 1 06/18/09 21:03 GY 5074333 Anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(b/fluoranthene ND 370 1 06/18/09 21:03 GY	4-Chloroaniline	ND	370	.1	06/18/09 21:03	GY	5074333
4-Nitroaniline ND 900 1 06/18/09 21:03 GY 5074333 4-Nitrophenol ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthene ND 370 1 06/18/09 21:03 GY 5074333 Acenaphthene ND 370 1 06/18/09 21:03 GY 5074333 Acenaphthylene ND 370 1 06/18/09 21:03 GY 5074333 Aniline ND 370 1 06/18/09 21:03 GY 5074333 Anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benz(a)anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(b)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(g,h,i)perylene ND 370 1 06/18/09 21:03 GY	4-Chlorophenyl phenyl ether	ND	370	1	06/18/09 21:03	GY	5074333
4-Nitrophenol ND 900 1 06/18/09 21:03 GY 5074333 Acenaphthene ND 370 1 06/18/09 21:03 GY 5074333 Acenaphthylene ND 370 1 06/18/09 21:03 GY 5074333 Aniline ND 370 1 06/18/09 21:03 GY 5074333 Aniline ND 370 1 06/18/09 21:03 GY 5074333 Anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benz(a)anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(b)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(g,h,i)perylene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrlene ND 370 1 06/18/09 21:03 GY 5074	4-Nitroaniline	ND	900	1	06/18/09 21:03	GY	5074333
Acenaphthene ND 370 1 06/18/09 21:03 GY 5074333 Acenaphthylene ND 370 1 06/18/09 21:03 GY 5074333 Aniline ND 370 1 06/18/09 21:03 GY 5074333 Aniline ND 370 1 06/18/09 21:03 GY 5074333 Anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benz(a)anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(b)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(g,h,i)perylene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(k)fluoranthene ND 370 1 06/18/09 21:03 GY <t< td=""><td>4-Nitrophenol</td><td>ND</td><td>900</td><td>1</td><td>06/18/09 21:03</td><td>GY</td><td>5074333</td></t<>	4-Nitrophenol	ND	900	1	06/18/09 21:03	GY	5074333
Acenaphthylene ND 370 1 06/18/09 21:03 GY 5074333 Aniline ND 370 1 06/18/09 21:03 GY 5074333 Aniline ND 370 1 06/18/09 21:03 GY 5074333 Anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benz(a)anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(b)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(g,h,i)perylene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(k)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(c)k/fluoranthene ND 370 1 06/18/09 21:03 GY	Acenaphthene	ND	370	1	06/18/09 21:03	GY	5074333
Aniline ND 370 1 06/18/09 21:03 GY 5074333 Anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benz(a)anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benz(a)anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(b)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(g,h,i)perylene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(g,h,i)perylene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(acid ND 370 1 06/18/09 21:03 GY 5074333 Benzo(acid ND 370 1 06/18/09 21:03 GY	Acenaphthylene	ND	370	1	06/18/09 21:03	GY	5074333
Anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benz(a)anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benz(a)anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(b)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(g,h,i)perylene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(k)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzoic acid ND 370 1 06/18/09 21:03 GY 5074333 Benzyl alcohol ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03	Aniline	ND	370	1	06/18/09 21:03	GY	5074333
Benz(a)anthracene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(b)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(g,h,i)perylene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(k)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(k)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzoic acid ND 370 1 06/18/09 21:03 GY 5074333 Benzyl alcohol ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06	Anthracene	ND	370	1	06/18/09 21:03	GY	5074333
Benzo(a)pyrene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(b)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(b)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(g,h,i)perylene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(k)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(k)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzoic acid ND 1800 1 06/18/09 21:03 GY 5074333 Benzyl alcohol ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333	Benz(a)anthracene	ND	370	1	06/18/09 21:03	GY	5074333
Benzo(b)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(g,h,i)perylene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(g,h,i)perylene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(k)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzoic acid ND 370 1 06/18/09 21:03 GY 5074333 Benzoic acid ND 1800 1 06/18/09 21:03 GY 5074333 Benzyl alcohol ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333	Benzo(a)pyrene	ND	370	1	06/18/09 21:03	GY	5074333
Benzo(g,h,i)perylene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(k)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzo(k)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzoic acid ND 1800 1 06/18/09 21:03 GY 5074333 Benzyl alcohol ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333	Benzo(b)fluoranthene	ND	370	1	06/18/09 21:03	GY	5074333
Benzo(k)fluoranthene ND 370 1 06/18/09 21:03 GY 5074333 Benzoic acid ND 1800 1 06/18/09 21:03 GY 5074333 Benzyl alcohol ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333	Benzo(g,h,i)perylene	ND	370	1	06/18/09 21:03	GY	5074333
Benzoic acid ND 1800 1 06/18/09 21:03 GY 5074333 Benzyl alcohol ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333	Benzo(k)fluoranthene	ND	370	1	06/18/09 21:03	GY	5074333
Benzyl alcohol ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333	Benzoic acid	ND	1800	1	06/18/09 21:03	GY	5074333
Bis(2-chloroethoxy)methane ND 370 1 06/18/09 21:03 GY 5074333 Bis(2-chloroethyl)ether ND 370 1 06/18/09 21:03 GY 5074333	Benzyl alcohol	ND	370	1	06/18/09 21:03	GY	5074333
Bis(2-chloroethyl)ether ND 370 1 06/18/09 21:03 GY 5074333	Bis(2-chloroethoxy)methane	ND	370	1	06/18/09 21:03	GY	5074333
	Bis(2-chloroethyl)ether	ND	370	1	06/18/09 21:03	GY	5074333

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-3 (12.5-14)

Collected: 06/10/2009 13:45

SPL Sample ID: 09060712-03

	Site: San Juan County, NM								
Analyses/Method	Result	QUAL	Rep.	Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #	
Bis(2-chloroisopropyl)ether	ND			370	1	06/18/09 21:03	GY	5074333	
Bis(2-ethylhexyl)phthalate	ND		370		1	06/18/09 21:03	GY	5074333	
Butyl benzyl phthalate	ND			370	1	06/18/09 21:03	GY	5074333	
Carbazole	ND			370	1	06/18/09 21:03	GY	5074333	
Chrysene	ND			370	1	06/18/09 21:03	GY	5074333	
Dibenz(a,h)anthracene	· ND			370	1	06/18/09 21:03	GY	5074333	
Dibenzofuran	ND			370	1	06/18/09 21:03	GY	5074333	
Diethyl phthalate	ND			370	1	06/18/09 21:03	GY	5074333	
Dimethyl phthalate	ND			370	1	06/18/09 21:03	GY	5074333	
Di-n-butyl phthalate	ND			370	· 1	06/18/09 21:03	GY	5074333	
Di-n-octyl phthalate	ND			370	· 1	06/18/09 21:03	GY	5074333	
Fluoranthene	ND			370	1	06/18/09 21:03	GY	5074333	
Fluorene	ND			370	1	06/18/09 21:03	GY	5074333	
Hexachlorobenzene	ND			370	1	06/18/09 21:03	GY	5074333	
Hexachlorobutadiene	ND			370	1	06/18/09 21:03	GY	5074333	
Hexachlorocyclopentadiene	ND			370	1	06/18/09 21:03	GY	5074333	
Hexachloroethane	ND			370	1	06/18/09 21:03	GY	5074333	
Indeno(1,2,3-cd)pyrene	ND			370	1	06/18/09 21:03	GY	5074333	
Isophorone	ND			370	1	06/18/09 21:03	GY	5074333	
Naphthalene	ND			370	1	06/18/09 21:03	GY	5074333	
Nitrobenzene	ND	·		370	1	06/18/09 21:03	GY	5074333	
N-Nitrosodi-n-propylamine	ND			370	1	06/18/09 21:03	GY	5074333	
N-Nitrosodiphenylamine	ND			370	1	06/18/09 21:03	GY	5074333	
Pentachlorophenol	ND			900	1	06/18/09 21:03	GY	5074333	
Phenanthrene	ND			370	1	06/18/09 21:03	GY	5074333	
Phenol	ND			370	1	06/18/09 21:03	GY	5074333	
Pyrene	ND			370	1	06/18/09 21:03	GY	5074333	
Pyridine	ND			370	1	06/18/09 21:03	GY	5074333	
2-Methylphenol	ND			370	1	06/18/09 21:03	GY	5074333	
3 & 4-Methylphenol	ND			370	1	06/18/09 21:03	GY	5074333	
Surr: 2,4,6-Tribromophenol	102		% 1	9-135	1	06/18/09 21:03	GY	5074333	
Surr: 2-Fluorobiphenyl	76.5		% 1	5-140	1	06/18/09 21:03	GY	5074333	
Surr: 2-Fluorophenol	70.0		% 1	5-122	1	06/18/09 21:03	GY	5074333	
Surr: Nitrobenzene-d5	63.5		% 1	0-134	1	06/18/09 21:03	GY	5074333	
Surr: Phenol-d5	69.2		% 1	0-123	1	06/18/09 21:03	GY	5074333	
Surr: Terphenyl-d14	78.2		% 1	8-166	1	06/18/09 21:03	GY	5074333	

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550C	06/15/2009 10:31	FAK	1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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06/15/2009 11:10

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-3 (12.5-14)		Collected:	SPL Sample ID:		09060712-03					
			·	Site: Sa	n Juan C	ounty, NI	vi			
Analyses/Method		Result	QUAL	Rep.Limit	I	Dil. Factor	Date Analyz	zed	Analyst	Seq. #
TOTAL PETROLEUM		BONS	·	····	MCL		E418.1	Unit	s: mg/kg	g-dry
Petroleum Hydrocarbor	ns,TR	85		11		1	06/15/09 15	5:24 L	.LL	5067479
Prep Method	Prep Date	· · · · · · · · · · · · · · · · · · ·	Prep Initials	Prep Factor						

1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve
- TNTC Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

> 09060712 Page 22 6/29/2009 4:35:18 PM



8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-3 (12.5-14)

Collected: 06/10/2009 13:45

SPL Sample ID: 09060712-03

		Site: San	Juan County, NN	Λ		
Analyses/Method	Result QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B		MCL SV	V8260B Un	its: ug/kg	-dry
1,1,1,2-Tetrachloroethane	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,1,1-Trichloroethane	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,1,2,2-Tetrachloroethane	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,1,2-Trichloroethane	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,1-Dichloroethane	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,1-Dichloroethene	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,1-Dichloropropene	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,2,3-Trichlorobenzene	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,2,3-Trichloropropane	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,2,4-Trichlorobenzene	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,2,4-Trimethylbenzene	2900	280	50	06/22/09 16:03	LU_L	5078884
1,2-Dibromo-3-chloropropane	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,2-Dibromoethane	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,2-Dichlorobenzene	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,2-Dichloroethane	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,2-Dichloropropane	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,3,5-Trimethylbenzene	220	5.7	1	06/15/09 18:46	E_G	5068521
1,3-Dichlorobenzene	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,3-Dichloropropane	ND	5.7	1	06/15/09 18:46	E_G	5068521
1,4-Dichlorobenzene	ND	5.7	1	06/15/09 18:46	E_G	5068521
2,2-Dichloropropane	ND	5.7	1	06/15/09 18:46	E_G	5068521
2-Butanone	ND	23	1	06/15/09 18:46	E_G	5068521
2-Chloroethyl vinyl ether	ND	11	1	06/15/09 18:46	E_G	5068521
2-Chlorotoluene	ND	5.7	1	06/15/09 18:46	E_G	5068521
2-Hexanone	ND	11	1	06/15/09 18:46	E_G	5068521
4-Chlorotoluene	ND	5.7	1	06/15/09 18:46	E_G	5068521
4-Isopropyltoluene	49	5.7	1	06/15/09 18:46	E_G	5068521
4-Methyl-2-pentanone	ND	11	· 1	06/15/09 18:46	E_G	5068521
Acetone	ND	110	1	06/15/09 18:46	E_G	5068521
Acrylonitrile	ND	57	1	06/15/09 18:46	E_G	5068521
Benzene	ND	5.7	1	06/15/09 18:46	E_G	5068521
Bromobenzene	ND	5.7	1	06/15/09 18:46	E_G	5068521
Bromochloromethane	ND	5.7	1	06/15/09 18:46	E_G	5068521
Bromodichloromethane	ND	5.7	1	06/15/09 18:46	E_G	5068521
Bromoform	ND	5.7	1	06/15/09 18:46	E_G	5068521
Bromomethane	ND	11	1	06/15/09 18:46	E_G	5068521
Carbon disulfide	ND	5.7	1	06/15/09 18:46	E_G	5068521
Carbon tetrachloride	ND	5.7	1	06/15/09 18:46	E_G	5068521
Chlorobenzene	ND	5.7	1	06/15/09 18:46	E_G	5068521

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve
- TNTC Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-3 (12.5-14)

Collected: 06/10/2009 13:45

SPL Sample ID: 09060712-03

			Site	e: San .	Juan County, NN	•		
Analyses/Method	Result	QUAL	Re	p.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND			11	1	06/15/09 18:46	E_G	5068521
Chloroform	ND			5.7	1	06/15/09 18:46	E_G	5068521
Chloromethane	ND			11	1	06/15/09 18:46	E_G	5068521
Dibromochloromethane	ND			5.7	1	06/15/09 18:46	E_G	5068521
Dibromomethane	ND			5.7	1	06/15/09 18:46	E_G	5068521
Dichlorodifluoromethane	ND			11	1	06/15/09 18:46	E_G	5068521
Ethylbenzene	200			5.7	1	06/15/09 18:46	E_G	5068521
Hexachlorobutadiene	ND			5.7	1	06/15/09 18:46	E_G	5068521
Isopropylbenzene	110			5.7	1	06/15/09 18:46	E_G	5068521
Methyl tert-butyl ether	ND			5.7	1	06/15/09 18:46	E_G	5068521
Methylene chloride	ND			5.7	1	06/15/09 18:46	E_G	5068521
Naphthalene	11			5.7	1	06/15/09 18:46	E_G	5068521
n-Butylbenzene	12			5.7	1	06/15/09 18:46	E_G	5068521
n-Propylbenzene	180			5.7	1	06/15/09 18:46	E_G	5068521
sec-Butylbenzene	48			5.7	1	06/15/09 18:46	E_G	5068521
Styrene	ND			5.7	1	06/15/09 18:46	E_G	5068521
tert-Butylbenzene	54			5.7	1	06/15/09 18:46	E_G	5068521
Tetrachloroethene	ND			5.7	1	06/15/09 18:46	E_G	5068521
Toluene	92			5.7	1	06/15/09 18:46	E_G	5068521
Trichloroethene	ND	,		5.7	. 1	06/15/09 18:46	E_G	5068521
Trichlorofluoromethane	ND			5.7	1	06/15/09 18:46	E_G	5068521
Vinyl acetate	ND			11	1	06/15/09 18:46	E_G	5068521
Vinyl chloride	ND			11	1	06/15/09 18:46	E_G	5068521
cis-1,2-Dichloroethene	ND			5.7	1	06/15/09 18:46	E_G	5068521
cis-1,3-Dichloropropene	ND			5.7	1	06/15/09 18:46	E_G	5068521
m,p-Xylene	950			280	50	06/22/09 16:03	LU_L	5078884
o-Xylene	460			280	50	06/22/09 16:03	LU_L	5078884
trans-1,2-Dichloroethene	ND			5.7	1	06/15/09 18:46	E_G	5068521
trans-1,3-Dichloropropene	ND			5.7	1	06/15/09 18:46	E_G	5068521
Xylenes,Total	1410			283	50	06/22/09 16:03	LU_L	5078884
1,2-Dichloroethene (total)	ND			5.7	1	06/15/09 18:46	E_G	5068521
Surr: 1,2-Dichloroethane-d4	100		%	78-116	50	06/22/09 16:03	LU_L	5078884
Surr: 1,2-Dichloroethane-d4	99.6		%	71-130	1	06/15/09 18:46	E_G	5068521
Surr: 4-Bromofluorobenzene	104		%	65-131	1	06/15/09 18:46	E_G	5068521
Surr: 4-Bromofluorobenzene	104		%	74-125	50	06/22/09 16:03	LU_L	5078884
Surr: Toluene-d8	103		%	75-136	1	06/15/09 18:46	E_G	5068521
Surr: Toluene-d8	107		%	82-118	50	06/22/09 16:03	LU_L	5078884

Prep Method	Prep Date	Prep Initials	Prep Factor
SW 5030B	06/16/2009 11:40	E_G	1.00
SW 5030B	06/13/2009 11:16	E_G	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/\!V}}\xspace$ - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW	-3 (7.5-9)			Colle	cted: 0	6/10/2009 1	3:32	SPL Sar	nple	D: 090	60712-04
				Site:	Sar	Juan Coun	ity, NN	Λ			
Analyses/Method		Result	QUAL	Rep	.Limit	Dil.	Factor	Date Ana	lyzed	Analys	t Seq. #
GASOLINE RANGE O	RGANICS					MCL	SV	V8015B	Ur	nits: mg/	kg-dry
Gasoline Range Organic	S	ND			0.12		1	06/19/09	12:52	WLV	5075697
Surr: 1,4-Difluorobenz	ene	99.6		% 6	53-142		1	06/19/09	12:52	WLV	5075697
Surr: 4-Bromofluorobe	enzene	104		% 5	50-159		1	06/19/09	12:52	WLV	5075697
Prep Method	Prep Date		Prep Initials	Prep F	actor						
SW 5030B	06/19/2009 9:26		XML	1.00							
ION CHROMATOGRA	APHY					MCL	E300	.0 MOD	Ur	nits: mg/	kg-dry
Bromide		ND			6.22		1	06/17/09	20:05	BDG	5073749
Chloride		ND			6.22		1	06/17/09	20:05	BDG	5073749
Fluoride	·····	13.4			6.22		1	06/17/09	20:05	BDG	5073749
Ortho-phosphate (As P)		ND			6.22		1	06/19/09	23:09	BDG	5076756
Sulfate		187			6.22		1	06/17/09	20:05	BDG	5073749
Nitrogen, Nitrate (As N)		ND			6.22		1	06/17/09	20:05	BDG	5073689
Nitrogen, Nitrite (As N)		ND			6.22		1	06/17/09	20:05	BDG	5073689
MERCURY, TOTAL						MCL	SV	V7471A	Ur	nits: mg/	kg-dry
Mercury		ND		(0.0373		1	06/17/09	15:07	F_S	5071959
Pren Method	Pren Date		Pren Initials	Pren F	actor				•		
SW7471A	06/17/2009 12:00	0	F_S	1.00	<u>.</u>						
METALS BY METHOD	0 6010B. TOTA					MCL	SV	V6010B	Ur	nits: ma/	ka-drv
Aluminum		2050			12.4		1	06/18/09	14:25	EG	5073490
Boron		1.48			1.24		1	06/18/09	14:25	EG	5073490
Calcium		1350			12.4		1	06/18/09	14:25	EG	5073490
Iron		3400			1.24		1	06/18/09	14:25	EG	5073490
Magnesium		563			12.4		1	06/18/09	14:25	EG	5073490

62.2

12.4

0.373

0.622

Strontium Tin

Potassium

Sodium

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	06/18/2009 17:00	AB1	1.00
SW 3050B	06/16/2009 10:30	AB1	1.00

361

130

60.7

ND

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- $\ensuremath{\mathsf{B/V}}\xspace$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

1

1

1

1

06/18/09 14:25 EG

06/19/09 10:57 EG

06/18/09 14:25 EG

06/18/09 14:25 EG

5073490

5075347

5073490

5073490



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-3 (7.5-9)

Collected: 06/10/2009 13:32 SPL Sample ID:

Sample ID: 09060712-04

Analyses/MethodResultQUALRep.LimitDil. FactorMETALS BY METHOD 6020A, TOTALMCLSWIAntimonyND0.6221Arsenic1.510.6221Barium1770.6221BerylliumND0.4981CadmiumND0.6221Chromium2.060.6221	Site: San Juan County, NM									
METALS BY METHOD 6020A, TOTAL MCL SW Antimony ND 0.622 1 Arsenic 1.51 0.622 1 Barium 177 0.622 1 Beryllium ND 0.498 1 Cadmium ND 0.622 1 Chromium 2.06 0.622 1	Date Analyzed Analyst Seq. #									
Antimony ND 0.622 1 Arsenic 1.51 0.622 1 Barium 177 0.622 1 Beryllium ND 0.498 1 Cadmium ND 0.622 1 Chromium 2.06 0.622 1	6020A Units: mg/kg-dry									
Arsenic 1.51 0.622 1 Barium 177 0.622 1 Beryllium ND 0.498 1 Cadmium ND 0.622 1 Chromium 2.06 0.622 1	06/17/09 23:05 AL_H 5072408									
Barium 177 0.622 1 Beryllium ND 0.498 1 Cadmium ND 0.622 1 Chromium 2.06 0.622 1	06/17/09 23:05 AL_H 5072408									
Beryllium ND 0.498 1 Cadmium ND 0.622 1 Chromium 2.06 0.622 1	06/18/09 13:19 AL_H 5073068									
Cadmium ND 0.622 1 Chromium 2.06 0.622 1	06/18/09 13:19 AL_H 5073068									
Chromium 2.06 0.622 1	06/17/09 23:05 AL_H 5072408									
	06/17/09 23:05 AL_H 5072408									
Cobalt 1.63 0.622 1	06/17/09 23:05 AL_H 5072408									
Copper 2.99 0.622 1	06/17/09 23:05 AL_H 5072408									
Lead 2.51 0.622 1	06/17/09 23:05 AL_H 5072408									
Manganese 100 0.622 1	06/18/09 13:19 AL_H 5073068									
Molybdenum ND 0.622 1	06/17/09 23:05 AL_H 5072408									
Nickel 2.17 0.622 1	06/17/09 23:05 AL_H 5072408									
Selenium ND 0.622 1	06/17/09 23:05 AL_H 5072408									
Silver ND 0.622 1	06/17/09 23:05 AL_H 5072408									
Thallium ND 0.622 1	06/17/09 23:05 AL_H 5072408									
Vanadium 3.84 0.622 1	06/17/09 23:05 AL_H 5072408									
Zinc 7.24 1.24 1	06/17/09 23:05 AL_H 5072408									

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3050B	06/16/2009 10:30	AB1	1.00

PERCENT MOISTURE			MCL		D2216	Ur	nits: wt%	
Percent Moisture	19.6	0		1	06/15/09	17:02	EB1	5068027
SEMIVOLATILE HYDROCARBO	NS		MCL		SW8015B	Ur	nits: mg/kg	g-dry
Diesel Range Organics	ND	6.2		1	06/19/09	2:59	NW	5085865
Fuel Oil Range Organics	ND	12		1	06/19/09	2:59	NW	5085865
Hydraulic Fluid Range Organics	ND	12		1	06/19/09	2:59	NW	5085865
Kerosene Range Organics	ND	12		1	06/19/09	2:59	NW	5085865
Mineral Spirits Range Organics	ND	12		1	06/19/09	2:59	NW	5085865
Oil Range Organics	ND	12		1	06/19/09	2:59	NW	5085865
Surr: n-Pentacosane	68.1	% 20-154		1	06/19/09	2:59	NW	5085865

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550B	06/18/2009 14:12	QMT	1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-3 (7.5-9)

Collected: 06/10/2009 13:32

1

SPL Sample ID: 09060712-04

Site: San Juan County, NM								
Analyses/Method	Result QUA	L Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #		
SEMIVOLATILE ORGANICS BY	METHOD 8270C		MCL SV	V8270C Ur	nits: ug/kg	j-dry		
1,2,4-Trichlorobenzene	ND	410	1	06/18/09 18:17	GY	5074318		
1,2-Dichlorobenzene	ND	410	1	06/18/09 18:17	GY	5074318		
1,2-Diphenylhydrazine	ND	410	1	06/18/09 18:17	GY	5074318		
1,3-Dichlorobenzene	ND	410	1	06/18/09 18:17	GY	5074318		
1,4-Dichlorobenzene	ND	410	1	06/18/09 18:17	GY	5074318		
2,4,5-Trichlorophenol	ND	1000	1	06/18/09 18:17	GY	5074318		
2,4,6-Trichlorophenol	ND	410	1	06/18/09 18:17	GY	5074318		
2,4-Dichlorophenol	ND	410	1	06/18/09 18:17	GY	5074318		
2,4-Dimethylphenol	ND	410	1	06/18/09 18:17	GY	5074318		
2,4-Dinitrophenol	ND	1000	1	06/18/09 18:17	GY	5074318		
2,4-Dinitrotoluene	ND	1000	1	06/18/09 18:17	GY	5074318		
2,6-Dinitrotoluene	ND	410	1	06/18/09 18:17	GY	5074318		
2-Chloronaphthalene	ND	410	1	06/18/09 18:17	GY	5074318		
2-Chlorophenol	ND	410	1	06/18/09 18:17	GY	5074318		
2-Methylnaphthalene	ND	410	1	06/18/09 18:17	GY	5074318		
2-Nitroaniline	ND	1000	1	06/18/09 18:17	GY	5074318		
2-Nitrophenol	ND	410	1	06/18/09 18:17	GY	5074318		
3,3'-Dichlorobenzidine	ND	410	1	06/18/09 18:17	GY	5074318		
3-Nitroaniline	ND	1000	1	06/18/09 18:17	GY	5074318		
4,6-Dinitro-2-methylphenol	ND	1000	1	06/18/09 18:17	GY	5074318		
4-Bromophenyl phenyl ether	ND	410	1	06/18/09 18:17	GY	5074318		
4-Chloro-3-methylphenol	ND	. 410	1	06/18/09 18:17	GY	5074318		
4-Chloroaniline	ND	410	1	06/18/09 18:17	GY	5074318		
4-Chlorophenyl phenyl ether	ND	410	1	06/18/09 18:17	GY	5074318		
4-Nitroaniline	ND	1000	1	06/18/09 18:17	GY	5074318		
4-Nitrophenol	ND	1000	1	06/18/09 18:17	GY	5074318		
Acenaphthene	ND	410	1	06/18/09 18:17	GY	5074318		
Acenaphthylene	ND	410	1	06/18/09 18:17	GY	5074318		
Aniline	ND	410	1	06/18/09 18:17	GY	5074318		
Anthracene	ND	410	1	06/18/09 18:17	GY	5074318		
Benz(a)anthracene	ND	410	1	06/18/09 18:17	GY	5074318		
Benzo(a)pyrene	ND	410	1	06/18/09 18:17	GY	5074318		
Benzo(b)fluoranthene	ND	410	1	06/18/09 18:17	GY	5074318		
Benzo(g,h,i)perylene	ND	410	1	06/18/09 18:17	GY	5074318		
Benzo(k)fluoranthene	ND	410	1	06/18/09 18:17	GY	5074318		
Benzoic acid	ND	2000	1	06/18/09 18:17	GY	5074318		
Benzyl alcohol	ND	410	1	06/18/09 18:17	GY	5074318		
Bis(2-chloroethoxy)methane	ND	410	1	06/18/09 18:17	GY	5074318		
Bis(2-chloroethyl)ether	ND	410	1	06/18/09 18:17	GY	5074318		

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-3 (7.5-9)

Collected: 06/10/2009 13:32

SPL Sample ID: 09060712-04

Site: San Juan County, NM								
Analyses/Method	Result	QUAL	Re	p.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND			410	1	06/18/09 18:17	GY	5074318
Bis(2-ethylhexyl)phthalate	ND			410	1	06/18/09 18:17	GY	5074318
Butyl benzyl phthalate	ND			410	1	06/18/09 18:17	GY	5074318
Carbazole	ND			410	. 1	06/18/09 18:17	GY	5074318
Сһгуѕепе	ND			410	1	06/18/09 18:17	GY	5074318
Dibenz(a,h)anthracene	ND			410	1	06/18/09 18:17	GY	5074318
Dibenzofuran	ND			410	1	06/18/09 18:17	GY	5074318
Diethyl phthalate	ND			410	1	06/18/09 18:17	GY	5074318
Dimethyl phthalate	ND			410	1	06/18/09 18:17	GY	5074318
Di-n-butyl phthalate	ND			410	1	06/18/09 18:17	GY	5074318
Di-n-octyl phthalate	· ND			410	1	06/18/09 18:17	GY	5074318
Fluoranthene	ND			410	1	06/18/09 18:17	GY	5074318
Fluorene	ND			410	1	06/18/09 18:17	GY	5074318
Hexachlorobenzene	. ND			410	1	06/18/09 18:17	GY	5074318
Hexachlorobutadiene	ND			410	1	06/18/09 18:17	GY	5074318
Hexachlorocyclopentadiene	ND			410	1	06/18/09 18:17	GY	5074318
Hexachloroethane	ND			410	1	06/18/09 18:17	GY	5074318
Indeno(1,2,3-cd)pyrene	ND			410	1	06/18/09 18:17	GY	5074318
Isophorone	ND			410	1	06/18/09 18:17	GY	5074318
Naphthalene	ND			410	1	06/18/09 18:17	GY	5074318
Nitrobenzene	ND			410	1	06/18/09 18:17	GY	5074318
N-Nitrosodi-n-propylamine	ND			410	1	06/18/09 18:17	GY .	5074318
N-Nitrosodiphenylamine	ND			410	1	06/18/09 18:17	GY	5074318
Pentachlorophenol	ND			1000	1	06/18/09 18:17	GY	5074318
Phenanthrene	ND	· · ·		410	1	06/18/09 18:17	GY	5074318
Phenol	ND			410	1	06/18/09 18:17	GY	5074318
Pyrene	ND			410	1	06/18/09 18:17	GY	5074318
Pyridine	ND			410	1	06/18/09 18:17	GY	5074318
2-Methylphenol	ND			410	1	06/18/09 18:17	GY	5074318
3 & 4-Methylphenol	ND			410	1	06/18/09 18:17	GY	5074318
Surr: 2,4,6-Tribromophenol	111		%	19-135	1	06/18/09 18:17	GY	5074318
Surr: 2-Fluorobiphenyl	84.1		%	15-140	1	06/18/09 18:17	GY	5074318
Surr: 2-Fluorophenol	76.8		%	15-122	1	06/18/09 18:17	GY	5074318
Surr: Nitrobenzene-d5	69.4		%	10-134	1	06/18/09 18:17	GY	5074318
Surr: Phenol-d5	76.0		%	10-123	1	06/18/09 18:17	GY	5074318
Surr: Terphenyl-d14	83.5		%	18-166	1	06/18/09 18:17	GY	5074318

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3550C	06/15/2009 10:31	FAK	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

haunx interference

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-	3 (7.5-9)			Collecte	ed: 06	6/10/2009 13:32	SPL Sam	nple I	D: 0906	0712-04
				Site:	San	Juan County, NM	И			
Analyses/Method		Result	QUAL	Rep.Li	mit	Dil. Factor	Date Anal	yzed	Analyst	Seq. #
TOTAL PETROLEUM	HYDROCARBO	NS				MCL	E418.1	Ur	nits: mg/kg	g-dry
Petroleum Hydrocarbons,	TR	ND			12	1	06/15/09	15:24	LLL	5067480
Prep Method	Prep Date		Prep Initials	Prep Fact	or					
	06/15/2009 11:10			1.00						

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

> 09060712 Page 29 6/29/2009 4:35:20 PM



8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Client Sample ID:MW-3 (7.5-9)

Collected: 06/10/2009 13:32 SPL Sample ID:

SPL Sample ID: 09060712-04

			Site:	San	Juan County, I	NM			
Analyses/Method	Result	QUAL	Rep.L	imit	Dil. Fact	or Date Analyz	zed	Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B				MCL	SW8260B	Ur	nits: ug/kg	j-dry
1,1,1,2-Tetrachloroethane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,1,1-Trichloroethane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,1,2,2-Tetrachloroethane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,1,2-Trichloroethane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,1-Dichloroethane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,1-Dichloroethene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,1-Dichloropropene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,2,3-Trichlorobenzene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,2,3-Trichloropropane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,2,4-Trichlorobenzene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,2,4-Trimethylbenzene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,2-Dibromo-3-chloropropane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,2-Dibromoethane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,2-Dichlorobenzene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,2-Dichloroethane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,2-Dichloropropane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,3,5-Trimethylbenzene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
1,3-Dichlorobenzene	ND			6.2	· 1	06/15/09 19	9:17	E_G	5068522
1,3-Dichloropropane	ND		· · · · · · · · · · · · · · · · · · ·	6.2	1	06/15/09 19	9:17	E_G	5068522
1,4-Dichlorobenzene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
2,2-Dichloropropane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
2-Butanone	ND			25	1	06/15/09 19	9:17	E_G	5068522
2-Chloroethyl vinyl ether	ND			12	1	06/15/09 19	9:17	E_G	5068522
2-Chlorotoluene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
2-Hexanone	ND			12	1	06/15/09 19	9:17	E_G	5068522
4-Chlorotoluene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
4-isopropyltoluene	ND	<u></u>		6.2	1	06/15/09 19	9:17	E_G	5068522
4-Methyl-2-pentanone	ND			12	1	06/15/09 19	9:17	E_G	5068522
Acetone	ND			120	1	06/15/09 19	9:17	E_G	5068522
Acrylonitrile	ND			62	1	06/15/09 19	9:17	E_G	5068522
Benzene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
Bromobenzene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
Bromochloromethane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
Bromodichloromethane	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
Bromoform	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
Bromomethane	ND			12	1	06/15/09 19	9:17	E_G	5068522
Carbon disulfide	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
Carbon tetrachloride	ND			6.2	1	06/15/09 19	9:17	E_G	5068522
Chlorobenzene	ND			6.2	1	06/15/09 19	9:17	E_G	5068522

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- Currogate According Cutotae Autoable de Lint
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve
- TNTC Too numerous to count

- >MCL Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution
- MI Matrix Interference



8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-3 (7.5-9)

Collected: 06/10/2009 13:32

SPL Sample ID: 09060712-04

			Sile	San Ju	an County, NW			
Analyses/Method	Result	QUAL	Rep	.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND			12	1	06/15/09 19:17	E_G	5068522
Chloroform	ND			6.2	1	06/15/09 19:17	E_G	5068522
Chloromethane	ND			12	1	06/15/09 19:17	E_G	5068522
Dibromochloromethane	ND			6.2	1	06/15/09 19:17	E_G	5068522
Dibromomethane	ND			6.2	1	06/15/09 19:17	E_G	5068522
Dichlorodifluoromethane	ND			12	1	06/15/09 19:17	E_G	5068522
Ethylbenzene	ND			6.2	1	06/15/09 19:17	E_G	5068522
Hexachlorobutadiene	ND			6.2	1	06/15/09 19:17	E_G	5068522
Isopropylbenzene	ND			6.2	1	06/15/09 19:17	E_G	5068522
Methyl tert-butyl ether	ND			6.2	1	06/15/09 19:17	E_G	5068522
Methylene chloride	ND			6.2	1	06/15/09 19:17	E_G	5068522
Naphthalene	ND			6.2	1	06/15/09 19:17	E_G	5068522
n-Butylbenzene	ND			6.2	1	06/15/09 19:17	E_G	5068522
n-Propylbenzene	ND			6.2	1	06/15/09 19:17	E_G	5068522
sec-Butylbenzene	ND			6.2	1	06/15/09 19:17	E_G	5068522
Styrene	ND			6.2	1	06/15/09 19:17	E_G	5068522
tert-Butylbenzene	ND			6.2	1	06/15/09 19:17	E_G	5068522
Tetrachloroethene	ND			6.2	1	06/15/09 19:17	E_G	5068522
Toluene	ND			6.2	1	06/15/09 19:17	E_G	5068522
Trichloroethene	ND			6.2	1	06/15/09 19:17	E_G	5068522
Trichlorofluoromethane	ND			6.2	1	06/15/09 19:17	E_G	5068522
Vinyl acetate	ND			12	1	06/15/09 19:17	E_G	5068522
Vinyl chloride	ND			12	1	06/15/09 19:17	E_G	5068522
cis-1,2-Dichloroethene	ND			6.2	1	06/15/09 19:17	E_G	5068522
cis-1,3-Dichloropropene	ND			6.2	1	06/15/09 19:17	E_G	5068522
m,p-Xylene	ND			6.2	1	06/15/09 19:17	E_G	5068522
o-Xylene	ND			6.2	1	06/15/09 19:17	E_G	5068522
trans-1,2-Dichloroethene	ND			6.2	1	06/15/09 19:17	EG	5068522
trans-1,3-Dichloropropene	ND			6.2	1	06/15/09 19:17	E_G	5068522
Xylenes,Total	ND			6.2	1	06/15/09 19:17	EG	5068522
1,2-Dichloroethene (total)	ND			6.2	1	06/15/09 19:17	E_G	5068522
Surr: 1,2-Dichloroethane-d4	99.0		% 7	71-130	1	06/15/09 19:17	E_G	5068522
Surr: 4-Bromofluorobenzene	101		% 6	5-131	1	06/15/09 19:17	E_G	5068522
Surr: Toluene-d8	105		% 7	75-136	1	06/15/09 19:17	EG	5068522

Prep Method	Prep Date	Prep Initials	Prep Factor
SW 5030B	06/13/2009 11:16	E_G	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit

 $\ensuremath{\mathsf{B/\!V}}\xspace$ - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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Conoco Phillips Randleman #1

Analysis: Method:	Total Petroleum Hyc E418.1	rocarbons		WorkOrder: Lab Batch ID:	09060712 R275474
	Met	nod Blank	Samples in Analytic	al Batch:	
RunID: EX_0906	15C-5067473	Units: mg/kg	Lab Sample ID	Client Sar	nple ID
Analysis Date:	06/15/2009 15:24	Analyst: LLL	09060712-01B	(7-8.5) MV	V-2
Preparation Date:	06/15/2009 11:10	Prep By: Metho	d: 09060712-02B	MW-4 (12.	.5-14)
			09060712-03B	· MW-3 (12.	.5-14)
	Analyte	Result Rep	09060712-04B	MW-3 (7.5	5-9)
Petro	leum Hydrocarbons,TR		10		

Laboratory Cor	ntrol Sampl	<u>e (LCS)</u>
EX_090615C-5067474	Units:	mg/kg

RunID: Analysis Date: Preparation Date:

06/15/2009 15:24 06/15/2009 11:10 Units: mg/kg Analyst: LLL Prep By: Method:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Petroleum Hydrocarbons,TR	200	195	97.5	80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:0906RunID:EX_CAnalysis Date:06/1Preparation Date:06/1

09060712-01 EX_090615C-5067481 06/15/2009 15:24 e: 06/15/2009 11:10

Units: mg/kg-dry Analyst: LLL Prep By: Method:

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Petroleum Hydrocarbons,TR	12.6	252	240	90.0	252	246	92.5	2.60	20	75	125

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

MI - Matrix Interference D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

J - Estimated value between MDL and PQL E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Oil Range Organics

Surr: n-Pentacosane

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

Randleman #1

Analysis:	Semivolatile Hydrocar	bons				WorkOrder:	09060712	
Method:	SW8015B					Lab Batch ID:	91215	
Method Blank				Samples in Analyti	Samples in Analytical Batch:			
RunID: HP_V_09	0618D-5085858	Units:	mg/kg		Lab Sample ID	Client Sar	nple ID	
Analysis Date:	06/19/2009 0:38	Analyst:	NW		09060712-01B	(7-8.5) MV	V-2	
Preparation Date:	06/18/2009 14:12	Prep By:	QMT N	lethod: SW3550B	09060712-02B	MW-4 (12.	.5-14)	
					09060712-03B	MW-3 (12.	5-14)	
·		1			09060712-04B	MW-3 (7.5	i-9)	
	Analyte	1	Result	Rep Limit				
Diese	Range Organics		ND	5.0				
Fuel C	Dil Range Organics		ND	10				
Hydra	ulic Fluid Range Organics		ND	10				
Keros	ene Range Organics	-	ND	10				
Minera	al Spirits Range Organics		ND	10				

Laboratory Control Sample (LCS)

10

20-154

RunID:
Analysis Date:
Preparation Date:

06/19/2009 0:58 e: 06/18/2009 14:12

ND

HP_V_090618D-5085859

120.8

Units: mg/kg Analyst: NW Prep By: QMT Method: SW3550B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics	16.6	19.6	118	57	150
Surr: n-Pentacosane	1.66	0.934	56.3	20	154

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	09060712-01		
RunID:	HP_V_090618D-5085861	Units:	mg/kg-dry
Analysis Date:	06/19/2009 1:38	Analyst:	NW
Preparation Date:	06/18/2009 14:12	Prep By:	QMT Method: SW3550B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Diesel Range Organics	ND	21	23.5	112	42	34.3	81.6	37.3	50	21	175
Surr: n-Pentacosane	ND	1.05	1.15	109	2.09	1.94	92.5	51.1 *	30	20	154

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

k D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Anaiysis: Method:	Gasoline Range Orga SW8015B	anics						Work Lab E	Order: Batch ID:	09060712 R275951
	Meth	od Blank				Samp	oles in Analy	tical Batch	1:	
RunID: HP_R_09	00619A-5075619	Units:	mg/kg			Lab S	Sample ID		Client Sar	nple ID
Analysis Date:	06/19/2009 10:29	Analyst:	WLV			09060	0712-01B		(7-8.5) MV	V-2
Preparation Date:	06/19/2009 10:29	Prep By:	N	lethod: S	W5030B	09060	0712-02A		MW-4 (12	.5-14)
					09060	0712-03B		MW-3 (12	.5-14)	
						09060	0712-04B		MW-3 (7.5	5-9)
	Analyte		Result	Rep Lim	lit					
Gaso	line Range Organics		<u>ND</u>	0.1	0					
		1	90.0	03-14	Z					
Su	r: 4-Bromofluorobenzene		99.7	50-15	9					
Su	r: 4-Bromofluorobenzene		99.7	50-15	y Control S	Sample (L	<u>CS)</u>			
Su	r: 4-Bromofluorobenzene RunID:		99.7 <u>La</u> HP_R_090	50-15 boratory	<u>75618</u> Ur	Sample (L nits: rr	<u>CS)</u> ng/kg			
Su	rr: 4-Bromofluorobenzene RunID: Analysis	s Date:	99.7 <u>La</u> HP_R_090 06/19/200	50-15 boratory 0619A-507 09 9:31	<u>75618</u> An	Sample (L nits: rr nalyst: V	<mark>CS)</mark> ng/kg VLV			
Su	rr: 4-Bromofluorobenzene RunID: Analysis Prepara	s Date: tion Date:	99.7 La HP_R_090 06/19/200 06/19/200	50-15 boratory 0619A-507 09 9:31 09 9:31	r Control S 75618 Ur An Pre	Sample (L hits: rr halyst: V ep By:	<u>CS)</u> ng/kg VLV Method:	SW5030B		
Su	r: 4-Bromofluorobenzene RunID: Analysis Prepara	s Date: tion Date: Analyt	99.7 La HP_R_090 06/19/200 06/19/200 te	50-15 boratory 0619A-507 09 9:31 09 9:31	2 <mark>5618 Ur</mark> 75618 Ur An Pru Spike Added	Sample (L nits: rr nalyst: V ep By: Result	CS) ng/kg VLV Method: Percent Recovery	SW5030B	Upper Limit	
Su	r: 4-Bromofluorobenzene RunID: Analysis Prepara	s Date: tion Date: Analy Range Organ	99.7 <u>La</u> HP_R_090 06/19/200 06/19/200 te	50-15 boratory 0619A-507 09 9:31 09 9:31	7 <mark>5618 Ur</mark> 75618 Ur An Pr Spike Added 1.00	Sample (L nits: rr nalyst: V ep By: Result 1.01	CS) ng/kg VLV Method: Percent Recovery 101	SW5030B Lower Limit 70	Upper Limit 130	
Su	RunID: Analysis Prepara Gasoline F Surr: 1,4	s Date: tion Date: Analy Range Organ 4-Difluorober	99.7 <u>La</u> HP_R_090 06/19/200 06/19/200 te te nics nzene	50-15 boratory 0619A-507 09 9:31 09 9:31	2 Control S 75618 Ur An Pr Spike Added 1.00 0.100	Sample (L nits: rr nalyst: V ep By: Result 1.01 0.106	CS) ng/kg VLV Method: Percent Recovery 101 106	SW 5030B Lower Limit 70 63	Upper Limit 130 142	

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	09060712-04		
RunID:	HP_R_090619A-5075626	Units:	mg/kg-dry
Analysis Date:	06/19/2009 15:11	Analyst:	WLV
Preparation Date:	06/18/2009 19:32	Prep By:	JWS Method: SW5030B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	ND	1.24	1.13	90.5	1.24	1.18	95.0	4.77	50	26	147
Surr: 1,4-Difluorobenzene	ND	0.124	0.132	106	0.124	0.131	105	0.379	30	63	142
Surr: 4-Bromofluorobenzene	ND	0.124	0.132	106	0.124	0.131	105	0.662	30	50	159

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

Blank D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

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Calcium

Magnesium

Potassium

Strontium

Iron

Tin

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips Randleman #1

Analysis: Method:	alysis: Metals by Method 6010B, Total thod: SW6010B		Metals by Method 6010B, Total SW6010B				09060712 91142
	Met	hod Blank			Samples in Analyti	cal Batch:	
RunID: ICP2_09	0618A-5073478	Units:	mg/kg		Lab Sample ID	Client Sar	nple ID
Analysis Date:	06/18/2009 13:34	Analyst:	EG		09060712-01C	(7-8.5) MV	V-2
Preparation Date:	06/16/2009 10:30	Prep By:	AB1 M	lethod: SW3050B	09060712-02B	MW-4 (12	.5-14)
					09060712-03B	MW-3 (12	.5-14)
	Analyte		Result	Rep Limit	09060712-04C	MW-3 (7.5	i-9)
Alum	ninum		ND	.10			
Boro	0		ND	1			

10

1

10

50 0.3

0.5

ND

ND

ND

ND

ND

ND

Laboratory	Control	Sample	(LCS)

RunID:	ICP2_090618A-5073479	Units:	mg/kg
Analysis Date:	06/18/2009 13:38	Analyst:	EG
Preparation Date:	06/16/2009 10:30	Prep By:	AB1 Method: SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Aluminum	7590	5812	76.57	58	142
Boron	96.60	81.41	84.28	56	144
Calcium	4320	4010	92.82	79	121
Iron	14400	11170	77.57	52	149
Magnesium	2220	1922	86.58	77	123
Potassium	2380	2216	93.11	71	129
Strontium	113.0	106.4	94.16	80	120
Tin	175.0	155.2	88.69	70	130

Post Digestion Spike (PDS) / Post Digestion Spike Duplicate (PDSD)

Sample Spiked:	09060712-03		
RunID:	ICP2_090618A-5073484	Units:	mg/kg-dry
Analysis Date:	06/18/2009 14:00	Analyst:	EG

	Analyte	Sample Result	PDS Spike Added	PDS Result	PDS % Recovery	PDSD Spike Added	PDSD Result	PDSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Qualifiers:	ND/U - Not Detected at the Reporting Limit MI - Matrix Interference											
	B/V - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution											
	J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits											
	E - Estimated	E - Estimated Value exceeds calibration curve										
	N/C - Not Calc	N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.										
	TNTC - Too ni	imerous to count								09	060712	Page

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Analysis:	Metals by Method 6	6010B, Total						WorkOrder:	090	60712		
Method:	SW6010B							Lab Batch ID:	911	42		
Potassium		534	1131.2	1837	115.2	1131.2	1843	115.7	0.3074	20	75	125
		Matrix	<u>Spike (</u> I	MS) / Matrix S	Spike Dupli	cate (MS	<u>SD)</u>					
	Sam	ple Spiked:	09060	712-03								
	Run	ID:	ICP2_0	90618A-50734	81 Units:	mg/	/kg-dry					
	Ana	lysis Date:	06/18/2	2009 13:47	Analys	st: EG						
	Prep	paration Date:	06/16/2	2009 10:30	Prep I	By: AB	1 Method: SV	V3050B				
	Analyte	Sample	MS	MS	MS %	MSD	MSD	MSD %	RPD	RPD	Low	High
		Result	Spike	Result	Recovery	Spike	Result	Recovery		Limit	Limit	Limit
			Added			Added						
Aluminum		3016	113.1	6673	N/C	113.1	5810	N/C	N/C	20	75	125
Boron		1.934	113.1	100.3	86.92	113.1	101.3	87.82	1.010	20	75	125
Calcium		3937	113.1	3497	N/C	113.1	2902	N/C	N/C	20	75	125
Iron		4949	113.1	6889	N/C	113.1	5926	N/C	N/C	20	75	125
Magnesium		· 834.7	113.1	1393	N/C	113.1	1164	N/C	N/C	20	75	125
Potassium		533.9	1131	2015	130.9 *	1131	1922	122.7	4.713	20	75	125
Strontium		73.97	113.1	205.0	115.8	113.1	181.0	94.61	12.43	20	75	125
Tin		0.8710	113.1	110.1	96.56	113.1	109.2	95.77	0.8150	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

k D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

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Manganese

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips Randleman #1

Analysis: Method:	Metals by Method 6 SW6020A	020A, Total			WorkOrder: Lab Batch ID:	09060712 91142A-I			
	Method Blank				Samples in Analytical Batch:				
RunID: ICPMS_0	90618A-5073056	Units:	mg/kg	Lab Sample ID	Client San	nple ID			
Analysis Date:	06/18/2009 12:20	Analyst:	AL_H	09060712-01C	(7-8.5) MW	1-2			
Preparation Date:	06/16/2009 10:30	Prep By:	AB1 Method: SW3050B	09060712-02B	MW-4 (12.	5-14)			
				09060712-03B	MW-3 (12.	5-14)			
Poriu	Analyte		Result Rep Limit	09060712-04C	MW-3 (7.5	-9)			
Berv	lium		ND 0.4						

Laboratory Control Sample (LCS)

0.5

RunID:
Analysis Date:
Preparation Da

06/18/2009 12:25 06/16/2009 10:30 ate[.]

ND

ICPMS_090618A-5073057 Units: mg/kg Analyst: AL_H AB1 Method: SW3050B Prep By:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit	
Barium	156.0	136.1	87.24	82	119	
Beryllium	143.0	143.9	100.6	82	118	
Manganese	304.0	278.5	91.61	80	120	

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	1
RunID:	
Analysis Date:	
Preparation Date:	

09060712-03 ICPMS_090618A-5073059 06/18/2009 12:35 06/16/2009 10:30

Units: mg/kg-dry Analyst: AL_H Prep By: AB1 Method: SW3050B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Barium	145.1	11.31	131.9	N/C	11.31	171.6	N/C	N/C	20	75	125
Beryllium	ND	11.31	<i>.</i> 9.224	79.13	11.31	9.245	79.32	0.2327	20	75	125
Manganese	192.8	11.31	183.1	N/C	11.31	153.5	N/C	N/C	20	75	125

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

Randleman #1

Analysis: Aethod:	Metals by Method SW6020A	0020A, 10tai					Work Lab I	Order: Batch ID:	09060712 91142-l	
	M	thod Blank			Samp	les in Analy	tical Batch	1:		
uniD: ICPMS	_090617A-5072396	Units:	mg/kg		Lab S	ample ID		Client San	nple ID	
nalysis Date:	06/17/2009 22:05	Analyst:	AL_H		09060)712-01C		(7-8.5) MW	V-2	
reparation Date	e: 06/16/2009 10:30	Prep By	AB1 Meth	od: SW3050B	09060)712-02B		MW-4 (12.	.5-14)	
					09060)712-03B		MW-3 (12.	.5-14)	
	Analita		Bogult Bo	n Limit	09060)712-04C		MW-3 (7.5	5-9)	
An	timony			0.5						
Ars	senic		ND	0.5						
Ca	dmium		ND	0.5						
Co	romium bait		ND	0.5						
Co	pper		ND	0.5						
Lea	ad		ND	0.5						
Nic	ckel		ND	0.5						
Sel	lenium		ND	0.5						
Th	allium		ND	0.5						
Vai	nadium		ND	0.5						
Zin	1C		ND	1						
	Runi	D: /sis Date [:]	ICPMS_09061	17A-5072397 U	nits: m nalvst: A	ng/kg IH				
	Runi Anal Prep	D: /sis Date: aration Date: Analy	ICPMS_09061 06/17/2009 2 06/16/2009 2	17A-5072397 U 22:10 A 10:30 P Spike Added	nits: m nalyst: A ep By: A Result	1g/kg L_H B1 Method: Percent Recovery	SW 3050B	Upper Limit		
	Runi Anal Prep	D: /sis Date: aration Date: Analy	ICPMS_09061 06/17/2009 2 06/16/2009 ⁻ te	17A-5072397 U; 22:10 Ai 10:30 Pi Spike Added 77.50	nits: m nalyst: A ep By: A Result 55.56	ig/kg L_H B1 Method: Percent Recovery 71.69	SW 3050B Lower Limit 30	Upper Limit 223		
	Runi Anal Prep Antimoi Arsenic	D: /sis Date: aration Date: Analy	ICPMS_09061 06/17/2009 2 06/16/2009 2	17A-5072397 Ui 22:10 Ai 10:30 Pi Spike Added 77.50 80.90	nits: m nalyst: A ep By: A Result 55.56 78.30	ng/kg L_H B1 Method: Percent Recovery 71.69 96.79	SW 3050B Lower Limit 30 79	Upper Limit 223 121		
	Runi Anal Prep Antimor Arsenic Cadmiu	D: vsis Date: aration Date: Analy	ICPMS_09061 06/17/2009 2 06/16/2009 2	17A-5072397 Ur 22:10 Ar 10:30 Pr Added 77.50 80.90 233.0	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8	ig/kg L_H B1 Method: Percent Recovery 71.69 96.79 99.48	SW 3050B Lower Limit 30 79 81	Upper Limit 223 121 119		·
	Runi Anal Prep Antimor Arsenic Cadmiu Chromi	D: /sis Date: aration Date: Analy ny m m	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ur 22:10 Ar 10:30 Pr Added 77.50 80.90 233.0 60.80	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8 59.58	19/kg L_H B1 Method: Recovery 71.69 96.79 99.48 97.99	SW 3050B Lower Limit 30 79 81 78	Upper Limit 223 121 119 121		
	Runi Anal Prep Antimon Arsenic Cadmiu Chromi Cobalt	D: /sis Date: aration Date: Analy IV m um	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 U1 22:10 Ar 10:30 Pr Spike Added 77.50 80.90 233.0 60.80 68.60	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8 59.58 68.90	ng/kg L_H B1 Method: Percent Recovery 71.69 96.79 99.48 97.99 100.4	SW 3050B Lower Limit 30 79 81 78 82	Upper Limit 223 121 119 121 118		
	Runi Anal Prep Antimo Arsenic Cadmiu Chromi Cobalt Copper	D: /sis Date: aration Date: Analy m m um	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ur 22:10 Ar 10:30 Pr Spike Added 77.50 80.90 233.0 60.80 68.60 131.0	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8 59.58 68.90 130.9	ng/kg L_H B1 Method: Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92	SW 3050B Lower Limit 30 79 81 78 82 79	Upper Limit 223 121 119 121 118 118		
	Runi Anal Prep Antimon Arsenic CadmiL Chromi Cobalt Copper Lead	D: vsis Date: aration Date: Analy m m um	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ur 22:10 Ar 10:30 Pr Added 77:50 80.90 233.0 60.80 68.60 131.0 76.80	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8 59.58 68.90 130.9 71.35	ng/kg L_H B1 Method: Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90	SW 3050B Lower Limit 30 79 81 78 82 79 81	Upper Limit 223 121 119 121 118 118 118 120		
	Runi Anal Prep Antimor Arsenic Cadmiu Chromi Cobalt Copper Lead Molybd	D: vsis Date: aration Date: Analy m um enum	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ur 22:10 Ar 10:30 Pr Added 77.50 80.90 233.0 60.80 68.60 131.0 76.80 58.40	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8 59.58 68.90 130.9 71.35 55.00	ng/kg L_H B1 Method: Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90 94.18	SW 3050B Lower Limit 300 79 81 78 82 79 81 79	Upper Limit 223 121 119 121 118 118 120 121		
	Runi Analy Prep Antimon Arsenic Cadmiu Chromi Cobalt Copper Lead Molybd Nickel	D: vsis Date: aration Date: Analy NY m um enum	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ut 22:10 Ar 10:30 Pr 300 300 300 300 300 300 300 300 300 30	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8 59.58 68.90 130.9 71.35 55.00 51.70	19/kg L_H B1 Method: Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90 94.18 104.2	SW 3050B Lower Limit 30 79 81 78 82 79 81 79 81 79	Upper Limit 223 121 119 121 118 118 120 121 119		
	Runl Anal Prep Antimoo Arsenic Cadmiu Chromi Cobalt Copper Lead Molybd Nickel Seleniu	D: vsis Date: aration Date: Analy m m um enum m	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ur 22:10 An 10:30 Pr 30:00 22:10 An 10:30 Pr 40:00 77:50 80:90 233.0 60:80 60:80 68:60 131.0 76:80 58:40 49:60 82:90	nits: m nalyst: A ep By: A Result 555.56 78.30 231.8 59.58 68.90 130.9 71.35 55.00 51.70 89.06	ng/kg L_H B1 Method: Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90 94.18 104.2 107.4	SW 3050B Lower Limit 30 79 81 78 82 79 81 79 81 79 81 79	Upper Limit 223 121 119 121 118 120 121 119 119 124		
	Runi Anal Prep Antimoo Arsenic CadmiL Chromi Cobalt Copper Lead Molybd Nickel Seleniu Silver	D: vsis Date: aration Date: Analy m m enum m	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ur 22:10 An 10:30 Pr 30:00 22:10 An 10:30 Pr 40:00 77:50 80:90 233:0 60:80 60:80 68:60 131:0 76:80 68:40 68:40 58:40 49:60 82:90 80:00	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8 59.58 68.90 130.9 71.35 55.00 51.70 89.06 85.50	Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90 94.18 104.2 107.4 106.9 96.71	SW 3050B Lower Limit 30 79 81 78 82 79 81 79 81 79 81 76 61 76	Upper Limit 223 121 119 121 118 118 120 121 119 124 139 125		
	Runi Anal Prep Antimou Arsenic Cadmiu Chromi Cobalt Copper Lead Molybd Nickel Seleniu Silver Thalliur	D: vsis Date: aration Date: Analy m m enum m n m	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ur 22:10 Ar 10:30 Pr 30 30 30 30 30 30 30 30 30 30 30 30 30	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8 59.58 68.90 130.9 71.35 55.00 51.70 89.06 85.50 152.8 63.90	Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90 94.18 104.2 107.4 106.9 96.71 88.26	SW 3050B Lower Limit 300 79 81 78 82 79 81 79 81 79 81 76 61 76 71	Upper Limit 223 121 119 121 118 118 120 121 119 124 139 125 128		
	Runl Anal Prep Antimon Arsenic CadmiL Chromi Cobalt Copper Lead Molybd Nickel Seleniu Silver Thalliur Vanadii Zinc	D: vsis Date: aration Date: Analy m m enum m n m	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ur 22:10 Ar 10:30 Pr 300 300 300 300 300 300 300 300 300 30	nits: m nalyst: A ep By: A Result 555.56 78.30 231.8 59.58 68.90 130.9 71.35 55.00 51.70 89.06 85.50 152.8 63.90 106.8	Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90 94.18 104.2 107.4 106.9 96.71 88.26 92.07	SW 3050B Lower Limit 300 799 811 788 822 799 811 766 611 766 711 788 799	Upper Limit 223 121 119 121 118 118 120 121 119 124 139 125 128 122		
	Runi Anal Prep Antimon Arsenic Cadmiu Chromi Cobalt Copper Lead Molybd Nickel Seleniu Silver Thalliur Vanadii Zinc	D: vsis Date: aration Date: Analy m m um enum m n um	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ut 22:10 An 10:30 Pr 300 22:10 An 10:30 Pr 400 30:00 233.0 60.80 233.0 60.80 68.60 131.0 68.60 131.0 76.80 58.40 49.60 82.90 80.00 158.0 72.40 116.0	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8 59.58 68.90 130.9 71.35 55.00 51.70 89.06 85.50 152.8 63.90 106.8	Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90 94.18 104.2 107.4 106.9 96.71 88.26 92.07	SW 3050B Lower Limit 30 79 81 78 82 79 81 79 81 76 61 76 61 76 71 78	Upper Limit 223 121 119 121 118 120 121 119 124 139 125 128 122		
Qualifiers:	Runi Anal Prep Antimoo Arsenic Cadmiu Chromi Cobalt Copper Lead Molybd Nickel Seleniu Silver Thalliur Vanadii Zinc	D: vsis Date: aration Date: Analy m m m enum m m m m m m enum m m cation Date: Analy m m m enum m m m enum m m m enum m m enum m enum m enum m enum m enum e	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ur 22:10 An 10:30 Pr 30:90 22:10 An 10:30 Pr 30:90 233.0 60.80 233.0 60.80 68.60 131.0 76.80 68.60 131.0 76.80 82.90 80.00 158.0 158.0 72.40 116.0	nits: m nalyst: A ep By: A Result 555.56 78.30 231.8 59.58 68.90 130.9 71.35 555.00 51.70 89.06 85.50 152.8 63.90 106.8 - Matrix Int	ng/kg L_H B1 Method: Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90 94.18 104.2 107.4 106.9 96.71 88.26 92.07 reference	SW 3050B Lower Limit 30 79 81 78 82 79 81 79 81 79 81 76 61 76 61 76 71 78	Upper Limit 223 121 119 121 118 120 121 119 124 139 125 128 122		
Qualifiers:	Runi Anal Prep Antimou Arsenic Cadmiu Chromi Cobalt Copper Lead Molybd Nickel Seleniu Silver Thalliur Vanadii Zinc ND/U - Not Detected B/V - Analyte detect	D: vsis Date: aration Date: Analy m m m m m m m d at the Repor ted in the asso	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ur 22:10 Ar 10:30 Pr 300 22:10 Ar 10:30 Pr 300 300 300 300 300 300 300 300 300 30	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8 59.58 68.90 130.9 71.35 55.00 51.70 89.06 85.50 152.8 63.90 106.8 - Matrix Int Recovery	Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90 94.18 104.2 107.4 106.9 96.71 88.26 92.07 reference Unreportable	SW 3050B Lower Limit 300 79 81 78 82 79 81 76 61 76 71 78 78 82 79 81 79 81 76 61 76 71 78 78 82 79 81 76 61 76 71 78 78 78 78 78 79 81 76 61 76 71 78 78 78 78 78 78 78 78 78 78	Upper Limit 223 121 119 121 118 118 120 121 119 124 139 125 128 122 128		
Qualifiers:	Runi Anal Prep Antimou Arsenic Cadmiu Chromi Cobalt Copper Lead Molybd Nickel Seleniu Silver Thalliur Vanadii Zinc ND/U - Not Detecte B/V - Analyte detec J - Estimated value	D: vsis Date: aration Date: Analy M m enum m n m n m d at the Repor ted in the asso between MDL	ICPMS_09061 06/17/2009 2 06/16/2009 2 te	17A-5072397 Ur 22:10 Ar 10:30 Pr 22:10 Ar 10:30 Pr 30:00 30	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8 59.58 68.90 130.9 71.35 55.00 51.70 89.06 85.50 152.8 63.90 106.8 63.90 106.8	Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90 94.18 104.2 107.4 106.9 96.71 88.26 92.07 erference Unreportable Dutside Advis	SW 3050B Lower Limit 300 799 811 788 822 799 811 766 611 766 711 788 788 789 799 811 766 711 788 788 789 789 810 760 711 788 788 789 789 780 780 780 780 780 780 780 780	Upper Limit 223 121 119 121 118 118 120 121 119 124 139 125 128 122 122 122		
Qualifiers:	Runl Anal Prep Antimon Arsenic Cadmiu Chromi Cobalt Copper Lead Molybd Nickel Seleniu Silver Thalliur Vanadii Zinc ND/U - Not Detecte B/V - Analyte detec J - Estimated Value	D: vsis Date: aration Date: Analy M m an an m an m an an m an an an an an an an an an an	ICPMS_09061 06/17/2009 2 06/16/2009 2 tte	17A-5072397 Ur 22:10 Ar 10:30 Pr 22:10 Ar 10:30 Pr 80.90 233.0 60.80 233.0 76.80 20 80.00 1158.0 72.40 116.0 72.40 116.0 72.40 116.0 72.40 72.40 116.0 72.40	nits: m nalyst: A ep By: A Result 55.56 78.30 231.8 59.58 68.90 130.9 71.35 55.00 51.70 89.06 85.50 152.8 63.90 106.8 - Matrix Int Recovery C	Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90 94.18 104.2 107.4 106.9 96.71 88.26 92.07 eerference Unreportable Dutside Advis	SW 3050B Lower Limit 30 79 81 78 82 79 81 79 81 79 81 79 81 79 81 79 81 79 81 79 81 79 81 79 81 79 81 79 81 79 81 78 82 79 81 79 81 78 82 79 81 79 81 78 82 79 81 76 61 76 61 76 71 78 82 79 81 76 61 76 61 76 71 78 82 79 81 76 61 76 71 78 82 79 81 76 61 76 71 78 82 79 81 76 61 76 71 78 82 79 81 78 78 78 78 78 78 78 78 78 78	Upper Limit 223 121 119 121 118 120 121 119 124 139 125 128 122 128 122		
Qualifiers:	Runl Anal Prep Antimoo Arsenic Cadmiu Chromi Cobalt Copper Lead Molybd Nickel Seleniu Silver Thalliur Vanadit Zinc ND/U - Not Detecte B/V - Analyte detect J - Estimated Value N/C - Not Calculated	D: vsis Date: aration Date: Analy m m m enum m enum m d at the Reported in the asso between MDL e exceeds calib d - Sample col	ICPMS_09061 06/17/2009 2 06/16/2009 2 tte	17A-5072397 Ui 10:30 Pi 22:10 Ai 10:30 Pi Spike Added 77.50 80.90 233.0 60.80 68.60 131.0 76.80 82.90 80.00 158.0 72.40 116.0 Hank D - seater than 4 tin	nits: m nalyst: A ep By: A Result 555.56 78.30 231.8 59.58 68.90 130.9 71.35 55.00 51.70 89.06 85.50 152.8 63.90 106.8 63.90 106.8 - Matrix Int Recovery C nes the am	Percent Recovery 71.69 96.79 99.48 97.99 100.4 99.92 92.90 94.18 104.2 107.4 106.9 96.71 88.26 92.07 eeference Unreportable Dutside Advis nount of spike	SW 3050B Lower Limit 30 79 81 78 82 79 81 79 81 79 81 79 81 76 61 76 61 76 61 76 61 76 61 76 61 76 61 76 61 78 81 79 81 76 61 76 61 76 61 76 61 78 78 78 78 79 81 76 61 76 61 76 78 78 81 76 61 76 78 78 81 76 61 76 78 78 81 78 78 81 76 61 78 78 81 78 78 81 78 81 78 81 78 78 78 78 78 78 78 78 78 78	Upper Limit 223 121 119 121 118 120 121 119 124 139 125 128 122 122 128 122	o not apply.	



Conoco Phillips

Randleman #1

Analysis:	Metals by Method 6020A, Total	WorkOrder:	09060712
Method:	SW6020A	Lab Batch ID:	91142-I

Post Digestion Spike (PDS) / Post Digestion Spike Duplicate (PDSD)

Sample Spiked:	09060712-03		
RunID:	ICPMS_090617A-5072402	Units:	mg/kg-dry
Analysis Date:	06/17/2009 22:35	Analyst:	AL_H

Analyte	Sample Result	PDS Spike Added	PDS Result	PDS % Recovery	PDSD Spike Added	PDSD Result	PDSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Antimony	ND	11.312	11.2	99.04	11.312	11.23	99.27	0.2320	20	75	125
Zinc	12.6	11.312	22.56	87.80	11.312	22.41	86.50	0.6541	20	75	125

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: RunID: Analysis Date: Preparation Date:

ICPMS_090617A-5072399 Units: 06/17/2009 22:20 06/16/2009 10:30

09060712-03

mg/kg-dry Analyst: AL H Prep By: AB1 Method: SW3050B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Antimony	ND	11.31	3.736	33.03 *	11.31	3.700	32.71 *	0.9735	20	75	125
Arsenic	1.898	11.31	. 11.43	84.22	11.31	12.06	89.82	5.395	20	7.5	125
Cadmium	ND	11.31	9.995	88.36	11.31	10.23	90.41	2.293	20	75	125
Chromium	3.928	11.31	13.81	87.38	11.31	14.77	95.88	6.727	20	75	125
Cobalt	2.483	11.31	12.22	86.05	11.31	12.33	87.05	0.9217	20	75	125
Copper	5.768	11.31	14.56	77.71	11.31	14.49	77.11	0.4673	20	75	125
Lead	4.259	11.31	14.04	86.45	11.31	13.96	85.75	0.5657	20	75	125
Molybdenum	ND	11.31	9.193	78.16	11.31	9.592	81.68	4.239	20	75	125
Nickel	3.368	11.31	13.10	86.03	11.31	13.02	85.33	0.6063	20	75	125
Selenium	ND	11.31	9.426	80.77	11.31	10.24	87.95	8.260	20	75	125
Silver	NÐ	11.31	10.77	95.24	· 11.31	11.06	97.73	2.581	20	75	125
Thallium	ND	11.31	9.719	84.63	11.31	9.984	86.97	2.687	20	75	125
Vanadium	6.285	11.31	16.13	87.04	11.31	15.67	82.94	2.917	20	75	125
Zinc	12.62	11.31	20.23	67.20 *	11.31	19.10	57.20 *	5.754	20	75	125

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis:	Mercury, Total				WorkOrder:	09060712
Method:	SW7471A				Lab Batch ID:	91177
	Met	hod Blank		Samples in Analyti	cal Batch:	
RunID: HGLC_09	00617A-5071953	Units:	mg/kg	Lab Sample ID	<u>Client Sar</u>	nple ID
Analysis Date:	06/17/2009 14:52	Analyst:	F_S	09060712-01C	(7-8.5) MW	1-2
Preparation Date:	06/17/2009 12:00	Prep By:	F_S Method: SW7471A	09060712-02B	MW-4 (12.	5-14)
				09060712-03B	MW-3 (12.	5-14)
	Analyte		Result Rep Limit	09060712-04C	MW-3 (7.5	-9)
Mercu	iry		ND 0.03			

Laboratory Control Sample (LCS)

RunID: Analysis Date: Preparation Date:

06/17/2009 14:54 :: 06/17/2009 12:00

HGLC_090617A-5071954

 Units:
 mg/kg

 Analyst:
 F_S

 Prep By:
 F_S
 Method: SW7471A

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Mercury	3.600	3.889	108.0	68	132

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

 Sample Spiked:
 09060712-01

 RunID:
 HGLC_090617A-5071956
 Units:
 mg/kg-dry

 Analysis Date:
 06/17/2009 15:00
 Analyst:
 F_S

 Preparation Date:
 06/17/2009 12:00
 Prep By:
 F_S
 Method: SW7471A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Mercury	ND	0.3783	0.4106	104.9	0.3783	0.4038	103.1	1.667	20	75	125

ualifiers:	ND/U - Not Detected at the Reporting Limit	MI - Matrix Interference	
	B/V - Analyte detected in the associated Method Blank	D - Recovery Unreportable due to Dilution	
	J - Estimated value between MDL and PQL	* - Recovery Outside Advisable QC Limits	
	E - Estimated Value exceeds calibration curve		
	N/C - Not Calculated - Sample concentration is greater the	an 4 times the amount of spike added. Control limits do not app	dy.
	TNTC - Too numerous to count		09060712 Page

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

Q

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Conoco Phillips

Analysis: Method:	Metals by I SW6010B	Method 6010B, Total						Work Lab E	Order: Batch ID	090 : 912	60712 42		
		Method Blank				Sample	s in Analyt	cal Batch	ı :				
RunID: ICP2_09	0619A-5075370	Units:	mg/kg)		Lab Sar	nole ID		Client	Sample ID)		
Analysis Date:	06/19/2009	12:59 Analyst	EG			090607	2-01C		(7-8.5)	MW-2			
Preparation Date:	06/18/2009	17:00 Prep B	/: AB1	Method: SW	3050B	090607	2-02B		MW-4	(12.5-14)			
						090607	2-03B		MW-3	(12.5-14)			
	A	nalvte	Result	Rep Limit		090607	2-04C		MW-3	(7.5-9)			
Sodi	um		N	ID 10									
			<u>t</u>	aboratory C	ontrol Sam	ple (LCS	<u>5)</u>						
		RunID:	ICP2 09	0619A-50753	36 Units:	ma/	ka						
		Analysis Date:	06/19/2	009 10:10	Analy	at: EG	Ng l						
	,	Preparation Date:	06/18/2	2009 17:00	Prep I	BV: AB	Method: S	W3050B					
		·			·								
		Ana	vte		Spike R	esult	Percent	Lower	Upper	٦			
					Added		Recovery	Limit	Limit				
		Sodium			456.0	477.5	104.7	56	144	4			
Sample Spiked: RunID: Analysis Date:	09060712-0 ICP2_090619 06/19/2009)3 9A-5075341 Units: 10:32 Analyst	mg/kg : EG	g-dry									
Sample Spiked: RunID: Analysis Date: Analysis A	09060712-0 ICP2_090619 06/19/2009 malyte)3 9A-5075341 Units: 10:32 Analyst Sample Result	mg/kg : EG PDS Spike	p-dry PDS Result	PDS % Recovery	PDSD Spike	PDSD Result	PDSD Recov	9 % /ery	RPD	RPD Limit	Low Limit	Higi Lim
Sample Spiked: RunID: Analysis Date: A	09060712-0 ICP2_090619 06/19/2009	03 9A-5075341 Units: 10:32 Analyst Sample Result	mg/kg : EG PDS Spike Added	g-dry PDS Result	PDS % Recovery	PDSD Spike Added	PDSD Result	PDSD Recov	very	RPD	RPD Limit	Low Limit	Hig
Sample Spiked: RunID: Analysis Date: A Sodium	09060712-0 ICP2_090619 06/19/2009	03 9A-5075341 Units: 10:32 Analyst Sample Result 262	mg/kg EG PDS Spike Added 113.12	PDS Result 352.9	PDS % Recovery 80.40	PDSD Spike Added 113.12	PDSD Result 352	PDSD Recov	9 % very 9.80	RPD 0.1925	RPD Limit 20	Low Limit 75	Higi Lim
Sample Spiked: RunłD: Analysis Date: A Sodium	09060712-0 ICP2_090619 06/19/2009	03 9A-5075341 Units: 10:32 Analyst Sample Result 262 <u>Matr</u>	mg/kg EG PDS Spike Added 113.12	PDS Result 352.9 (MS) / Matrix	PDS % Recovery 80.40	PDSD Spike Added 113.12 licate (M	PDSD Result 352 SD)	PDSD Recov	9 % /ery 9.80	RPD 0.1925	RPD Limit 20	Low Limit 75	Higi Lim
Sample Spiked: RunID: Analysis Date: A Sodium	09060712-0 ICP2_090619 06/19/2009	03 9A-5075341 Units: 10:32 Analyst Sample Result 262 <u>Matr</u> Sample Spiked: RunID:	mg/kg EG PDS Spike Added 113.12 ix Spike (09060 ICP2_0	PDS Result 352.9 (MS) / Matrix 0712-03 090619A-5075	PDS % Recovery 80.40 Spike Dup	PDSD Spike Added 113.12 licate (M	PDSD Result 352 <u>SD)</u> g/kg-dry	PDSD Recov	9 % yery 9.80	RPD 0.1925	RPD Limit 20	Low Limit 75	Higi Lim
Sample Spiked: RunID: Analysis Date: A Sodium	09060712-0 ICP2_090619 06/19/2009	03 9A-5075341 Units: 10:32 Analyst Sample Result 262 <u>Matr</u> Sample Spiked: RunID: Analysis Date:	mg/kg EG PDS Spike Added 113.12 ix Spike (09060 ICP2_0 06/19	PDS Result 352.9 (MS) / Matrix 0712-03 090619A-5075 /2009 10:19	PDS % Recovery 80.40 Spike Dup	PDSD Spike Added 113.12 licate (M s: m yst: Ef	PDSD Result 352 <u>SD)</u> g/kg-dry G	PDSD Recov	9 % /ery 9.80	RPD 0.1925	RPD Limit 20	Low Limit 75	Hig Lim
Sample Spiked: RunID: Analysis Date: A Sodium	09060712-0 ICP2_090619 06/19/2009	03 9A-5075341 Units: 10:32 Analyst Sample Result 262 <u>Matr</u> Sample Spiked: RunID: Analysis Date: Preparation Date	mg/kg EG Spike Added 113.12 x Spike (09060 ICP2_0 06/19 06/18	PDS Result 352.9 (MS) / Matrix 0712-03 090619A-5075 /2009 10:19 /2009 17:00	PDS % Recovery 80.40 Spike Dup 338 Unit Ana Prep	PDSD Spike Added 113.12 licate (M s: m yst: Ed By: Ad	PDSD Result 352 SD) g/kg-dry G 31 Method	PDSD Recov .3 7 SW3050	9 % very 9.80 B	RPD 0.1925	RPD Limit 20	Low Limit	Hig Lim
Sample Spiked: RunID: Analysis Date: A Sodium	09060712-0 ICP2_090619 06/19/2009	03 9A-5075341 Units: 10:32 Analyst Sample Result 262 <u>Matr</u> Sample Spiked: RunID: Analysis Date: Preparation Date Sample	mg/kg EG PDS Spike Added 113.12 ix Spike (09060 ICP2_0 06/19 06/18	PDS Result 352.9 (MS) / Matrix 0712-03 090619A-5075 /2009 10:19 /2009 17:00 MS	PDS % Recovery 80.40 Spike Dup 338 Unit Ana Prep MS %	PDSD Spike Added 113.12 licate (M s: m yst: Ed By: Al By: Al	PDSD Result 352 SD) g/kg-dry 3 31 Method MSD	PDSD Recov .3 7 SW3050	9 % very 9.80 B	RPD 0.1925	RPD Limit 20	Low Limit 75	Hig Lim
Sample Spiked: RunID: Analysis Date: A Sodium	09060712-0 ICP2_090619 06/19/2009	03 9A-5075341 Units: 10:32 Analyst Sample Result 262 <u>Matr</u> Sample Spiked: RunID: Analysis Date: Preparation Date Sample Result	mg/kg EG PDS Spike Added 113.12 ix Spike (09060 ICP2_0 06/19 06/18 MS Spike	PDS Result 352.9 (MS) / Matrix 0712-03 090619A-5075 /2009 10:19 /2009 17:00 MS Result	PDS % Recovery 80.40 Spike Dup 338 Unit Ana Prep MS % Recovery	PDSD Spike Added 113.12 licate (M s: m yst: Ei By: Al	PDSD Result 352 SD) g/kg-dry 3 31 Method Result	PDSD Recov .3 7 SW3050 MSD Reco	9 % 9.80 B 0 % svery	RPD 0.1925 RPD	RPD Limit 20 RPD Limit	Low Limit 75 Low Limit	Hig Lim 1: Hig Lim
Sample Spiked: RunID: Analysis Date: A Sodium	09060712-0 ICP2_090619 06/19/2009 malyte	03 9A-5075341 Units: 10:32 Analyst Sample Result 262 <u>Matr</u> Sample Spiked: RunID: Analysis Date: Preparation Date Sample Result	mg/kg EG Spike Added 113.12 IX Spike (09060 ICP2_0 06/19 06/18 Spike Added	PDS Result 352.9 (MS) / Matrix 0712-03 090619A-5075 /2009 10:19 /2009 17:00 MS Result	PDS % Recovery 80.40 Spike Dup 338 Unit Ana Prep MS % Recovery	PDSD Spike Added 113.12 iicate (M s: m yst: Ei By: Al Spike Added	PDSD Result 352 SD) g/kg-dry 3 31 Method Result	PDSD Recov .3 7 SW3050 MSE Reco	9 % 9.80 9.80 B	RPD 0.1925 RPD	RPD Limit 20 RPD Limit	Low Limit 75 Low Limit	Higi Lim 12 Higi Lim
Sample Spiked: RunID: Analysis Date: A Sodium A Sodium	09060712-0 ICP2_090619 06/19/2009	03 9A-5075341 Units: 10:32 Analyst 262 <u>Matr</u> Sample Spiked: RunID: Analysis Date: Preparation Date Sample Result 262	mg/kg EG Spike Added 113.12 ix Spike (09060 ICP2_0 06/19 06/18 MS Spike Added 0 113.1	PDS Result 352.0 (MS) / Matrix 0712-03 090619A-5075 /2009 10:19 /2009 17:00 MS Result 1 317.	PDS % Recovery 80.40 Spike Dup 338 Unit Ana Prep MS % Recovery 6 49.20	PDSD Spike Added 113.12 licate (M s: m yst: Et By: Ai Spike Addec * 113.	PDSD Result 352 SD) g/kg-dry 31 Method MSD Result 1 32	PDSD Recov .3 7 SW3050 Reco 6.2 56	9 % yery 9.80 B 0 % yvery 5.80 *	RPD 0.1925 RPD 2.670	RPD Limit 20 RPD Limit	Low Limit Low Limit	Hig Lim 1: Lim Lim
Sample Spiked: RunID: Analysis Date: A Sodium A Sodium Qualifiers:	09060712-0 ICP2_090619 06/19/2009 analyte	03 0A-5075341 Units: 10:32 Analyst 262 262 Matr Sample Spiked: RunID: Analysis Date: Preparation Date Preparation Date 262 262 262	mg/kg EG PDS Spike Added 113.12 ix Spike (09060 ICP2_0 06/19 06/19 06/18 MS Spike Added 0 113.1	PDS Result 352.9 (MS) / Matrix 090619A-5075 /2009 10:19 /2009 17:00 MS Result 1 317.	PDS % Recovery 80.40 Spike Dup 338 Unit Ana Prep MS % Recovery 6 49.20 MI - Ma	PDSD Spike Added 113.12 licate (M s: m yst: Ei By: Ai By: Ai Spike Addec * 113. atrix Inter	PDSD Result 352 SD) g/kg-dry 3 31 Method Result 1 32 ference	PDSD Recov .3 7 SW3050 Reco 6.2 56	9 % /ery 9.80 9.80 B 0 % overy 5.80 *	RPD 0.1925 RPD 2.670	RPD Limit 20 RPD Limit 20	Low Limit 275 Low Limit	Hig Lim 1: Lim
Sample Spiked: RunID: Analysis Date: A Sodium A Sodium Qualifiers:	09060712-0 ICP2_090619 06/19/2009 malyte nalyte ND/U - Not B/V - Analy	03 0A-5075341 Units: 10:32 Analyst Contemportal Sample Result 262 Matr Sample Spiked: RunID: Analysis Date: Preparation Date Sample Result 262 Cotected at the Reported at the R	mg/kg EG PDS Spike Added 113.12 ix Spike (09060 ICP2_0 06/19 06/18 MS Spike Added 0 113.1	PDS Result 352.9 (MS) / Matrix 0712-03 090619A-5075 /2009 10:19 /2009 17:00 MS Result 1 317.	PDS % Recovery 80.40 Spike Dup 338 Unit Ana Prep MS % Recovery 6 49.20 MI - Ma D - Re	PDSD Spike Added 113.12 iicate (M s: m yst: Ei By: Ai Spike Addec * 113. strix Inter covery Ur	PDSD Result 352 SD) g/kg-dry G 31 Method Result 1 32 ierence ireportable of	PDSD Recov .3 7 SW 3050 MSD Reco 6.2 56	9 % /ery 9.80 B D % /very 5.80 *	RPD 0.1925 RPD 2.670	RPD Limit 20 RPD Limit 20	Low Limit Low Limit 75	Hig Lim 1: Lim
Sample Spiked: RunID: Analysis Date: A Sodium A Sodium Qualifiers:	09060712-0 ICP2_090619 06/19/2009 malyte malyte ND/U - Not B/V - Analy J - Estimate	03 0A-5075341 Units: 10:32 Analyst Control Sample Result 262 Matr Sample Spiked: RunID: Analysis Date: Preparation Date Control Control Sample Result 262 Control Control Contro	mg/kg EG PDS Spike Added 113.12 IX Spike (09060 ICP2_0 06/19 06/18 Spike Added 0 113.1 rting Limit poiated Me and PQL	PDS Result 352.9 (MS) / Matrix 0712-03 090619A-5075 /2009 10:19 /2009 17:00 MS Result 1 317. t ethod Blank	PDS % Recovery 80.40 Spike Dup 338 Unit Ana Prep 6 49.20 MI - Mi D - Re * - Rec	PDSD Spike Added 113.12 iicate (M s: m yst: Ei By: Al Spike Addec * 113. atrix Inter covery Ur overy Ou	PDSD Result 352 SD) g/kg-dry 31 Method Result 1 32 ference irreportable of tside Advisa	PDSD Recov .3 7 SW3050 MSD Reco 6.2 56 lue to Dilu ble QC Lin	9 % /ery 9.80 9.80 B 0 % overy 5.80 *	RPD 0.1925 RPD 2.670	RPD Limit 20 RPD Limit 20	Low Limit 275 Low Limit 75	Hig Lim 1: Hig Lim
Sample Spiked: RunID: Analysis Date: A Sodium A Sodium Qualifiers:	09060712-0 ICP2_090619 06/19/2009 malyte nalyte ND/U - Not B/V - Analy J - Estimate E - Estimate	03 0A-5075341 Units: 10:32 Analyst Control Control	mg/kg EG Spike Added 113.12 x Spike (09060 ICP2_0 06/19 06/18 MS Spike Added 0 113.1 rting Limit poiated Me and PQL bration cu	PDS Result 352.9 (MS) / Matrix 0712-03 090619A-5075 /2009 10:19 /2009 17:00 MS Result 1 317. t ethod Blank	PDS % Recovery 80.40 Spike Dup 338 Unit Ana Prep MS % Recovery 6 49.20 MI - Ma D - Re * - Rec	PDSD Spike Added 113.12 licate (M s: m yst: Eq By: Al Spike Addec * 113. atrix Inter covery Ur overy Ou	PDSD Result 352 SD) g/kg-dry 3 31 Method Result 1 32 erence irreportable of tside Advisa	PDSD Recov 3 7 SW3050 Reco 6.2 56 Jue to Dilu ble QC Lin	9 % /ery 9.80 9.80 B 0 % /very 5.80 * tion mits	RPD 0.1925 RPD 2.670	RPD Limit 20 RPD Limit	Low Limit Low Limit	Hig Lim 1: Lim
Sample Spiked: RunID: Analysis Date: A Sodium A Sodium Qualifiers:	09060712-0 ICP2_090619 06/19/2009 analyte nalyte ND/U - Not B/V - Analy J - Estimate E - Estimate N/C - Not C	03 0A-5075341 Units: 10:32 Analyst 262 262 Matr Sample Spiked: RunID: Analysis Date: Preparation Date 262 262 262 262 262 262 262 26	mg/kg EG Spike Added 113.12 ix Spike (09060 ICP2_0 06/19 06/19 06/18 Spike Added 0 113.1 tring Limit bociated Me and PQL boration cu	PDS Result 352.0 (MS) / Matrix 0712-03 090619A-5075 /2009 10:19 /2009 17:00 MS Result 1 317. t ethod Blank - rve on is greater 1	PDS % Recovery 80.40 338 Unit Ana Prep MS % Recovery 6 49.20 MI - Ma D - Rea * - Recovers	PDSD Spike Added 113.12 licate (M s: m yst: Et By: Ai Spike Addec * 113. strix Inter covery Ur overy Ou the amou	PDSD Result 352 SD) g/kg-dry 31 Method MSD Result 1 32 reportable of tside Advisa	PDSD Recov 3 7 SW3050 Reco 6.2 56 lue to Dilu ble QC Lin added. Co	9 % /ery 9.80 9.80 B 0 % /very 5.80 * tion mits ntrol limit	RPD 0.1925 RPD 2.670	RPD Limit 20 RPD Limit 20	Low Limit Low Limit	Hig Lim 1: Lim



Conoco Phillips Randleman #1

Analysis:	Metals by Method 6010B, Total	WorkOrder:	09060712
Method:	SW6010B	Lab Batch ID:	91242

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Analysis: Method:		Semivolatile Organio SW8270C	s by Methoo	1 8270C			WorkOrder: Lab Batch ID:	09060712 91075b
s,		Meth	od Blank			Samples in Analyt	ical Batch:	
RuniD: H	I_090618	3C-5073119	Units:	ug/kg		Lab Sample ID	<u>Client San</u>	nple ID
Analysis Da	ite:	06/18/2009 12:45	Analyst:	GY		09060712-01B	(7-8.5) MW	1-2
Preparation	Date:	06/15/2009 10:31	Prep By:	FAK N	lethod: SW3550C	09060712-02B	MW-4 (12.	5-14)
•			. ,			09060712-03B	MW-3 (12	5-14)
						00000712-008	NNV-0 (12.	0)
		Analyte		Result	Rep Limit	09060712-04B	MVV-3 (7.5	-9)
	124	Trichlorobenzone		ND	330			
	1 2-Di	chlorobenzene			330			
	1.2-Di	ohenvlhydrazine		ND	330			
	1.3-Di	chlorobenzene		ND	330			
	1,4-Di	chlorobenzene		ND	330			
	2,4,5-	Trichlorophenol		ND	800			
	2,4,6-	Trichlorophenol		ND	330			
	2,4-Di	chiorophenol		ND	330			
	2,4-Di	methylphenol		ND	330			
	2,4-Di	nitrophenol		ND	800			
	2,4-Di	nitrotoluene		ND	800	· · · · ·		
	2,6-Di	nitrotoluene		ND	330			
	2-Chic	pronaphthalene		ND	330			
	2-Chic	brophenol			330			
	2-IVIET	nyinaphinalene			330			
	2 Nitre	onhonol			320			
	3 3'-0	Dichlorobenzidine			330			
	3-Nitr	naniline			800			
	4 6-Di	nitro-2-methylphenol			800			
	4-Bror	mophenyl phenyl ether		ND	330			
	4-Chic	pro-3-methylphenol		ND	330			
	4-Chlo	oroaniline		ND	330			
	4-Chlo	prophenyl phenyl ether		ND	330			
	4-Nitro	paniline		ND	800	•		
	4-Nitro	ophenol		ND	800			
	Acena	phthene		ND	330			
	Acena	phthylene		ND	330			
	Aniline	9		ND	330			
	Anthra				330			
	Benzia				330		•	
	Benzo	(a)pyrene			330			
	Benzo	(a h i)pervlene			330			
	Benzo	(k)fluoranthene		ND	330			
	Benzo	ic acid		ND	1600			
	Benzy	laicohol		ND	330			
	Bis(2-	chloroethoxy)methane		ND	330			
	Bis(2-	chloroethyl)ether		ND	330			
	Bis(2-	chloroisopropyl)ether		ND	330			
	Bis(2-	ethylhexyl)phthalate		ND	330			
	Butyl L	penzyi phthalate		ND	330			
	Carba	zole		ND	330			
	Chryse	ene		ND	330			
	Dibena	z(a,n)anthracene		ND	330			
	Dibena	zoiuran		ND	330			

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Conoco Phillips

Randleman #1

Analysis Method:	s: Semivolatile C : SW8270C	rolatile Organics by Method 8270C 70C		WorkOrder: Lab Batch ID:	09060712 91075b
		Method Blank			
RunID:	H_090618C-5073119	Units:	ug/kg		

RunID: H_09061	I8C-5073119	Units:	ug/kg
Analysis Date:	06/18/2009 12:45	Analyst:	GY
Preparation Date:	06/15/2009 10:31	Prep By:	FAK Method: SW3550C

Analyte	Result	Rep Limit
Diethyl phthalate	ND	330
Dimethyl phthalate	ND	330
Di-n-butyl phthalate	ND	330
Di-n-octyl phthalate	ND	330
Fluoranthene	ND	330
Fluorene	ND	330
Hexachlorobenzene	ND	330
Hexachlorobutadiene	ND	330
Hexachlorocyclopentadiene	ND	330
Hexachloroethane	ND	330
Indeno(1,2,3-cd)pyrene	ND	330
Isophorone	ND	330
Naphthalene	ND	330
Nitrobenzene	ND	330
N-Nitrosodi-n-propylamine	ND	330
N-Nitrosodiphenylamine	ND	330
Pentachiorophenoi	ND	800
Phenanthrene	ND	330
Phenol	ND	330
Pyrene	ND	330
Pyridine	ND	330
2-Methylphenol	ND	330
3 & 4-Methylphenol	NĎ	330
Surr: 2,4,6-Tribromophenol	100.8	19-135
Surr: 2-Fluorobiphenyl	74.7	15-140
Surr: 2-Fluorophenol	67.6	15-122
Surr: Nitrobenzene-d5	60.6	10-134
Surr: Phenol-d5	66.4	10-123
Surr: Terphenyl-d14	81.8	18-166

	Laboratory	Control	Sample (LCS)		
RunID: Analysis Date: Preparation Date:	H_090618C-507312 06/18/2009 13:17 06/15/2009 10:31	0 Ui Ar Pr	nits: nalyst: œp By:	ug/kg GY FAK Method:	SW3550C	;
Analy	yte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2,4-Trichlorobenzen	e	850	78	1 91.9	34	116
1,2-Dichlorobenzene		850	68	5 80.6	32	129

850

Qualifiers:

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

ND/U - Not Detected at the Reporting Limit

1,2-Diphenylhydrazine

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

560

* - Recovery Outside Advisable QC Limits

65.9

256

10

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

Randleman #1

Analysis:	Semivolatile Organics by Method 8270C	WorkOrder:	09060712
Method:	SW8270C	Lab Batch ID:	91075b
	Laboratory Control Sample (LCS)		

RunID: Analysis Date: Preparation Date: H_090618C-5073120 Units: 06/18/2009 13:17 Analyst: 06/15/2009 10:31 Prep By:

ug/kg

FAK Method: SW3550C

GY

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,3-Dichlorobenzene	850	678	79.8	10	172
1,4-Dichlorobenzene	850	671	78.9	20	124
2,4,5-Trichlorophenol	850	868	102	40	150
2,4,6-Trichlorophenol	850	886	104	37	144
2,4-Dichlorophenol	850	822	96.7	39	135
2,4-Dimethylphenol	850	736	86.6	32	119
2,4-Dinitrophenol	850	912	107	10	191
2,4-Dinitrotoluene	850	881	104	30	150
2,6-Dinitrotoluene	850	836	98.4	30	150
2-Chloronaphthalene	850	729	85.8	20	175
2-Chlorophenol	850	720	84.7	23	134
2-Methylnaphthalene	850	772	90.8	30	135
2-Nitroaniline	850	577	67.9	20	175
2-Nitrophenol	850	791	93.1	29	182
3,3'-Dichlorobenzidine	850	739	86.9	10	261
3-Nitroaniline	850	751	88.4	20	175
4,6-Dinitro-2-methylphenol	850	832	97.9	10	181
4-Bromophenyl phenyl ether	850	807	94.9	20	175
4-Chloro-3-methylphenol	850	838	98.6	22	147
4-Chloroaniline	850	762	89.6	20	175
4-Chlorophenyl phenyl ether	850	851	100	25	158
4-Nitroaniline	850	746	87.8	20	175
4-Nitrophenol	850	572	67.3	10	132
Acenaphthene	850	750	88.2	30	160
Acenaphthylene	850	784	92.2	10	150
Aniline	1700	1120	65.9	10	160
Anthracene	850	760	89.4	27	133
Benz(a)anthracene	850	758	89.2	33	143
Benzo(a)pyrene	850	690	81.2	17	163
Benzo(b)fluoranthene	850	780	91.8	24	159
Benzo(g,h,i)perylene	850	852	100	10	219
Benzo(k)fluoranthene	850	722	84.9	11	162
Benzoic acid	850	752	88.5	10	450
Benzvi alcohol	850	708	83.3	30	160

Qualifiers:

B/V - Analyte detected in the associated Method Blank

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

J - Estimated value between MDL and PQL

D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Analysis:	Semivolatile Organics by Method 8270C	WorkOrder:	09060712
Method:	SW8270C	Lab Batch ID:	91075b
e	Laboratory Control Sample (LCS)		

Laboratory Control Sample (LCS)

 RunID:
 H_090618C-5073120

 Analysis Date:
 06/18/2009 13:17

 Preparation Date:
 06/15/2009 10:31

Units: ug/kg Analyst: GY Prep By: FAK Method: SW3550C

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Bis(2-chloroethoxy)methane	850	640	75.3	33	184
Bis(2-chloroethyl)ether	850	608	71.5	28	158
Bis(2-chloroisopropyl)ether	850	471	55.4	36	166
Bis(2-ethylhexyl)phthalate	850	799	94.0	10	158
Butyl benzyl phthalate	850	761	89.5	10	152
Carbazole	850	736	86.6	45	135
Chrysene	850	759	89.3	17	168
Dibenz(a,h)anthracene	850	855	101	10	227
Dibenzofuran	850	792	93.2	30	160
Diethyl phthalate	850	805	94.7	10	160
Dimethyl phthalate	850	819	96.4	10	112
Di-n-butyl phthalate	850	775	91.2	10	118
Di-n-octyl phthalate	850	733	86.2	10	146
Fluoranthene	850	795	93.5	26	137
Fluorene	850	789	92.8	35	135
Hexachlorobenzene	850	854	. 100	10	152
Hexachlorobutadiene	850	799	94.0	20	140
Hexachlorocyclopentadiene	850	331	38.9	10	152
Hexachloroethane	850	593	69.8	25	118
Indeno(1,2,3-cd)pyrene	850	984	116	10	171
Isophorone	850	723	85.1	21	196
Naphthalene	850	727	85.5	21	133
Nitrobenzene	850	587	69.1	35	180
N-Nitrosodi-n-propylamine	850	515	60.6	10	230
N-Nitrosodiphenylamine	1700	1760	104	30	160
Pentachlorophenol	850	859	101	14	176
Phenanthrene	850	763	89.8	35	135
Phenol	850	675	79.4	44	120
Pyrene	850	802	94.4	34	138
Pyridine	1700	993	58.4	10	150
2-Methylphenol	850	699	82.2	40	160
3 & 4-Methylphenol	850	642	75.5	40	160
Surr: 2,4,6-Tribromophenol	2500	3350	134	19	135
Surr: 2-Fluorobiphenvl	1700	1680	98.8	15	140

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits



HOUSTON LABORATORY

8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

Randleman #1

Analysis: Method:	Semivolatile Organics by Method 8270C SW8270C							Wor Lab	WorkOrder: 09 Lab Batch ID: 9		60712 75b				
					aboratory C	ontrol S	ample	e (LCS)			·				
		RuniD	:	H_09061	8C-5073120	Uni	its:	ug/kg	3						
		Analys	is Date:	06/18/20	009 13:17	Ana	alyst:	GY	-						
		Prepar	ation Date:	06/15/20	009 10:31	Pre	ep By:	FAK	Method: S	SW35500	;				
	ſ		Analyt	e		Spike	Resu	ult F	Percent	Lower	Uppe	r			
						Added		R	ecovery	Limit	Limi	t			
	ľ	Surr: 2	-Fluorophenol			2500	22	200	88.0	15	1	122			
		Surr: N	litrobenzene-d	15		1700	13	370	80.6	32	1	153			
		Surr: P	henol-d5			2500	21	180	87.2	10	1	123			
	-	Surr: T	erphenyl-d14			1700	17	780	105	18	1	166			
								1	·						
· · ·			N -4	Smiles (I		Cuiles D		-4- /846	<u>'0'</u>						
			Matrix	Spike (i	vis) / wiatri)	Spike D	upiica	ate (IVIS	וחי						
		Sam	ple Spiked:	09060	712-04										
		Runi	D:	H_0906	618C-507431	÷υ	nits:	ug/	kg-dry						
		Analy	sis Date:	06/18/2	2009 18:51	А	nalyst:	: GY	, , , , , , , , , , , , , , , , , , , ,						
		Prepa	aration Date:	06/15/2	2009 10:31	Р	rep By	: FA	K Method	SW 3550	C				
	Analyte		Sample	MS	MS	MS 9	%	MSD	MSD	MS	D %	RPD	RPD	Low	High
			Result	Spike	Result	Recov	ery	Spike	Result	Rec	overy		Limit	Limit	Limit
				Aaaea			′	Aaaea						•	
1,2,4-Trichlorobe	nzene		ND	1060	73	4	69.4	1060	9	979	92.6	28.6 *	28	34	116
1,2-Dichlorobenz	ene		ND	1060	66	3	62.7	1060	8	362	81.5	26.1	60	32	129
1,2-Diphenylhydr	azine		ND	1060	47	1	44.6	1060	6	533	59.9	29.3	60	10	256
1,3-Dichlorobenz	ene		ND	1060	66	3	62.7	1060	8	356	80.9	25.4	60	10	172
1,4-Dichlorobenz	ene		ND	1060	64	7	61.2	1060	8	350	80.4	27.1	28	20	124
2,4,5-Trichloroph	enol		ND	1060	73	8	69.8	1060	9	976	92.4	27.9	60	40	150
2,4,6-Trichloroph	enol		ND	1060	72	8	68.8	1060	9	980	92.7	29.6	60	37	144
2,4-Dichlorophen	ol		ND	1060	70	0	66.2	1060	Ş	960	90.8	31.3	60	39	135
2,4-Dimethylpher	nol		ND	1060	62	2	58.8	1060	8	337	79.2	29.5	60	32	119
2,4-Dinitrophenol			ND	1060	71	6	67.8	1060	9	90	93.6	32.1	60	10	191
2,4-Dinitrotoluene) 		ND	1060	70	8	66.9	1060	9	980	92.7	32.3	50	30	150
2,6-Dinitrotoluene	•		ND	1060	68	2	64.5	1060	5	922	87.2	29.9	60	30	150
2-Chloronaphthal	ene		ND	1060	64	9	61.4	1060	8	366	81.9	28.6	60	20	175
2-Chlorophenol			ND	1060	66	2	62.6	1060	3	382	83.4	28.5	40	23	134
2-Methylnaphthal	ene		ND	1060	68	7	64.9	1060	e e	925	87.5	29.6	60	30	135
2-Nitroaniline			ND	1060	47	8	45.2	1060	6	654	61.9	31.2	60	20	175
2-Nitrophenol			ND	1060	74	5	70.5	1060	1(030	97.6	32.3	60	29	182

Qualifiers: ND/U - Not Detected at the Reporting Limit

3,3'-Dichlorobenzidine

B/V - Analyte detected in the associated Method Blank

ND

1060

J - Estimated value between MDL and PQL

MI - Matrix Interference D - Recovery Unreportable due to Dilution

1060

796

75.3

29.0

60

• - Recovery Outside Advisable QC Limits

56.2

595

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Analysis:	Semivolatile Organics by Method 8270C	WorkOrder:	09060712
Method:	SW8270C	Lab Batch ID:	91075b
	Matrix Spike (MS) / Matrix Spike Duplicate (MSD)		

Sample Spiked: RunID: Analysis Date: Preparation Date:

09060712-04 H_090618C-5074319 06/18/2009 18:51 : 06/15/2009 10:31

Units: ug/kg-dry Analyst: GY Prep By: FAK Method: SW3550C

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
3-Nitroaniline	ND	1060	662	62.6	1060	898	84.9	30.3	60	20	175
4,6-Dinitro-2-methylphenol	ND	1060	674	63.8	1060	914	86.5	30.2	60	10	181
4-Bromophenyl phenyl ether	ND	1060	673	63.6	1060	900	85.2	28.9	60	20	175
4-Chloro-3-methylphenol	ND	1060	682	64.5	1060	939	88.8	31.8	42	22	147
4-Chloroaniline	ND	1060	646	61.1	1060	900	85.2	33.0	60	20	175
4-Chlorophenyl phenyl ether	ND	1060	709	67.1	1060	953	90.1	29.3	60	25	158
4-Nitroaniline	ND	1060	652	61.6	1060	850	80.4	26.3	60	20	175
4-Nitrophenol	ND	1060	468	44.2	1060	644	60.9	31.8	50	10	132
Acenaphthene	ND	1060	, 654	61.9	1060	864	81.8	27.7	31	30	160
Acenaphthylene	ND	1060	673	63.6	1060	899	85.1	28.8	50	10	150
Aniline	ND	2110	1090	51.4	2110	1420	67.1	26.4	60	10	160
Anthracene	ND	1060	637	60.2	1060	847	80.1	28.3	50	27	133
Benz(a)anthracene	ND	1060	622	58.8	1060	823	77.9	27.9	50	33	143
Benzo(a)pyrene	ND	1060	546	51.6	1060	719	68.0	27.3	60	17	163
Benzo(b)fluoranthene	ND	1060	582	55.1	1060	815	77.1	33.3	60	24	159
Benzo(g,h,i)perylene	ND	1060	675	63.9	1060	908	85.9	29.4	60	10	219
Benzo(k)fluoranthene	ND	1060	600	56.7	1060	757	71.6	23.3	60	11	162
Benzoic acid	ND	1060	782	74.0	1060	868	82.1	10.4	60	10	450
Benzyl alcohol	ND	1060	627	59.3	1060	843	79.8	29.4	60	30	160
Bis(2-chloroethoxy)methane	ND	1060	567	53.6	1060	766	72.5	29.9	60	33	184
Bis(2-chloroethyl)ether	ND	1060	572	54.1	1060	743	70.2	25.9	60	28	158
Bis(2-chloroisopropyl)ether	ND	1060	445	42.1	1060	582	55.1	26.6	60	36	166
Bis(2-ethylhexyl)phthalate	ND	1060	654	61.9	1060	861	81.4	27.3	60	10	158
Butyl benzyl phthalate	ND	1060	617	58.4	1060	821	77.6	28.4	60	10	152
Carbazole	ND	1060	622	58.8	1060	830	78.5	28.6	60	45	135
Chrysene	ND	1060	631	59.6	1060	815	77.1	25.5	60	17	168
Dibenz(a,h)anthracene	ND	1060	687	64.9	1060	873	82.6	23.9	60	10	227
Dibenzofuran	ND	1060	684	64.7	1060	912	86.2	28.5	60	45	135
Diethyl phthalate	ND	1060	650	61.5	1060	872	82.5	29.1	60	10	160
Dimethyl phthalate	ND	1060	665	62.9	1060	892	84.4	29.1	60	10	112
Di-n-butyl phthalate	ND	1060	650	61.5	1060	864	81.8	28.2	60	40	132
Di-n-octyl phthalate	ND	1060	657	62.1	1060	836	79.1	24.0	60	10	146

Qualifiers: ND/U - Not Detected at the Reporting Limit

ng Limit MI - Matrix Interference

 B/V - Analyte detected in the associated Method Blank
 D

 J - Estimated value between MDL and PQL
 *

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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D - Recovery Unreportable due to Dilution



Conoco Phillips Randleman #1

Analysis:	Semivolatile Organics by Method 8270C	WorkOrder:	09060712
Method:	SW8270C	Lab Batch ID:	91075b
-	<u> Matrix Spike (MS) / Matrix Spike Duplicate (MSD)</u>		

Sample Spiked: RunID: Analysis Date: Preparation Date:

09060712-04 H_090618C-5074319 06/18/2009 18:51 06/15/2009 10:31

Units: ug/kg-dry Analyst: GY Prep By: FAK Method: SW3550C

Analyte	Sample Result	MS Spike	MS Result	MS %	MSD Spike	MSD Result	MSD %	RPD	RPD Limit	Low	High
	Result	Added	Tesuk	TRECOVERY	Added	Result	Recovery				LITIN
Fluoranthene	ND	1060	675	63.9	1060	888	84.0	27.2	60	26	137
Fluorene	ND	1060	672	63.5	1060	891	84.2	28.0	60	45	135
Hexachlorobenzene	ND	1060	735	69.5	1060	969	91.6	27.4	60	10	152
Hexachlorobutadiene	· ND	1060	746	70.6	1060	1010	95.4	29.9	60	20	140
Hexachlorocyclopentadiene	ND	1060	447	42.2	1060	583	55.2	26.6	60	10	152
Hexachloroethane	ND	1060	570	53.9	1060	755	71.4	28.0	60	25	118
Indeno(1,2,3-cd)pyrene	ND	1060	820	77.5	1060	1090	104	28.7	60	10	171
Isophorone	. ND	1060	636	60.1	1060	854	80.8	29.4	60	21	196
Naphthalene	ND	1060	674	63.8	1060	898	84.9	28.5	60	21	133
Nitrobenzene	ND	1060	544	51.4	1060	726	68.7	28.8	60	35	180
N-Nitrosodi-n-propylamine	ND	1060	469	44.4	1060	626	59.2	28.6	38	10	230
N-Nitrosodiphenylamine	ND	2110	1490	70.6	2110	1980	93.5	28.0	60	30	160
Pentachlorophenol	ND	1060	537	50.8	1060	841	79.5	44.0	50	14	176
Phenanthrene	ND	1060	648	61.3	1060	852	80.6	27.2	60	45	135
Phenol	ND	1060	618	58.5	1060	816	77.2	27.6	42	44	120
Pyrene	ND	1060	652	61.6	1060	853	80.7	26.8	31	26	127
Pyridine	ND	2110	991	46.9	2110	1280	60.6	25.5	60	10	150
2-Methylphenol	ND	1060	602	56.9	1060	823	77.9	31.1	60	40	160
3 & 4-Methylphenol	ND	1060	557	52.7	1060	751	71.1	29.7	60	40	160
Surr: 2,4,6-Tribromophenol	ND	3110	2700	86.8	3110	3710	119	31.5 *	30	19	135
Surr: 2-Fluorobiphenyl	ND	2110	1410	66.5	2110	1870	88.2	28.1	30	15	140
Surr: 2-Fluorophenol	ND	3110	1940	62.4	3110	2560	82.4	27.6	30	15	122
Surr: Nitrobenzene-d5	ND	2110	1180	55.9	2110	1590	75.3	29.5	30	10	134
Surr: Phenol-d5	ND	3110	1850	59.6	3110	2460	79.2	28.2	30	10	123
Surr: Terphenyl-d14	ND	2110	1380	65.3	2110	1790	84.7	25.9	30	18	166

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits

J - Estimated value between MDL and PQL

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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E - Estimated Value exceeds calibration curve



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

Randleman #1

nalysis: ethod:	Volatile Organics by M SW8260B	lethod 826	60B			WorkOrder: Lab Batch ID:	09060712 R275534
- · · · · · · · · · · · · · · · · · · ·	Metho	d Blank			Samples in Analyti	cal Batch:	
unID: M_0906	15A-5068516	Units:	ug/kg		Lab Sample ID	Client Sar	nple ID
nalysis Date:	06/15/2009 15:40	Analyst:	ΕG		09060712-01A	(7-8.5) MV	V-2
-		•	-		09060712-02A	MW-4 (12	5-14)
					09060712-034	MM/-3 (12	5-14)
					09000712-00A		:0-14) :0)
	Analyte		Result F	Rep Limit	09060712-04A	IVIVV-3 (7.3	-9)
1,1,1	1,2-Tetrachloroethane		· ND	5.0			
1,1,1	1-Trichloroethane		ND	5.0			
1,1,2	2,2-Tetrachloroethane		ND	5.0			
1,1,2	2-Trichloroethane		ND	5.0			,
1,1-1	Dichloroethene			5.0			
1,1-1	Dichloropropene		ND	5.0			
1,2,3	3-Trichlorobenzene		ND	5.0			
1,2,3	3-Trichloropropane		ND	5.0			
1,2,4	-Trichlorobenzene		ND	5.0			
1,2,4	I-Irimethylbenzene		ND	5.0			
1,2-1	Dibromo-3-chioropropane			5.0			
1,2-1	Dichlorobenzene		ND	5.0			
1,2-1	Dichloroethane		ND	5.0			
1,2-1	Dichloropropane		ND	5.0			
1,3,5	5-Trimethylbenzene		ND	5.0			
1.3-	Dichlorobenzene		ND	5.0			
1,3-	Dichloropropane			5.0			
2,2-1	Dichloropropane		ND	5.0			
2-Bu	itanone		ND	20			
2-Ct	nloroethyl vinyl ether		ND	10			
2-Ch	lorotoluene		ND	5.0			
2-He	exanone		ND	10			· · · · ·
4-0	propyltoluene			5.0			
4-M	ethvl-2-pentanone		ND	10			
Acet	one		ND	100			
Acry	lonitrile		ND	50			
Ben	zene		ND	5.0			
Bron	nobenzene		ND	5.0			
Bror	nodichloromethane		ND	5.0			
Bror	noform		ND	5.0			
Bron	nomethane		ND	10			
Cart	on disulfide		ND	5.0			
Cart	oon tetrachloride		ND ND	5.0			
Chio	roethane			10			
Chio	roform		ND	5.0			
Chio	romethane		ND	10		•	·
Dibro	omochloromethane		ND	5.0			
Dibro	omomethane		ND	5.0			
Ethy	ioroginuoromethane			5.0			
				0.0j			
Qualifiers:	ND/U - Not Detected at	the Report	ing Limit		MI - Matrix Interference		
	B/V - Analyte detected	in the assoc	ated Metho	od Blank	D - Recovery Unreportable d	lue to Dilution	
	J - Estimated value bet	ween MDL :	and PQL	-	* - Recovery Outside Advisa	ble QC Limits	
	E - Estimated Value ev	reeds calibi	ration curve				

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Analysis: Method:	Volatile Orga SW8260B	nics by Method 826	60B		WorkOrder: Lab Batch ID:	09060712 R275534
		Method Blank		•		
RunID [.] M	/ 090615A-5068516	Units [.]	ua/ka			

nalvsis Date:	06/15/2009 15:40	Analyst:	ΕG

Analyte	Result	Rep Limit
Hexachlorobutadiene	ND	5.0
Isopropylbenzene	ND	5.0
Methyl tert-butyl ether	ND	5.0
Methylene chloride	ND	5.0
Naphthalene	ND	5.0
n-Butylbenzene	ND	5.0
n-Propylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
Styrene	ND	5.0
tert-Butylbenzene	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Trichloroethene	ND	5.0
Trichlorofluoromethane	ND	5.0
Vinyl acetate	ND	10
Vinyl chloride	ND	10
cis-1,2-Dichloroethene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,2-Dichloroethene (total)	ND	5.0
Xylenes, Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	103.8	71-130
Surr: 4-Bromofluorobenzene	96.0	65-131
Surr: Toluene-d8	106.6	75-136

Laboratory Control Sample (LCS)

RunID:	M_090615A-5068515	Units:	ug/kg
Analysis Date:	06/15/2009 15:01	Analyst:	E_G

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1,2-Tetrachloroethane	20.0	21.0	105	56	140
1,1,1-Trichloroethane	20.0	20.9	104	58	135
1,1,2,2-Tetrachloroethane	20.0	18.3	91.4	52	139
1,1,2-Trichloroethane	20.0	19.9	99.6	81	138
1.1-Dichloroethane	20.0	19.7	98.5	56	137

Qualifiers:

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Analysis: Method:	Volatile Organics by Method 8260B SW8260B		
		Laboratory Control Sample (LCS)	

WorkOrder:	09060712
Lab Batch ID:	R275534

RunID: Analysis Date: M_090615A-5068515 06/15/2009 15:01

Units: ug/kg Analyst: EG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	20.0	20.0	99.9	56	135
1,1-Dichloropropene	20.0	21.1	105	62	132
1,2,3-Trichlorobenzene	20.0	21.3	107	53	144
1,2,3-Trichloropropane	20.0	17.3	86.6	44	141
1,2,4-Trichlorobenzene	20.0	21.0	105	51	143
1,2,4-Trimethylbenzene	20.0	21.8	109	59	148
1,2-Dibromo-3-chloropropane	20.0	18.0	90.1	53	144
1,2-Dibromoethane	20.0	19.0	95.1	55	138
1,2-Dichlorobenzene	20.0	21.5	107	63	137
1,2-Dichloroethane	20.0	18.2	91.1	56	135
1,2-Dichloropropane	20.0	19.8	99.2	62	132
1,3,5-Trimethylbenzene	20.0	21.6	108	54	145
1,3-Dichlorobenzene	20.0	22.2	111	66	137
1,3-Dichloropropane	20.0	19.4	97.0	59	138
1,4-Dichlorobenzene	20.0	21.5	108	61	142
2,2-Dichloropropane	20.0	21.2	106	55	138
2-Butanone	20.0	15.8	79.0	10	191
2-Chloroethyl vinyl ether	20.0	21.0	105	10	181
2-Chlorotoluene	20.0	22.2	111	64	139
2-Hexanone	20.0	16.0	79.9	18	182
4-Chlorotoluene	20.0	21.5	107	63	138
4-Isopropyltoluene	20.0	22.2	111	59	156
4-Methyl-2-pentanone	20.0	14.5	72.4	10	166
Acetone	20.0	19.8	98.9	10	200
Acrylonitrile	20.0	15.6	78.2	38	169
Benzene	20.0	19.7	98.5	64	130
Bromobenzene	20.0	21.0	105	58	139
Bromochloromethane	20.0	19.1	95.3	66	127
Bromodichloromethane	20.0	19.7	98.4	59	134
Bromoform	20.0	19.6	97.9	65	135
Bromomethane	20.0	17.2	86.0	40	134
Carbon disulfide	20.0	19.9	99.4	53	130
Carbon tetrachloride	20.0	21.1	105	61	132
Chlorobenzene	20.0	20.7	104	60	140

Qualifiers:

B/V - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits

J - Estimated value between MDL and PQL E - Estimated Value exceeds calibration curve

ND/U - Not Detected at the Reporting Limit

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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MI - Matrix Interference



Conoco Phillips Randleman #1

Analysis:	Volatile Organics by Method 8260B		WorkOrder:	09060712
Method:	SW8260B		Lab Batch ID:	R275534
<u></u> ,		Laboratory Control Sample (LCS)		

RunID: M_090615A-5068515 Units: ug/kg Analysis Date: 06/15/2009 15:01 Analyst: E_G

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloroethane	20.0	19.0	94.9	45	140
Chloroform	20.0	19.5	97.3	64	131
Chloromethane	20.0	16.4	82.1	39	140
Dibromochloromethane	20.0	20.4	102	54	138
Dibromomethane	20.0	18.7	93.7	64	131
Dichlorodifluoromethane	20.0	19.3	96.3	35	133
Ethylbenzene	20.0	20.9	105	58	143
Hexachlorobutadiene	20.0	22.9	114	56	166
Isopropylbenzene	20.0	18.3	91.4	58	133
Methyl tert-butyl ether	40.0	36.2	90.4	50	132
Methylene chloride	20.0	23.2	116	52	144
Naphthalene	20.0	19.1	95.7	51	139
n-Butylbenzene	20.0	22.7	114	59	164
n-Propylbenzene	20.0	21.5	107	57	140
sec-Butylbenzene	20.0	22.8	114	63	146
Styrene	20.0	20.4	102	57	134
tert-Butylbenzene	20.0	22.2	111	57	144
Tetrachloroethene	20.0	20.5	103	41	156
Toluene	20.0	20.9	105	63	139
Trichloroethene	20.0	20.4	102	62	135
Trichlorofluoromethane	20.0	20.6	103	53	140
Vinyl acetate	20.0	17.6	87.9	17	163
Vinyl chloride	20.0	19.8	98.9	45	148
cis-1,2-Dichloroethene	20.0	20.4	102	70	129
cis-1,3-Dichloropropene	20.0	20.7	103	58	132
m,p-Xylene	40.0	43.0	108	64	137
o-Xylene	20.0	21.8	109	64	143
trans-1,2-Dichloroethene	20.0	19.6	97.9	63	130
trans-1,3-Dichloropropene	20.0	19.8	99.1	58	128
1,2-Dichloroethene (total)	40	40	100	63	130
Xylenes,Total	60.0	64.8	108	64	143
Surr: 1,2-Dichloroethane-d4	50.0	47.7	95.3	71	130
Surr: 4-Bromofluorobenzene	50.0	48.9	97.8	65	131
Surr: Toluene-d8	50.0	52.2	104	75	136

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits

J - Estimated value between MDL and PQL E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Analysis:	Volatile Organics by Method 8260B
Method:	SW8260B

WorkOrder: 09060712 Lab Batch ID:

R275534

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: RunID: Analysis Date: Preparation Date:

M_090615A-5068518 06/15/2009 17:13 06/13/2009 11:15

09060712-01

Units: ug/kg-dry Analyst: ΕG E_G Method: SW5030B Prep By:

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1,1,2-Tetrachloroethane	ND	25.2	24.3	96.2	25.2	23.8	94.2	2.04	30	38	129
1,1,1-Trichloroethane	ND	25.2	23.8	94.4	25.2	23.2	92.1	2.50	30	44	154
1,1,2,2-Tetrachloroethane	ND	25.2	22.0	87.3	25.2	24.0	95.2	8.64	30	14	143
1,1,2-Trichloroethane	ND	25.2	24.4	96.6	25.2	25.4	101	4.38	30	34	135
1,1-Dichloroethane	ND	25.2	23.3	92.4	25.2	22.7	89.8	2.80	30	42	146
1,1-Dichloroethene	ND	25.2	24.1	95.4	25.2	23.4	93.0	2.64	22	39	168
1,1-Dichloropropene	ND	25.2	24.0	95.3	25.2	23.1	91.5	4.08	30	42	156
1,2,3-Trichlorobenzene	ND	25.2	19.2	75.9	25.2	19.7	78.0	2.73	30	10	125
1,2,3-Trichloropropane	ND	25.2	21.3	84.5	25.2	23.9	94.6	11.2	30	10	154
1,2,4-Trichlorobenzene	ND	25.2	19.0	75.3	25.2	18.7	74.0	1.78	30	10	. 128
1,2,4-Trimethylbenzene	ND	25.2	23.7	94.1	25.2	22.8	90.5	3.90	30	22	139
1,2-Dibromo-3-chloropropane	ND	25.2	20.3	80.4	25.2	24.3	96.3	17.9	30	23	139
1,2-Dibromoethane	ND	25.2	22.8	90.2	25.2	23.7	93.8	3.94	30	32	129
1,2-Dichlorobenzene	ND	25.2	23.1	91.7	25.2	22.9	90.8	0.937	30	17	130
1,2-Dichloroethane	ND	25.2	22.4	88.9	25.2	22.9	90.7	2.08	30	15	158
1,2-Dichloropropane	ND	25.2	23.7	93.9	25.2	23.1	91.5	2.61	30	42	133
1,3,5-Trimethylbenzene	ND	25.2	23.1	91.7	25.2	22.1	87.8	4.34	30	22	135
1,3-Dichlorobenzene	ND	25.2	24.0	95.2	25.2	23.0	91.1	4.42	30	22	130
1,3-Dichloropropane	ND	25.2	24.1	95.5	25.2	24.6	97.5	2.11	30	37	131
1,4-Dichlorobenzene	ND	25.2	23.3	92.6	25.2	22.7	90.0	2.85	30	20	129
2,2-Dichloropropane	ND	25.2	23.4	92.9	25.2	23.1	91.6	1.41	30	39	155
2-Butanone	ND	25.2	17.7	70.3	25.2	21.9	86.9	21.1	30	10	200
2-Chloroethyl vinyl ether	ND	25.2	18.7	74.0	25.2	20.1	79.8	7.55	30	10	168
2-Chlorotoluene	ND	25.2	24.3	. 96.2	25.2	23.7	93.9	2.37	30	30	133
2-Hexanone	ND	25.2	18.3	72.7	25.2	22.3	88.6	19.7	30	14	151
4-Chlorotoluene	ND	25.2	23.0	91.2	25.2	22.3	88.5	2.92	30	24	133
4-Isopropyltoluene	ND	25.2	23.1	91.6	25.2	22.1	87.5	4.59	30	17	143
4-Methyl-2-pentanone	ND	25.2	17.1	67.8	25.2	20.7	81.9	18.8	30	10	176
Acetone	ND	25.2	22.7	90.2	25.2	28.3	112	21.7	30	10	200
Acrylonitrile	ND	25.2	19.9	78.8	25.2	23.7	94.1	17.7	30	10	200

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits

J - Estimated value between MDL and PQL E - Estimated Value exceeds calibration curve

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QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

				Ran	dleman #1							
Analysis: Method:	Volatile Orga SW8260B	nics by Method 826	0B					WorkOrder: Lab Batch ID:	090 : R23	60712 75534		
		<u>Matrix</u>	Spike (N	AS) / Matrix	Spike Duplic	ate (MS	<u>D)</u>				,	
		Sample Spiked:	090607	712-01								
		RunID:	M 0906	615A-5068518	Units:	ua/k	a-drv				•	
		Analysis Date	06/15/2	2009 17:13	Analys	t: FG	5 - ·)					
		Preparation Date:	06/13/2	2009 11:15	Prep B	by: E_G	Method: SV	V5030B				
[Apolito	Comple		NC	MC N/	MOD	MCD		DDD	880	1.004	Lligh
	Analyte	Result	Spike Added	Result	Recovery	Spike Added	Result	Recovery	κгυ	Limit	Limit	Limit
Benzene		ND	25.2	23.0	91.4	25.2	22.3	88.3	3.47	21	49	135
Bromobenzene		ND	25.2	23.6	93.5	25.2	22.8	90.2	3.59	30	29	127
Bromochlorome	thane	ND	25.2	23.2	92.0	25.2	23.4	92.6	0.612	30	27	147
Bromodichlorom	nethane	ND	25.2	23.2	92.2	25.2	23.1	91.7	0.555	30	32	138
Bromoform		ND	25.2	23.6	93.4	25.2	24.6	97.4	4.19	30	27	129
Bromomethane		ND	25.2	20.5	81.2	25.2	18.1	71.8	12.3	30	32	142
Carbon disulfide	Э	ND	25.2	22.8	90.3	25.2	21.6	85.6	5.42	30	25	168
Carbon tetrachle	oride	ND	25.2	24.5	97.2	25.2	23.3	92.6	4.95	30	48	151
Chlorobenzene		ND	25.2	24.0	95.2	25.2	23.2	91.8	3.66	21	38	130
Chloroethane	· · · · · · · · · · · · · · · · · · ·	ND	25.2	22.7	90.2	25.2	20.4	81.0	10.7	30	29	161
Chloroform		ND	25.2	23.2	91.9	25.2	22.8	90.3	1.82	30	34	153
Chloromethane		ND	25.2	19.7	78.2	25.2	18.1	71.8	8.46	30	31	151
Dibromochlorom	nethane	ND	25.2	24.1	95.6	25.2	24.4	96.7	1.21	30	31	127
Dibromomethan	e	ND	25.2	23.0	91.3	25.2	23.5	93.3	2.19	30	30	141
Dichlorodifluoro	methane	ND	25.2	22.3	88.3	25.2	20.6	81.8	7.61	30	15	167
Ethylbenzene		ND	25.2	23.5	93.2	25.2	22.4	88.8	4.89	30	39	135
Hexachlorobuta	diene	ND	25.2	20.9	82.7	25.2	20.3	80.4	2.87	30	10	149
Isopropylbenzer	ne	ND	25.2	20.4	80.8	25.2	19.6	77.7	3.85	30	25	142
Methyl tert-butyl	ether	ND	50.4	43.0	85.2	50.4	45.2	89.7	5.16	30	19	142
Methylene chlor	ide	ND	25.2	25.5	101	25.2	25.0	99.2	2.08	30	13	170
Naphthalene		ND	25.2	17.6	69.8	25.2	20.3	80.4	14.0	30	10	124
n-Butylbenzene		ND	25.2	23.7	93.8	25.2	22.6	89.5	4.69	30	10	156
n-Propylbenzen	e	ND	25.2	22.9	90.8	25.2	21.6	85.7	5.73	30	20	141
sec-Butylbenzer	ne	ND	25.2	23.5	93.2	25.2	23.3	92.3	0.943	30	29	142
Styrene		ND	25.2	23.5	93.2	25.2	22.5	89.1	4.51	30	28	133
tert-Butylbenzer	ne	ND	25.2	23.5	93.3	25.2	22.1	87.5	6.36	30	26	141
Tetrachloroethe	ne	ND	25.2	22.7	90.0	25.2	22.4	88.9	1.23	30	33	149
Toluene		ND	25.2	24.3	96.2	25.2	23.4	92.8	3.59	21	49	133
Trichloroethene		ND	25.2	23.2	92.1	25.2	22.5	89.2	3.14	24	51	142
Trichlorofluorom	nethane	ND	25.2	24.0	95.3	25.2	22.9	90.6	5.00	30	24	184
Vinyl acetate		ND	25.2	6.84	27.1	25.2	6.55	26.0	4.37	30	10	174
Vinyl chloride		ND	25.2	27.3	108	25.2	25.1	99.6	8.34	30	29	177

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

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Quality Control Report

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

Randleman #1

Analysis: Method:	Volatile Organics by Method 826 SW8260B	60B		WorkOrder: Lab Batch ID:	09060712 R275534		
	<u>Matrix</u>	<u>c Spike (MS) / Matrix Sp</u>	ike Duplica	te (MSD)			
	Sample Spiked:	09060712-01					
	RunID:	M_090615A-5068518	Units:	ua/ka-drv			

 RunID:
 M_090615A-506851

 Analysis Date:
 06/15/2009 17:13

 Preparation Date:
 06/13/2009 11:15

 Units:
 ug/kg-dry

 Analyst:
 E_G

 Prep By:
 E_G Method: SW5030B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
cis-1,2-Dichloroethene	ND	25.2	23.8	94.3	25.2	23.6	93.6	0.825	30	38	151
cis-1,3-Dichloropropene	ND	25.2	24.0	95.2	25.2	24.1	95.7	0.514	30	31	131
m,p-Xylene	ND	50.4	49.0	97.1	50.4	46.5	92.2	5.10	30	32	140
o-Xylene	ND	25.2	25.0	99.0	25.2	24.0	95.1	4.04	30	36	142
trans-1,2-Dichloroethene	ND	25.2	23.2	91.9	25.2	22.4	88.9	3.33	30	41	153
trans-1,3-Dichloropropene	ND	25.2	23.3	92.6	25.2	23.4	92.9	0.393	30	27	128
1,2-Dichloroethene (total)	ND	50	47	93	50	46	91	2.1	30	38	153
Xylenes,Total	ND	76	74	98	76	70	93	4.7	30	32	142
Surr: 1,2-Dichloroethane-d4	ND	63.1	60.9	96.6	63.1	62.9	99.8	3.24	30	71	130
Surr: 4-Bromofluorobenzene	ND	63.1	62.8	99.6	63.1	62.7	99.4	0.199	30	65	131
Surr: Toluene-d8	ND	63.1	66.6	106	63.1	66.6	106	0.114	30	75	136

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Analysis: Method:	Volatile Organics by SW8260B	Method 826	DB		WorkOrder: Lab Batch ID:	09060712 R276156
,	Meth	nod Blank		Samples in Analytical	Batch:	
RunID: L_090	0622A-5078883	Units:	ug/kg	Lab Sample ID	Client San	nple ID
Analysis Date:	06/22/2009 15:13	Analyst:	LU L	09060712-03A	MW-3 (12.	5-14)

Analyte	Result	Rep Limit
1,2,4-Trimethylbenzene	ND	250
n,p-Xylene	ND	250
p-Xylene	ND	250
Kylenes, Total	ND	250
Surr: 1,2-Dichloroethane-d4	103.3	78-116
Surr: 4-Bromofluorobenzene	105.7	74-125
Surr: Toluene-d8	104.4	82-118

Laboratory Control Sample (LCS)

RunID:	L_090622A-5078881	Units:	ug/kg
Analysis Date:	06/22/2009 14:35	Analyst:	LU L

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2,4-Trimethylbenzene	20.0	21.1	106	64	128
m,p-Xylene	40.0	43.8	109	71	129
o-Xylene	20.0	21.9	109	74	130
Xylenes,Total	60.0	65.7	109	71	130
Surr: 1,2-Dichloroethane-d4	50.0	49.9	99.9	78	116
Surr: 4-Bromofluorobenzene	50.0	51.8	104	74	125
Surr: Toluene-d8	50.0	51.9	104	82	118

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	09060942-05		
RunID:	L_090622A-5080013	Units:	ug/kg
Analysis Date:	06/22/2009 18:08	Analyst:	LU_L
Preparation Date:	06/18/2009 12:15	Prep By:	Method: SW5030B

,	Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,2,4-Trimethylbenzene		97500	20000	123000	N/C	20000	122000	N/C	N/C	20	43	132
Qualifiers:	Qualifiers: ND/U - Not Detected at the Reporting Limit				MI - Mat	rix Interfer	ence					
B/V - Analyte detected in the associated Method Blank			thod Blank	D - Reco	overy Unre	portable due	to Dilution					
	J - Estimated value	between MDL a	and PQL		* - Reco	very Outsi	de Advisable	QC Limits				

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Analysis: Method:	Volatile Organics by Method 8260B SW8260B								: 090 ID: R2	9060712 \276156		
	<u>Matrix Spike (MS) / Matrix Spike Duplicate (MSD)</u>											
Sample Spiked: 09060942-05 RunID: L_090622A-5080013 U Analysis Date: 06/22/2009 18:08 A Preparation Date: 06/18/2009 12:15 P							<g L Method: SV</g 	V 5030B				
	Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
m,p-Xylene		157000	40000	204000	117	40000	207000	125	1.56	20	69	127
o-Xylene	<u></u> , , ,, , ,, , ,, , ,, , ,, , , , , , , , , , , , , , , , , , , ,	65200	20000	87400	111	20000	89500	121 *	2.38	20	84	114
Xylenes,Total		222500	60000	291400	114.7	60000	296500	123.6	1.805	20	69	127
Surr: 1,2-Dic	hloroethane-d4	ND	50000	48900	97.8	50000	50400	101	2.93	30	78	116
Surr: 4-Brom	ofluorobenzene	ND	50000	50600	101	50000	50600	1 01	0.00989	30	74	125
Surr: Toluene	e-d8	ND	50000	51900	104	50000	52300	105	0.851	30	82	118

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

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Conoco Phillips Randleman #1

Analysis: Method:	Alkalinity (as Ca E310.1	CO3), Total					V L	/orkOrder: ab Batch ID:	09060712 R275459	
		Method Blank		<u> </u>	Sar	nples in A	nalytical B	atch:		
RunID: WET_C	90615F-5067060	Units:	mg/Kg		Lat	Sample I	n	Client S	ample ID	
Analysis Date:	06/15/2009 12:30	Analyst:	PAC		090	60712-010	2	(7-8.5) M	IW-2	
		, una jou						(, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
[Analyte		Result Rep Lit	mit						
Alk	alinity, Total (As CaCO3)	ND	20						
			Laborator	ry Control	Sample	(LCS)				
	Ru	nID:	WET 090615F-50	67062 U	nits:	ma/Ka				
	An	alysis Date:	06/15/2009 12:30	0 A	nalyst:	PAC				
		Analy	te	Spike	Result	Perce	nt Lowe	r Upper		
				Added		Recov				
	Alkali	nity, 1 otal (As Ca	(387.0	기 380 Inlicata	.u 9	8.19	90 110		
			2	sample Du	picale					
		Original Sample:	09060712-01							
		RunID:	WET_090615F	-5067063	Units:	mg/Kg	-dry			
		Analysis Date:	06/15/2009 1	2:30	Analyst	: PAC				
			Analyte	Sa R	ample tesult	DUP Result	RPD	RPD Limit		
		Alkalinity, Total (As CaCO3)		227	227	0	20		
Qualifiers:	ND/U - Not Detec	ted at the Report	ling Limit	. M	I - Matrix	Interferenc		D 1.4		
	B/V - Analyte det	ected in the asso	ciated Method Blai	nk D -	- Recove	ry Unrepor	table due to	Dilution		
	J - Estimated value		and PQL	*-	Recover	y Outside A	Advisable Q			
	E - Estimated Va	iue exceeds calib	rauon curve	tor then 4 4	mon the	mountof	niko oddod	Control limite	do not annly	
	TNTC - NOT CAICULA	areu - Sample cor	centration is great	ter man 4 ti	ines the a		spike added	. Control limits		2000
	ented on the OC Sum	many Report have	been munded. Di	PD and ne	rcent reco	verv value				යයුළ කොට
calculated by the	SPL LIMS system ar	many report lidve	/ Souri Joundou, N	, cana per	JUILICUL	ver y value	•		6/29/2009 4:3	10.25
		e derived from Q	C data prior to the	application	of round	ing rules.				



Conoco Phillips

Randleman #1

Analysis: Method:	DERCENT MOISTURE		WorkOrder: Lab Batch ID:	09060712 R275504C
,		Samples in Analytica	l Batch:	
		Lab Sample ID	Client Sar	mple ID
		09060712-01C	(7-8.5) MV	V-2
		09060712-02B	MW-4 (12	.5-14)
		09060712-03B	MW-3 (12	.5-14)
		09060712-04C	MW-3 (7.5	5-9)

Sample Duplicate

Original Sample:	09060776-01			
RunID:	WET_090615L-5068026	Units:	wt%	
Analysis Date:	06/15/2009 17:02	Analyst:	EB1	

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Percent Moisture	13.2	13.18	0	20

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

- * Recovery Outside Advisable QC Limits
- Necovery Outside Advisable QO

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis: Method:	Ion Chromatography E300.0 MOD	/				WorkOrder: Lab Batch ID:	09060712 R275853
	Met	nod Blank			Samples in Analytic	cal Batch:	
RunID: IC2_09	0617B-5073684	Units:	mg/kg		Lab Sample ID	Client Sar	nple ID
Analysis Date:	06/17/2009 18:28	Analyst:	BDG		09060712-01C	(7-8.5) MV	1-2
					09060712-02B	MW-4 (12.	5-14)
					09060712-03B	MW-3 (12.	5-14)
	Analyte		Result	Rep Limit	09060712-04C	MW-3 (7.5	-9)
Nitr	ogen,Nitrate (As N)		ND	5.0			
Nitr	ogen,Nitrite (As N)		ND	5.0			

Laboratory Control Sample (LCS)

RunID:	IC2_090617B-5073685
Analysis Date:	06/17/2009 18:48

Units: mg/kg Analyst: BDG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen, Nitrate (As N)	100.0	102.2	102.2	90	110
Nitrogen, Nitrite (As N)	100.0	106.2	106.2	90	110

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:
RunID:
Analysis Date

: 09060712-03 IC2_090617B-5073693 06/17/2009 22:58

Units: mg/kg-dry Analyst: BDG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Nitrogen, Nitrate (As N)	ND	113.1	119.8	105.3	113.1	97.01	85.12	21.04 *	20	80	120
Nitrogen, Nitrite (As N)	ND	113.1	122.8	108.6	113.1	102.3	90.40	18.25	20	80	120

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09060712 Page 62 6/29/2009 4:35:25 PM



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

Randleman #1

Analysis: Method:	Ion Chromatography E300.0 MOD	y				WorkOrder: Lab Batch ID:	09060712 R275861
	Met	hod Blank			Samples in Analytica	al Batch:	
RuniD: IC2_09	0617D-5073744	Units:	mg/kg		Lab Sample ID	Client Sar	nple ID
Analysis Date:	06/17/2009 18:28	Analyst:	BDG		09060712-01C	(7-8.5) MV	V-2
					09060712-02B	MW-4 (12	.5-14)
					09060712-03B	MW-3 (12	.5-14)
[Analyte		Result	Rep Limit	09060712-04C	MW-3 (7.5	5-9)
Bro	mide	•	ND	50			
Chl	oride		ND	5.0			
Flue	oride		ND	5.0			
Sult	fate		ND	5.0			

	Laboratory Con	trol Sample	<u>(LCS)</u>	
RunID:	IC2_090617D-5073745	Units:	mg/kg	
Analysis Date:	06/17/2009 18:48	Analyst:	BDG	

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Bromide	100.0	109.2	109.2	80	120
Chloride	100.0	104.5	104.5	80	120
Fluoride	100.0	109.1	109.1	80	120
Sulfate	100.0	103.7	103.7	80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	09060712-03		
RunID:	IC2_090617D-5073757	Units:	mg/kg-dry
Analysis Date:	06/17/2009 22:58	Analyst:	BDG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Bromide	ND	113.1	129.1	114.2	113.1	104.1	92.06	21.42 *	20	75	125
Chloride	ND	113.1	123.2	105.4	113.1	131.6	112.8	6.578	20	75	125
Fluoride	ND	113.1	127.0	110.4	113.1	139.7	121.6	9.544	20	75	125
Sulfate	844.5	113.1	862.7	N/C	113.1	872.0	N/C	N/C	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis: Method:	Ion Chromatography E300.0 MOD	/				WorkOrder: Lab Batch ID:	09060712 R276034					
	<u>Meth</u>	nod Blank		Samples in Analytic	Samples in Analytical Batch:							
RunID: IC2_090	0619C-5076740	Units:	mg/kg		Lab Sample ID	Client San	nple ID					
Analysis Date:	06/19/2009 12:35	Analyst:	BDG		09060712-01C	(7-8.5) MW-2						
					09060712-02B	MW-4 (12.	5-14)					
					09060712-03B	MW-3 (12.	5-14)					
	Analyte		Result Rep Limit		09060712-04C	MW-3 (7.5	-9)					
Chlo	oride		ND	5.0								
Orth	o-phosphate (As P)		ND	5.0								
Sulfa	ate		ND	5.0								

	Laboratory Con	trol Sample	<u>(LCS)</u>	
RunID:	IC2_090619C-5076741	Units:	mg/kg	
Analysis Date:	06/19/2009 12:54	Analyst:	BDG	

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloride	100.0	94.36	94.36	80	120
Ortho-phosphate (As P)	100.0	103.0	103.0	80	120
Sulfate	100.0	102.6	102.6	80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	090607
RunID:	IC2_090
Analvsis Date:	06/19/2

09060712-03 IC2_090619C-5076754 Units: 06/19/2009 22:31 Analys

Units: mg/kg-dry Analyst: BDG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Chloride	ND	2262	1932	85.41	2262	2149	94.97	10.60	20	75	125
Ortho-phosphate (As P)	ND	2262	2870	126.8 *	2262	2963	130.9 *	3.172	20	75	125
Sulfate	300.7	2262	4251	174.6 *	2262	4784	198.1 *	11.78	20	75	125

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

09060712 Page 64 6/29/2009 4:35:25 PM Sample Receipt Checklist And Chain of Custody

> 09060712 Page 65 6/29/2009 4:35:26 PM



Sample Receipt Checklist

Workorder: Date and Til Temperature	me Received: e:	09060712 6/12/2009 9:00:00 AM 2.0°C			Received By Carrier name Chilled by:	/: NW e: Fedex-Priority Water Ice	,
1. Shippir	ng container/co	ooler in good condition?	Yes		No 🗌	Not Present	
2. Custod	y seals intact o	on shippping container/cooler?	Yes		No 🗌	Not Present	
3. Custod	y seals intact o	on sample bottles?	Yes		No 🗔	Not Present	
4. Chain c	of custody pres	sent?	Yes		Νο		
5. Chain c	of custody sigr	ned when relinquished and received?	Yes		No 🗆		
6. Chain c	of custody agre	ees with sample labels?	Yes		No 🗹		
7. Sample	s in proper co	ntainer/bottle?	Yes		No 🗌		
8. Sample	containers int	act?	Yes		No 🗌		
9. Sufficie	ent sample volu	ume for indicated test?	Yes		No 🗌		
10. All sam	ples received	within holding time?	Yes		No 🗆		
11. Contair	ner/Temp Blani	k temperature in compliance?	Yes		No 🗌 🛛		
12. Water -	VOA vials hav	e zero headspace?	Yes		No	VOA Vials Not Present	
13. Water -	Preservation of	checked upon receipt (except VOA*)?	Yes		No 🗌	Not Applicable	
*VOA P	reservation Ch	necked After Sample Analysis					
SP	L Representati	ve:	act Date &	& Time:			
Client	Name Contact	ed:					
Non Co	nformance Re Issues:	eceived trip blank not listed on the chain of	custody. Log	ged in on I	hold.		
Client Ir	structions:	· · · ·					

327652	page0f	quested Analysis													۲ ک		Intact? V N N Ice? V N N Temp:	PM reven (initial):	V			Will a UL	459 Hughes Drive 3, MI 49686 (231) 947-5777
rL workorder No.	29040712	s. Re	I Diese I Diese I R Si		1440 100 100 100 100			X T	X I I J	4 i X	$\times \times$ $-\infty$	$\mathbf{X} = \mathbf{x}$	XX I I	4 1 × 1	MICX			ion Limits (specify):		2. Received by:	4. Received by:	6. Received by Laborate	Traverse Cit
	<u> </u>	matrix bottle size pre-	e X=othe e X=othe f=other f=other other	Collios= Collios Collios Collios= Collios Colli	ater S= ludge 1 later 4= ter 5	DI=1 DI=1	5 C 4 M	SG 8 Im	5 G 8 M	SGH W	S G 8 M	SG4 No	S G 8 W	N H D S	SG 8 W	5000	ırks:	cmail 🔲 PDF 🛄 Special Detect		date of the lime 600	date 6-11-09 time	date (12/04 times)	or Caffery Parkway 3 (337) 237-4775
	L, Inc. Chain of Custody Record	co thilics	14 54 200 State WM ZIP 20140	# Email: Kelly, Warcherd Chratan	#1 San Juan Parntu	Ph: DATE TIME comp	- 6/i0/09 1050	2901 6010119	× 6/ 10/09 1050	1619109 1510	6/9/09 1510	6/10/09 1345	6/10/09 1345	6/10/09 1332	6 10 00 1332	6/10/09 1332	FL, Ortho, SOy, NOR/NO.	ceporting Requirements Results: Fax E	OC Level 3 QC Level 9 QC TX TRRP	ULLASSENTIL ULLU	uished by:	uished by:	01 Scott, LA 7058
	SP Analysis Request &	Client Name: TETRI TECH/ CUNC	City AlDAANOVCANO City AlDAANOVCANO Phone/Fax: 505-737-8440	Client Contact: Kolly Blarr Mrc	Site Name: Site Location: DADAID MAN	Invoice To: (JOND) C PUILING SAMPLE ID	195/11/1-2 F12-5-141	- 8.5MW - 2 725 mg	18.5/MW-2 425-14	MW - 4/12.5-14	MW - 4/25-14)	mW-3 (72.5-41)	MW-3 (12,5-14)	MW)-3 (7.5-9)	MW+3 (7.5-9)	MW-3 (7.5-9)	Client/Consultant Remarks: General Ohent = Alk, Bry Cloh,	Requested TAT Special R	1 Business Day Contract Standard	2 Business Days 🔲 Standard 1. Retind	3 Business Days 3 Relind	Other 5. Reling Rush TAT requires prior notice 5. Reling	B880 Interchange Drive Houston, TX 77054 (713) 660-09

APPENDIX C

Groundwater Sampling Field Forms
Æ	WATER SA	MPLING FI	ELD FOI	RM			
Project No. Randalman H				1	of	4	
Site Location Aztec NM							
Site/Well No. <u>MW-</u>	Coded/ Replicate No.		Date	6/121	09		
Weather <u>AMAN</u>	Time Sampling Began		Time Samp Completed	ling 1/2	3		
·	EVACUATION	N DATA					
Description of Measuring Pt (MP)							
Height of MP Above/Below Land Surface		MP Elevation					
Total Sounded Depth of Well Below MP	24,34	Water-Level Elev	vation				
Held Depth to Water Below MP	13,98	Diameter of Casi Gallons Pumped	ing /Bailed	$\frac{2 \operatorname{inch} / 4 \operatorname{inc}}{5}$	ch		
	-0.10	Prior to Sampling					
Gallons in Wel	1.1.6710 43	Sampling Pump	Intake				
	- 4,9728						
S Time Tomporature N	AMPLING DATA/FIEL		S		<u>ADD</u>	Other	
	3 3445	7.237	A.16	29,2	~11.5		
055 12.98 7	74 348-	2.267	2.93	28-1	-14,2	2	
					• •		
Sampling Equipment Low Flow	Pump / Disposable Bail						
Constituents Sampled	Container Descr	iption		Preser	<u>vative</u>		
							
Remarks In Alighell, Alle for rechause							
Sampling Personnel	N Volly Blan	chard. ()	highin	o Math	RUJS		
$G_{cl} H = 41/P = 0.077$	Well Casing	Volumes	0 37	/" - 0 GE			
$1 \frac{1}{2}^{\circ} = 0.077$	2 = 0.16 $2\frac{1}{2}^{n} = 0.24$	3" ½ = (0.50				
						i.	

R:\Share\Maxim Forms\Field Forms\2008 Water Sampling Field Form

WATER SA	AMPLING FIELD FORM
Project No. Randalmant 1	2 of 4
Site Location Affect NM	
Site/Well No. MW- 2 Coded/ Replicate No.	Date 4/12/09
Weather ALAMAN Began	Time Sampling Completed
EVACUATIO	N DATA
Description of Measuring Pt (MP)	
Height of MP Above/Below Land Surface	MP Elevation
Total Sounded Depth of Well Below MP 26,54	Water-Level Elevation
Held Depth to Water Below MP 15,57	Diameter of Casing 2 inch / 4 inch
Wet Water Column in Well 10, 97	Prior to Sampling 5.5
Gallons per Foot <u>0.110</u>	Sampling Pump Intake
Gallons in Well 17552 , 3	(feet below land surface)
Purging Equipment Mulo - 51 2020	
SAMPLING DATA/FIE Time Temperature pH Conductivity	LD PARAMETERS
1021 10.77 7.56 8935	1.893 1.41 12.9 -99.3
1531 10.92 7.54 2868	1.865 1.63 14,8 - 92.9
Sampling Equipment Low Flow Pump / Disposable Ba	
Constituents Sampled	Preservative
Remarks	A. I alouid! Moderna
Sampling Personnel CUDYL DIZALN, ICLILY FULL	Marcy Christing Chulus
Well Casin	g Volumes
Gal./ft. $1 \frac{1}{4}$ " = 0.077 2 " = 0.16 $1 \frac{1}{2}$ " = 0.10 $2 \frac{1}{2}$ " = 0.24	3" = 0.37 $4" = 0.653"\frac{1}{2} = 0.50 6" = 1.46$

R:\Share\Maxim Forms\Field Forms\2008 Water Sampling Field Form

WATER SA	AMPLING FIELD FORM
Project No. Randaman #1	of 4
Site Location A-Zfc, NM	
Site/Well No. <u>MW-</u> Coded/ Replicate No.	130 Date <u>6/12/09</u>
Weather AMM Began 00	05 Time Sampling Completed 1045
EVACUATIO	N DATA
Description of Measuring Pt (MP)	
Height of MP Above/Below Land Surface	MP Elevation
Total Sounded Depth of Well Below MP 24, 27	Water-Level Elevation
Held Depth to Water Below MP	Diameter of Casing 2 inch 4 inch
Wet Water Column in Well <u>8.87</u>	Prior to Sampling
Gallons per Foot	Sampling Pump Intake
Gallons in Well $\frac{1}{492}$ X 3	(feet below land surface)
Purging Equipment DUHC - 12370	
SAMPLING DATA/FIE Time Temperature pH Conductivity	LD PARAMETERS TDS DO DO% ORP Other
013 11.17 6.92 2.897	2.117 5.04 45.1 -56.0 2.15 4.05 37.3 -77.8
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
022 1.34 7.80 2.374	2.087 4.49 41.4 -139.4
Sampling Equipment Low Flow Pump / Disposable Ba	iler
VACE SUACE Container Desc	Preservative
Metals, TPH GPOS DRO Gimbers, 2	2 ground nut in 3
General Chem 16 or Fla	stic. tunsets voas
1 a : weathered	l'a la calle dre lines
Remarks 120 16 Grow W Nyay Ola	WON COLOR SHOTTY ALECONTINUUS
Sampling Personnel	Webs, Kally Burchard Ster
Well Casin	g Volumes
Gal./ft. $1 \frac{1}{4}$ " = 0.077 2" = 0.16 $1 \frac{1}{2}$ " = 0.10 $2 \frac{1}{2}$ " = 0.24	3" = 0.37 $4" = 0.653"\frac{1}{2} = 0.50 6" = 1.46$
	MW-2 MW-1 MW.4
R:\Share\Maxim Forms\Field Forms\2008 Water Sampling Field Form	1035 1100 1130
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	WATER SAMPLING FIELD FORM
Project No. Rawla (man #1	4 of 4
Site Location Aztec, N.M.	
Site/Weil No. <u>MW-</u>	boded/ eplicate No Date <u>U/12/81</u>
Weather <u>Suminy</u> B	eganCompleted30
	EVACUATION DATA
Description of Measuring Pt (MP)	
Height of MP Above/Below Land Surface	MP Elevation
Total Sounded Depth of Well Below MP	8.7 Water-Level Elevation
Held Depth to Water Below MP	7, 68 Diameter of Casing 2 inch / 4 inch
Wet Water Column in Well	11,02 Gallons Pumped/Balled Prior to Sampling
Gallons per Foot	171032×3=
Gallons in Well-	(feet below land surface)
Purging Equipment	······································
SAM	PLING DATA/FIELD PARAMETERS
17.40 4.43 9.40	2 12477 2.290 1.6 113.0 24.9
12.44 3.9 0.03	19.171 7.829 7.8% 79.0 17.1
Sampling Equipment Low Flow Put	np (Disposable Bailer
Constituents Sampled	Container Description Preservative
<u> </u>	
Remarks Worker 15 tan 6	When esther recharge molerate
Sampling Personnel	unstine Kelly Blanchard
	Well Casing Volumes
Gal./ft. 1 ¼" = 0.077 1 ½" = 0.10	$2^{"}$ = 0.16 $3^{"}$ = 0.37 $4^{"}$ = 0.65 $2\frac{1}{2}$ " = 0.24 $3^{"}\frac{1}{2}$ = 0.50 $6"$ = 1.46

R:\Share\Maxim Forms\Field Forms\2008 Water Sampling Field Form

APPENDIX D

Groundwater Laboratory Analysis Reports



Conoco Phillips

Certificate of Analysis Number: <u>09060743</u>						
Report To:	Project Name:	Randleman #1				
Tetra Tech, Inc.	Site:	San Juan County, NM				
Kelly Blanchard	Site Address:					
6121 Indian School Road, N.E.						
Suite 200	PO Number					
Albuquerque			İ			
NM	State:	New Mexico				
87110-	State Cert. No.:					
ph: (505) 237-8440 fax:	Date Reported:	6/23/2009	1			

This Report Contains A Total Of 64 Pages

Excluding This Page, Chain Of Custody

And

Any Attachments

6/23/2009



Case Narrative for: Conoco Phillips

Certificate of Analysis Number:

09060743

Report To:	Project Name: Randleman #1
Tetra Tech, Inc.	Site: San Juan County, NM
Kelly Blanchard	Site Address:
6121 Indian School Road, N.E.	
Suite 200	BO Number
Albuquerque	<u>FO Nullibel.</u>
NM	<u>State:</u> New Mexico
87110-	State Cert. No.:
ph: (505) 237-8440 fax:	Date Reported: 6/23/2009

I. SAMPLE RECEIPT:

There were no exceptions.

II: ANALYSES AND EXCEPTIONS:

SW8260B Volatile Organics:

For Volatile Organics analysis (8260B), the results for 2-chloroethyl vinyl ether are estimated due to sample preservation. The result for this compound is reported as "ND J" for all samples in the report.

SW8015 Diesel Range Organics:

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID:91124 for the Diesel Range Organics analysis by Method 8015B. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

SW8270C Semivolatile Organics:

Due to limited sample volume, a Matrix Spike (MS) or Matrix Spike Duplicate (MSD) was not extracted with Batch ID: 91162 for the Semivolatile Organics analysis by SW846 Method 8270C. A Laboratory Control Sample (LCS) and a Laboratory Control Sample Duplicate (LCSD) were extracted with the analytical batch and serve as the batch quality control (QC). The LCS and LCSD recovered acceptably and precision criteria were met.

SM4500 Nitrite as Nitrogen:

Your sample ID "MW-3" (SPL ID: 09060743-01) was randomly selected for use in SPL's quality control program for the Total Nitrite as Nitrogen analysis by Standard Method 4500 (Batch ID: R275563). The Matrix Spike Duplicate (MSD) recovery was outside of the advisable quality control limits due to possible matrix interference.

III. CERTIFICATION:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

IV. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg\kg-dry " or " ug\kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the

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09060743 Page 1

6/23/2009

Erica Cardenas Project Manager

Test results meet all requirements of NELAC, unless specified in the narrative.



Case Narrative for: Conoco Phillips

Certificate of Analysis Number:

<u>09060743</u>

MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of. Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

In Cardinas

09060743 Page 2 6/23/2009

Erica Cardenas Project Manager



Conoco Phillips

	Certificate of Analysis Number: <u>09060743</u>					
<u>Report To:</u>	Tetra Tech, Inc. Kelly Blanchard 6121 Indian School Road, N.E.	<u>Projec</u> <u>Site:</u> <u>Site A</u>	<u>:t Name:</u> Randleman #1 San Juan County, NM <u>ddress:</u>			
	Suite 200 Albuquerque NM	PO Nu	imber:			
	87110- ph: (505) 237-8440 fax: (505	i) 881-3283 <u>State:</u> <u>State</u>	New Mexico <u>Cert. No.:</u>			
<u>Fax To:</u>		Date F	Reported: 6/23/2009			

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
MW-3	09060743-01	Water	6/12/2009 10:45:00 AM	6/13/2009 10:00:00 AM	327653	
MW-3	09060743-01	Water	6/12/2009 10:45:00 AM	6/13/2009 10:00:00 AM	653,327829,327	
MW-2	09060743-02	Water	6/12/2009 10:35:00 AM	6/13/2009 10:00:00 AM		
MW-1	09060743-03	Water	6/12/2009 11:00:00 AM	6/13/2009 10:00:00 AM		
MW-4	09060743-04	Water	6/12/2009 11:30:00 AM	6/13/2009 10:00:00 AM		
Trip Blank	09060743-06	Water	6/12/2009 11:00:00 AM	6/13/2009 10:00:00 AM		
Duplicate	09060743-07	Water	6/12/2009 11:30:00 AM	6/13/2009 10:00:00 AM		

a Cardinas E

6/23/2009

Date

Erica Cardenas Project Manager

> Kesavalu M. Bagawandoss Ph.D., J.D. Laboratory Director

> > Ted Yen Quality Assurance Officer

> > > 09060743 Page 3 6/23/2009 4:14:52 PM



HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW	-3		Collect	ed: (06/12/200	9 10:45	SPL San	nple	D: 0906	0743-01
			Site:	Sai	n Juan C	ounty, M	M			
Analyses/Method	Resu	it QUAL	Rep.Li	mit		Dil. Facto	or Date Anal	yzed	Analyst	Seq. #
ALKALINITY (AS CAC	CO3), TOTAL				MCL		E310.1	Ur	nits: mg/L	
Alkalinity, Total (As CaC	03) 99	Ð		2		1	06/14/09	12:15	PAC	5065992
DIESEL RANGE ORG	ANICS				MCL	5	SW8015B	Ur	nits: mg/L	
Diesel Range Organics (C10-C28) 1.2	2		0.1		1	06/19/09	18:29	NW	5077348
Surr: n-Pentacosane	59.0)	% 20-	150		1	06/19/09	18:29	NW	5077348
Prep Method	Prep Date	Prep Initia	ls Prep Fact	or						
SW3510C	06/16/2009 10:43	N_M	1.00							
GASOLINE RANGE O	RGANICS				MCL		SW8015B	Ur	nits: mg/L	
Gasoline Range Organic	s 2'	1		10		100	06/17/09	2:46	EMB	5070812
Surr: 1,4-Difluorobenz	ene 97.	5	% 60-	155		100	06/17/09	2:46	EMB	5070812
Surr: 4-Bromofluorobe	nzene 10	7	% 50-	158		100	06/17/09	2:46	EMB	5070812
ION CHROMATOGRA	PHY				MCL		E300.0	Ur	nits: mg/L	
Bromide	NE)		0.5		1	06/19/09	13:52	BDG	5076623
Chloride	40.3	3		5		10	06/19/09	14:11	BDG	5076624
Fluoride	NE)		0.5		1	06/19/09	13:52	BDG	5076623
Ortho-phosphate (As P)	NE)		0.5		1	06/19/09	13:52	BDG	5076623
Sulfate	1510)		100		200	06/19/09	14:30	BDG	5076625
MERCURY, TOTAL					MCL	S	SW7470A	Ur	nits: mg/L	
Mercury	NE)	0.0	002		1	06/18/09	13:45	F_S	5073576
Prep Method	Pren Date	Pren Initia	Is Pren Fact	or						
SW7470A	06/18/2009 10:15	F_S	1.00	<u></u>						
METALS BY METHOD	0 6010B TOTAL				MCI		W6010B	Ur	nits: ma/l	
Aluminum	1.1	1		0.1		1	06/21/09	15:12	EG	5077088
Boron	0.107	7	· · · · · · · · · · · · · · · · · · ·	0.1		1	06/21/09	15:12	EG	5077088
Calcium	523	7		1		10	06/21/09	15:16	EG	5077089
Iron	1.65	5	0	.02		1	06/21/09	15:12	EG	5077088
Magnesium	23.9)		0.1		1	06/21/09	15:12	EG	5077088
Potassium	(6		1		1	06/21/09	15:12	EG	5077088
Sodium	242	2		1		10	06/21/09	15:16	EG	5077089
Strontium	10.5	5		0.5		10	06/21/09	15:16	EG	5077089
Tin	0.006	1	0.0	005		1	06/21/09	15:12	EG	5077088
Pren Method	Pren Date	Pren Initia	ls Pren Fact	or						

Qualifiers:

SW 3010A

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits

AB1

1.00

- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve
- TNTC Too numerous to count

06/16/2009 10:30

- >MCL Result Over Maximum Contamination Limit(MCL)
 D Surrogate Recovery Unreportable due to Dilution
- MI Matrix Interference

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HOUSTON, TX 77054

(713) 660-0901

09060743-01

Client Sample ID:MW-3

Collected: 06/12/2009 10:45 SPL Sample ID:

San Juan County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyz	ed Analyst	Seq. #
METALS BY METHOD 6	020A, TOTAL	· ·· · •		MCL SI	N6020A	Units: mg/L	
Antimony	ND		0.005	1	06/18/09 0	0:09 AL_H	5072421
Arsenic	ND		0.005	1	06/18/09 0):09 AL_H	5072421
Barium	0.0537		0.005	1	06/19/09 16	5:26 S_C	5077039
Beryllium	ND		0.004	1	06/19/09 16	3:26 S_C	5077039
Cadmium	ND		0.005	1	06/18/09 0	0:09 AL_H	5072421
Chromium	ND		0.005	1	06/18/09 0):09 AL_H	5072421
Cobalt	ND		0.005	1	06/18/09 0):09 AL_H	5072421
Copper	ND		0.005	1	06/18/09 0	0:09 AL_H	5072421
Lead	ND		0.005	1	06/18/09 0):09 AL_H	5072421
Manganese	3		0.005	1	06/19/09 16	3:26 S_C	5077039
Molybdenum	ND		0.01	1	06/18/09 0	09 AL_H	5072421
Nickel	0.00971		0.005	1	06/18/09 0):09 AL_H	5072421
Selenium	ND		0.005	1	06/18/09 0	:09 AL_H	5072421
Silver	ND		0.005	1	06/18/09 0	:09 AL_H	5072421
Thallium	ND		0.005	1	06/18/09 0	:09 AL_H	5072421
Vanadium	ND		0.005	1	06/18/09 0	0:09 AL_H	5072421
Zinc	ND		0.01	1	06/18/09 0	0:09 AL_H	5072421

Site:

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	06/16/2009 10:30	AB1	1.00

NITRATE NITROGEN (AS N),	TOTAL		MCL	SM450	0-NO3 F	Units: mg/L	
Nitrogen, Nitrate (As N)	ND	0.5		1	06/13/09	16:00 ESK	5069046
NITRITE NITROGEN (AS N), T	OTAL		MCL	SM450	0-NO2 B	Units: mg/L	
Nitrogen, Nitrite	ND	0.5		1	06/13/09	14:15 ESK	5068989

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

09060743 Page 5 6/23/2009 4:15:05 PM



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-3

Collected: 06/12/2009 10:45

SPL Sample ID: 09060743-01

			Site:	San	Juan County, N	Ň		
Analyses/Method	Result	QUAL	Rep.L	imit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS E	BY METHOD 82	70C			MCL SI	N8270C Ur	nits: ug/L	
1,2,4-Trichlorobenzene	ND			5	1	06/18/09 16:03	GY	5074314
1,2-Dichlorobenzene	ND			5	1	06/18/09 16:03	GY	5074314
1,2-Diphenylhydrazine	ND			10	1	06/18/09 16:03	GY	5074314
1,3-Dichlorobenzene	ND			5	1	06/18/09 16:03	GY	5074314
1,4-Dichlorobenzene	ND			5	1	06/18/09 16:03	GY	5074314
2,4,5-Trichlorophenol	ND			10	1	06/18/09 16:03	GY	5074314
2,4,6-Trichlorophenol	ND	•		5	1	06/18/09 16:03	GY	5074314
2,4-Dichlorophenol	ND			5	1	06/18/09 16:03	GY	5074314
2,4-Dimethylphenol	18			5	1	06/18/09 16:03	GY	5074314
2,4-Dinitrophenol	ND			25	1	06/18/09 16:03	GY	5074314
2,4-Dinitrotoluene	ND			5	1	06/18/09 16:03	GY	5074314
2,6-Dinitrotoluene	ND			5	1	06/18/09 16:03	GY	5074314
2-Chloronaphthalene	ND			5	1	06/18/09 16:03	GY	5074314
2-Chlorophenol	ND			5	1	06/18/09 16:03	GY	5074314
2-Methylnaphthalene	12			5	1	06/18/09 16:03	GY	5074314
2-Nitroaniline	ND			25	1	06/18/09 16:03	GY	5074314
2-Nitrophenol	ND			5	1	06/18/09 16:03	GY	5074314
3,3'-Dichlorobenzidine	ND			10	1	06/18/09 16:03	GY	5074314
3-Nitroaniline	ND			25	1	06/18/09 16:03	GY	5074314
4,6-Dinitro-2-methylphenol	ND			25	1	06/18/09 16:03	GY	5074314
4-Bromophenyl phenyl ether	ND			5	1	06/18/09 16:03	GY	5074314
4-Chloro-3-methylphenol	ND			5	1	06/18/09 16:03	GY	5074314
4-Chloroaniline	ND			5	1	06/18/09 16:03	GY	5074314
4-Chlorophenyl phenyl ether	ND			5	1	06/18/09 16:03	GY	5074314
4-Nitroaniline	ND			25	1	06/18/09 16:03	GY	5074314
4-Nitrophenol	ND			25	1	06/18/09 16:03	GY	5074314
Acenaphthene	ND			5	1	06/18/09 16:03	GY	5074314
Acenaphthylene	ND			5	1	06/18/09 16:03	GY	5074314
Aniline	ND			5	1	06/18/09 16:03	GY	5074314
Anthracene	ND			5	1	06/18/09 16:03	GY	5074314
Benz(a)anthracene	ND			5	1	06/18/09 16:03	GY	5074314
Benzo(a)pyrene	ND			5	1	06/18/09 16:03	GY	5074314
Benzo(b)fluoranthene	ND			5	1	06/18/09 16:03	GY	5074314
Benzo(g,h,i)perylene	ND			5	1	06/18/09 16:03	GY	5074314
Benzo(k)fluoranthene	ND			5	1	06/18/09 16:03	GY	5074314
Benzoic acid	ND			25	1	06/18/09 16:03	GY	5074314
Benzyl alcohol	ND			5	1	06/18/09 16:03	GY	5074314
Bis(2-chloroethoxy)methane	ND			5	1	06/18/09 16:03	GY	5074314
Bis(2-chloroethyl)ether	ND			5	1	06/18/09 16:03	GY	5074314

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-3

Collected: 06/12/2009 10:45

SPL Sample ID: 09060743-01

Analyses/Method	Result	QUAL	Rep	Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND			5	1	06/18/09 16:03	GY	5074314
Bis(2-ethylhexyl)phthalate	ND			. 5	1	06/18/09 16:03	GY	5074314
Butyl benzyl phthalate	ND			5	1	06/18/09 16:03	GY	5074314
Carbazole	ND			5	1	06/18/09 16:03	GY	5074314
Chrysene	ND			5	1	06/18/09 16:03	GY	5074314
Dibenz(a,h)anthracene	ND			5	1	06/18/09 16:03	GY	5074314
Dibenzofuran	ND			5	1	06/18/09 16:03	GY	5074314
Diethyl phthalate	ND			5	1	06/18/09 16:03	GY	5074314
Dimethyl phthalate	ND			5	1	06/18/09 16:03	GY	5074314
Di-n-butyl phthalate	ND		·	5	. 1	06/18/09 16:03	GY	5074314
Di-n-octyl phthalate	ND			5	1	06/18/09 16:03	GY	5074314
Fluoranthene	ND			5	1	06/18/09 16:03	GY	5074314
Fluorene	ND			5	1	06/18/09 16:03	GY	5074314
Hexachlorobenzene	ND			5	1	06/18/09 16:03	GY	5074314
Hexachlorobutadiene	ND			5	1	06/18/09 16:03	GY	5074314
Hexachlorocyclopentadiene	ND			5	1	06/18/09 16:03	GY	5074314
Hexachloroethane	ND			5	1	06/18/09 16:03	GY	5074314
Indeno(1,2,3-cd)pyrene	ND			5	1	06/18/09 16:03	GY	5074314
Isophorone	ND			5	1	06/18/09 16:03	GY	5074314
Naphthalene	20			5	1	06/18/09 16:03	GY	5074314
Nitrobenzene	ND			5	1	06/18/09 16:03	GY	5074314
N-Nitrosodi-n-propylamine	ND			5	· 1	06/18/09 16:03	GY	5074314
N-Nitrosodiphenylamine	ND			5	1	06/18/09 16:03	GY	5074314
Pentachlorophenol	ND			25	1	06/18/09 16:03	GY	5074314
Phenanthrene	ND			5	1	06/18/09 16:03	GY	5074314
Phenol	ND			5	1	06/18/09 16:03	GY	5074314
Pyrene	ND			5	1	06/18/09 16:03	GY	5074314
Pyridine	ND			5	1	06/18/09 16:03	GY	5074314
2-Methylphenol	7.2			5	1	06/18/09 16:03	GY	5074314
3 & 4-Methylphenol	8.3			5	1	06/18/09 16:03	GY	5074314
Surr: 2,4,6-Tribromophenol	105		% 1	10-123	1	06/18/09 16:03	GY	5074314
Surr: 2-Fluorobiphenyl	75.8		% 2	23-116	1	06/18/09 16:03	GY	5074314
Surr: 2-Fluorophenol	57.5		% 1	16-110	1	06/18/09 16:03	GY	5074314
Surr: Nitrobenzene-d5	63.2		% 2	21-114	1	06/18/09 16:03	GY	5074314
Surr: Phenol-d5	43.2		% 1	10-110	1	06/18/09 16:03	GY	5074314
Surr: Terphenyl-d14	76.0		% 2	22-141	1	06/18/09 16:03	GY	5074314

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/17/2009 7:29	N_M	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

> 09060743 Page 7 6/23/2009 4:15:05 PM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-3

Collected: 06/12/2009 10:45

Site:

SPL Sample ID:

09060743-01

		Site: Sa	n Juan County,	NM	
Analyses/Method	Result QUAL	Rep.Limit	Dil. Fac	tor Date Analyzed Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B		MCL	SW8260B Units: ug/L	
1,1,1,2-Tetrachloroethane	. ND	5	1	06/20/09 18:52 LU_L	5076481
1,1,1-Trichloroethane	ND	5	1	06/20/09 18:52 LU_L	5076481
1,1,2,2-Tetrachloroethane	ND	5	1	06/20/09 18:52 LU_L	5076481
1,1,2-Trichloroethane	ND	5	1	06/20/09 18:52 LU_L	5076481
1,1-Dichloroethane	ND	5	1	06/20/09 18:52 LU_L	5076481
1,1-Dichloroethene	ND	5	1	06/20/09 18:52 LU_L	5076481
1,1-Dichloropropene	ND	5	1	06/20/09 18:52 LU_L	5076481
1,2,3-Trichlorobenzene	ND	5	1	06/20/09 18:52 LU_L	5076481
1,2,3-Trichloropropane	ND	5	1	06/20/09 18:52 LU_L	5076481
1,2,4-Trichlorobenzene	ND	5	1	06/20/09 18:52 LU_L	5076481
1,2,4-Trimethylbenzene	440	100	20	06/21/09 10:45 LU_L	5078047
1,2-Dibromo-3-chloropropane	ND	5	1	06/20/09 18:52 LU_L	5076481
1,2-Dibromoethane	ND	5	1	06/20/09 18:52 LU_L	5076481
1,2-Dichlorobenzene	ND	5	1	06/20/09 18:52 LU_L	5076481
1,2-Dichloroethane	ND	5	1	06/20/09 18:52 LU_L	5076481
1,2-Dichloropropane	ND	5	1	06/20/09 18:52 LU_L	5076481
1,3,5-Trimethylbenzene	140	5	1	06/20/09 18:52 LU_L	5076481
1,3-Dichlorobenzene	ND	5	1	06/20/09 18:52 LU_L	5076481
1,3-Dichloropropane	ND	5	1	06/20/09 18:52 LU_L	5076481
1,4-Dichlorobenzene	ND	5	1	06/20/09 18:52 LU_L	5076481
2,2-Dichloropropane	ND	5	. 1	06/20/09 18:52 LU_L	5076481
2-Butanone	ND	20	1	06/20/09 18:52 LU_L	5076481
2-Chloroethyl vinyl ether	ND J	10	1	06/20/09 18:52 LU_L	5076481
2-Chlorotoluene	ND	5	1	06/20/09 18:52 LU_L	5076481
2-Hexanone	ND	10	· 1	06/20/09 18:52 LU_L	5076481
4-Chlorotoluene	ND	5	1	06/20/09 18:52 LU_L	5076481
4-Isopropyltoluene	6.3	5	1	06/20/09 18:52 LU_L	5076481
4-Methyl-2-pentanone	ND	10	1	06/20/09 18:52 LU_L	5076481
Acetone	ND	20	1	06/20/09 18:52 LU_L	5076481
Acrytonitrile	ND	10	1	06/20/09 18:52 LU_L	5076481
Benzene	10	5	1	06/20/09 18:52 LU_L	5076481
Bromobenzene	ND	5	1	06/20/09 18:52 LU_L	5076481
Bromochloromethane	ND	5	1	06/20/09 18:52 LU_L	5076481
Bromodichloromethane	ND	5	1	06/20/09 18:52 LU_L	5076481
Bromoform	ND	5	1	06/20/09 18:52 LU_L	5076481
Bromomethane	ND	10	1	06/20/09 18:52 LU_L	5076481
Carbon disulfide	ND	5	1	06/20/09 18:52 LU_L	5076481
Carbon tetrachloride	ND	5	1	06/20/09 18:52 LU_L	5076481
Chlorobenzene	ND	5	1	06/20/09 18:52 LU_L	5076481
			-		

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

> 09060743 Page 8 6/23/2009 4:15:05 PM



HOUSTON, TX 77054

(713) 660-0901

```
Client Sample ID:MW-3
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Collected: 06/12/2009 10:45 .

09060743-01 SPL Sample ID:

			Site	e: Sa	an Juan	County, NM	n		
Analyses/Method	Result	QUAL	Re	p.Limit		Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND			10		1	06/20/09 18:52	LU_L	5076481
Chloroform	ND			5		1	06/20/09 18:52	LU_L	5076481
Chloromethane	ND			10		1	06/20/09 18:52	LU_L	5076481
Dibromochloromethane	ND			5		1	06/20/09 18:52	LU_L	5076481
Dibromomethane	ND			5		1	06/20/09 18:52	LU_L	5076481
Dichlorodifluoromethane	ND			10		1	06/20/09 18:52	LU_L	5076481
Ethylbenzene	490			100		20	06/21/09 10:45	LU_L	5078047
Hexachlorobutadiene	ND			5		1	06/20/09 18:52	LU_L	5076481
Isopropylbenzene	46			5		1	06/20/09 18:52	LU_L	5076481
Methyl tert-butyl ether	ND			5		1	06/20/09 18:52	LU_L	5076481
Methylene chloride	ND			5		1	06/20/09 18:52	LU_L	5076481
Naphthalene	36			5		1	06/20/09 18:52	LU_L	5076481
n-Butylbenzene	ND			5		1	06/20/09 18:52	LU_L	5076481
n-Propylbenzene	48			5		1	06/20/09 18:52	LU_L	5076481
sec-Butylbenzene	6.1			5		1	06/20/09 18:52	LU_L	5076481
Styrene	ND			5		1	06/20/09 18:52	LU_L	5076481
tert-Butylbenzene	ND	_		5		· 1	06/20/09 18:52	LU_L	5076481
Tetrachloroethene	ND			5		1	06/20/09 18:52	LU_L	5076481
Toluene	1400			100		20	06/21/09 10:45	LU_L	5078047
Trichloroethene	ND			5		1 .	06/20/09 18:52	LU_L	5076481
Trichlorofluoromethane	ND			5		1	06/20/09 18:52	LU_L	5076481
Vinyl acetate	ND			10		1	06/20/09 18:52	LU_L	5076481
Vinyl chloride	ND			2		1	06/20/09 18:52	LU_L	5076481
cis-1,2-Dichloroethene	ND	,		5		1	06/20/09 18:52	LU_L	5076481
cis-1,3-Dichloropropene	ND			5		1	06/20/09 18:52	LU_L	5076481
m,p-Xylene	3100			100		20	06/21/09 10:45	LU_L	5078047
o-Xylene	950			100		20	06/21/09 10:45	LU_L	5078047
trans-1,2-Dichloroethene	ND			5		1	06/20/09 18:52	LU_L	5076481
trans-1,3-Dichloropropene	ND			5		1	06/20/09 18:52	LU_L	5076481
1,2-Dichloroethene (total)	ND			5		1	06/20/09 18:52	LU_L	5076481
Xylenes,Total	4050			100		20	06/21/09 10:45	LU_L	5078047
Surr: 1,2-Dichloroethane-d4	97.2		%	78-116		1	06/20/09 18:52	LU_L	5076481
Surr: 1,2-Dichloroethane-d4	95.8		%	78-116		20	06/21/09 10:45	LU_L	5078047
Surr: 4-Bromofluorobenzene	103		%	74-125		20	06/21/09 10:45	LU_L	5078047
Surr: 4-Bromofluorobenzene	105		%	74-125		1	06/20/09 18:52	LU_L	5076481
Surr: Toluene-d8	92.2		%	82-118		20	06/21/09 10:45	LU_L	5078047
Surr: Toluene-d8	90.4		%	82-118		1	06/20/09 18:52	LU_L	5076481

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MV	V-2			Colle	cted:	06/12/20	09 10:3	5 SPL Sar	nple	ID: 090	60743-02
		_		Site:	Sa	n Juan C	county,	NM			
Analyses/Method	Res	sult	QUAL	Rep	.Limit		Dil. Fac	tor Date Ana	lyzed	Analyst	Seq. #
ALKALINITY (AS CA	CO3), TOTAL					MCL	_	E310.1	Uı	nits: mg/L	-
Alkalinity, Total (As Cal	CO3) 2	15			2		1	06/14/09	12:15	PAC	5065993
DIESEL RANGE OR	GANICS			·		MCL	•	SW8015B	U	nits: mg/L	
Diesel Range Organics	(C10-C28) 0	76		,	0.1		1	06/19/09	18:49	NW	5077349
Surr: n-Pentacosane	4	4.2		% 2	20-150		1	06/19/09	18:49	NW	5077349
Prep Method	Prep Date		Prep Initials	Prep F	actor						
SW3510C	06/16/2009 10:43		N_M	1.00							
GASOLINE RANGE	ORGANICS		·		·	MCL		SW8015B	U	nits: ma/L	
Gasoline Range Organi	ics	11			5		50	06/17/0	9 3:15	EMB	5070813
Surr: 1,4-Difluoroben	izene 9	8.5		% 6	60-155		50	06/17/0	9 3:15	EMB	5070813
Surr: 4-Bromofluorob	penzene 1	06		% 5	50-158		50	06/17/0	9 3:15	EMB	5070813
ION CHROMATOGR	APHY					MCL		E300.0	U	nits: mg/L	
Bromide		ND			0.5		1	06/19/09	16:07	BDG	5076630
Chloride	4	D.1			5		10	06/19/09	16:25	BDG	5076631
Fluoride	0.6	21			0.5		1	06/19/09	16:07	BDG	5076630
Ortho-phosphate (As P) I	١D			0.5		1	06/19/09	16:07	BDG	5076630
Sulfate	13	60			100		200	06/19/09	16:45	BDG	5076632
MERCURY, TOTAL						MCL		SW7470A	Ur	nits: mg/L	
Mercury		١D		(0.0002		1	06/18/09	13:48	F_S	5073577
Prep Method	Prep Date		Prep Initials	Prep F	actor						
SW7470A	06/18/2009 10:15		F_S	1.00							
METALS BY METHO	D 6010B. TOTAL			·····		MCI		SW6010B	U	nits: ma/l	
Aluminum	2	99			0.1		- 1	06/21/09	15:20	EG	5077090
Boron		ND			0.1		1	06/21/09	15:20	EG	5077090
Calcium	5	28			1		10	06/21/09	15:24	EG	5077091
Iron		3.7			0.02		1	06/21/09	15:20	EG	5077090
Magnesium	1	9.7			0.1		1	06/21/09	15:20	EG	5077090
Potassium	7.	53			1		1	06/21/09	15:20	EG	5077090
Sodium	1	96			1		10	06/21/09	15:24	EG	5077091
Strontium	8	54			0.5		10	06/21/09	15:24	EG	5077091
Tin		٩D			0.005		1	06/21/09	15:20	EG	5077090
Prep Method	Prep Date		Prep Initials	Prep F	actor						

Qualifiers:

SW3010A

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits

AB1

1.00

- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

06/16/2009 10:30

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

> 09060743 Page 10 6/23/2009 4:15:06 PM



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

09060743-02

Client Sample ID:MW-2

Collected: 06/12/2009 10:35 **SPL Sample ID:**

Site: San Juan County, NM Dil. Factor Date Analyzed Analyses/Method Result QUAL Rep.Limit Analyst Seq. # METALS BY METHOD 6020A, TOTAL SW6020A MCL Units: mg/L 5072422 Antimony ND 0.005 1 06/18/09 0:14 AL_H 0.005 1 06/18/09 0:14 AL_H 5072422 Arsenic 0.00759 5077040 0.005 1 06/19/09 16:31 S_C Barium 0.107 Beryllium ND 0.004 1 06/19/09 16:31 S_C 5077040 ND 0.005 5072422 Cadmium 1 06/18/09 0:14 AL_H 5072422 Chromium ND 0.005 1 06/18/09 0:14 AL_H Cobalt ND 0.005 1 06/18/09 0:14 AL_H 5072422 0.00699 0.005 1 06/18/09 0:14 AL_H 5072422 Copper 06/18/09 0:14 AL_H Lead 0.00561 0.005 1 5072422 5077040 0.005 1 06/19/09 16:31 S_C Manganese 3.56 ND 0.01 1 06/18/09 0:14 AL H 5072422 Molybdenum Nickel 0.0107 0.005 1 06/18/09 0:14 AL_H 5072422 5072422 Selenium ND 0.005 1 06/18/09 0:14 AL_H Silver ND 0.005 1 06/18/09 0:14 AL_H 5072422 5072422 Thallium ND 0.005 1 06/18/09 0:14 AL_H Vanadium 0.00592 0.005 1 06/18/09 0:14 AL H 5072422 0.0152 0.01 1 06/18/09 0:14 AL_H 5072422 Zinc

Prep Method	Prep Date	Prep Initials	Prep Factor
SW 3010A	06/16/2009 10:30	AB1	1.00

NITRATE NITROGEN (AS N),	TOTAL		MCL	SM450	0-NO3 F	Units: mg/L	
Nitrogen, Nitrate (As N)	0.52	0.5		1	06/13/09	16:00 ESK	5069049
NITRITE NITROGEN (AS N), 1	OTAL		MCL	SM450	0-NO2 B	Units: mg/L	
Nitrogen, Nitrite	ND	0.5		1	06/13/09	14:15 ESK	5068992

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

> 09060743 Page 11 6/23/2009 4:15:06 PM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-2

Collected: 06/12/2009 10:35

SPL Sample ID: 09060743-02

		Site: S	ian Juar	n County, NI	M		
Analyses/Method	Result QUAL	Rep.Lim	it	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS E	BY METHOD 8270C		M	CL SI	N8270C Un	its: ug/L	
1,2,4-Trichlorobenzene	ND		5	1	06/18/09 16:36	GY	5074315
1,2-Dichlorobenzene	ND		5	1	06/18/09 16:36	GY	5074315
1,2-Diphenylhydrazine	ND	1	0	1	06/18/09 16:36	GY	5074315
1,3-Dichlorobenzene	ND .		5	1	06/18/09 16:36	GY	5074315
1,4-Dichlorobenzene	ND		5	1	06/18/09 16:36	GY	5074315
2,4,5-Trichlorophenol	ND	1	0	1	06/18/09 16:36	GY	5074315
2,4,6-Trichlorophenol	ND		5	1	06/18/09 16:36	GY	5074315
2,4-Dichlorophenol	ND		5	1	06/18/09 16:36	GY	5074315
2,4-Dimethylphenol	ND		5	1	06/18/09 16:36	GY	5074315
2,4-Dinitrophenol	ND	2	5	1	06/18/09 16:36	GY	5074315
2,4-Dinitrotoluene	ND		5	1	06/18/09 16:36	GY	5074315
2,6-Dinitrotoluene	ND		5	1	06/18/09 16:36	GY	5074315
2-Chloronaphthalene	ND		5	1	06/18/09 16:36	GY	5074315
2-Chlorophenol	ND		5	1	06/18/09 16:36	GY	5074315
2-Methylnaphthalene	13		5	1	06/18/09 16:36	GY	5074315
2-Nitroaniline	ND	2	5	1	06/18/09 16:36	GY	5074315
2-Nitrophenol	ND		5	1	06/18/09 16:36	GY	5074315
3,3'-Dichlorobenzidine	ND	1	0	1	06/18/09 16:36	GY	5074315
3-Nitroaniline	ND .	2	5	1	06/18/09 16:36	GY	5074315
4,6-Dinitro-2-methylphenol	ND	2	5	1	06/18/09 16:36	GY	5074315
4-Bromophenyl phenyl ether	ND		5	1	06/18/09 16:36	GY	5074315
4-Chloro-3-methylphenol	ND		5.	1	06/18/09 16:36	GY	5074315
4-Chloroaniline	ND		5	1	06/18/09 16:36	GY	5074315
4-Chlorophenyl phenyl ether	ND		5	1	06/18/09 16:36	GY	5074315
4-Nitroaniline	ND	2	5	1	06/18/09 16:36	GY	5074315
4-Nitrophenol	ND	2	5	1	06/18/09 16:36	GY	5074315
Acenaphthene	ND		5	1	06/18/09 16:36	GY	5074315
Acenaphthylene	ND		5	1	06/18/09 16:36	GY	5074315
Aniline	ND		5	1	06/18/09 16:36	GY	5074315
Anthracene	ND		5	1	06/18/09 16:36	GY	5074315
Benz(a)anthracene	ND	· · · · · ·	5	1	06/18/09 16:36	GY	5074315
Benzo(a)pyrene	ND		5	1	06/18/09 16:36	GY	5074315
Benzo(b)fluoranthene	ND		5	1	06/18/09 16:36	GY	5074315
Benzo(g,h,i)perylene	ND	·	5	1	06/18/09 16:36	GY	5074315
Benzo(k)fluoranthene	ND		5	1	06/18/09 16:36	GY	5074315
Benzoic acid	ND	2	5	1	06/18/09 16:36	GY	5074315
Benzyl alcohol	6.8		5	1	06/18/09 16:36	GY	5074315
Bis(2-chloroethoxy)methane	ND		5	1	06/18/09 16:36	GY	5074315
Bis(2-chloroethyl)ether	ND		5	1	06/18/09 16:36	GY	5074315

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

CI	lier	nt S	Samp	ole II	D:MV	V-2

Collected: 06/12/2009 10:35

SPL Sample ID: 09060743-02

			Site	e: S	an Juar	n County, NN	1		
Analyses/Method	Result	QUAL	Re	p.Limi	t	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND				;	1	06/18/09 16:36	GY	5074315
Bis(2-ethylhexyl)phthalate	ND				;	1	06/18/09 16:36	GY	5074315
Butyl benzyl phthalate	ND				;	1	06/18/09 16:36	GY	5074315
Carbazole	ND				;	1	06/18/09 16:36	GY	5074315
Chrysene	ND				;	1	06/18/09 16:36	GY	5074315
Dibenz(a,h)anthracene	ND			(;	1	06/18/09 16:36	GY	5074315
Dibenzofuran	ND			:	;	1	06/18/09 16:36	GY	5074315
Diethyl phthalate	ND			:	;	1	06/18/09 16:36	GY	5074315
Dimethyl phthalate	ND				;	1	06/18/09 16:36	GY	5074315
Di-n-butyl phthalate	ND		·	:	;	1	06/18/09 16:36	GY	5074315
Di-n-octyl phthalate	ND			ļ	;	1	06/18/09 16:36	GY	5074315
Fluoranthene	ND			:	;	1	06/18/09 16:36	GY	5074315
Fluorene	ND				;	1	06/18/09 16:36	GY	5074315
Hexachlorobenzene	ND				;	1	06/18/09 16:36	GY	5074315
Hexachlorobutadiene	ND			;	;	1	06/18/09 16:36	GY	5074315
Hexachlorocyclopentadiene	ND			:	;	1	06/18/09 16:36	GY	5074315
Hexachloroethane	ND			;	;	1	06/18/09 16:36	GY	5074315
Indeno(1,2,3-cd)pyrene	ND			:	;	1	06/18/09 16:36	GY	5074315
Isophorone	ND				;	1	06/18/09 16:36	GY	5074315
Naphthalene	14				i	1	06/18/09 16:36	GY	5074315
Nitrobenzene	ND				;	1	06/18/09 16:36	GY	5074315
N-Nitrosodi-n-propylamine	ND			:	;	1	06/18/09 16:36	GY	5074315
N-Nitrosodiphenylamine	ND			ļ	;	1	06/18/09 16:36	GY	5074315
Pentachlorophenol	ND			2	;	1	06/18/09 16:36	GY	5074315
Phenanthrene	ND				;	1	06/18/09 16:36	GY	5074315
Phenoi	ND				;	1	06/18/09 16:36	GY	5074315
Pyrene	ND				j	1	06/18/09 16:36	GY	5074315
Pyridine	ND				;	1	06/18/09 16:36	GY	5074315
2-Methylphenol	ND			ļ	;	1	06/18/09 16:36	GY	5074315
3 & 4-Methylphenol	ND			:	i	1	06/18/09 16:36	GY	5074315
Surr: 2,4,6-Tribromophenol	109		%	10-12	;	1	06/18/09 16:36	GY	5074315
Surr: 2-Fluorobiphenyl	76.8		%	23-11	;	1	06/18/09 16:36	GY	5074315
Surr: 2-Fluorophenol	58.4		%	16-11)	1	06/18/09 16:36	GY	5074315
Surr: Nitrobenzene-d5	66.0		%	21-11	ļ	1	06/18/09 16:36	GY	5074315
Surr: Phenol-d5	42.9		%	10-110)	1	06/18/09 16:36	GY	5074315
Surr: Terphenyl-d14	82.8		%	22-14		1	06/18/09 16:36	GY	5074315

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/17/2009 7:29	N_M	1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve
- TNTC Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

> 09060743 Page 13 6/23/2009 4:15:07 PM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-2

Collected: 06/12/2009 10:35

SPL Sample ID: 09060743-02

		Site:	San	Juan County, N	IM		
Analyses/Method	Result QUAL	Rep.Li	mit	Dil. Facto	or Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY M	ETHOD 8260B			MCL S	SW8260B U	nits: ug/L	
1,1,1,2-Tetrachloroethane	ND		5	1	06/20/09 19:47	LU_L	5076483
1,1,1-Trichloroethane	ND	·····	5	1	06/20/09 19:47	LU_L	5076483
1,1,2,2-Tetrachloroethane	ND		5	1	06/20/09 19:47	LU_L	5076483
1,1,2-Trichloroethane	ND		5	· 1	06/20/09 19:47	LU_L	5076483
1,1-Dichloroethane	ND		5	1	06/20/09 19:47	LU_L	5076483
1,1-Dichloroethene	ND		5	1	06/20/09 19:47	LU_L	5076483
1,1-Dichloropropene	ND		5	1	06/20/09 19:47	LU_L	5076483
1,2,3-Trichlorobenzene	ND		5	1	06/20/09 19:47	LU_L	5076483
1,2,3-Trichloropropane	ND		5	1	06/20/09 19:47	LU_L	5076483
1,2,4-Trichlorobenzene	ND		5	1	06/20/09 19:47	LU_L	5076483
1,2,4-Trimethylbenzene	300		50	10	06/21/09 10:18	LU_L	5078046
1,2-Dibromo-3-chloropropane	ND		5	1	06/20/09 19:47	LU_L	5076483
1,2-Dibromoethane	ND		5	1	06/20/09 19:47	LU_L	5076483
1,2-Dichlorobenzene	ND		5	1	06/20/09 19:47	LU_L	5076483
1,2-Dichloroethane	ND .		5	1	06/20/09 19:47	LU_L	5076483
1,2-Dichloropropane	ND		5	1	06/20/09 19:47	LU_L	5076483
1,3,5-Trimethylbenzene	96		5	1	06/20/09 19:47	LU_L	5076483
1,3-Dichlorobenzene	ND		5	1	06/20/09 19:47	LU_L	5076483
1,3-Dichloropropane	ND		5	1	06/20/09 19:47	LU_L	5076483
1,4-Dichlorobenzene	ND		5	1	06/20/09 19:47	LU_L	5076483
2,2-Dichloropropane	ND	· · <u>· · · · · · · · · · · · · · · · · </u>	5	1	06/20/09 19:47	LU_L	5076483
2-Butanone	ND		20	1	06/20/09 19:47	LU_L	5076483
2-Chloroethyl vinyl ether	ND J		10	1	06/20/09 19:47	LU_L	5076483
2-Chlorotoluene	ND		5	1	06/20/09 19:47	LU_L	5076483
2-Hexanone	ND		10	1	06/20/09 19:47	LU_L	5076483
4-Chlorotoluene	ND		5	1	06/20/09 19:47	LU_L	5076483
4-Isopropyltoluene	7.2		5	1	06/20/09 19:47	LU_L	5076483
4-Methyl-2-pentanone	ND		10	1	06/20/09 19:47	LU_L	5076483
Acetone	ND		20	1	06/20/09 19:47	LU_L	5076483
Acrylonitrile	ND		10	1	06/20/09 19:47	LU_L	5076483
Benzene	9.4		5	1	06/20/09 19:47	LU_L	5076483
Bromobenzene	ND		5	1	06/20/09 19:47	LU_L	5076483
Bromochloromethane	ND		5	1	06/20/09 19:47	LU_L	5076483
Bromodichloromethane	ND		5	1	06/20/09 19:47	LU_L	5076483
Bromoform	ND		5	1	06/20/09 19:47	ւս_ւ	5076483
Bromomethane	ND		10	1	06/20/09 19:47	LU_L	5076483
Carbon disulfide	ND		5	1	06/20/09 19:47	LU_L	5076483
Carbon tetrachloride	ND		5	1	06/20/09 19:47	LU_L	5076483
Chlorobenzene	ND		5	1	06/20/09 19:47	LU_L	5076483

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-2

Collected: 06/12/2009 10:35

SPL Sample ID: 09060743-02

			Site	: Sa	an Juan Coun	ty, NN	1		
Analyses/Method	Result	QUAL	Rep	o.Limit	Dil. F	actor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND			10		1	06/20/09 19:47	LU_L	5076483
Chloroform	ND			5		1	06/20/09 19:47	LU_L	5076483
Chloromethane	ND			10		1	06/20/09 19:47	LU_L	5076483
Dibromochloromethane	ND			5		1	06/20/09 19:47	LU_L	5076483
Dibromomethane	ND			5		1	06/20/09 19:47	LU_L	5076483
Dichlorodifluoromethane	ND			10		1	06/20/09 19:47	LU_L	5076483
Ethylbenzene	180			5		1	06/20/09 19:47	LU_L	5076483
Hexachlorobutadiene	ND			5		1	06/20/09 19:47	LU_L	5076483
Isopropylbenzene	24			5		1	06/20/09 19:47	LU_L	5076483
Methyl tert-butyl ether	ND			5		1	06/20/09 19:47	LU_L	5076483
Methylene chloride	ND			5		1	06/20/09 19:47	LU_L	5076483
Naphthalene	21			5		1	06/20/09 19:47	LU_L	5076483
n-Butylbenzene	5.2			5		1	06/20/09 19:47	LU_L	5076483
n-Propylbenzene	25			5		1	06/20/09 19:47	LU_L	5076483
sec-Butylbenzene	6.6			5		1	06/20/09 19:47	LU_L	5076483
Styrene	ND			5		1	06/20/09 19:47	LU_L	5076483
tert-Butylbenzene	ND			5		1	06/20/09 19:47	LU_L	5076483
Tetrachloroethene	ND			5		1	06/20/09 19:47	LU_L	5076483
Toluene	1100			50		10	06/21/09 10:18	LU_L	5078046
Trichloroethene	ND			5		1	06/20/09 19:47	LU_L	5076483
Trichlorofluoromethane	ND			5		1	06/20/09 19:47	LU_L	5076483
Vinyl acetate	ND			10		1	06/20/09 19:47	LU_L	5076483
Vinyl chloride	~ ND			2		1	06/20/09 19:47	LU_L	5076483
cis-1,2-Dichloroethene	ND			5		1	06/20/09 19:47	LU_L	5076483
cis-1,3-Dichloropropene	ND			5		1	06/20/09 19:47	LU_L	5076483
m,p-Xylene	1800			50		10	06/21/09 10:18	LU_L	5078046
o-Xylene	480			50		10	06/21/09 10:18	LU_L	5078046
trans-1,2-Dichloroethene	ND			5		1	06/20/09 19:47	LU_L	5076483
trans-1,3-Dichloropropene	ND			5		1	06/20/09 19:47	LU_L	5076483
1,2-Dichloroethene (total)	ND			5		1	06/20/09 19:47	LU_L	5076483
Xylenes,Total	2280			50		10	06/21/09 10:18	LU_L	5078046
Surr: 1,2-Dichloroethane-d4	94.5		%	78-116		1	06/20/09 19:47	LU_L	5076483
Surr: 1,2-Dichloroethane-d4	93.7		%	78-116		10	06/21/09 10:18	LU_L	5078046
Surr: 4-Bromofluorobenzene	103		%	74-125		10	06/21/09 10:18	LU_L	5078046
Surr: 4-Bromofluorobenzene	107		%	74-125		1	06/20/09 19:47	LU_L	5076483
Surr: Toluene-d8	93.4		%	82-118		1	06/20/09 19:47	LU_L	5076483
Surr: Toluene-d8	91.6		%	82-118		10	06/21/09 10:18	LU_L	5078046

Qualifiers:

ND/U - Not Detected at the Reporting Limit

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count



HOUSTON, TX 77054

(713) 660-0901

Clier	nt Sample ID:MW	/-1			Col	lected:	06	/12/2009	9 11:00	SPL San	nple	D: 09	060743	3-03
					Sit	e: Sa	an .	Juan Co	unty, N	м				
Analy	/ses/Method	Resu	lt	QUAL	R	ep.Limit		D	il. Facto	or Date Ana	yzed	Analys	t S	eq. #
ALK	ALINITY (AS CA	CO3), TOTAL						MCL		E310.1	Ur	nits: ma	/L	
Alka	alinity, Total (As CaC	03) 165	5			2			1	06/14/09	12:15	PAC	50	65994
			•••					MCI				ite: ma	/1	
Die	sel Range Organics	(C10-C28) NC)			0.1		WICL	1	06/19/09	19.10	NW	50	77350
	Surr: n-Pentacosane	(010-020) NE	, 3		%	20-150			1	06/19/09	19:10	NW	50	77350
					70				· · · ·	00/10/00	10.10			
	Prep Method	Prep Date	E	Prep Initials	Prep	Factor]							
	SW3510C	06/16/2009 10:43	N	N_M	1.00]							
GAS	OLINE RANGE C	RGANICS						MCL	S	W8015B	Ur	nits: ma	/L	
Gas	soline Range Organic	s 0.22	2			0.1			1	06/17/09	9 3:43	EMB	50	70814
s	Surr: 1,4-Difluorobenz	zene 10°	I		%	60-155			1	06/17/0	9 3:43	EMB	50	70814
s	Surr: 4-Bromofluorobe	enzene 106	6		%	50-158			1	06/17/0	9 3:43	EMB	50	70814
ION	CHROMATOGRA	APHY						MCL		E300.0	Ur	nits: ma	/L	
Bro	mide	NE)			0.5			1	06/19/09	17:04	BDG	50	76633
Chl	oride	119)			5			10	06/19/09	17:23	BDG	50	76634
Flue	oride	0.518	3			0.5			1	06/19/09	17:04	BDG	50	76633
Ortl	ho-phosphate (As P)	NE)			0.5			1	06/19/09	17:04	BDG	50	76633
Sul	fate	1690)			100			200	06/19/09	18:59	BDG	50	76637
MER	CURY. TOTAL					<u>.</u>		MCL	S	W7470A	Ur	nits: ma	/L	
Mer	rcury	NE)			0.0002			1	06/18/09	13:51	F_S	50	73578
					1		1			· · · · · · · · ·				
	Prep Method	Prep Date	<u>_</u>	Prep Initials	Prep	Factor								
	SW7470A	06/18/2009 10:15	F	S	1.00									
MET	ALS BY METHO	D 6010B, TOTAL						MCL	S	W6010B	Ur	nits: mg	'L	
Alu	minum	9.22	2			0.1			1	06/21/09	15:28	EG	50	77092
Bor	on	0.135	5			0.1			1	06/21/09	15:28	EG	50	77092
Cal	cium	473	3			1			10	06/21/09	15:32	EG	50	77093
Iron)	6.81				0.02			1	06/21/09	15:28	EG	50	77092
Mag	gnesium	27.1				0.1			1	06/21/09	15:28	EG	50	77092
Pot	assium	7.31	1			1			1	06/21/09	15:28	EG	50	77092
Sod	lium	454	1			1			10	06/21/09	15:32	EG	50	77093
Stro	ontium	8.51				0.5			10	06/21/09	15:32	EG	50	77093
Tin		NF)			0.005			1	06/21/09	15.28	FG	50	77092

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3010A	06/16/2009 10:30	AB1	1.00

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

SPL Sample ID:

09060743-03

Client Sample ID:MW-1

Collected: 06/12/2009 11:00

San Juan County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyze	ed Analyst	Seq. #
METALS BY METHOD	6020A, TOTAL			MCL SI	N6020A	Units: mg/L	
Antimony	ND		0.005	1	06/18/09 0:	19 AL_H	5072423
Arsenic	ND		0.005	1	06/18/09 0:	19 AL_H	5072423
Barium	0.0857		0.005	1	06/19/09 16:	37 S_C	5077041
Beryllium	ND		0.004	1	06/19/09 16:	37 S_C	5077041
Cadmium	ND		0.005	1	06/18/09 0:	19 AL_H	5072423
Chromium	. 0.00601	•	0.005	1	06/18/09 0:	19 AL_H	5072423
Cobalt	0.0157		0.005	1	06/18/09 0:	19 AL_H	5072423
Copper	0.022		0.005	1	06/18/09 0:	19 AL_H	5072423
Lead	0.0124		0.005	1	06/18/09 0:	19 AL_H	5072423
Manganese	4.79		0.005	1	06/19/09 16:	37 S_C	5077041
Molybdenum	ND		0.01	1	06/18/09 0:	19 AL_H	5072423
Nickel	0.0185		0.005	1	06/18/09 0:	19 AL_H	5072423
Selenium	ND		0.005	1	06/18/09 0:	19 AL_H	5072423
Silver	ND		0.005	1	06/18/09 0:	19 AL_H	5072423
Thallium	ND		0.005	1	06/18/09 0:	19 AL_H	5072423
Vanadium	0.012		0.005	1	06/18/09 0:	19 AL_H	5072423
Zinc	0.0322		0.01	1	06/18/09 0:	19 AL_H	5072423

Site:

	Top moniou	TTCP Date	riep miliais	<u>Flep Facior</u>
SW 3010A 06/16/2009 10:30 [AB1 1.0	SW3010A	06/16/2009 10:30	AB1	1.00

NITRATE NITROGEN (AS N),	TOTAL		MCL	SM450	0-NO3 F	Units: mg/L	
Nitrogen, Nitrate (As N)	0.78	0.5		1	06/13/09	16:00 ESK	5069050
NITRITE NITROGEN (AS N), TOTAL			MCL	SM450	0-NO2 B	Units: mg/L	
Nitrogen, Nitrite	ND	0.5		1	06/13/09	14:15 ESK	5068993

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

09060743 Page 17 6/23/2009 4:15:08 PM



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

> (713) 660-0901 SPL Sample ID:

09060743-03

Client Sample ID:MW-1

Collected: 06/12/2009 11:00

Site:

San Juan County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS E	BY METHOD 8	270C		MCL SV	V8270C Ur	its: ug/L	
1,2,4-Trichlorobenzene	ND		5	. 1	06/18/09 17:10	GY	5074316
1,2-Dichlorobenzene	ND		5	1	06/18/09 17:10	GY	5074316
1,2-Diphenylhydrazine	ND		10	1	06/18/09 17:10	GY	5074316
1,3-Dichlorobenzene	ND		5	1	06/18/09 17:10	GY	5074316
1,4-Dichlorobenzene	ND		5	1	06/18/09 17:10	GY	5074316
2,4,5-Trichlorophenol	ND		10	1	06/18/09 17:10	GY	5074316
2,4,6-Trichlorophenol	ND		5	1	06/18/09 17:10	GY	5074316
2,4-Dichlorophenol	ND		5	1	06/18/09 17:10	GY	5074316
2,4-Dimethylphenol	ND		5	1	06/18/09 17:10	GY	5074316
2,4-Dinitrophenol	ND		25	1	06/18/09 17:10	GY	5074316
2,4-Dinitrotoluene	ND		5	1	06/18/09 17:10	GY	5074316
2,6-Dinitrotoluene	ND		5	1	06/18/09 17:10	GY	5074316
2-Chloronaphthalene	ND		5	1	06/18/09 17:10	GY	5074316
2-Chlorophenol	ND		5	1	06/18/09 17:10	GY	5074316
2-Methylnaphthalene	ND		5	1	06/18/09 17:10	GY	5074316
2-Nitroaniline	ND		25	1	06/18/09 17:10	GY	5074316
2-Nitrophenol	ND		5	1	06/18/09 17:10	GY	5074316
3,3'-Dichlorobenzidine	ND		10	1	06/18/09 17:10	GY	5074316
3-Nitroaniline	ND		25	1	06/18/09 17:10	GY	5074316
4,6-Dinitro-2-methylphenol	ND		25	1	06/18/09 17:10	GY	5074316
4-Bromophenyl phenyl ether	ND	··· ·· ··	5	1	06/18/09 17:10	GY	5074316
4-Chloro-3-methylphenol	ND		5	1	06/18/09 17:10	GY	5074316
4-Chloroaniline	ND		5	· 1	06/18/09 17:10	GY	5074316
4-Chlorophenyl phenyl ether	ND	· · ·	5	1	06/18/09 17:10	GY	5074316
4-Nitroaniline	ND		25	1	06/18/09 17:10	GY	5074316
4-Nitrophenol	ND		25	1	06/18/09 17:10	GY	5074316
Acenaphthene	ND	•	5	1	06/18/09 17:10	GY	5074316
Acenaphthylene	ND		5	1	06/18/09 17:10	GY	5074316
Aniline	ND		5	1	06/18/09 17:10	GY	5074316
Anthracene	ND		5	1	06/18/09 17:10	GY	5074316
Benz(a)anthracene	ND		5	1	06/18/09 17:10	GY	5074316
Benzo(a)pyrene	ND		5	1	06/18/09 17:10	GY	5074316
Benzo(b)fluoranthene	ND		5	1	06/18/09 17:10	GY	5074316
Benzo(g,h,i)perylene	ND		5	1	06/18/09 17:10	GY	5074316
Benzo(k)fluoranthene	ND		5	1	06/18/09 17:10	GY	5074316
Benzoic acid	ND		25	1	06/18/09 17:10	GY	5074316
Benzyl alcohol	ND		5	1	06/18/09 17:10	GY	5074316
Bis(2-chloroethoxy)methane	ND		5	1	06/18/09 17:10	GY	5074316
Bis(2-chloroethyl)ether	ND		5	1	06/18/09 17:10	GY	5074316

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

- >MCL Result Over Maximum Contamination Limit(MCL)
- D Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve
- TNTC Too numerous to count

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8880 INTERCHANGE DRIVE - HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-1

Collected: 06/12/2009 11:00

SPL Sample ID: 09060743-03

			Site: Sa	in Juan County, NN			
Analyses/Method	Result	QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Bis(2-chloroisopropyl)ether	ND		5	1	06/18/09 17:10	GY	5074316
Bis(2-ethylhexyl)phthalate	ND		5	1	06/18/09 17:10	GY	5074316
Butyl benzyl phthalate	ND		5	1	06/18/09 17:10	GY	5074316
Carbazole	ND		5	1	06/18/09 17:10	GY	5074316
Chrysene	ND		5	1	06/18/09 17:10	GY	5074316
Dibenz(a,h)anthracene	ND		5	1	06/18/09 17:10	GY	5074316
Dibenzofuran	ND		5	1	06/18/09 17:10	GY	5074316
Diethyl phthalate	ND		5	1	06/18/09 17:10	GY	5074316
Dimethyl phthalate	ND		5	1	06/18/09 17:10	GY	5074316
Di-n-butyl phthalate	ND		5	1	06/18/09 17:10	GY	5074316
Di-n-octyl phthalate	ND		5	1	06/18/09 17:10	GY	5074316
Fluoranthene	ND		5	1	06/18/09 17:10	GY	5074316
Fluorene	ND		5	1	06/18/09 17:10	GY	5074316
Hexachlorobenzene	ND		5	1	06/18/09 17:10	GY	5074316
Hexachlorobutadiene	ND		5	1	06/18/09 17:10	GY	5074316
Hexachlorocyclopentadiene	ND		5	1	06/18/09 17:10	GY .	5074316
Hexachloroethane	ND		5	1	06/18/09 17:10	GY	5074316
Indeno(1,2,3-cd)pyrene	ND		5	1	06/18/09 17:10	GY	5074316
Isophorone	ND		5	1	06/18/09 17:10	GY	5074316
Naphthalene	ND		5	1	06/18/09 17:10	GY	5074316
Nitrobenzene	ND		5	1	06/18/09 17:10	GY	5074316
N-Nitrosodi-n-propylamine	ND		5	1	06/18/09 17:10	GY	5074316
N-Nitrosodiphenylamine	ND		5	1	06/18/09 17:10	GY	5074316
Pentachlorophenol	ND		25	1	06/18/09 17:10	GY	5074316
Phenanthrene	ND		5	1	06/18/09 17:10	GY	5074316
Phenol	. ND		5	1	06/18/09 17:10	GY	5074316
Pyrene	ND		5	1	06/18/09 17:10	GY	5074316
Pyridine	ND	·	5	1	06/18/09 17:10	GY	5074316
2-Methylphenol	ND		5	1	06/18/09 17:10	GY	5074316
3 & 4-Methylphenol	ND		5	1	06/18/09 17:10	GY	5074316
Surr: 2,4,6-Tribromophenol	89.6		% 10-123	1	06/18/09 17:10	GY	5074316
Surr: 2-Fluorobiphenyl	66.8		% 23-116	1	06/18/09 17:10	GY	5074316
Surr: 2-Fluorophenol	49.9		% 16-110	1	06/18/09 17:10	GY	5074316
Surr: Nitrobenzene-d5	56.2		% 21-114	1	06/18/09 17:10	GY	5074316
Surr: Phenol-d5	37.1		% 10-110	1	06/18/09 17:10	GY	5074316
Surr: Terphenyl-d14	64.0		% 22-141	1	06/18/09 17:10	GY	5074316

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/17/2009 7:29	N_M	1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



HOUSTON, TX 77054

(713) 660-0901 SPL Sample ID:

09060743-03

Client Sample ID:MW-1

Collected: 06/12/2009 11:00

Site: San Juan County, NM

Analyses/Method	Result Q	UAL Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	THOD 8260B		MCL SV	V8260B Ur	nits: ug/L	
1,1,1,2-Tetrachloroethane	ND	5	1	06/21/09 9:51	LU_L	5078045
1,1,1-Trichloroethane	ND	5	1	06/21/09 9:51	LU_L	5078045
1,1,2,2-Tetrachloroethane	ND	5	1	06/21/09 9:51	LU_L	5078045
1,1,2-Trichloroethane	ND	5	1	06/21/09 9:51	LU_L	5078045
1,1-Dichloroethane	ND	5	· 1	06/21/09 9:51	LU_L	5078045
1,1-Dichloroethene	ND	5	1	06/21/09 9:51	LU_L	5078045
1,1-Dichloropropene	ND	5	1	06/21/09 9:51	LU_L	5078045
1,2,3-Trichlorobenzene	ND	5	1	06/21/09 9:51	LU_L	5078045
1,2,3-Trichloropropane	ND	5	1	06/21/09 9:51	LU_L	5078045
1,2,4-Trichlorobenzene	ND	5	1	06/21/09 9:51	LU_L	5078045
1,2,4-Trimethylbenzene	ND	5	1	06/21/09 9:51	LU_L	5078045
1,2-Dibromo-3-chloropropane	ND	5	1	06/21/09 9:51	LU_L	5078045
1,2-Dibromoethane	ND	5	1	06/21/09 9:51	LU_L	5078045
1,2-Dichlorobenzene	ND	5	1	06/21/09 9:51	LU_L	5078045
1,2-Dichloroethane	ND	5	1	06/21/09 9:51	LU_L	5078045
1,2-Dichloropropane	ND	5	1	06/21/09 9:51	LU_L	5078045
1,3,5-Trimethylbenzene	ND	5	1	06/21/09 9:51	LU_L	5078045
1,3-Dichlorobenzene	ND	5	1	06/21/09 9:51	LU_L	5078045
1,3-Dichloropropane	ND	5	1	06/21/09 9:51	LU_L	5078045
1,4-Dichlorobenzene	ND	5	1	06/21/09 9:51	LU_L	5078045
2,2-Dichloropropane	ND	5	1	06/21/09 9:51	LU_L	5078045
2-Butanone	ND	20	1	06/21/09 9:51	LU_L	5078045
2-Chloroethyl vinyl ether	ND J	10	1	06/21/09 9:51	LU_L	5078045
2-Chlorotoluene	ND	5	1	06/21/09 9:51	LU_L	5078045
2-Hexanone	ND	10	1	06/21/09 9:51	LU_L	5078045
4-Chlorotoluene	ND	5	1	06/21/09 9:51	LU_L	5078045
4-isopropyltoluene	ND	5	1	06/21/09 9:51	LU_L	5078045
4-Methyl-2-pentanone	ND	10	1	06/21/09 9:51	LU_L	5078045
Acetone	ND	20	1	06/21/09 9:51	LU_L	5078045
Acrylonitrile	ND	10	1	06/21/09 9:51	LU_L	5078045
Benzene	5.1	5	1	06/21/09 9:51	LU_L	5078045
Bromobenzene	ND	5	1	06/21/09 9:51	LU_L	5078045
Bromochloromethane	ND	5	1	06/21/09 9:51	LU_L	5078045
Bromodichloromethane	ND	5	1	06/21/09 9:51	LU_L	5078045
Bromoform	ND	5	1	06/21/09 9:51	LU_L '	5078045
Bromomethane	ND	10	1	06/21/09 9:51	LU_L	5078045
Carbon disulfide	ND	5	1	06/21/09 9:51	LU_L	5078045
Carbon tetrachloride	ND	5	1	06/21/09 9:51	LU_L	5078045
Chlorobenzene	ND	5	1	06/21/09 9:51	LUL	5078045

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- Estimated value between MDL and r QL
- E Estimated Value exceeds calibration curve
- TNTC Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-1

Collected: 06/12/2009 11:00

SPL Sample ID: 09060743-03

			Site:	San	Juan County, NM			
Analyses/Method	Result	QUAL	Rep.	Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
Chloroethane	ND			10	1	06/21/09 9:51	LU_L	5078045
Chloroform	ND			5	1	06/21/09 9:51	LU_L	5078045
Chloromethane	ND			10	1	06/21/09 9:51	LU_L	5078045
Dibromochloromethane	ND			5	1	06/21/09 9:51	LU_L	5078045
Dibromomethane	ND			5	1	06/21/09 9:51	LU_L	5078045
Dichlorodifluoromethane	ND			10	1	06/21/09 9:51	LU_L	5078045
Ethylbenzene	ND			5	1	06/21/09 9:51	LU_L	5078045
Hexachlorobutadiene	ND			5	1	06/21/09 9:51	LU_L	5078045
Isopropylbenzene	ND			5	1	06/21/09 9:51	LU_L	5078045
Methyl tert-butyl ether	ND			5	1	06/21/09 9:51	LU_L	5078045
Methylene chloride	ND			5	1	06/21/09 9:51	LU_L	5078045
Naphthalene	ND		-	5	1	06/21/09 9:51	LU_L	5078045
n-Butylbenzene	ND			5	1	06/21/09 9:51		5078045
n-Propylbenzene	ND			5	1	06/21/09 9:51	LU_L	5078045
sec-Butylbenzene	ND			5	1	06/21/09 9:51	LU_L	5078045
Styrene	ND			5	1	06/21/09 9:51	LU_L	5078045
tert-Butylbenzene	. ND			5	1	06/21/09 9:51		5078045
Tetrachloroethene	ND			5	1	06/21/09 9:51	LU_L	5078045
Toluene	7.6			5	1	06/21/09 9:51	LU_L	5078045
Trichloroethene	ND			5	1	06/21/09 9:51	LU_L	5078045
Trichlorofluoromethane	ND			5	1	06/21/09 9:51		5078045
Vinyl acetate	ND			10	1	06/21/09 9:51	LU_L	5078045
Vinyl chloride	ND			2	1	06/21/09 9:51	LU_L	5078045
cis-1,2-Dichloroethene	ND			5	1	06/21/09 9:51	LUL	5078045
cis-1,3-Dichloropropene	ND			5	1	06/21/09 9:51		5078045
m,p-Xylene	9.7			5	1	06/21/09 9:51		5078045
o-Xylene	ND			5	1	06/21/09 9:51		5078045
trans-1,2-Dichloroethene	ND			5	1	06/21/09 9:51	LU_L	5078045
trans-1,3-Dichloropropene	ND			5	1	06/21/09 9:51		5078045
1,2-Dichloroethene (total)	ND			5	1	06/21/09 9:51		5078045
Xylenes,Total	9.7			5	1	06/21/09 9:51		5078045
Surr: 1,2-Dichloroethane-d4	91.8		% 78	8-116	1	06/21/09 9:51	LU_L	5078045
Surr: 4-Bromofluorobenzene	94.9		% 74	4-125	1	06/21/09 9:51	LU_L	5078045
Surr: Toluene-d8	89.0		% 82	2-118	1	06/21/09 9:51	LU_L	5078045

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank

* - Surrogate Recovery Outside Advisable QC Limits

- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-4				Colle	cted: 0	6/12/2009	9 11:30	SPL San	SPL Sample ID: 09060743-04			
				Site	San	Juan Co	unty, N	М				
Analyses/Method		Result	QUAL	Rep	.Limit	D	il. Facto	r Date Ana	yzed	Analyst	Seq. #	
ALKALINITY (AS CA	CO3), TOTAL					MCL		E310.1	Ur	nits: mg/L		
Alkalinity, Total (As Ca	CO3)	200			2		1	06/14/09	12:15	PAC	506599	
DIESEL RANGE OR	GANICS					MCL	S	W8015B	Ur	nits: ma/L		
Diesel Range Organics	s (C10-C28)	ND	·····		0.1		1	06/19/09	19:30	NW	507735	
Surr: n-Pentacosane)	41.8		%	20-150		1	06/19/09	19:30	NW	507735	
Prep Method	Prep Date		Prep Initials	Prep F	actor							
SW3510C	06/16/2009 10:4	3	N_M	1.00								
GASOLINE RANGE	ORGANICS					MCI	S	W8015B	Ur	nits: ma/l		
Gasoline Range Organ	ics	ND		•	0.1		1	06/17/09	9 4:12	EMB	507081	
Surr: 1,4-Difluorober	izene	94.7		% (60-155		1	06/17/0	9 4:12	EMB	507081	
Surr: 4-Bromofluorol	penzene	106		%	50-158		1	06/17/0	9 4:12	EMB	507081	
ION CHROMATOGR	APHY					MCL		E300.0	Ur	nits: ma/L		
Bromide		ND			0.5		1	06/19/09	19:18	BDG	5076638	
Chloride		2310			250		500	06/19/09	19:37	BDG	5076639	
Fluoride		0.652			0.5		1	06/19/09	19:18	BDG	5076638	
Ortho-phosphate (As P	')	ND			0.5		1	06/19/09	19:18	BDG	5076638	
Sulfate		4190			250		500	06/19/09	19:37	BDG	5076639	
MERCURY, TOTAL						MCL	S	W7470A	Ur	nits: ma/L		
Mercury	-	ND		(0.0002		1	06/18/09	13:54	F_S	5073579	
Pren Method	Pren Date		Pren Initials	Pren F	actor							
SW7470A	06/18/2009 10:1	5	F S	1.00								
		1				MCI	6		11-	ito, ma/l		
		13.6			0.1	MUCL	<u> </u>	06/21/09	15:36	FG	507709/	
Boron		0.523			0.1		1	06/21/09	15.36	FG	507709/	
Calcium		496			1		10	06/21/09	15:40	FG	507709	
Iron		20			0.02		1	06/21/09	15:36	 FG	5077094	
Magnesium		32.2			0.02		1	06/21/09	15:36	FG	5077094	
Potassium		19.1			1		1	06/21/09	15:36	 EG	5077094	
Sodium		2720			2		20	06/21/09	15:45	EG	5077096	
Strontium		11.6			0.5		10	06/21/09	15:40	EG	507709	
Tin		ND			0.005		1	06/21/09	15:36	EG	5077094	
0			0									
Prep Method	Prep Date	0		1 co	actor							
ISVVSUIUA	100/10/2009 10:3	1.7	IADI	11.00	1							

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve
- TNTC Too numerous to count

- >MCL Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution
- MI Matrix Interference

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8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-4

Collected: 06/12/2009 11:30 SPL Sample ID: 09060743-04

Analyses/Method	Result	QUAL	Rep.Limit		il. Factor	Date Analyze	d Analyst	Seq. #
METALS BY METHO	D 6020A. TOTAL		····	MCL		V6020A	Jnits: ma/L	
Antimony	ND		0.005		1	06/18/09 0:2	4 AL H	5072424
Arsenic	ND		0.005		1	06/18/09 0:2	 4 AL H	5072424
Barium	0.131		0.005		1	06/19/09 16:4	 3 S C	5077042
Beryllium	0.00468		0.004		1	06/19/09 16:4	<u>3 S C</u>	5077042
Cadmium	ND		0.005		1	06/18/09 0:2	4 AL H	5072424
Chromium	0.117		0.005		1	06/18/09 0:2	4 AL_H	5072424
Cobalt	0.0312		0.005		1	06/18/09 0:2	4 AL_H	5072424
Copper	0.041		0.005		1	06/18/09 0:2	4 AL_H	5072424
Lead	0.0418		0.005		1	06/18/09 0:2	4 AL_H	5072424
Manganese	4.92		0.005		1	06/19/09 16:4	3 S_C	5077042
Molybdenum	0.0146		0.01		1	06/18/09 0:2	4 AL_H	5072424
Nickel	0.0372		0.005		1	06/18/09 0:2	4 AL_H	5072424
Selenium	0.00558		0.005		1	06/19/09 16:4	3 S_C	5077042
Silver	ND		0.005		1	06/18/09 0:2	A AL_H	5072424
Thallium	ND		0.005		1	06/18/09 0:2	4 AL_H	5072424
Vanadium	0.0269		0.005		1	06/18/09 0:2	4 AL_H	5072424
Zinc	0.103		0.01		1	06/18/09 0:2	4 AL_H	5072424
Prep Method	Prep Date	Prep Initials	Prep Factor					
SW3010A	06/16/2009 10:30	AB1	1.00					
NITRATE NITROGEN	N (AS N), TOTAL			MCL	SM4500)-NO3 F	Jnits: mg/L	
Nitrogen, Nitrate (As N) ND		0.5		1	06/13/09 16:0	0 ESK	5069051
					014500		1	

NITRITE NITROGEN (AS N	, TOTAL		MCL	SM450	0-NO2 B	Units: mg/L	
Nitrogen, Nitrite	ND	0.5		1	06/13/09	14:15 ESK	5068994

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-4

Collected: 06/12/2009 11:30 SPL Sample ID: 09060743-04

		Site: San	Juan County, NM			
Analyses/Method	Result QUAL	Rep.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #
SEMIVOLATILE ORGANICS E	BY METHOD 8270C		MCL SV	V8270C Un	its: ug/L	
1,2,4-Trichlorobenzene	ND	5	1	06/18/09 17:44	GY	5074317
1,2-Dichlorobenzene	• ND	5	1	06/18/09 17:44	GY	5074317
1,2-Diphenylhydrazine	ND	10	1	06/18/09 17:44	GY	5074317
1,3-Dichlorobenzene	ND	5	1	06/18/09 17:44	GY	5074317
1,4-Dichlorobenzene	ND	5	1	06/18/09 17:44	GY	5074317
2,4,5-Trichlorophenol	ND	10	1	06/18/09 17:44	GY	5074317
2,4,6-Trichlorophenol	ND	5	1	06/18/09 17:44	GY	5074317
2,4-Dichlorophenol	ND	5	1	06/18/09 17:44	GY	5074317
2,4-Dimethylphenol	ND	5	1	06/18/09 17:44	GY	5074317
2,4-Dinitrophenol	ND	25	1	06/18/09 17:44	GY	5074317
2,4-Dinitrotoluene	ND	5	1	06/18/09 17:44	GY	5074317
2,6-Dinitrotoluene	ND	5	1	06/18/09 17:44	GY	5074317
2-Chloronaphthalene	ND	5	1	06/18/09 17:44	GY	5074317
2-Chlorophenol	ND	5	1	06/18/09 17:44	GY	5074317
2-Methylnaphthalene	ND	5	1	06/18/09 17:44	GY	5074317
2-Nitroaniline	ND	25	1	06/18/09 17:44	GY	5074317
2-Nitrophenol	ND	5	1	06/18/09 17:44	GY	5074317
3,3'-Dichlorobenzidine	ND	10	1	06/18/09 17:44	GY	5074317
3-Nitroaniline	ND	25	1	06/18/09 17:44	GY	5074317
4,6-Dinitro-2-methylphenol	ND	25	1	06/18/09 17:44	GY	5074317
4-Bromophenyl phenyl ether	ND	5	1	06/18/09 17:44	GY	5074317
4-Chloro-3-methylphenol	ND	5	1	06/18/09 17:44	GY	5074317
4-Chloroaniline	ND	5	1	06/18/09 17:44	GY	5074317
4-Chlorophenyl phenyl ether	ND	5	1	06/18/09 17:44	GY	5074317
4-Nitroaniline	ND	25	1	06/18/09 17:44	GY ·	5074317
4-Nitrophenol	ND	25	1	06/18/09 17:44	GY	5074317
Acenaphthene	ND	5	1	06/18/09 17:44	GY	5074317
Acenaphthylene	ND	5	1	06/18/09 17:44	GY	5074317
Aniline	ND	5	1	06/18/09 17:44	GY	5074317
Anthracene	ND	5	1	06/18/09 17:44	GY	5074317
Benz(a)anthracene	ND	5	1	06/18/09 17:44	GY	5074317
Benzo(a)pyrene	ND	5	1	06/18/09 17:44	GY	5074317
Benzo(b)fluoranthene	ND	5	1	06/18/09 17:44	GY	5074317
Benzo(g,h,i)perylene	ND	5	1	06/18/09 17:44	GY	5074317
Benzo(k)fluoranthene	ND	5	1	06/18/09 17:44	GY	5074317
Benzoic acid	ND	25	1	06/18/09 17:44	GY	5074317
Benzyl alcohol	ND	5	1	06/18/09 17:44	GY	5074317
Bis(2-chloroethoxy)methane	ND	5	1	06/18/09 17:44	GY	5074317
Bis(2-chloroethyl)ether	ND	5	1	06/18/09 17:44	GY	5074317

Qualifiers:

ND/U - Not Detected at the Reporting Limit

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank * - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count



8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID:MW-4

Collected: 06/12/2009 11:30

SPL Sample ID: 09060743-04

	Site: San Juan County, NM									
Analyses/Method	Result	QUAL	Rep	.Limit	Dil. Factor	Date Analyzed	Analyst	Seq. #		
Bis(2-chloroisopropyl)ether	ND			5	1	06/18/09 17:44	GY	5074317		
Bis(2-ethylhexyl)phthalate	ND			5	1	06/18/09 17:44	GY	5074317		
Butyl benzyl phthalate	ND			5	1	06/18/09 17:44	GY	5074317		
Carbazole	ND			5	1	06/18/09 17:44	GY	5074317		
Chrysene	ND			5	1	06/18/09 17:44	GY	5074317		
Dibenz(a,h)anthracene	ND			5	1	06/18/09 17:44	GY	5074317		
Dibenzofuran	ND			5	1	06/18/09 17:44	GY	5074317		
Diethyl phthalate	ND			5	1	06/18/09 17:44	GY	5074317		
Dimethyl phthalate	ND			5	1	06/18/09 17:44	GY	5074317		
Di-n-butyl phthalate	ND			5	1	06/18/09 17:44	GY	5074317		
Di-n-octyl phthalate	ND			5	1	06/18/09 17:44	GY	5074317		
Fluoranthene	ND			5	· 1	06/18/09 17:44	GY	5074317		
Fluorene	ND			5	1	06/18/09 17:44	GY	5074317		
Hexachlorobenzene	ND			5	1	06/18/09 17:44	GY	5074317		
Hexachlorobutadiene	ND		,	5	1	06/18/09 17:44	GY	5074317		
Hexachlorocyclopentadiene	ND			5	1	06/18/09 17:44	GY	5074317		
Hexachloroethane	ND			5	1	06/18/09 17:44	GY	5074317		
Indeno(1,2,3-cd)pyrene	ND			5	1	06/18/09 17:44	GY	5074317		
Isophorone	ND			5	1	06/18/09 17:44	GY	5074317		
Naphthalene	ND			5	1	06/18/09 17:44	GY	5074317		
Nitrobenzene	ND			5	1	06/18/09 17:44	GY	5074317		
N-Nitrosodi-n-propylamine	ND			5	1	06/18/09 17:44	GY	5074317		
N-Nitrosodiphenylamine	ND			5	1	06/18/09 17:44	GY	5074317		
Pentachlorophenol	ND			25	1	06/18/09 17:44	GY	5074317		
Phenanthrene	ND			5	1	06/18/09 17:44	GY	5074317		
Phenol	ND			5	1	06/18/09 17:44	GY	5074317		
Pyrene	ND			5	1	06/18/09 17:44	GY	5074317		
Pyridine	ND			5	1	06/18/09 17:44	GY	5074317		
2-Methylphenol	ND			5	1	06/18/09 17:44	GY	5074317		
3 & 4-Methylphenol	ND			5	1	06/18/09 17:44	GY	5074317		
Surr: 2,4,6-Tribromophenol	75.5		%	10-123	1	06/18/09 17:44	GY	5074317		
Surr: 2-Fluorobiphenyl	57.2		%	23-116	1	06/18/09 17:44	GY	5074317		
Surr: 2-Fluorophenol	37.7		%	16-110	1	06/18/09 17:44	GY	5074317		
Surr: Nitrobenzene-d5	47.2		%	21-114	1	06/18/09 17:44	GY	5074317		
Surr: Phenol-d5	26.1		%	10-110	1	06/18/09 17:44	GY	5074317		
Surr: Terphenyl-d14	47.6		%	22-141	1	06/18/09 17:44	GY	5074317		

Prep Method	Prep Date	Prep Initials	Prep Factor
SW3510C	06/17/2009 7:29	N_M	1.00

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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HOUSTON, TX 77054

09060743-04

(713) 660-0901

Client Sample ID:MW-4

Collected: 06/12/2009 11:30 SPL Sample ID:

Site:

San Juan County, NM

Analyses/Method	Result	QUAL	Rep.Limit	Dil. Fact	or Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY M	ETHOD 8260B			MCL	SW8260B U	nits: ug/L	
1,1,1,2-Tetrachloroethane	ND		5	1	06/20/09 20:42	LU_L	5076484
1,1,1-Trichloroethane	ND		5	1	06/20/09 20:42	LU_L	5076484
1,1,2,2-Tetrachloroethane	ND		5	1	06/20/09 20:42	LU_L	5076484
1,1,2-Trichloroethane	ND		5	1	06/20/09 20:42	LU_L	-5076484
1,1-Dichloroethane	ND		5	1	06/20/09 20:42	LU_L	5076484
1,1-Dichloroethene	ND		5	1	06/20/09 20:42	LU_L	5076484
1,1-Dichloropropene	ND		5	1	06/20/09 20:42	LU_L	5076484
1,2,3-Trichlorobenzene	ND		5	1	06/20/09 20:42	LU_L	5076484
1,2,3-Trichloropropane	ND		5	1	06/20/09 20:42	LU_L	5076484
1,2,4-Trichlorobenzene	ND		5	1	06/20/09 20:42	LU_L	5076484
1,2,4-Trimethylbenzene	ND		5	1	06/20/09 20:42	LU_L	5076484
1,2-Dibromo-3-chloropropane	ND		5	1 [.]	06/20/09 20:42	LU_L	5076484
1,2-Dibromoethane	ND	•	5	1	06/20/09 20:42	LU_L	5076484
1,2-Dichlorobenzene	ND		5	1	06/20/09 20:42		5076484
1,2-Dichloroethane	ND	* * * *	5	1	06/20/09 20:42	LU_L	5076484
1,2-Dichloropropane	ND		5	1	06/20/09 20:42	LU_L	5076484
1,3,5-Trimethylbenzene	ND		5	1	06/20/09 20:42	LU_L	5076484
1,3-Dichlorobenzene	ND		5	1	06/20/09 20:42	LU_L	5076484
1,3-Dichloropropane	ND		5	1	06/20/09 20:42	LU_L	5076484
1,4-Dichlorobenzene	ND		5	1	06/20/09 20:42	LU_L	5076484
2,2-Dichloropropane	ND		5	1	06/20/09 20:42	LU_L	5076484
2-Butanone	ND		20	1	06/20/09 20:42	LU_L	5076484
2-Chloroethyl vinyl ether	ND J		10	1	06/20/09 20:42	LU_L	5076484
2-Chlorotoluene	ND		5	1	06/20/09 20:42	LU_L	5076484
2-Hexanone	ND		10	1	06/20/09 20:42	LU_L	5076484
4-Chlorotoluene	ND		5	1	06/20/09 20:42	LU_L	5076484
4-Isopropyltoluene	ND		5	1	06/20/09 20:42	LU_L	5076484
4-Methyl-2-pentanone	ND		10	1	06/20/09 20:42	LU_L	5076484
Acetone	ND		20	1	06/20/09 20:42	LU_L	5076484
Acrylonitrile	ND		10	1	06/20/09 20:42	LU_L	5076484
Benzene	ND		5	1	06/20/09 20:42	LU_L	5076484
Bromobenzene	ND		5	1	06/20/09 20:42	LU_L	5076484
Bromochloromethane	ND		5	1	06/20/09 20:42	LU_L	5076484
Bromodichloromethane	ND		5	1	06/20/09 20:42	LU_L	5076484
Bromoform	ND		5	1	06/20/09 20:42	LU_L	5076484
Bromomethane	ND		10	1	06/20/09 20:42	LU_L	5076484
Carbon disulfide	ND		5	1	06/20/09 20:42	LU_L	5076484
Carbon tetrachloride	ND		5	1	06/20/09 20:42	LU_L	5076484
Chlorobenzene	ND		5	1	06/20/09 20:42	LU_L	5076484

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve
- TNTC Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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8880 INTERCHANGE DRIVE

HOUSTON, TX 77054

(713) 660-0901

Collected: 06/12/2009 11:30

SPL Sample ID: 09060743-04

			Site:	San Juan County, NM					
Analyses/Method	Result	QUAL	Rep.l	_imit	Dil. Factor	Date Analyzed	Analyst	Seq. #	
Chloroethane	ND			10	1	06/20/09 20:42	LU_L	5076484	
Chloroform	ND			5	1	06/20/09 20:42	LU_L	5076484	
Chloromethane	ND			10	1	06/20/09 20:42	LU_L	5076484	
Dibromochloromethane	ND			5	1	06/20/09 20:42	LU_L	5076484	
Dibromomethane	ND			5	1	06/20/09 20:42	LU_L	5076484	
Dichlorodifluoromethane	ND			10	1	06/20/09 20:42	LU_L	5076484	
Ethylbenzene	ND			5	1	06/20/09 20:42	LU_L	5076484	
Hexachlorobutadiene	ND			5	1	06/20/09 20:42	LU_L	5076484	
Isopropylbenzene	ND			5	1	06/20/09 20:42	LU_L	5076484	
Methyl tert-butyl ether	ND			5	1	06/20/09 20:42	LU_L	5076484	
Methylene chloride	ND			5	1	06/20/09 20:42	LU_L	5076484	
Naphthalene	ND			5	1	06/20/09 20:42	LU_L	5076484	
n-Butylbenzene	ND			5	1	06/20/09 20:42	LU_L	5076484	
n-Propylbenzene	ND			5	1	06/20/09 20:42	LU_L	5076484	
sec-Butylbenzene	ND			5	1	06/20/09 20:42	LU_L	5076484	
Styrene	ND			5	1	06/20/09 20:42	LU_L	5076484	
tert-Butylbenzene	ND			5	1	06/20/09 20:42	LU_L	5076484	
Tetrachloroethene	ND			5	<u> </u>	06/20/09 20:42	LU_L	5076484	
Toluene	ND			5	1	06/20/09 20:42	LU_L	5076484	
Trichloroethene	ND			5	1	06/20/09 20:42	LU_L	5076484	
Trichlorofluoromethane	ND			5	1	06/20/09 20:42	LU_L	5076484	
Vinyl acetate	ND			10	1	06/20/09 20:42	LU_L	5076484	
Vinyl chloride	ND			2	1	06/20/09 20:42	LU_L	5076484	
cis-1,2-Dichloroethene	ND			5	1	06/20/09 20:42	LU_L	5076484	
cis-1,3-Dichloropropene	ND			5	1	06/20/09 20:42	LU_L	5076484	
m,p-Xylene	ND			5	1	06/20/09 20:42	LU_L	5076484	
o-Xylene	ND			5	1	06/20/09 20:42	LU_L	5076484	
trans-1,2-Dichloroethene	ND			5	1	06/20/09 20:42	LU_L	5076484	
trans-1,3-Dichloropropene	ND			5	1	06/20/09 20:42	LU_L	5076484	
1,2-Dichloroethene (total)	ND			5	1	06/20/09 20:42	LU_L	5076484	
Xylenes,Total	ND			5	1	06/20/09 20:42	LU_L	5076484	
Surr: 1,2-Dichloroethane-d4	97.0		% 78	-116	1	06/20/09 20:42	LU_L	5076484	
Surr: 4-Bromofluorobenzene	98.2		% 74	-125	1	06/20/09 20:42	LU_L	5076484	
Surr: Toluene-d8	93.2		% 82	-118	1	06/20/09 20:42	LU_L	5076484	

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL
- E Estimated Value exceeds calibration curve

TNTC - Too numerous to count

- >MCL Result Over Maximum Contamination Limit(MCL)
- D Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Client Sample ID: Trip Blank

Collected: 06/12/2009 11:00 S

SPL Sample ID: 09060743-06

			Sit	e: San	Juan Co	ounty, NI	N			
Analyses/Method	Result	QUAL	Re	ep.Limit		Dil. Factor	Date Ana	lyzed	Analyst	Seq. #
VOLATILE ORGANICS BY MET	HOD 8260B				MCL	SV	V8260B	Ur	nits: ug/L	
Benzene	ND			5		1	06/20/09	19:20	LU_L	5076482
Ethylbenzene	ND			5		1	06/20/09	19:20	LU_L	5076482
Toluene	ND			5		1	06/20/09	19:20	LU_L	5076482
m,p-Xylene	ND			5		1	06/20/09	19:20	LU_L	5076482
o-Xylene	ND			5		1	06/20/09	19:20	LU_L	5076482
Xylenes,Total	ND			5		1	06/20/09	19:20	LU_L	5076482
Surr: 1,2-Dichloroethane-d4	94.7		%	78-116		1	06/20/09	19:20	LU_L	5076482
Surr: 4-Bromofluorobenzene	101		%	74-125		1	06/20/09	19:20	LU_L	5076482
Surr: Toluene-d8	95.6		%	82-118		1	06/20/09	19:20	LU_L	5076482

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- $\ensuremath{\mathsf{B/V}}\xspace$ Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference

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8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

09060743-07

Client Sample ID: Duplicate

Collected: 06/12/2009 11:30 SPL Sample ID:

			Sit	e: San	Juan County,	NM			
Analyses/Method	Result	QUAL	R	ep.Limit	Dil. Fact	or Date Ana	lyzed	Analyst	Seq. #
VOLATILE ORGANICS BY ME	THOD 8260B				MCL	SW8260B	U	nits: ug/L	
Benzene	10			5	1	06/20/09	18:25	LU_L	5076480
Ethylbenzene	540			100	20	06/21/09	11:12	LU_L	5078048
Toluene	1400			100	20	06/21/09	11:12	LU_L	5078048
m,p-Xylene	3300			100	20	06/21/09	11:12	LU_L	5078048
o-Xylene	1000			100	20	06/21/09	11:12	LU_L	5078048
Xylenes,Total	4300			100	20	06/21/09	11:12	LU_L	5078048
Surr: 1,2-Dichloroethane-d4	95.7		%	78-116	20	06/21/09	11:12	LU_L	5078048
Surr: 1,2-Dichloroethane-d4	95.1		%	78-116	1	06/20/09	18:25	LU_L	5076480
Surr: 4-Bromofluorobenzene	105		%	74-125	20	06/21/09	11:12	LU_L	5078048
Surr: 4-Bromofluorobenzene	110		%	74-125	1	06/20/09	18:25	LU_L	5076480
Surr: Toluene-d8	94.8		%	82-118	20	06/21/09	11:12	LU_L	5078048
Surr: Toluene-d8	92.1		%	82-118	1	06/20/09	18:25	LU_L	5076480

Qualifiers:

- ND/U Not Detected at the Reporting Limit
- B/V Analyte detected in the associated Method Blank
- * Surrogate Recovery Outside Advisable QC Limits
- J Estimated Value between MDL and PQL

E - Estimated Value exceeds calibration curve

TNTC - Too numerous to count

>MCL - Result Over Maximum Contamination Limit(MCL) D - Surrogate Recovery Unreportable due to Dilution MI - Matrix Interference

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Quality Control Documentation

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Conoco Phillips Randleman #1

Analysis: Method:	Diesel Range Organ SW8015B	ics				WorkOrder: Lab Batch ID:	09060743 91124		
	Method Blank				Samples in Analytical Batch:				
RunID: HP_V_09	00619A-5077354	Units:	mg/L		Lab Sample ID	Client Sar	npie ID		
Analysis Date:	06/20/2009 8:38	Analyst:	NW		09060743-01C	MW-3			
Preparation Date:	06/16/2009 10:43	Prep By:	N_M N	/lethod: SW3510C	09060743-02C	MW-2			
					09060743-03C	MW-1			
	Analyte	T	Result	Rep Limit	09060743-04C	MW-4			
Diese	el Range Organics (C10-C2	28)	ND	0.10					
Su	rr: n-Pentacosane		79.2	20-150					

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: Analysis Date: Preparation Date: HP_V_090619A-5077346 06/19/2009 17:48 06/16/2009 10:43 Units: mg/L Analyst: NW Prep By: N_M Method: SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Diesel Range Organics (C10-C28)	1.00	0.651	65.1	1.00	0.653	65.3	0.4	20	21	130
Surr: n-Pentacosane	0.0500	0.0331	66.2	0.0500	0.0333	66.6	0.6	30	20	150

Qualifiers: ND/U - Not De

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis: Method:	Gasoline Range Org SW8015B	anics				WorkOrder: Lab Batch ID:	09060743 R275684	
	od Blank			Samples in Analytic	Samples in Analytical Batch:			
RunID: HP_P	_090616C-5070800	Units:	mg/L		Lab Sample ID	Client Sar	nple ID	
Analysis Date:	06/16/2009 19:44	Analyst:	EMB		09060743-01B	MW-3		
					09060743-02B	MW-2		
					09060743-03B	MW-1		
Г	Analyte		Result	Rep Limit	09060743-04B	MW-4		
Ga	asoline Range Organics		ND	0.10				
	Surr: 1,4-Difluorobenzene		94.6	60-155				
	Surr: 4-Bromofluorobenzene		106.5	50-158				

	Laboratory Cont	rol Sample	(LCS)	
RunID:	HP_P_090616C-5070799	Units:	mg/L	
Analysis Date:	06/16/2009 18:39	Analyst:	EMB	

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1.00	0.974	97.4	42	136
Surr: 1,4-Difluorobenzene	0.100	0.104	104	60	155
Surr: 4-Bromofluorobenzene	0.100	0.111	110	50	158

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	09060743-02		
RunID:	HP_P_090616C-5070818	Units:	mg/L
Analysis Date:	06/17/2009 6:05	Analyst:	EMB

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	11.5	50	49.9	76.9	50	50.6	78.2	1.31	36	22	174
Surr: 1,4-Difluorobenzene	ND	5	5.14	103	5	5.16	103	0.334	30	60	155
Surr: 4-Bromofluorobenzene	ND	5	5.38	108	5	5.39	108	0.230	30	50	158

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips Randleman #1

					R	andlem	an #1						
Analysis: Method:		Metals by SW6010B	Method 6010B, Total							Work Lab E	Order: Batch ID:	09060743 91143	
			Method Blank				Sar	nples i	in Analy	tical Batch	1:		
RunID: ICP2_090 Analysis Date: Preparation Date:		90621A-5077078 Units: mg/L 06/21/2009 14:30 Analyst: EG 06/16/2009 10:30 Prep By: AB1 Method: \$					<u>Lat</u> 090 090	5 Samp 60743- 60743-	-01D -02D -03D		<u>Client Sar</u> MW-3 MW-2 MW-1	mple ID	
				T		_	090	60743	-04D		MW-4		
		/	Analyte	Result	Rep Lim	it.			0.0				
	Boron	num				1							
	Calciu	m		ND	0.	1							
	Iron			ND	0.0	2							
	Potase	sium			<u>)</u>	1							
	Sodiur	n		ND	0.	1							
	Stront	um		ND	0.0	5							
					0.00	5							
				La	boratory	Contro	Sample	<u>(LCS)</u>					
			RunID:	ICP2_090	621A-5077	7079 L	Units:	mg/L					
			Analysis Date:	06/21/20	09 14:34	, A	Analyst:	EG					
			Preparation Date:	06/16/20	09 10:30	F	Prep By:	AB1	Method:	SW3010A			
			Analy	/te		Spike	Result	t Pe	ercent	Lower	Upper		
		;				Added		Re	ecovery	Limit	Limit		
			Aluminum			1.00	1.08	32	108.2	80	120		
			Boron			1.00	0 1.02	29	102.9	80	120		
			Calcium			1.00	0 1.03	30	103.0	80	120		
			Iron			1.00	0 1.03	35	103.5	80	120		
			Magnesium			1.00	0 1.03	31	103.1	80	120		
			Potassium			10.0	0 10.2	24	102.4	80	120		
			Sodium			1.00	1.02	21	102.1	80	120		
			Strontium			1.00	00 1.05	59	105.9	80	120		
			Tin			1.00	00 1.08	33	108.3	80	120		
			Matri	x Spike (N	IS) / Matr	rix Spike	e Duplicat	e (MSI	<u>D)</u>		·······	<u></u>	
			Sample Spiked:	090606	609-01								
			RunID:	ICP2_09	90621A-50	77081	Units:	mg/l	L				
			Analysis Date:	06/21/2	2009 14:42	2	Analyst:	EG					
			Preparation Date:	06/16/2	2009 10:30	0	Prep By:	AB1	Method	I: SW3010	A		
Qualifiers:		ND/U - No	ot Detected at the Repor	ting Limit		N	/II - Matrix	Interfer	rence				
		B/V - Anal	lyte detected in the asso	ciated Met	hod Blank	c D) - Recover	ry Unre	eportable	due to Dilu	tion		
		J - Estima	ted value between MDL	and PQL		*	- Recovery	y Outsi	ide Advis	able QC Lii	mits		
		E - Estima	ated Value exceeds calib	pration curv	/e								
		N/C - Not	Calculated - Sample col	ocentration	is oreate	r than 4 t	times the a	amount	t of spike	added. Co	ntrol limits d	o not apply.	
									•				
		TNTC - T	oo numerous to count		J							09060743 F	age



Conoco Phillips

Randleman #1

Analysis: Method:	Metals by Method SW6010B	6010B, Total						WorkOrder Lab Batch I	: 090 ID: 911	60743 43		
	Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Aluminum		ND	1	1.809	106.4	1	1.985	124.0	9.278	20	75	125
Boron		ND	1	1.354	104.5	1	1.362	105.3	0.5891	20	75	125
Calcium		504.4	1	526.6	N/C	1	511.6	N/C	N/C	20	75	125
Iron		0.5626	1	1.585	102.2	1	1.634	107.1	3.044	20	75	125
Magnesium		192.3	1	201.9	N/C	1	196.9	N/C	N/C	20	75	125
Potassium		ND	10	15.03	120.5	10	14.53	115.5	3.383	20	75	125
Sodium		629.6	1	661.7	N/C	1	642.1	N/C	N/C	20	75	125
Strontium		4.237	1	5.520	N/C	1	5.394	N/C	N/C	20	75	125
Tin	······	ND	1	1.085	107.4	1	1.099	108.8	1.282	20	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

Blank D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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HOUSTON LABORATORY

8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

Analysis:	Metals by Method 6	020A, Total							Wor	kOrder:	090	060743		
lethod:	SW6020A								Lab	Batch II	D: 91 ⁻	143A-I		
	Met	hod Blank				Sam	ples i	in Analyt	ical Batc	h:				
tunID: ICPMS2	_090619A-5077029	Units:	mg/L			Lab	Sam	ole 1D		Clien	t Sample II	C	2	
nalysis Date:	06/19/2009 15:31	Analyst:	sc			0906	0743	-01D		MW-3	3	-		
reparation Date:	06/16/2009 10:30	Prep By:	AB1	Method: SW	3010A	0906	0743	-02D		MW-2	2			
						0906	0743	-03D		MW-1	l			
	· · · · · · · · · · · · · · · · · · ·			<u> </u>		0906	0743	-04D		MW-4	ļ.			
	Analyte		Result	Rep Limit										
Bari	im lium			0.005										
Mang	janese		N	0.005										
Selei	nium		N	0.005										
				beratory (Control S	male (I	<u>()</u>						`	
				aboratory C	ontrol 5a	impie (L	.03							
	RunID	:	ICPMS2_	090619A-507	7030 Unit	s: r	mg/L							
	Analys	is Date:	06/19/20	009 15:36	Ana	lyst: S	s_c							
	Prepar	ation Date:	06/16/20	009 10:30	Pre	oBy: A	AB1	Method: S	SW 3010A	N				
		Analyt	е		Spike	Result	Pe	ercent	Lower	Upper				
					Added		Re	covery	Limit	Limit				
	Barium				0.1000	0.09749	9	97.49	80	1:	20			
	Beryllium				0.1000	0.1111	i i	111.1	80	1:	20			
	Mangane	se			0.1000	0.1037	7	103.7	80	1:	20			
	Selenium				0.1000	0.1007	7	100.7	80	1:	20			
	ų <u></u>			l					• •	1	•			
													•	
		<u>Matrix</u>	Spike (I	MS) / Matrix	(Spike D	uplicate	(MS	<u>D)</u>						
	0			000.04										
	Sam	pie Spikea:	09060	609-01										
	Runi		ICPMS:	2_090619A-5	077032 Ui	nits:	mg/l	L						
	Analy	/sis Date:	06/19/	2009 15:47	Ar	nalyst:	S_C	; •••••	0.4400.44					
	Prep	aration Date:	06/16/.	2009 10:30	Pr	ер ву:	AB1	Method	5003010	JA	÷			
A	nalyte	Sample Result	MS Snike	MS Result	MS %		SD	MSD Result	MS Rec	D%	RPD	RPD Limit	Low	High
		1 COUR	Added	1 Count		Ad	ded	Result		overy				
arium		2 052	0.1	2.04	6		0.1		52	NIC	N/C	20	75	11
endlium		2.002	0.1	2.21		15.0	0.1		128	102.8	2 117	20	75	12
langangeo			0.1	1.00			0.1	0.10	120	102.0 N/C	2.117	20	75	12
anyanese alanium		0.9074	0.1	0.140	9 44	12.8	0.1	0.95	31	112.1	0.2656	20	75	14
		ND	0.1	0.112	u i	2.0	0.1	0.1	51	113.1	0.2000	20	. 75	<u> </u>

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

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Conoco Phillips

Analysis: Nethod:	Metals by Method 6020A SW6020A	A, Total					Work Lab E	Order: Batch ID:	09060743 91143-I	
	Method I	Blank			Samp	les in Analy	tical Batch	1:		
RunID: ICPMS	_090617A-5072411	Units: mg/L			Lab S	ample ID		Client Sar	nole ID	
Analysis Date:	06/17/2009 23:19	Analyst: AL H			09060	743-01D		MW-3		
Preparation Date	e: 06/16/2009 10:30 I	Prep By: AB1 I	Method: SW	V3010A	09060	743-02D		MW-2		
					09060	743-03D		MW-1		
	A			1	09060	743-04D		MW-4		
4.51	Analyte	Result		1						
An	senic		0.005							
Ca	dmium	NE	0.005	1						
Ch	romium		0.005							
Co	pper	NE	0.005							
Lea	ad	N	0.005							
1 <u>Mo</u> Nic	kei		0.001							
Sel	lenium	N	0.005	1						
Silv	ver		0.005							
Var	nadium		0.005							•
Zin		NE	0.01]						
	RunID: Analysis Da	Lá ICPMS_0 ate: 06/17/20	boratory C 90617A-5072 09 23:25	2412 Un An:	its: m	<u>CS)</u> ng/L I Н				
	RunID: Analysis Da Preparation	La ICPMS_0 ate: 06/17/20 Date: 06/16/20	90617A-5072 90623:25 09 10:30	2412 Un An: Pre	its: m alyst: A ap By: A	<u>CS)</u> Ig/L L_H B1 Method:	SW3010A			
	RunID: Analysis Da Preparation	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	2412 Un An Pre Spike Added	its: m alyst: A ep By: A Result	C <u>S)</u> lg/L L_H B1 Method: Percent Recovery	SW3010A Lower Limit	Upper Limit		
	RunID: Analysis Da Preparation	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	2412 Un An: Pre Spike Added 0.1000	its: m alyst: A ap By: A Result 0.09148	CS) ng/L L_H B1 Method: Percent Recovery 91.48	SW 3010A Lower Limit 80	Upper Limit 120		
	RunID: Analysis Da Preparation Antimony Arsenic	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Spike Added 0.1000	its: m alyst: A ep By: A Result 0.09148 0.09665	CS) ng/L L_H B1 Method: Percent Recovery 91.48 96.65	SW3010A Lower Limit 80 80	Upper Limit 120 120		
	RunID: Analysis Da Preparation Antimony Arsenic Cadmium	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	2412 Un An: Pre Spike Added 0.1000 0.1000 0.1000	ample (Lu its: m alyst: A ep By: A Result 0.09148 0.09665 0.09573	CS) g/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73	SW3010A Lower Limit 80 80 . 80	Upper Limit 120 120 120		
	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Control S 2412 Un An: Pre Spike Added 0.1000 0.1000 0.1000 0.1000	ample (Lu its: m alyst: A ep By: A Result 0.09148 0.09665 0.09573 0.1004	CS) g/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4	SW 3010A Lower Limit 80 80 . 80 . 80 . 80	Upper Limit 120 120 120 120		
	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium Cobalt	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Control S 2412 Un An: Pre Spike Added Added 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000	its: m alyst: A ep By: A Result 0.09148 0.09665 0.09573 0.1004 0.09957	CS) g/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4 99.57	SW3010A Lower Limit 80 80 . 80 80 80 80	Upper Limit 120 120 120 120 120 120		
	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium Cobalt Copper	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Control S 2412 Un An: Pre Spike Added Added 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000	ample (Lu its: m alyst: A ep By: A Result 0.09148 0.09665 0.09573 0.1004 0.09957 0.09664	CS) g/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4 99.57 96.64	SW 3010A Lower Limit 80 80 . 80 80 80 80 80	Upper Limit 120 120 120 120 120 120 120		
	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium Cobalt Copper Lead	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Spike Added 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000	ample (Lu its: m alyst: A p By: A Result 0.09148 0.09665 0.09573 0.1004 0.09957 0.09664 0.09452	CS) g/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4 99.57 96.64 94.52 015	SW3010A Lower Limit 80 80 . 80 . 80 . 80 . 80 . 80 . 80 . 8	Upper Limit 120 120 120 120 120 120 120		
	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium Cobalt Copper Lead Molybdenum	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Control S 2412 Un An: Pre Added 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000	ample (Lu its: m alyst: A p By: A Result 0.09148 0.09665 0.09573 0.1004 0.09957 0.09664 0.09452 0.09420	CS) gy/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4 99.57 96.64 94.52 94.20 424.0	SW3010A Lower Limit 80 80 80 80 80 80 80 80	Upper Limit 120 120 120 120 120 120 120 120 120		
	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium Cobalt Copper Lead Molybdenum Nickel Sclopium	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Control S 2412 Un Ana Pre Spike Added Added 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000	ample (Lu its: m alyst: A ep By: A Result 0.09148 0.09665 0.09573 0.1004 0.09957 0.09664 0.09452 0.09420 0.09420 0.1010	CS) g/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4 99.57 96.64 94.52 94.20 101.0 06.82	SW3010A Lower Limit 80 80 80 80 80 80 80 80 80 80	Upper Limit 120 120 120 120 120 120 120 120 120 120		
	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium Cobalt Copper Lead Molybdenum Nickel Selenium Silver	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Control S 2412 Un An: Pre Spike Added Added 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000	ample (Lu its: m alyst: A p By: A Result 0.09148 0.09665 0.09573 0.1004 0.09957 0.09664 0.09452 0.09420 0.09420 0.1010 0.09680 0.1056	CS) gy/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4 99.57 96.64 94.52 94.20 101.0 96.80 105.6	SW3010A Lower Limit 80 80 80 80 80 80 80 80 80 80 80 80 80	Upper Limit 120 120 120 120 120 120 120 120 120 120		
	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium Cobalt Copper Lead Molybdenum Nickel Selenium Silver Thallium	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Control S 2412 Un An: Pre Spike Added Added 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000	ample (Lu its: m alyst: A p By: A Result 0.09148 0.09665 0.09573 0.1004 0.09957 0.09664 0.09452 0.09420 0.1010 0.09680 0.1056 0.09113	CS) g/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4 99.57 96.64 94.52 94.20 101.0 96.80 105.6 91.13	SW3010A Lower Limit 80 80 80 80 80 80 80 80 80 80 80 80 80	Upper Limit 120 120 120 120 120 120 120 120 120 120		
	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium Cobalt Copper Lead Molybdenum Nickel Selenium Silver Thallium Vanadium	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Control S 2412 Un An: Pre Spike Added Added 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000	ample (L4 its: m alyst: A p By: A Result 0.09148 0.09665 0.09573 0.1004 0.09957 0.09664 0.09452 0.09420 0.1010 0.09680 0.1056 0.09113 0.09013 0.1006	CS) g/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4 99.57 96.64 94.52 94.20 101.0 96.80 105.6 91.13 100 6	SW3010A Lower Limit 80 80 80 80 80 80 80 80 80 80	Upper Limit 120 120 120 120 120 120 120 120 120 120		
	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium Cobalt Copper Lead Molybdenum Nickel Selenium Silver Thallium Vanadium Zinc	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Control S 2412 Un Ana Pres Spike Added Added 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000	ample (Lu its: m alyst: A p By: A Result 0.09148 0.09665 0.09573 0.1004 0.09957 0.09664 0.09452 0.09420 0.1010 0.09680 0.1056 0.09113 0.1006 0.09113 0.1006	CS) gy/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4 99.57 96.64 94.20 101.0 96.80 105.6 91.13 100.6 87.42	SW3010A Lower Limit 80 80 80 80 80 80 80 80 80 80 80 80 80	Upper Limit 120 120 120 120 120 120 120 120 120 120		
	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium Cobalt Copper Lead Molybdenum Nickel Selenium Silver Thallium Vanadium Zinc	Li ICPMS_0 ate: 06/17/20 I Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Control S 2412 Un Ana Pre Spike Added 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000	ample (Lu its: m alyst: A p By: A Result 0.09148 0.09665 0.09573 0.09664 0.09452 0.09452 0.09420 0.1010 0.09452 0.09420 0.1010 0.09680 0.1056 0.09113 0.1006 0.08742	CS) gy/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4 99.57 96.64 94.52 94.20 101.0 96.80 105.6 91.13 100.6 87.42	SW 3010A Lower Limit 80 80 80 80 80 80 80 80 80 80	Upper Limit 120 120 120 120 120 120 120 120 120 120		
Qualifiers:	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium Cobalt Copper Lead Molybdenum Nickel Selenium Silver Thallium Vanadium Zinc	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Control S 2412 Un An: Pre Spike Added 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000	ample (Lu its: m alyst: A p By: A Result 0.09148 0.09665 0.09573 0.1004 0.09957 0.09664 0.09452 0.09420 0.1010 0.09680 0.1056 0.09113 0.090113 0.1006 0.08742 Matrix Int	CS) g/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4 99.57 96.64 94.52 94.20 101.0 96.80 105.6 91.13 100.6 87.42 erference	SW3010A Lower Limit 80 80 80 80 80 80 80 80 80 80	Upper Limit 120 120 120 120 120 120 120 120 120 120		
Qualifiers:	RunID: Analysis Da Preparation Antimony Arsenic Cadmium Chromium Cobalt Copper Lead Molybdenum Nickel Selenium Silver Thallium Vanadium Zinc ND/U - Not Detected at the B/V - Analyte detected in t	La ICPMS_0 ate: 06/17/20 Date: 06/16/20 Analyte	boratory C 90617A-5072 09 23:25 09 10:30	Control S 2412 Un An: Pre Added 0.1000	ample (Lu its: m alyst: A p By: A Result 0.09148 0.09665 0.09573 0.1004 0.09957 0.09664 0.09452 0.09420 0.1010 0.09680 0.1056 0.09113 0.1006 0.09113 0.1006 0.08742 Matrix Int Recovery	CS) gy/L L_H B1 Method: Percent Recovery 91.48 96.65 95.73 100.4 99.57 96.64 94.20 101.0 96.80 105.6 91.13 100.6 87.42 erference Unreportable	SW 3010A Lower Limit 80 80 80 80 80 80 80 80 80 80	Upper Limit 120 120 120 120 120 120 120 120 120 120		

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis:	Metals by Method 6020A, Total	WorkOrder:	09060743
Method:	SW6020A	Lab Batch ID:	91143-I

Post Digestion Spike (PDS) / Post Digestion Spike Duplicate (PDSD)

Sample Spiked:	09060609-01		
RunID:	ICPMS_090617A-5072417	Units:	mg/L
Analysis Date:	06/17/2009 23:49	Analyst:	AL_H

Analyte	Sample Result	PDS Spike Added	PDS Result	PDS % Recovery	PDSD Spike Added	PDSD Result	PDSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Zinc	ND	0.1	0.08382	78.54	0.1	0.08493	79.65	1.316	20	75	125

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:
RunID:
Analysis Date:
Preparation Date

06/17/2009 23:35 06/16/2009 10:30

09060609-01

ICPMS_090617A-5072414 Units: mg/L Analyst: AL_H Prep By: AB1 Method: SW3010A

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Antimony	ND	0.1	0.08676	86.76	0.1	0.08556	85.56	1.393	20	75	125
Arsenic	0.01035	0.1	0.09760	87.25	0.1	0.09549	85.14	2.186	20	75	125
Cadmium	. ND	0.1	0.08421	84.21	0.1	0.08293	82.93	1.532	20	75	125
Chromium	0.005271	0.1	0.09718	91.91	0.1	0.09511	89.84	2.153	20	75	125
Cobalt	0.007312	0.1	0.09403	86.72	0.1	0.09136	84.05	2.880	20	75	125
Copper	ND	0.1	0.08558	82.77	0.1	0.08573	82.92	0.1751	20	75	125
Lead	ND	0.1	0.09519	95.19	0.1	0.09299	92.99	2.338	20	75	125
Molybdenum	ND	0.1	0.09094	90.94	0.1	0.08824	88.24	3.014	20	75	125
Nickel	0.01763	0.1	0.1009	83.27	0.1	0.09819	80.56	2.722	20	75	125
Selenium	ND	0.1	0.08330	83.30	0.1	0.07875	78.75	5.616	20	75	125
Silver	ND	0.1	0.08916	89.16	0.1	0.08845	88.45	0.7995	20	75	125
Thallium	ND	0.1	0.09376	93.76	0.1	0.09288	92.88	0.9430	20	75	125
Vanadium	ND	0.1	0.09408	93.17	0.1	0.09245	91.54	1.748	20	75	125
Zinc	ND	0.1	0.07727	71.99 *	0.1	0.07662	71.34 *	0.8448	20	75	125

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

MI - Matrix Interference D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

J - Estimated value between MDL and PQL

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis: Method:	Mercury, Total SW7470A							Wor Lab	kOrder: Batch II	090 D: 912	60743 12		
	Met	hod Blank				Sample	s in Analy	tical Batc	h:				
RunID: HGLC_0	90618A-5073565	Units:	mg/L		•	Lab Sa	nple ID		Client	t Sample ID)		
Analysis Date:	06/18/2009 13:08	Analyst:	F_S			0906074	43-01D		MW-3		-		
Preparation Date:	06/18/2009 10:15	Prep By:	F_S	Method: SW	7470A	0906074	13-02D		MW-2	:			
						0906074	43-03D		MW-1				
	Analvte		Result	Rep Limit		0906074	13-04D		MW-4				
Merc	ury		N	ID 0.0002									
				aboratory C	ontrol Sam		2)						
			7		unuor Sam		21						
	RunID):	HGLC_(090618A-50735	66 Units:	mg/	L						
	Analys	sis Date:	06/18/2	2009 13:10	Analys	t: F_8	i						
	Prepa	ration Date:	06/18/2	2009 10:15	Prep B	y: F_5	Method:	SW7470A	N				
		Analyt	e		Spike Re	sult	Percent	Lower	Upper				
			_			1000			Limit				
	imercury			0.	02000 0.00	1962	98.10	80	14	20			
		Matrix	Spike	(MS) / Matrix	Spike Dupl	icate (N	SD)						
	Sam	ple Spiked:	0906	0553-01									
	Run	ID:	HGLC	_090618A-507	3568 Units	: m	a/L						
	Anal	ysis Date:	06/18	/2009 13:16	Anal	vst: F	S						
	Prep	aration Date:	06/18	/2009 10:15	Prep	By: F	S Method	I: SW7470)A				
A	nalyte	Sample	MS	MS	MS %	MSD	MSD	MS	D %	RPD	RPD	Low	High
		Result	Spike	Result	Recovery	Spike	Resul	t Rec	overy		Limit	Limit	Limit
			-nuueu			Audeo	·						
Mercury		ND	0.002	2 0.001612	2 80.6	0.00	2 0.001	613	80.67	0.09314	20	75	125

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

ank D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Analysis: Method:	Semivolatile Organic SW8270C	s by Methoo		WorkOrder: Lab Batch ID:	09060743 91162		
	od Blank			Samples in Analyti	cal Batch:		
RunID: H_09061	8B-5073113	Units:	ug/L		Lab Sample ID	Client Sar	nple ID
Analysis Date:	06/18/2009 11:06	Analyst:	GY		09060743-01F	MW-3	
Prenaration Date	06/17/2009 7.29	Prep By:	NMA	Aethod: SW3510C	09060743-02E	M\\\/_2	
reparation bate.	00/11/2000 1.20	пер Бу.	14 <u>-</u> 141 1		00000740-020		
					09060743-03F	MVV-1	
	Analyte		Decult	Pen Limit	09060743-04F	MW-4	
124	Trichischerster		INCOUN				
1,2,4	- I richlorobenzene			5.0			
1.2-)inhenvlhydrazine			5.0	•		
1.3-	Dichlorobenzene			5.0			
1.4-0	Dichlorobenzene		NE	5.0			
2,4,5	-Trichlorophenol		ND	10			
2,4,6	-Trichlorophenol		ND	5.0			
2,4-D	Dichlorophenol		ND	5.0			
2,4-D	Dimethylphenol		ND	5.0			
2,4-0	Dinitrophenol			25			
2,4-L		·		5.0			
2,6-L				5.0			
12-UN				5.0			
2-01	thylnanhthalene			5.0			
2-Nit	roaniline			25			
2-Nit	rophenol			50			
3,3'-	Dichlorobenzidine		ND	10			
3-Nit	roaniline		ND	25			
4,6-C)initro-2-methylphenol		ND	25			
4-Bro	mophenyl phenyl ether		ND	5.0			
4-Ch	loro-3-methylphenol		ND	5.0			
4-Ch	loroaniline		ND	5.0			
4-Ch	lorophenyl phenyl ether			5.0			
4-Niti				25			
4-111	aphthono			20			
Acen	anhthylene			5.0			
Anilir	10		ND	5.0			
Anthr	acene		ND	5.0			
Benz	(a)anthracene		ND	5.0			
Benz	o(a)pyrene		ND	5.0			
Benz	o(b)fluoranthene		ND	5.0			
Benz	o(g,h,i)perylene		ND	5.0			
Benz	o(k)fluoranthene		ND	5.0			
Benz	DIC aCID		ND	25			
Bio/2	chloroethow/mothono			5.0			
Bis(2)	-chloroethyl)ether			5.0			
Bis(2	-chloroisopropyl)ether			5.0			
Bis(2	-ethylhexyl)phthalate		ND	5.0			
Butyl	benzyl phthalate		ND	5.0			
Carba	azole		ND	5.0			
Chrys	sene		ND	5.0			
Diber	nz(a,h)anthracene		ND	5.0			
Dibor	zofuran		ND	1 5.0			

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips Randleman #1

Analysis: Semivolatile Method: SW8270C		e Organics by Metho	1 8270C	WorkOrder: Lab Batch ID:	09060743 91162
		Method Blank			
RunID:	H_090618B-5073113	Units:	ug/L		

RunID: H_090618	B-5073113	Units:	ug/L
Analysis Date:	06/18/2009 11:06	Analyst:	GY
Preparation Date:	06/17/2009 7:29	Prep By:	N_M Method: SW3510C

Analyte	Result	Rep Limit
Diethyl phthalate	ND	5.0
Dimethyl phthalate	ND	5.0
Di-n-butyl phthalate	ND	5.0
Di-n-octyl phthalate	ND	5.0
Fluoranthene	ND	5.0
Fluorene	ND	5.0
Hexachlorobenzene	ND	5.0
Hexachlorobutadiene	ND	5.0
Hexachlorocyclopentadiene	ND	5.0
Hexachloroethane	ND	5.0
Indeno(1,2,3-cd)pyrene	ND	5.0
Isophorone	ND	5.0
Naphthalene	ND	5.0
Nitrobenzene	ND	5.0
N-Nitrosodi-n-propylamine	ND	5.0
N-Nitrosodiphenylamine	ND	5.0
Pentachlorophenol	ND	25
Phenanthrene	ND	5.0
Phenol	ND	5.0
Pyrene	ND	5.0
Pyridine	ND	5.0
2-Methylphenol	ND	5.0
3 & 4-Methylphenol	ND	5.0
Surr: 2,4,6-Tribromophenol	99.3	10-123
Surr: 2-Fluorobiphenyl	79.8	23-116
Surr: 2-Fluorophenol	65.3	16-110
Surr: Nitrobenzene-d5	64.4	21-114
Surr: Phenol-d5	53.5	10-110
Surr: Terphenyl-d14	84.4	22-141

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

Units:

RuniD:	H_090618B-5073114
Analysis Date:	06/18/2009 11:39
Preparation Date:	06/17/2009 7:29

Analyst: GY Prep By: N_M Method: SW3510C

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
1,2,4-Trichlorobenzene	25.0	16.7	66.8	25.0	17.2	68.8	2.9	39	21	120
1,2-Dichlorobenzene	25.0	14.8	59.2	25.0	15.4	61.6	4.0	50	20	150

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

ug/L

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis: Method:	Semivolatile Organics by SW8270C	Method 8270C		WorkC Lab Ba	Order: 09060743 atch ID: 91162				
	Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)								
	RunID:	H_090618B-5073114	Units:	ug/L					
	Analysis Date:	06/18/2009 11:39	Analyst:	GY					
	Preparation Date:	06/17/2009 7:29	Prep By:	N_M Method: SW3510C					

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	25.0	10.8	43.2	25.0	11.2	44.8	3.6	50	10	251
1,3-Dichlorobenzene	25.0	14.5	58.0	25.0	15.4	61.6	6.0	50	20	150
1,4-Dichlorobenzene	25.0	14.7	58.8	25.0	15.6	62.4	5.9	45	20	150
2,4,5-Trichlorophenol	25.0	16.9	67.6	25.0	17.6	70.4	4.1	50	30	150
2,4,6-Trichlorophenol	25.0	16.6	66.4	25.0	17.3	69.2	4.1	50	30	150
2,4-Dichlorophenol	25.0	15.9	63.6	25.0	16.6	66.4	4.3	50	30	150
2,4-Dimethylphenol	25.0	14.0	56.0	25.0	15.1	60.4	7.6	50	32	140
2,4-Dinitrophenol	25.0	16.0	64.0	25.0	18.3	73.2	13.4	50	-10	160
2,4-Dinitrotoluene	25.0	16.4	65.6	25.0	17.7	70.8	7.6	50	30	150
2,6-Dinitrotoluene	25.0	15.5	62.0	25.0	16.8	67.2	8.0	50	30	150
2-Chloronaphthalene	25.0	14.8	59.2	25.0	15.6	62.4	5.3	50	30	150
2-Chlorophenol	25.0	14.6	58.4	25.0	. 15.6	62.4	6.6	40	23	134
2-Methylnaphthalene	25.0	15.5	62.0	25.0	16.5	66.0	6.3	50	20	170
2-Nitroaniline	25.0	10.7	42.8	25.0	11.5	46.0	7.2	50	20	160
2-Nitrophenol	25.0	15.3	61.2	25.0	17.0	68.0	10.5	50	29	182
3,3'-Dichlorobenzidine	25.0	12.6	50.4	25.0	13.6	54.4	7.6	50	30	200
3-Nitroaniline	25.0	14.7	58.8	25.0	15.5	62.0	5.3	50	20	160
4,6-Dinitro-2-methylphenol	25.0	15.8	63.2	25.0	16.8	67.2	6.1	50	10	160
4-Bromophenyl phenyl ether	25.0	15.8	63.2	25.0	16.7	66.8	5.5	50	30	150
4-Chloro-3-methylphenol	25.0	15.5	62.0	25.0	16.5	66.0	6.3	42	25	160
4-Chloroaniline	25.0	14.7	58.8	25.0	15.9	63.6	7.8	50	20	160
4-Chlorophenyl phenyl ether	25.0	16.4	65.6	25.0	17.6	70.4	7.1	50	25	158
4-Nitroaniline	25.0	14.6	58.4	25.0	15.5	62.0	6.0	50	20	160
4-Nitrophenol	25.0	10.6	42.4	25.0	11.7	46.8	9.9	50	10	132
Acenaphthene	25.0	15.0	60.0	25.0	15.8	63.2	5.2	31	30	150
Acenaphthylene	25.0	15.4	61.6	25.0	16.1	64.4	4.4	50	33	250
Aniline	50.0	23.4	46.8	50.0	24.9	49.8	6.2	50	10	135
Anthracene	25.0	14.7	58.8	25.0	15.5	62.0	5.3	50	27	133
Benz(a)anthracene	25.0	14.9	59.6	25.0	15.9	63.6	6.5	50	33	143
Benzo(a)pyrene	25.0	13.5	54.0	25.0	14.2	56.8	5.1	50	17	163
Benzo(b)fluoranthene	25.0	14.8	59.2	25.0	15.2	60.8	2.7	50	24	159
Benzo(g,h,i)perylene	25.0	16.4	65.6	25.0	17.4	69.6	5.9	50	30	160
Benzo(k)fluoranthene	25.0	14.8	59.2	25.0	16.1	64.4	· 8.4	50	11	162

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

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Conoco Phillips

Randleman #1

							1					
Analysis: Method:	Semivo SW827	olatile Organ IC	lics by M	ethod 8270	C				WorkOrder: Lab Batch II):	0906074 91162	13
		Labora	tory Con	trol Sample	e/Laboratory	Control Sa	mple Duplica	te (LCS/LC	SD)			
		RunID:		H_090618B-	5073114	Units:	ug/L					
		Analysis Da	ate:	06/18/2009	11:39	Analyst:	GY					
		Preparation	Date:	06/17/2009	7:29	Prep By:	N_M Method	: SW3510C				
	Analyte		LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Benzoic acid			25.	0 20.4	81.6	25.0	20.8	83.2	1.9	50	10	400
Benzyl alcohol			25.	0 13.5	54.0	25.0	14.8	59.2	9.2	50	30	160
Bis(2-chloroetho	xy)methane		25.	0 12.9	51.6	25.0	13.7	54.8	6.0	50	33	184
Bis(2-chloroethy	1)ether		25.	0 12.5	50.0	25.0	13.4	53.6	6.9	50	12	158
Bis(2-chloroisop	ropyl)ether		25.	0 9.62	38.5	25.0	10.3	41.2	6.8	50	20	160
Bis(2-ethylhexyl)	phthalate		25.	0 14.6	58.4	25.0	16.4	65.6	11.6	50	10	158
Butyl benzyl phtł	halate		25.	0 14.2	56.8	25.0	15.5	62.0	8.8	50	30	160
Carbazole			25.	0 14.4	57.6	25.0	15.2	60.8	5.4	50	30	150
Chrysene			25.	0 15.2	60.8	25.0	16.0	64.0	5.1	50	17	168

Bis(2-chloroisopropyl)ether	25.0	9.62	38.5	25.0	10.3	41.2	6.8	50	20	160
Bis(2-ethylhexyl)phthalate	25.0	14.6	58.4	25.0	16.4	65.6	11.6	50	10	158
Butyl benzyl phthalate	25.0	14.2	56.8	25.0	15.5	62.0	8.8	50	30	160
Carbazole	25.0	14.4	57.6	25.0	15.2	60.8	5.4	50	30	150
Chrysene	25.0	15.2	60.8	25.0	16.0	64.0	5.1	50	17	168
Dibenz(a,h)anthracene	25.0	16.8	67.2	25.0	17.6	70.4	4.7	50	30	160
Dibenzofuran	25.0	15.8	63.2	25.0	16.6	66.4	4.9	50	30	150
Diethyl phthalate	25.0	15.4	61.6	25.0	16.3	65.2	5.7	50	30	160
Dimethyl phthalate	25.0	15.4	61.6	25.0	16.5	66.0	6.9	50	30	160
Di-n-butyl phthalate	25.0	14.5	58.0	25.0	15.7	62.8	7.9	50	30	160
Di-n-octyl phthalate	25.0	14.6	58.4	25.0	15.5	62.0	6.0	50	20	150
Fluoranthene	25.0	15.5	62.0	25.0	16.4	65.6	5.6	50	26	137
Fluorene	25.0	15.5	62.0	25.0	16.2	64.8	. 4.4	50	30	150
Hexachlorobenzene	25.0	16.8	67.2	25.0	17.6	70.4	4.7	50	20	150
Hexachlorobutadiene	25.0	16.5	66.0	25.0	17.6	70.4	6.5	50	20	140
Hexachlorocyclopentadiene	25.0	13.0	52.0	25.0	13.8	55.2	6.0	50	10	150
Hexachloroethane	25.0	12.4	49.6	25.0	13.4	53.6	7.8	50	14	120
Indeno(1,2,3-cd)pyrene	25.0	16.8	67.2	25.0	18.2	72.8	8.0	50	30	160
Isophorone	25.0	14.2	56.8	25.0	15.0	60.0	5.5	50	21	196
Naphthalene	25.0	15.0	60.0	25.0	16.0	64.0	6.5	50	21	133
Nitrobenzene	25.0	11.8	47.2	25.0	12.7	50.8	.7.3	50	20	160
N-Nitrosodi-n-propylamine	25.0	10.2	40.8	25.0	11.0	44.0	7.5	38	30	160
N-Nitrosodiphenylamine	50.0	34.6	69.2	50.0	36.2	72.4	4.5	50	30	150
Pentachlorophenol	25.0	15.6	62.4	25.0	15.6	62.4	0.0	50	14	176
Phenanthrene	25.0	14.9	59.6	25.0	15.5	62.0	3.9	50	10	140
Phenol	25.0	13.9	55.6	25.0	14.6	58.4	4.9	42	40	132
Pyrene	25.0	15.8	63.2	25.0	16.5	66.0	4.3	38	30	150
Pyridine	50.0	21.8	43.6	50.0	23.2	46.4	6.2	50	10	150
2-Methylphenol	25.0	13.4	53.6	25.0	14.3	57.2	6.5	50	30	160

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

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Conoco Phillips

Randleman #1

Analysis: Method:	Semiv SW82	volatile Organi 70C	ics by Me	ethod 8270	C				WorkOrder Lab Batch	: ID:	0906074 91162	43
		Laborat	ory Cont	trol Sample	e/Laborator	Control S	ample Duplic	ate (LCS/LC	<u>(SD)</u>			
		RunID: Analysis Dat Preparation	H le: (Date: (H_090618B- 06/18/2009 06/17/2009	5073114 11:39 7:29	Units: Analyst: Prep By:	ug/L GY N_M Method	d: SW3510C	; .			
	Analyte		LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit

3 & 4-Methylphenol	25.0	12.4	49.6	25.0	13.3	53.2	7.0	50	10	160
Surr: 2,4,6-Tribromophenol	75.0	56.9	75.9	75.0	59.1	78.8	3.8	30	10	123
Surr: 2-Fluorobiphenyl	50.0	29.3	58.6	50.0	29.9	59.8	2.0	30	23	116
Surr: 2-Fluorophenol	75.0	35.8	47.7	75.0	36.6	48.8	2.2	30	16	110
Surr: Nitrobenzene-d5	50.0	24.1	48.2	50.0	25.2	50.4	4.5	30	21	114
Surr: Phenol-d5	75.0	28.7	38.3	75.0	29.2	38.9	1.7	30	10	110
Surr: Terphenyl-d14	50.0	30.6	61.2	50.0	31.3	62.6	2.3	30	22	141

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Conoco Phillips Randleman #1

Analysis: Method:	Volatile Organics by SW8260B	Method 826	0B			WorkOrder: Lab Batch ID:	09060743 R276016
	Met	hod Blank			Samples in Analyti	cal Batch:	
RunID: K_0906	20B-5076476	Units:	ug/L		Lab Sample ID	Client Sar	nple ID
Analysis Date:	06/20/2009 11:32	Analyst:	LU_L		09060743-01A	MW-3	
					09060743-02A	MW-2	
					09060743-04A	MW-4	
<u> </u>	Azolita		Desult	Den Limit	09060743-06A	Trip Blank	
	Analyle		Result	Rep Linit	09060743-07A	Duplicate	

	Troourc	riop Lina
1,1,1,2-Tetrachioroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
1,1-Dichloroethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloropropene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0
1,2,3-Trichloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
1,2-Dibromo-3-chloropropane	ND	5.0
1,2-Dibromoethane	ND	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dichloropropane	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,3-Dichloropropane	ND	5.0
1,4-Dichlorobenzene	ND	5.0
2,2-Dichloropropane	ND	5.0
2-Butanone	ND	20
2-Chloroethyl vinyl ether	ND	10
2-Chlorotoluene	ND	5.0
2-Hexanone	ND	10
4-Chlorotoluene	ND	5.0
4-Isopropyltoluene	ND	5.0
4-Methyl-2-pentanone	ND	10
Acetone	ND	20
Acrylonitrile	ND	10
Benzene	ND	5.0
Bromobenzene	ND	5.0
Bromochloromethane	ND	5.0
Bromodichlorom <u>ethane</u>	ND	5.0
Bromoform	ND	5.0
Bromomethane	ND	10
Carbon disulfide	ND	5.0
Carbon tetrachloride	ND	5.0
Chlorobenzene	ND	5.0
Chloroethane	NĎ	10
Chloroform	ND	5.0
Chloromethane	ND	10
Dibromochloromethane	ND	5.0
Dibromomethane	ND	5.0
Dichlorodifluoromethane	ND	10
Ethylbenzene	ND	5.0

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve .

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

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09060743

R276016

WorkOrder:

Lab Batch ID:

Conoco Phillips Randleman #1

Analysis Method:	s: Volatile Organi SW8260B	cs by Method 826	0B	
		Method Blank		<u>µ = </u>
RunID:	K_090620B-5076476	Units:	ug/L	

LU_L

 RunID:
 K_090620B-5076476
 Units:

 Analysis Date:
 06/20/2009 11:32
 Analyst:

Analyte	Result	Rep Limit
Hexachlorobutadiene	ND	5.0
Isopropyibenzene	ND	5.0
Methyl tert-butyl ether	ND	5.0
Methylene chloride	ND	5.0
Naphthalene	ND	5.0
n-Butylbenzene	ND	5.0
n-Propylbenzene	ND	5.0
sec-Butylbenzene	ND	5.0
Styrene	ND	5.0
tert-Butylbenzene	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Trichloroethene	ND	5.0
Trichlorofluoromethane	ND	5.0
Vinyl acetate	ND	10
Vinyl chloride	ND	2.0
cis-1,2-Dichloroethene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,2-Dichloroethene (total)	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	94.4	78-116
Surr: 4-Bromofluorobenzene	96.8	74-125
Surr: Toluene-d8	117.7	82-118

Laboratory Control Sample (LCS)

RunID:	K_090620B-5076475	Units:	ug/L
Analysis Date:	06/20/2009 10:46	Analyst:	LU_L

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1,2-Tetrachloroethane	20.0	21.6	108	71	128
1,1,1-Trichloroethane	20.0	21.8	109	61	135
1,1,2,2-Tetrachloroethane	20.0	20.2	101	60	133
1,1,2-Trichloroethane	20.0	23.7	119	77	127
1,1-Dichloroethane	20.0	19.4	97.2	68	132

Qualifiers:

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

ND/U - Not Detected at the Reporting Limit

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

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RunID:

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips Randleman #1

Analysis:	Volatile Organics by Method 8260B		WorkOrder:	09060743
Method:	SW8260B		Lab Batch ID:	R276016
		Laboratory Control Sample (LCS)		

K 090620B-5076475 Units: Analysis Date: 06/20/2009 10:46

ug/L Analyst: LU_L

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	20.0	19.6	97.8	65	134
1,1-Dichloropropene	20.0	21.3	107	68	126
1,2,3-Trichlorobenzene	20.0	23.3	116	36	154
1,2,3-Trichloropropane	20.0	20.4	102	38	153
1,2,4-Trichlorobenzene	20.0	22.0	110	69	144
1,2,4-Trimethylbenzene	20.0	21.3	106	64	128
1,2-Dibromo-3-chloropropane	20.0	21.2	106	44	141
1,2-Dibromoethane	20.0	20.7	103	75	124
1,2-Dichlorobenzene	20.0	21.3	106	68	124
1,2-Dichloroethane	20.0	19.1	95.5	61	138
1,2-Dichloropropane	20.0	22.0	110	76	123
1,3,5-Trimethylbenzene	20.0	21.4	107	61	127
1,3-Dichlorobenzene	20.0	21.2	106	68	127
1,3-Dichloropropane	20.0	23.1	115	76	125
1,4-Dichlorobenzene	20.0	21.4	107	68	124
2,2-Dichloropropane	20.0	22.2	111	42	142
2-Butanone	20.0	20.0	99.8	22	183
2-Chloroethyl vinyl ether	20.0	18.2	91.1	10	179
2-Chlorotoluene	20.0	21.8	109	64	132
2-Hexanone	20.0	29.7	149	31	178
4-Chlorotoluene	20.0	21.5	107	61	132
4-Isopropyltoluene	20.0	23.5	118	63	136
4-Methyl-2-pentanone	20.0	21.8	109	10	159
Acetone	20.0	30.9	154	10	200
Acrylonitrile	20.0	18.7	93.3	54	155
Benzene	20.0	21.1	106	74	123
Bromobenzene	20.0	19.5	97.3	68	125
Bromochloromethane	20.0	20.1	101	71	124
Bromodichloromethane	20.0	21.4	107	72	128
Bromoform	20.0	20.2	101	73	143
Bromomethane	20.0	15.6	78.1	53	130
Carbon disulfide	20.0	18.8	93.9	41	143
Carbon tetrachloride	20.0	23.2	116	59	142
Chlorobenzene	20.0	21.3	107	75	125

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

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Conoco Phillips

Randleman #1

ug/L

LU_L

Analysis:	Volatile Organics by Method 8260B
Method:	SW8260B
<u> </u>	Laboratory Control Sample (LCS)

RunID:

K 090620B-5076475 Units: Analysis Date: 06/20/2009 10:46 Analyst:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloroethane	20.0	19.4	97.0	60	134
Chloroform	20.0	20.2	101	71	127
Chloromethane	20.0	16.3	81.5	50	139
Dibromochloromethane	20.0	24.4	122	65	130
Dibromomethane	20.0	21.7	109	79	124
Dichlorodifluoromethane	20.0	16.8	84.0	22	162
Ethylbenzene	20.0	20.3	102	72	127
Hexachlorobutadiene	20.0	24.6	123	45	152
Isopropylbenzene	20.0	19.3	96.3	58	130
Methyl tert-butyl ether	40.0	37.8	94.5	63	123
Methylene chloride	20.0	19.3	96.4	61	135
Naphthalene	20.0	21.6	108	33	148
n-Butylbenzene	20.0	25.5	127	62	136
n-Propylbenzene	20.0	20.3	102	57	131
sec-Butylbenzene	20.0	23.5	118	63	131
Styrene	20.0	20.8	104	69	120
tert-Butylbenzene	20.0	22.6	113	59	131
Tetrachloroethene	20.0	21.3	106	45	173
Toluene	20.0	23.6	118	74	126
Trichloroethene	20.0	22.0	110	79	131
Trichlorofluoromethane	20.0	20.5	103	49	153
Vinyl acetate	20.0	13.7	68.6	10	167
Vinyl chloride	20.0	19.8	99.0	51	148
cis-1,2-Dichloroethene	20.0	20.1	1 01	71	128
cis-1,3-Dichloropropene	20.0	23.6	118	67	128
m,p-Xylene	40.0	43.0	108	71	129
o-Xylene	20.0	21.9	110	74	130
trans-1,2-Dichloroethene	20.0	19.7	98.4	66	128
trans-1,3-Dichloropropene	20.0	24.1	121	60	128
1,2-Dichloroethene (total)	40.0	39.8	99.5	66	128
Xylenes, Total	60.0	64.9	108	71	130
Surr: 1,2-Dichloroethane-d4	50.0	48.6	97.2	78	116
Surr: 4-Bromofluorobenzene	50.0	51.7	103	74	125
Surr: Toluene-d8	50.0	58.6	117	82	118

Qualifiers:

B/V - Analyte detected in the associated Method Blank

MI - Matrix Interference D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

J - Estimated value between MDL and PQL E - Estimated Value exceeds calibration curve

ND/U - Not Detected at the Reporting Limit

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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WorkOrder: 09060743 Lab Batch ID:

R276016



Conoco Phillips Randleman #1

Analysis:	Volatile Organics by Method 8260B
Method:	SW8260B

WorkOrder: 09060743 Lab Batch ID:

R276016

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	
RunID:	
Analysis Date:	

09060870-02 K_090620B-5076478 06/20/2009 12:54

Units: ug/L Analyst: LU_L

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1,1,2-Tetrachloroethane	ND	· 20	19.2	96.0	20	19.3	96.3	0.333	20	68	124
1,1,1-Trichloroethane	ND	· 20	18.9	94.5	20	20.5	103	8.32	20	69	123
1,1,2,2-Tetrachloroethane	ND	20	19.6	97.8	20	19.1	95.5	2.34	20	69	130
1,1,2-Trichloroethane	ND	20	17.1	85.7	20	16.5	82.4	4.00	20	75	126
1,1-Dichloroethane	ND	20	17.9	89.7	20	19.0	94.9	5.57	20	65	129
1,1-Dichloroethene	ND	20	17.5	87.3	20	18.4	92.1	5.34	22	61	139
1,1-Dichloropropene	ND	20	19.2	96.0	20	19.0	95.1	0.984	20	69	121
1,2,3-Trichlorobenzene	ND	20	18.1	90.4	20	18.9	94.5	4.53	20	53	127
1,2,3-Trichloropropane	ND	20	19.3	96.3	20	19.5	97.4	1.13	20	79	124
1,2,4-Trichlorobenzene	ND	20	17.2	86.1	20	17.5	87.4	1.48	20	58	118
1,2,4-Trimethylbenzene	. ND	20	17.9	89.5	20	17.6	88.0	1.70	20	43	132
1,2-Dibromo-3-chloropropane	ND	20	19.0	95.0	20	18.5	92.4	2.74	20	46	131
1,2-Dibromoethane	ND	20	18.7	93.3	20	19.0	94.8	1.70	20	76	122
1,2-Dichlorobenzene	ND	20	19.0	94.8	20	17.8	88.9	6.44	20	74	110
1,2-Dichloroethane	ND	20	17.5	87.5	20	19.6	98.1	11.4	20	60	129
1,2-Dichloropropane	ND	20	19.2	96.0	20	18.9	94.5	1.60	20	76	116
1,3,5-Trimethylbenzene	ND	⁾ 20	17.8	89.1	20	17.4	87.0	2.43	20	51	121
1,3-Dichlorobenzene	ND	20	18.0	90.0	20	17.3	86.5	3.99	20	71	110
1,3-Dichloropropane	ND	20	17.8	89.0	20	17.8	89.1	0.135	20	80	119
1,4-Dichlorobenzene	ND	20	20.3	101	20	19.5	97.3	4.25	20	69	110
2,2-Dichloropropane	ND	20	19.5	97.3	20	20.7	103	6.21	20	52	122
2-Butanone	ND	20	15.3	76.3	20	15.6	78.1	2.32	20	10	133
2-Chloroethyl vinyl ether	ND	20	0	0*	20	0	0*	0	20	10	182
2-Chlorotoluene	ND	20	18.5	92.7	20	18.5	92.6	0.167	20	69	112
2-Hexanone	ND	20	18.5	92.3	20	19.2	96.0	3.89	20	10	163
4-Chlorotoluene	ND	20	19.1	95.7	20	17.6	88.2	8.11	20	37	110
4-Isopropyltoluene	ND	20	18.5	92.6	20	17.2	86.2	7.17	20	65	116
4-Methyl-2-pentanone	ND	20	17.4	87.2	20	21.3	107 *	20.2 *	20	10	103
Acetone	ND	20	23.2	78.6	20	23.8	81.5	2.49	20	10	160
Acrylonitrile	ND	20	17.4	87.1	20	17.9	89.3	2.51	20	45	155

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits



HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

Conoco Phillips Randleman #1

Analysis:	Volatile Organics by Method 8260B
Method:	SW8260B

WorkOrder: 09060743 Lab Batch ID: R276016

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: RunID: Analysis Date:

09060870-02 K_090620B-5076478 06/20/2009 12:54

Units: ug/L LU_L Analyst:

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	· ND	20	19.0	95.0	20	18.7	93.4	1.69	22	70	124
Bromobenzene	ND	20	17.6	88.0	20	17.3	86.7	1.58	20	72	111
Bromochloromethane	ND	20	18.2	91.0	20	17.6	88.2	3.12	20	73	126
Bromodichloromethane	ND	20	17.7	83.7	20	21.5	103	19.4	20	68	125
Bromoform	ND	20	18.6	93.0	20	18.3	91.4	1.68	20	44	132
Bromomethane	ND	20	13.8	68.9	20	15.0	75.1	8.67	20	50	140
Carbon disulfide	ND	20	15.8	79.1	20	17.3	86.6	9.02	20	46	143
Carbon tetrachloride	ND	20	21.1	106	20	23.2	116	9.33	20	66	126
Chlorobenzene	ND	20	19.5	97.3	20	18.4	92.0	5.59	21	68	123
Chloroethane	ND	20	16.3	81.4	20	17.0	85.2	4.58	20	59	134
Chloroform	ND	20	21.8	92.9	20	22.5	96.3	3.14	20	68	127
Chloromethane	ND	20	14.2	70.8	20	15.5	77.3	8.79	20	51	137
Dibromochloromethane	ND	20	19.2	96.2	20	18.5	92.7	3.67	20	58	131
Dibromomethane	ND	20	19.4	96.9	20	20.1	100	3.62	20	82	123
Dichlorodifluoromethane	ND	20	16.5	82.3	20	18.5	92.7	12.0	20	35	143
Ethylbenzene	ND	20	18.7	93.4	20	. 18.6	92.9	0.499	20	76	122
Hexachlorobutadiene	ND	20	17.5	87.3	20	17.5	87.3	0.0573	20	43	137
Isopropylbenzene	ND	20	17.0	84.9	20	16.1	80.3	5.60	20	57	124
Methyl tert-butyl ether	ND	40	34.6	86.6	40	38.7	96.8	11.1	20	10	200
Methylene chloride	ND	20	17.6	88.2	20	18.6	92.9	5.15	20	70	134
Naphthalene	ND	20	18.0	90.0	20	18.5	92.5	2.72	20	42	140
n-Butylbenzene	ND	20	18.7	93.3	20	18.2	91.2	2.25	20	82	112
n-Propylbenzene	ND	20	17.2	85.8	20	16.0	79.8	7.28	20	73	108
sec-Butylbenzene	ND	20	18.5	92.4	20	18.0	89.8	2.86	20	76	110
Styrene	ND	20	17.5	87.3	20	16.9	84.6	3.15	20	58	152
tert-Butylbenzene	ND	20	19.4	97.1	20	18.5	92.7	4.66	20	66	120
Tetrachioroethene	ND	20	19.7	98.5	20	18.3	91.4	7.44	20	71	130
Toluene	ND	20	17.4	86.9	20	16.7	83.6	3.82	24	80	117
Trichloroethene	ND	20	15.5	77.5 *	20	19.2	96.1	21.3 *	21	82	121
Trichlorofluoromethane	ND	20	18.8	94.1	20	20.1	100	6.57	20	74	138
Vinyl acetate	ND	20	13.7	68.4	20	13.5	67.6	1.20	20	66	135
Vinyl chloride	ND	20	17.4	87.0	20	18.6	93.2	6.96	20	45	143

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits

J - Estimated value between MDL and PQL E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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HOUSTON LABORATORY 8880 INTERCHANGE DRIVE

HOUSTON, TX 77054 (713) 660-0901

Conoco Phillips

Randleman #1

Analysis:	Volatile Organics by Method 8260B	WorkOrder:	09060743
Method:	SW8260B	Lab Batch ID:	R276016
	Matrix Spike (MS) / Matrix Spike Duplicate (MSD)		· · ·

Sample Spiked: RunID: Analysis Date:

09060870-02 K_090620B-5076478 06/20/2009 12:54

Units: ug/L Analyst: LU_L

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
cis-1,2-Dichloroethene	ND	20	18.7	93.7	20	17.9	89.7	4.39	20	67	132
cis-1,3-Dichloropropene	ND	20	17.1	85.6	20	21.6	108	23.1 *	20	67	116
m,p-Xylene	ND	40	39.0	97.5	40	38.1	95.4	2.22	20	69	127
o-Xylene	ND	20	20.3	101	20	19.4	97.1	4.30	20	84	114
trans-1,2-Dichloroethene	ND	20	17.8	89.1	20	17.7	88.5	0.715	20	68	131
trans-1,3-Dichloropropene	ND	20	18.1	90.6	20	22.4	112	20.9 *	20	56	131
1,2-Dichloroethene (total)	ND	40	36.5	91.4	40	35.6	89.1	2.58	20	67	132
Xylenes,Total	ND	60	59.3	98.8	60	57.5	95.9	2.93	20	69	127
Surr: 1,2-Dichloroethane-d4	ND	50	48.9	97.9	50	48.6	97.2	0.724	30	78	116
Surr: 4-Bromofluorobenzene	ND	50	52.3	105	50	51.9	104	0.758	30	74	125
Surr: Toluene-d8	ND	50	47.2	94.4	50	46.1	92.3	2.33	30	82	118

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

Iank D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

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MW-1

Duplicate

Conoco Phillips Randleman #1

Analysis: Method:	Volatile Organics by Method 8260BWorkOrder:090607SW8260BLab Batch ID:R27609						
	Met	hod Blank	·	Samples in Analytica	I Batch:		
RunID: K_090	620C-5078041	Units:	ug/L	Lab Sample ID	Client San	nple ID	
Analysis Date:	06/21/2009 3:59	Analyst:	LU_L	09060743-01A	MW-3		
				09060743-02A	MW-2		

09060743-03A

09060743-07A

Analyte	Result	Rep Limit
1,1,1,2-Tetrachioroethane	ND	5.0
1,1,1-Trichloroethane	ND	5.0
1,1,2,2-Tetrachloroethane	ND	5.0
1,1,2-Trichloroethane	ND	5.0
1,1-Dichloroethane	ND	5.0
1,1-Dichloroethene	ND	5.0
1,1-Dichloropropene	ND	5.0
1,2,3-Trichlorobenzene	ND	5.0
1,2,3-Trichloropropane	ND	5.0
1,2,4-Trichlorobenzene	ND	5.0
1,2,4-Trimethylbenzene	ND	5.0
1,2-Dibromo-3-chloropropane	ND	5.0
1,2-Dibromoethane	<u>ND</u>	5.0
1,2-Dichlorobenzene	ND	5.0
1,2-Dichloroethane	ND	5.0
1,2-Dichloropropane	ND	5.0
1,3,5-Trimethylbenzene	ND	5.0
1,3-Dichlorobenzene	ND	5.0
1,3-Dichloropropane	ND	5.0
1,4-Dichlorobenzene	ND	5.0
2,2-Dichloropropane	ND	5.0
2-Butanone	ND	20
2-Chloroethyl vinyl ether	ND	10
2-Chlorotoluene	ND	5.0
2-Hexanone	ND	10
4-Chlorotoluene	ND	5.0
4-IsopropyItoluene	ND	5.0
4-Methyl-2-pentanone	ND	10
Acetone	ND	20
Acrylonitrile	ND	10
Benzene	ND	5.0
Bromobenzene	ND	5.0
Bromochloromethane	ND ND	5.0
Bromodicniorometnane	ND	5.0
Bromotorm	ND	. 5.0
	ND	10
Carbon disultide		5.0
Chlorobannas	ND	5.0
		5.0
Chloroform		10
	ND	5.0
Dibromochleromethane		10
Dibromochiorometrane		5.0
Diptoriomeinane		5.0
Ethylpoptopo		= 10
Euryidenzene	UN	5.0

Qualifiers:

ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

 $\ensuremath{\mathsf{B/V}}\xspace$ - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Quality Control Report

HOUSTON LABORATORY 8880 INTERCHANGE DRIVE HOUSTON, TX 77054

(713) 660-0901

09060743

R276097

Conoco Phillips

Randleman #1

Analysis: Method:	Volatile Organics by Method 8260B SW8260B	WorkOrder: Lab Batch ID:
	Method Blank	
RunID: K_090620	C-5078041 Units: ug/L	

Analyst: LU_L

Analysis Date:	06/21/2009 3:59

Analyte	Result	Rep Limit
Hexachlorobutadiene	. ND	5.0
Isopropylbenzene	ND	5.0
Methyl tert-butyl ether	ND	5.0
Methylene chloride	ND	5.0
Naphthalene	ND	5.0
n-Butylbenzene	ND	5.0
n-Propylbenzene	ND	5.0
sec-Butylbenzene	· ND	5.0
Styrene	ND	5.0
tert-Butylbenzene	ND	5.0
Tetrachloroethene	ND	5.0
Toluene	ND	5.0
Trichloroethene	ND	5.0
Trichlorofluoromethane	ND	5.0
Vinyl acetate	ND	10
Vinyl chloride	ND	2.0
cis-1,2-Dichloroethene	ND	5.0
cis-1,3-Dichloropropene	ND	5.0
m,p-Xylene	ND	5.0
o-Xylene	ND	5.0
trans-1,2-Dichloroethene	ND	5.0
trans-1,3-Dichloropropene	ND	5.0
1,2-Dichloroethene (total)	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	91.9	78-116
Surr: 4-Bromofluorobenzene	100.0	74-125
Surr: Toluene-d8	92.7	82-118

Laboratory Control Sample (LCS)

RunID:	K_090620C-5078040	Units:	ug/L
Analysis Date:	06/21/2009 3:32	Analyst:	LU_L

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1,2-Tetrachloroethane	20.0	20.0	99.8	71	128
1,1,1-Trichloroethane	20.0	22.5	113	61	135
1,1,2,2-Tetrachloroethane	20.0	20.5	103	60	133
1,1,2-Trichloroethane	20.0	18.2	91.2	77	127
1,1-Dichloroethane	20.0	21.3	107	68	132

Qualifiers:

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

ND/U - Not Detected at the Reporting Limit

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis:	Volatile Organics by Method 8260B		WorkOrder:	09060743
Method:	SW8260B		Lab Batch ID:	R276097
		Laboratory Control Sample (LCS)		

 RunID:
 K_090620C-5078040
 Units:
 ug/L

 Analysis Date:
 06/21/2009 3:32
 Analyst:
 LU_L

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	20.0	21.4	107	65	134
1,1-Dichloropropene	20.0	21.3	106	68	126
1,2,3-Trichlorobenzene	20.0	21.1	105	36	154
1,2,3-Trichloropropane	20.0	21.0	105	38	153
1,2,4-Trichlorobenzene	20.0	20.2	101	69	144
1,2,4-Trimethylbenzene	20.0	20.4	102	64	128
1,2-Dibromo-3-chloropropane	20.0	19.3	96.5	44	141
1,2-Dibromoethane	20.0	19.4	97.0	75	124
1,2-Dichlorobenzene	20.0	20.8	104	68	124
1,2-Dichloroethane	20.0	22.0	110	61	138
1,2-Dichloropropane	20.0	22.2	111	76	123
1,3,5-Trimethylbenzene	20.0	19.9	99.5	61	127
1,3-Dichlorobenzene	20.0	20.8	104	68	127
1,3-Dichloropropane	20.0	19.0	95.1	76	125
1,4-Dichlorobenzene	20.0	20.2	101	68	124
2,2-Dichloropropane	20.0	18.3	91.3	42	142
2-Butanone	20.0	16.2	81.0	22	183
2-Chloroethyl vinyl ether	20.0	17.2	86.0	10	179
2-Chlorotoluene	20.0	20.9	104	64	132
2-Hexanone	20.0	18.9	94.7	31	178
4-Chlorotoluene	20.0	20.4	102	61	132
4-Isopropyltoluene	20.0	20.4	102	63	136
4-Methyl-2-pentanone	20.0	22.3	112	10	159
Acetone	20.0	20.7	104	10	200
Acrylonitrile	20.0	20.6	103	54	155
Benzene	20.0	20.6	103	74	123
Bromobenzene	20.0	19.4	96.8	68	125
Bromochloromethane	20.0	20.7	103	71	124
Bromodichloromethane	20.0	22.9	114	72	128
Bromoform	20.0	16.3	81.3	73	143
Bromomethane	20.0	17.5	87.4	53	130
Carbon disulfide	20.0	19.8	98.9	41	143
Carbon tetrachloride	20.0	23.1	115	59	142
Chlorobenzene	20.0	20.7	104	75	125

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

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090



Conoco Phillips Randleman #1

Analysis:	Volatile Organics by Method 8260B	WorkOrder:	09060743	
Method:	SW8260B	Lab Batch ID:	R276097	
	Laboratory Control Sample (LCS)			

RunID: Analysis Date: Units: ug/L

06/21/2009 3:32

K_090620C-5078040

Analyst: LU_L

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Chloroethane	20.0	20.1	100	60	134
Chloroform	20.0	22.5	112	71	127
Chloromethane	20.0	18.7	93.3	50	139
Dibromochloromethane	20.0	18.5	92.7	65	130
Dibromomethane	20.0	22.0	110	. 79	124
Dichlorodifluoromethane	20.0	17.5	87.4	22	162
Ethylbenzene	20.0	20.0	100	72	127
Hexachlorobutadiene	20.0	22.5	112	45	152
Isopropylbenzene	20.0	18.2	90.8	58	130
Methyl tert-butyl ether	40.0	43.2	108	63	123
Methylene chloride	20.0	21.0	105	61	135
Naphthalene	20.0	20.9	104	33	148
n-Butylbenzene	20.0	22.6	113	62	136
n-Propylbenzene	20.0	18.7	93.4	57	131
sec-Butylbenzene	20.0	21.2	106	63	131
Styrene	20.0	18.5	92.4	69	120
tert-Butylbenzene	20.0	21.8	109	59	131
Tetrachloroethene	20.0	21.7	· 108	45	173
Toluene	20.0	18.5	92.3	74	126
Trichloroethene	20.0	22.5	112	79	131
Trichlorofluoromethane	20.0	21.6	108	49	153
Vinyl acetate	20.0	13.7	68.5	10	167
Vinyl chloride	20.0	22.1	111	51	148
cis-1,2-Dichloroethene	20.0	20.7	103	71	128
cis-1,3-Dichloropropene	20.0	22.7	113	67	128
m,p-Xylene	40.0	41.4	104	71	129
o-Xylene	20.0	21.4	107	74	130
trans-1,2-Dichloroethene	20.0	20.9	105	66	128
trans-1,3-Dichloropropene	20.0	23.7	119	60	128
1,2-Dichloroethene (total)	40.0	41.6	104	66	128
Xylenes,Total	60.0	62.8	105	71	130
Surr: 1,2-Dichloroethane-d4	50.0	49.3	98.7	78	116
Surr: 4-Bromofluorobenzene	50.0	50.9	102	74	125
Surr: Toluene-d8	50.0	46.4	92.9	82	118

Qualifiers:

B/V - Analyte detected in the associated Method Blank

MI - Matrix Interference

J - Estimated value between MDL and PQL

D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

ND/U - Not Detected at the Reporting Limit

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Analysis:	Volatile Organics by Method 8260B
Method:	SW8260B

WorkOrder: 09060743 Lab Batch ID:

R276097

Matrix Spike (MS) / Matrix Spike Duplicate (MSD) Sample Spiked: 09060979-02

RunID: Analysis Date: K_090620C-5078043 06/21/2009 4:53

Units: ug/L Analyst: LU_L

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1,1,2-Tetrachloroethane	ND	20	18.4	92.0	20	20.1	100	8.59	20	68	124
1,1,1-Trichloroethane	ND	20	23.1	115	20	23.1	115	0.0997	20	69	123
1,1,2,2-Tetrachloroethane	ND	20	20.9	105	20	22.0	110	4.95	20	69	130
1,1,2-Trichloroethane	ND	20	17.9	89.5	20	18.3	91.4	2.03	20	75	126
1,1-Dichloroethane	ND	20	22.2	111	20	22.7	114	2.52	20	65	129
1,1-Dichloroethene	ND	20	20.5	102	20	21.5	107	4.87	22	61	139
1,1-Dichloropropene	ND	20	21.3	106	20	21.7	109	1.91	20	69	121
1,2,3-Trichlorobenzene	ND	20	18.2	90.9	20	19.2	96.1	5.50	20	53	127
1,2,3-Trichloropropane	ND	20	20.0	99.8	20	20.9	105	4.70	20	79	124
1,2,4-Trichlorobenzene	ND	20	17.1	85.5	20	17.4	86.8	1.52	20	58	118
1,2,4-Trimethylbenzene	ND	20	19.2	96.0	20	19.3	96.4	0.426	20	43	132
1,2-Dibromo-3-chloropropane	ND	20	20.8	104	20	20.8	104	0.168	20	46	131
1,2-Dibromoethane	ND	20	19.0	95.0	20	20.3	101	6.49	20	76	122
1,2-Dichlorobenzene	ND	20	19.0	94.8	20	18.9	94.6	0.153	20	74	110
1,2-Dichloroethane	ND	20	21.9	110	20	23.5	118	6.90	20	60	129
1,2-Dichloropropane	ND	20	21.6	108	20	22.7	114	5.00	20	76	116
1,3,5-Trimethylbenzene	ND	20	18.2	90.9	20	18.7	93.3	2.68	20	51	121
1,3-Dichlorobenzene	ND	20	17.6	88.2	20	17.8	88.9	0.802	20	71	110
1,3-Dichloropropane	ND	20	18.2	90.9	20	19.1	95.4	4.79	20	80	119
1,4-Dichlorobenzene	ND	20	20.1	101	20	20.2	101	0.486	20	69	110
2,2-Dichloropropane	ND	20	18.2	91.0	20	19.2	96.2	5.51	20	52	122
2-Butanone	ND	20	17.3	86.3	20	18.8	94.2	8.73	20	10	133
2-Chloroethyl vinyl ether	ND	20	0	0 *	20	0	0 *	0	20	10	182
2-Chlorotoluene	ND	20	19.5	97.5	20	19.2	96.2	1.32	20	69	112
2-Hexanone	ND	20	20.4	102	20	20.5	102	0.396	20	10	163
4-Chlorotoluene	ND	20	18.2	90.9	20	18.4	92.2	1.49	20	37	110
4-Isopropyltoluene	ND	20	17.8	89.1	20	17.5	87.7	1.55	20	65	116
4-Methyl-2-pentanone	ND	20	23.7	119	20	23.9	120	0.780	20	10	159
Acetone	ND	20	18.6	93.2	20	22.8	114	20.0 *	20	10	160
Acrylonitrile	ND	20	21.3	106	20	23.6	118	10.4	20	45	155

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference

B/V - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits

J - Estimated value between MDL and PQL E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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09060743

R276097

WorkOrder:

Lab Batch ID:

Conoco Phillips

Randleman #1

Analysis:	Volatile Organics by Method 8260B
Method:	SW8260B
	Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: RunID: Analysis Date: 09060979-02 K_090620C-5078043 06/21/2009 4:53

Units: ug/L Analyst: LU_L

			[r	1						r
Analyte	Sample Result	MS Spike Added	MS Resuit	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low	High Limit
Benzene	ND	20	23.3	104	20	24.0	107	2.74	22	70	124
Bromobenzene	ND	20	18.1	90.4	20	18.2	90.9	0.507	20	72	111
Bromochloromethane	ND	20	20.3	101	20	20.2	101	0.643	20	73	126
Bromodichloromethane	ND	20	21.9	109	20	22.7	113	3.50	20	68	125
Bromoform	ND	20	14.9	74.5	20	15.2	75.9	1.97	20	44	132
Bromomethane	ND	20	15.8	79.2	20	16.3	81.6	3.04	20	50	140
Carbon disulfide	ND	20	20.0	100	20	20.5	103	2.38	20	46	143
Carbon tetrachloride	ND	20	22.0	110	20	22.6	113	2.46	20	66	126
Chlorobenzene	ND	20	19.5	97.5	20	20.5	102	4.87	21	68	123
Chloroethane	ND	20	19.8	99.1	20	22.0	110	10.4	20	59	134
Chloroform	ND	20	21.9	109	20	22.5	112	2.79	20	68	127
Chloromethane	ND	20	16.3	81.5	20	17.0	84.9	4.12	20	51	137
Dibromochloromethane	ND	20	17.4	86.8	20	18.2	90.8	4.47	20	58	131
Dibromomethane	ND	20	21.8	109	20	22.5	113	3.35	20	82	123
Dichlorodifluoromethane	ND	20	19.0	95.0	20	17.2	86.1	9.79	20	35	143
Ethylbenzene	ND	20	21.5	98.4	20	22.4	103	4.22	20	76	122
Hexachlorobutadiene	ND	20	15.4	76.9	20	15.1	75.3	2.18	20	43	137
Isopropylbenzene	ND	20	17.9	89.7	20	18.8	93.9	4.67	20	57	124
Methyl tert-butyl ether	ND	40	44.3	111	40	46.7	117	5.16	20	10	200
Methylene chloride	ND	20	21.6	108	20	22.1	110	2.05	20	70	134
Naphthalene	ND	20	20.1	100	20	20.7	104	3.22	20	42	140
n-Butylbenzene	ND	20	17.7	88.6	20	17.3	86.3	2.63	20	82	112
n-Propylbenzene	ND	20	18.4	91.8	20	18.1	90.4	1.48	20	73	108
sec-Butylbenzene	ND	20	18.7	93.3	20	18.8	93.9	0.647	20	76	110
Styrene	ND	20	18.7	93.3	20	19.3	96.6	3.42	20	58	152
tert-Butylbenzene	ND	20	19.5	97.7	20	20.0	99.8	2.13	20	66	120
Tetrachloroethene	ND	20	19.2	96.0	20	18.6	93.2	2.98	20	71	130
Toluene	ND	20	17.6	87.8	20	18.3	91.5	4.13	24	80	117
Trichloroethene	ND	20	21.9	110	20	21.7	109	1.07	21	82	121
Trichlorofluoromethane	ND	20	21.7	108	20	22.6	113	4.14	20	74	138
Vinyl acetate	ND	20	11.9	59.6 *	20	12.5	62.7 *	4.95	20	66	135
Vinyt chloride	ND	20	21.1	105	20	22.2	111	5.38	20	45	143

Qualifiers: ND/U - Not Detected at the Reporting Limit

MI - Matrix Interference

 $\ensuremath{\mathsf{B/\!V}}\xspace$ - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution * - Recovery Outside Advisable QC Limits

J - Estimated value between MDL and PQL E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips

Randleman #1

Analysis:	Volàtile Organics by Method 8260B	WorkOrder:	09060743	
Method:	SW8260B	Lab Batch ID:	R276097	
	Matrix Spike (MS) / Matrix Spike Duplicate (MSD)		· · ·	

Sample Spiked: RunID: Analysis Date:

09060979-02 K_090620C-5078043 06/21/2009 4:53

Units: ug/L Analyst: LU_L

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
cis-1,2-Dichloroethene	ND	20	20.3	102	20	20.8	104	2.41	20	67	132
cis-1,3-Dichloropropene	ND	20	18.3	91.5	20	18.7	93.7	2.40	20	67	116
m,p-Xylene	5.06	40	44.5	98.5	40	46.2	103	3.88	20	69	127
o-Xylene	. ND	20	20.6	103	20	21.3	106	3.37	20	84	114
trans-1,2-Dichloroethene	ND	20	21.2	106	20	21.1	105	0.469	20	68	131
trans-1,3-Dichloropropene	ND	20	16.5	82.3	20	17.3	86.3	4.71	20	56	131
1,2-Dichloroethene (total)	ND	40	41.5	104	40	41.9	105	0.954	20	67	132
Xylenes,Total	5.06	60	65.1	100	60	67.5	104	3.72	20	69	127
Surr: 1,2-Dichloroethane-d4	ND	50	46.7	93.3	50	49.7	99.3	6.22	30	78	116
Surr: 4-Bromofluorobenzene	ND	50	50.2	100	50	51.6	103	2.76	30	74	125
Surr: Toluene-d8	ND	50	45.3	90.5	50	46.7	93.3	3.05	30	82	118

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis: Method:	Alkalinity (as CaCO3 E310.1	i), Total				WorkOrder: Lab Batch ID:	09060743 R275389
	Meth	od Blank			Samples in Analytic	cal Batch:	
RunID: WET_	090614H-5065989	Units:	mg/L		Lab Sample ID	Client Sar	nple ID
Analysis Date:	06/14/2009 12:15	Analyst:	PAC		09060743-01E	MW-3	
					09060743-02E	MW-2	
					09060743-03E	MW-1	
[Analyte		Result	Rep Limit	09060743-04E	MW-4	
Alk	alinity, Total (As CaCO3)		ND	2.0			
			La	boratory Contro	I Sample (LCS)		

RunID:	WET_090614H-5065991	Units:	mg/L
Analysis Date:	06/14/2009 12:15	Analyst:	PAC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Alkalinity, Total (As CaCO3)	38.70	38.00	98.19	90	110

Sample Duplicate

Original Sample:	09060743-04
RunID: ,	WET_090614H-506
Analysis Date:	06/14/2009 12:15

09060/43-04 WET_090614H-5065995 Units: mg/L 06/14/2009 12:15 Analyst: PAC

Analyte	Sample Result	DUP Result	RPD	RPD Limit
Alkalinity, Total (As CaCO3)	200	200	0	20

 Qualifiers:
 ND/U - Not Detected at the Reporting Limit
 MI - Matrix Interference

 B/V - Analyte detected in the associated Method Blank
 D - Recovery Unreportable due to Dilution

 J - Estimated value between MDL and PQL
 * - Recovery Outside Advisable QC Limits

 E - Estimated Value exceeds calibration curve
 * - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis: Method:	Nitrite Nitrogen (as I SM4500-NO2 B	N), Total			WorkOrder: Lab Batch ID:	09060743 R275563
	Metl	nod Blank		Samples in Analytic	cal Batch:	
RunID: WET_0	90613Q-5068986	Units:	mg/L	Lab Sample ID	Client Sar	nple ID
Analysis Date:	06/13/2009 14:15	Analyst:	ESK	09060743-01E	MW-3	
				09060743-02E	MW-2	
				09060743-03E	MW-1	
[Analyte		Result Rep Limit	09060743-04E	MW-4	
Nitro	ogen,Nitrite		ND 0.50			

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:
RunID:
Analysis Date

09060743-01 WET_090613Q-5068990 06/13/2009 14:15

Units: mg/L Analyst: ESK

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Nitrogen, Nitrite	ND	5	4.584	88.34 *	5	4.853	93.71	5.692	20	90	110

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis: Method:	Nitrate Nitrogen (as SM4500-NO3 F	N), Total			WorkOrder: Lab Batch ID:	09060743 R275568
	Met	nod Blank		Samples in Analytic	cal Batch:	
RunID: WET_0	90613R-5069042	Units:	mg/L	Lab Sample ID	Client San	nple ID
Analysis Date:	06/13/2009 16:00	Analyst:	ESK	09060743-01E	MW-3	
				09060743-02E	MW-2	
				09060743-03E	MW-1	
	Analyte		Result Rep Limit	09060743-04E	MW-4	
Nitr	ogen, Nitrate (As N)		ND 0.50			

	Laboratory Cont	rol Sample	<u>e (LCS)</u>
RunID:	WET_090613R-5069043	Units:	mg/L
Analysis Date:	06/13/2009 16:00	Analyst:	ESK

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen, Nitrate (As N)	5.00	4.83	96.5	90	110

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: RunID: Analysis Date:

09060743-01 WET_090613R-5069047 mg/L Units: 06/13/2009 16:00 Analyst: ESK

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Nitrogen, Nitrate (As N)	ND	5	4.80	90.5	5	5.13	97.0	6.61	20	90	110

Qualifiers:

ND/U - Not Detected at the Reporting Limit

J - Estimated value between MDL and PQL

B/V - Analyte detected in the associated Method Blank

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis: Method:	lon Chromatography E300.0					WorkOrder: Lab Batch ID:	09060743 R276029A
	Meth	od Blank	<u> </u>		Samples in Ar	alytical Batch:	
RunID: IC2	2_090619A-5076621	Units:	mg/L		Lab Sample ID	<u>Client Sar</u>	nple ID
Analysis Date	e: 06/19/2009 12:35	Analyst:	BDG		09060743-01E	MW-3	
					09060743-02E	MW-2	
					09060743-03E	MW-1	
	Analyte		Result	Rep Limit	09060743-04E	MW-4	
	Bromide		ND	0.50			
	Chloride		ND	0.50			
	Fluoride		ND	0.50			
	Ortho-phosphate (As P)		ND	0.50			
	Sulfate		ND	0.50			

	Laboratory Con	trol Sample	e (LCS)	
RunID:	IC2_090619A-5076622	Units:	mg/L	
Analysis Date:	06/19/2009 12:54	Analyst:	BDG	

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Bromide	10.00	9.983	99.83	85	115
Chloride	10.00	9.436	94.36	85	115
Fluoride	10.00	9.855	98.55	85	115
Ortho-phosphate (As P)	10.00	10.30	103.0	85	115
Sulfate	10.00	10.26	102.6	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked:	09060875-01		
RunID:	IC2_090619A-5076655	Units:	mg/L
Analysis Date:	06/20/2009 6:12	Analyst:	BDG

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Bromide	ND	10	9.088	89.56	10	10.22	100.8	11.68	20	80	120
Chloride	18.33	10	30.23	119.0	10	30.20	118.8	0.08273	20	80	120
Fluoride	0.6210	10	11.30	106.8	10	11.42	108.0	1.048	20	80	120
Ortho-phosphate (As P)	ND	10	17.42	174.2 *	10	20.57	205.7 *	16.61	20	80	120

ND/U - Not Detected at the Reporting Limit Qualifiers:

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

E - Estimated Value exceeds calibration curve

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Conoco Phillips Randleman #1

Analysis: Method:	Ion Chrom E300.0	atography					WorkOrder: Lab Batch II	09 D: R2	060743 276029A		
		Matrix	(Spike (MS) / Matrix	Spike Duplica	ite <u>(</u> MSD	1				-	
		Sample Spiked: RunID: Analysis Date:	09060875-01 IC2_090619A-507665 06/20/2009 6:12	5 Units: Analyst:	mg/L BDG						·
	A						1.100.00				T

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Sulfate	24.10	10	36.49	123.9 *	10	35.75	116.6	2.043	20	80	120

Qualifiers: ND/U - Not Detected at the Reporting Limit

B/V - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

E - Estimated Value exceeds calibration curve

MI - Matrix Interference

D - Recovery Unreportable due to Dilution

* - Recovery Outside Advisable QC Limits

N/C - Not Calculated - Sample concentration is greater than 4 times the amount of spike added. Control limits do not apply.

TNTC - Too numerous to count

QC results presented on the QC Summary Report have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules.

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Sample Receipt Checklist

Workorder: 09060743 Date and Time Received: 6/13/2009 10:00:00 AM Temperature: 1.0°C		Received By: Carrier name: Chilled by:	CAW Fedex-Priority Water Ice
1. Shipping container/cooler in good condition?	Yes 🗹	No 🗌	Not Present
2. Custody seals intact on shippping container/cooler?	Yes 🗹	No 🗌	Not Present
3. Custody seals intact on sample bottles?	Yes 🗋	No	Not Present
4. Chain of custody present?	Yes 🗹	No 🗍	
5. Chain of custody signed when relinguished and received?	Yes 🗹	No 🗌	
6. Chain of custody agrees with sample labels?	Yes 🗹	No 🗌	
7. Samples in proper container/bottle?	Yes 🗹	Νο	
8. Sample containers intact?	Yes 🗹	No 🗌	
9. Sufficient sample volume for indicated test?	Yes 🗹	Νο	
10. All samples received within holding time?	Yes 🗹	No 🗔	
11. Container/Temp Blank temperature in compliance?	Yes 🗹		
12. Water - VOA vials have zero headspace?	Yes 🗹		Vials Not Present
13. Water - Preservation checked upon receipt (except VOA*)?	Yes 🗹	No 🗌	Not Applicable
*VOA Preservation Checked After Sample Analysis			
SPL Representative:	Contact Date &	Time:	
Non Conformance			
Client Instructions:			




327818 ^{page} 3 of 3	ATTEX CNTA Second Analysis SUCC Analysis SUCC SUC	Intact? JY N Ice? Temp: / Ppreview (initial) Preview (initial) Preview (initial) Hughes Drive Hughes Drive
SI'L WOTKOTGET INO.	Image: Second state Image: Second st	Detection Limits (specify): 2. Received by: 4. Received by Laboratory: 0. Baceived by Laboratory: 1459 Traverse City M
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SPL, SPL,	Then Name: THATECH/ Chron ddress: ELZ Indian, 2000 Tiv Hiburu Unane Propect Name/No.: Stant Contact: Kelly Blanchard Troject Name/No.: SAMPLE ID MU-4	Client/Consultant Remarks: